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INCLUDING TRADE MARKS, DESIGNS AND COPYRIGHT IN CINEMATOGRAPH FILMS

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The numerical references denote the following: **(21)** Number of application. **(22)** Date of application. **(DA)** Date of acceptance. **(51)** Class. **(71)** Name of applicant(s). **(72)** Name of all inventors. **(33)** Country. **(31)** Number and **(32)** Date of convention application. **(54)** Title of invention. **(00)** Number of sheets.

. - APPLIED ON 2022-02-21 -

2022/02141 ~ Complete ~54:AN EMPIRICAL SYSTEM FOR RISK ASSESSMENT OF MENTAL ILLNESS DISORDERS USING NEURAL NETWORK DIAGNOSTIC ~71:Dr Rahul Dubey, Department of Electronics Engineering MITS, Gwalior, Madhya Pradesh, India;Dr Saurabh Pal, Department of Computer Application, V B S Purvanchal University Campus, Jaunpur, Uttar Pradesh, 222003, India;Dr Shikha Gupta, Department - Computer Engineering Department, Lokmanya Tilak College of Engineering, Sector-4, Koparkhairane, Navi Mumbai, Maharashtra, 400709, India;Dr Umesh Kumar Pandey, Department of Computer Science and Engineering, United Institute of Technology Naini, Prayagraj, Uttar Pradesh, India;Dr. Durgacharan Arun Bhagwat,, Bharati Vidyapeeth College of Pharmacy, Near Chitranagari, Morewadi, Kolhapur, MS, Maharashtra, 416013, India;Dr. P.THARMARAJ, PG and Research Department of Chemistry, Thiagarajar College (Autonomous), 139-140 Kamarajar salai, Teppakulam, Madurai, Tamilnadu, 625009, India;Dr.J.SHAKINA, Department of Chemistry and Research Centre, Sarah Tucker College, (Autonomous), Perumalpuram, Tirunelveli, Tamilnadu, 627007, India;Mr. Zatin Gupta, KIET Group of Institutions, Delhi-NCR, Ghaziabad & Research Scholar, Department of CSE, MMEC, MM(DU), Mullana, Ambala, Haryana, Uttar Pradesh, India ~72: Dr Rahul Dubey;Dr Saurabh Pal;Dr Shikha Gupta;Dr Umesh Kumar Pandey;Dr. Durgacharan Arun Bhagwat,;Dr. P.THARMARAJ;Dr.J.SHAKINA;Mr. Zatin Gupta~

2022/02143 ~ Complete ~54:OPEN ARC SELF-SHIELDED FLUX-CORED WIRE FOR SURFACING HORIZONTAL CONTINUOUS CASTING ROLLS AND PREPARATION METHOD THEREOF ~71:Liaoning Jianye New Material Co., Ltd, No. 3-92-38, Bearing street, Lishan District, Anshan City, Liaoning Province, 114013, People's Republic of China;Shenyang University of Technology, No. 111, Shenliao West Road, Economic and Technological Development Zone, Shenyang City, Liaoning Province, 110870, People's Republic of China ~72: Di Man;Hou Lian;Liu Tongyu;Shi Minghao;Yin Chaokun;Yuan Xiaoguang;Zhang Jian~

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2022/02161 ~ Complete ~54:NETWORK CLASSROOM TEACHING AIDS DEVICE ~71:Zhengzhou Railway Vocational And Technical College, No.56 of Pengcheng Avenue, Zhengdong New District, Zhengzhou City, Henan Province, 450000, People's Republic of China ~72: Bin CHEN;Bo LIU;Chaohui LIANG;Hui QI;Jiling SHANG;Qian GAO;Qian ZHANG;Wenli HU;Xiangge YANG~

2022/02165 ~ Complete ~54:MICRO CHILLER-BASED HEATING, VENTILATION AND AIR CONDITIONING SYSTEM ~71:Pinoak Management Pty Ltd, 41 Pinoak Drive, Yarra Glen, Australia ~72: CONRY, Ronald David~ 33:US ~31:62/891,581 ~32:26/08/2019;33:US ~31:17/001,818 ~32:25/08/2020

2022/02178 ~ Complete ~54:PROCESS FOR THE PREPARATION OF A MEDICAMENT CONTAINING AN OXEPANE RING ~71:F. HOFFMANN-LA ROCHE AG, Grenzacherstrasse 124, 4070, Basel, Switzerland ~72: ANDREW MCCLORY;FRANCIS GOSSELIN;ZHIGANG CHENG~ 33:US ~31:62/898,861 ~32:11/09/2019;33:US ~31:62/934,382 ~32:12/11/2019

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2022/02154 ~ Complete ~54:ELECTRONIC TICKETING SYSTEM BASED ON RFID TECHNOLOGY ~71:Nanchong Qinghui Construction Engineering Co. , Ltd., 309,310 Yuping Road, Shunqing District, Nanchong, People's Republic of China;Xihua University, No. 999, Jinzhou Road, Tuqiao, Jinniu District, Chengdu City, Sichuan Province, People's Republic of China ~72: MENG, Juntong;QING, Tao;YAO, Baisong;YAO, Shibin~ 33:CN ~31:202210141393.2 ~32:16/02/2022

2022/02171 ~ Complete ~54:NEW WING PROTECTOR FOR WINGED CAPSULE AND METHOD OF USING SAME ~71:Elanco Tiergesundheit AG, MATTENSTR.24 A, BASEL 4058, SWITZERLAND, Switzerland;Elanco US Inc., 2500 Innovation Way, GREENFIELD 46140, IN, USA, United States of America ~72: COOPER, Benjamin Jeffrey;LI, Jianbin~ 33:US ~31:62/886,594 ~32:14/08/2019

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2022/02146 ~ Complete ~54:A FOLDING TABLE ~71:Binzhou university, No.391 Huanghe Road, Binzhou City, Shandong Province, People's Republic of China ~72: Cao Jianmeng;Liu Jing;Liu Yongtao;Liu Zeguo;Xie Mingzhi~ 33:CN ~31:202111476070.0 ~32:06/12/2021

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2022/02162 ~ Complete ~54:GANGUE DISCHARGING DEVICE AND GANGUE LOADING AND DISCHARGING SYSTEM FOR SHAFT CONSTRUCTION ~71:CHINA RAILWAY 18 BUREAU GROUP CO. LTD., Shuanggang Town, Jinnan District,, People's Republic of China ~72: LI, Genqiao;XI, Jufa;ZHANG, Xin~ 33:CN ~31:202220257987.5 ~32:09/02/2022

2022/02168 ~ Complete ~54:SUBSTITUTED N-PHENYL URACILS, SALTS THEREOF AND THEIR USE AS HERBICIDAL AGENTS ~71:Bayer Aktiengesellschaft, Kaiser-Wilhelm-Allee 1, LEVERKUSEN 51373, GERMANY, Germany ~72: ASMUS, Elisabeth;FRACKENPOHL, Jens;GATZWEILER, Elmar;HEINEMANN, Ines;HELMKE, Hendrik;JAKOBI, Harald;ROSINGER, Christopher Hugh;WILLMS, Lothar~ 33:EP ~31:19187529.3 ~32:22/07/2019

2022/02133 ~ Provisional ~54:AUTOMATIC CHARGER DISCONNECTOR ~71:Blessing Sepudumo, MONUMENT ROAD Glen Eagle Estate Stand no 974, South Africa ~72: Blessing Sepudumo~

2022/02135 ~ Provisional ~54:PAYMENT AND ACCESS CONTROL SOLUTIONS ~71:Win Htoo Aung, 135 Somerset Gardens , Mulbarton Road , Beverley A/H , 2191, South Africa ~72: Win Htoo Aung~

2022/02153 ~ Complete ~54:HEIGHT-ADJUSTABLE MEDICAL CARE CHAIR ~71:Dongying Huachen Pension Service Center, No. 129, Fuqian Street, Dongying District, Dongying City, Shandong, 257029, People's Republic of China ~72: YU, Weiping~

2022/02136 ~ Complete ~54:INTELLIGENT MONITORING AND DE-ICING INTEGRATION SYSTEM AND METHOD ~71:Nanjing University of Aeronautics and Astronautics, No. 29, Yudao Street, Qinhuai District,, NANJING CITY 210016, JIANGSU PROVINCE, CHINA (P.R.C.), People's Republic of China ~72: HE, Xiping;HEI, Xuechun;PAN, Lei;ZHANG, Anjing;ZHANG, Haoran;ZHUANG, Zhiqi~

2022/02152 ~ Complete ~54:INTEGRATED COMPOSITE VIBRATION ISOLATOR BASED ON METAL RUBBER AND ITS WORKING METHOD ~71:Fuzhou University, No. 2, Wulongjiang North Avenue, Fuzhou University Town, Minhou County, Fuzhou City, Fujian, 350108, People's Republic of China ~72: LI, Chengwei;LIANG, Yi;QIU, Tao;REN, Zhiying;YAO, Jiecheng~ 33:CN ~31:202110639034.5 ~32:08/06/2021

2022/02159 ~ Complete ~54:METHOD FOR RAPIDLY DETECTING ATP IN CHILLED CHICKEN ~71:YANGZHOU UNIVERSITY, 88 South University Road, Yangzhou, Jiangsu, 225009, People's Republic of

China ~72: BAI, Hao;BI, Yulin;CHANG, Guobin;CHEN, Guohong;JIANG, Yong;LIU, Xiangping;LU, Wei;QIU, Lingling;WANG, Zhixiu;XU, Qi;XU, Shenghai;ZHANG, Haitao;ZHANG, Kangning;ZHANG, Yang~

2022/02252 ~ Provisional ~54:BAKKIE TRAPPIE ROOF RACK TRAPPIE TROKKIE TRAPPIE TRUCK TRAPPIE ~71:CHARLES EUGENE O'REILLY, 97 POR1, 2ND AVENUE, FONTAINEBLEAU, GAUTENG, South Africa ~72: CHARLES EUGENE O'REILLY ~

2022/02156 ~ Complete ~54:ANTIBACTERIAL AND FRESH-KEEPING COATING LIQUID FOR REFRIGERATED FRESH PODS OF BROAD BEAN, PREPARATION METHOD AND APPLICATION ~71:Jiangsu Yanjiang Institute of Agricultural Sciences, No. 28, Xingfu Road, Chongchuan District, Nantong City, Jiangsu Province, 226001, People's Republic of China ~72: Chen Hui;Liu Chang;Song Juyi;Zhang Xin~ 33:CN ~31:202210016536.7 ~32:07/01/2022

2022/02139 ~ Complete ~54:LIDAR SCANNING AUTOMATIC ROW-FOLLOW METHOD FOR WHEAT SEEDLING ROOT-CUTTING AND FERTILIZATION ~71:Jiaozhou Agriculture and Rural Bureau, No. 2, Beijing Road, Jiaozhou City, Shandong, 266300, People's Republic of China;QINGDAO UNIVERSITY OF TECHNOLOGY, No.777, Jialingjiang East Road, Huangdao District, Qingdao City, Shandong Province, 266520, People's Republic of China ~72: LIN, Haibo;LU, Yuandong;WANG, Bingjun;XIU, Yufeng~

2022/02150 ~ Complete ~54:TEST BENCH FOR STATIC LOAD ANCHORING PERFORMANCE OF PRESTRESSED ANCHORAGE DEVICE ~71:Shandong Highway Bridge Construction Co.,Ltd., Room 1815, No. 14677, Jingshi Road, Lixia District, Jinan City, Shandong, 250014, People's Republic of China;Shandong University, No. 27, Shanda South Road, Jinan City, Shandong, 250109, People's Republic of China ~72: CUI, Liheng;HOU, Yahui;LI, Xuliang;WANG, Dongming;ZHANG, Feng~

2022/02179 ~ Complete ~54:SCREENING DEVICE ~71:METSO OUTOTEC FINLAND OY, PL 306 33101 TAMPERE, Finland ~72: TIMO LEINONEN~ 33:EP ~31:19193866.1 ~32:27/08/2019

2022/02140 ~ Complete ~54:TWO-STAGE LOGO IMAGE DETECTION METHOD AND SYSTEM BASED ON DEEP LEARNING ~71:Shandong Normal University, No. 88 Wenhua East Road, Lixia District, Jinan City, Shandong Province , 250014, People's Republic of China ~72: HOU, Qiang;HOU, Sujuan;JIA, Weikuan;MENG, Ye;WANG, Jing;ZHENG, Yuanjie~ 33:CN ~31:202110240268.2 ~32:04/03/2021

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2022/02174 ~ Complete ~54:METHOD FOR TREATING DISEASES BASED ON INTERFERON ~71:BIOSTEED GENE TRANSFORMATION TECH. CO., LTD., 9th Floor, 289 Wengjiao Road, Xinyang Industry Zone of Haicang, Xiamen, Fujian, 361028, People's Republic of China;XIAMEN AMOYTOP BIOTECH CO., LTD., No. 330 Wengjiao Road, Xinyang Industry Zone of Haicang Xiamen, Fujian, 361028, People's Republic of China ~72: JIEHUA ZHENG;LI SUN;LINGYING ZENG;LINZHONG ZHANG;LU ZHUANG;MEIHUA YANG;RUOYI HE;SHIYUAN WANG;TING ZHOU;WEIDONG ZHOU;XIAOJIN LIAO~ 33:CN ~31:201910660749.1 ~32:22/07/2019

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2022/02134 ~ Provisional ~54:TYRE EYE TECHNOLOGY ~71:Suleiman Ebrahim Akhalwaya, 64 St Jerome Avenue, Mayfair West, South Africa ~72: Suleiman Ebrahim Akhalwaya~ 33:ZA ~31:1 ~32:18/02/2022

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2022/02164 ~ Complete ~54:BOOM FOR AN AGRICULTUAL CROP SPRAYER AND METHOD OF MANUFACTURE ~71:AGCO DO BRASIL SOLUÇÕES AGRÍCOLAS LTDA, Avenida Bandeirantes, no 384 Ribeireo Preto, Brazil ~72: SOLIMAN, Marcos Pedrolo~ 33:GB ~31:1913473.3 ~32:18/09/2019

2022/02172 ~ Complete ~54:MOVEABLE OVERFLOW ~71:ARCELORMITTAL, 24-26, Boulevard d'Avranches, Luxembourg ~72: Amico SETTEFRATI;Bert VAN NIEUWENHUYZE;Freddy KREPS;Hubert SAINT-RAYMOND;Jose VEG;Kristof VAN DYCK;Woudhouh MEMNI~ 33:IB ~31:PCT/IB2019/057602 ~32:10/09/2019

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2022/02160 ~ Complete ~54:METHOD FOR PREPARING LITHIUM TRIETHYLBOROHYDRIDE TETRAHYDROFURAN SOLUTION ~71:ZHUANG, Yingjun, Specialized, Fined and Peculiar New Company, Fine Chemical Industry Park, Lanzhou New District, Lanzhou City, Gansu Province , 730300, People's Republic of China ~72: ZHUANG, Yingjun~

2022/02147 ~ Complete ~54:DEEP-SEA PRESSURE-RESISTANT CABIN MICRO-CRACK DAMAGE IDENTIFICATION SYSTEM AND QUANTITATIVE EVALUATION METHOD THEREOF ~71:Shanghai Maritime University, 1550 Haigang Avenue, Pudong New Area, Shanghai, 201306, People's Republic of China;Shanghai Ocean University, 999 Hucheng Huan Road, Pudong New Area, Shanghai, 201306, People's Republic of China ~72: CAO, Yu;CHU, Zhenhua;LUO, Ruilong;WANG, Fang;WU, Yu;YANG, Chao;ZHANG, Jinfei~

2022/02148 ~ Complete ~54:FEEDING BIRDCAGE CAPABLE OF AUTOMATICALLY CLEANING FEED IMPURITIES ~71:Nanjing Institute of Environmental Sciences, Ministry of Ecology and Environment, 8 Jiangwangmiao Street, Nanjing, Jiangsu Province, People's Republic of China ~72: Chen Shuifei;Cui Peng;Wang Le;Wu Yi;Yong Fan;Zhang Wenwen;Zhao Shengjun~

2022/02163 ~ Complete ~54:THERAPEUTIC CONJUGATE ~71:PORTON BIOPHARMA LIMITED, Manor Farm Road, Porton Down, United Kingdom ~72: GERVAIS, David~ 33:GB ~31:1912020.3 ~32:21/08/2019

2022/02137 ~ Complete ~54:WAIST BELT AND WAIST BELT LEASH INCLUDING SAME ~71:ROGZ (PROPRIETARY) LIMITED, Omarumba Park, 1 Kunene Crescent, Montagu Gardens, Milnerton, 7441, South Africa ~72: IRENÉ RAUBENHEIMER;PETER CAREL REX METELERKAMP~

2022/02142 ~ Complete ~54:METHOD AND SYSTEM FOR AUTOMATICALLY IDENTIFYING EVENT FLOODS ~71:China Institute of Water Resources and Hydropower Research, A-1, Fuxing Road, Haidian District, Beijing, 100038, People's Republic of China ~72: CHAI Fuxin;LI Kuang;LIANG Lili;LIU Kexin;LIU Shu;ZHU Jisheng~

2022/02169 ~ Complete ~54:A METHOD FOR PREPARING IVOSIDENIB AND AN INTERMEDIATE THEREOF ~71:Les Laboratoires Servier, 50 Rue Carnot, SURESNES CEDEX 92284, FRANCE, France ~72: SIZEMORE, Jacob Paul;VO, Nha Huu;ZHANG, Shijie~ 33:US ~31:62/884,480 ~32:08/08/2019

2022/02170 ~ Complete ~54:NOVEL SOLUBLE LIQUID COMPOSITIONS OF SAFLUFENACIL, METHOD OF PREPARATION AND USE THEREOF ~71:Adama Agan Ltd., P.O. Box 262, Northern Industrial Zone, ASHDOD 7710001, ISRAEL, Israel ~72: MELIKER, Daniel;NAHMOUD, Sergio;ZISERMAN, Lior~ 33:US ~31:62/891,902 ~32:26/08/2019

2022/02175 ~ Complete ~54:MEDICAL DEVICE PACKAGING AND RELATED METHODS ~71:REGENERON PHARMACEUTICALS, INC., 777 Old Saw Mill River Road, Tarrytown, New York, 10591, United States of America ~72: ANDREW COOK;VICTOR BRADFORD~ 33:US ~31:62/879,906 ~32:29/07/2019

2022/02176 ~ Complete ~54:ENZYMATIC RNA CAPPING METHOD ~71:NEW ENGLAND BIOLABS, INC, 240 County Road, Ipswich, Massachusetts, 01938, United States of America ~72: BIJOYITA ROY;G. BRETT ROBB;SIU-HONG CHAN~ 33:US ~31:62/890,821 ~32:23/08/2019;33:US ~31:PCT/US2020/047521 ~32:21/08/2020

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2022/02157 ~ Complete ~54:METHOD FOR PRODUCING EDIBLE MUSHROOM SUBSTRATE STICKS WITH PHRAGMITES AUSTRALIS STRAWS ~71:Jilin Agricultural University, No. 2888 Xincheng Street, Changchun City, Jilin Province , 130118, People's Republic of China;Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences, No. 4888, Shengbei Street, Changchun City, Jilin Province , 130102, People's Republic of China ~72: CHEN, Guoshuang;LI, Xiaoyu;LU, Lixin;MA, Xuehui;YAO, Fangjie~

2022/02166 ~ Complete ~54:SHORT SEGMENT GENERATION FOR USER ENGAGEMENT IN VOCAL CAPTURE APPLICATIONS ~71:Smule, Inc., 139 Townsend Street, Suite 300, SAN FRANCISCO 94107, CA, USA, United States of America ~72: COOK, Perry R.;MOLDOVER, Jon;SMITH, Jeffrey C.;STEINWEDEL, David~ 33:US ~31:62/891,412 ~32:25/08/2019

2022/02183 ~ Complete ~54:FLUID CONTAINER ~71:THOMPSON, Stewart, 12 Merchiston Grove, Strathmore, Victoria, 3041, Australia ~72: THOMPSON, Stewart~ 33:AU ~31:2019903458 ~32:17/09/2019

. - APPLIED ON 2022-02-22 -

2022/02195 ~ Complete ~54:CO-DOMINANT INDEL MARKERS FOR IDENTIFYING BURLEY TOBACCO AND USE THEREOF ~71:YUNNAN TOBACCO QUALITY SUPERVISION MONITORING STATION, No.41 of Yike Road, High-tech Development Zone, Kuming, Yunnan, People's Republic of China;Yunnan Academy of Tobacco Agricultural Sciences, No.33 of Yuantong Road, Kuming, Yunnan, People's Republic of China ~72: CAI,

Jieyun;CHEN, Dan;FANG, Dunhuang;GU, Jianlong;LI, Dan;LI, Haiyan;LIN, Zhonglong;LIU, Zhonghua;LONG, Jie;SUN, Haowei;TONG, Zhijun;WANG, Chunqiong;WEI, Jia;XIAO, Bingguang;ZHANG, Jiwu;ZHANG, Ke;ZHANG, Xiaowei~ 33:CN ~31:202210013453.2 ~32:06/01/2022

2022/02204 ~ Complete ~54:A SPECIAL WINE WITH BAYBERRY FLAVOR PREPARED BY A COST-SAVING WAY ~71:ZheJiang University ZhongYuan Institute, Building 7, No. 6, Changchun Road, High-tech Development Zone, Zhengzhou City, Henan , 450000, People's Republic of China ~72: CHEN, Jianle;CHEN, Shiguo;CHENG, Huan;PAN, Haibo;YE, Xingqian~

2022/02188 ~ Provisional ~54:EDU BOOK REVIEW ~71:Top Corner Enterprises (Pty) Ltd, 106 Jacobson Drive, Lynnwood Ridge, South Africa ~72: Top Corner Enterprises (Pty) Ltd~

2022/02194 ~ Complete ~54:OMNIDIRECTIONAL BISTABLE TRIBOELECTRIC NANOGENERATOR-BASED WAVE ENERGY HARVESTER ~71:Ocean University of China, No.238 Songling Road, Laoshan District, Qingdao City, Shandong Province, 266100, People's Republic of China ~72: Gao Wenbo;Li Yiran;Li Zihao;Qiao Longfei;Sun Guitao;Zhao Bo~

2022/02213 ~ Complete ~54:4D PRINTING METHOD BASED ON FRACTAL CURVE STRETCHABLE HEATING CIRCUIT PRINTING ~71:QINGDAO UNIVERSITY OF TECHNOLOGY, No.777, Jialingjiang East Road, Huangdao District, Qingdao City, Shandong Province, 266520, People's Republic of China ~72: LAN, Hongbo;LI, Hongke;LI, Zhenghao;ZHANG, Yuanfang;ZHU, Xiaoyang~

2022/02220 ~ Complete ~54:A METHOD TO DETECT FOREST COVER CHANGE USING THE SEVI ~71:Fuzhou University, 2 Wulongjiangbei Avenue, University Town, Fuzhou, Fujian, 350108, People's Republic of China ~72: Jiang Hong;Li Jian;Zhang Chunying~

2022/02228 ~ Complete ~54:A TRAINER FOR SIMULATING THORACOSCOPIC SURGERY ~71:SUINING CENTRAL HOSPITAL, No. 127 Desheng West Road, Chuanshan District, Suining City, People's Republic of China ~72: HU, Haiyang;LI, Heng;LIU, Tao;YANG, Li;YANG, Li;YU, Li;ZHONG, Chuan;ZHU, Yunhe~

2022/02229 ~ Complete ~54:PERK INHIBITING COMPOUNDS ~71:HIBERCELL, INC, 619 West 54th Street, New York, United States of America ~72: LI, An-Hu;MULVIHILL, Mark, J.;SURMAN, Matthew, David~ 33:US ~31:62/893,512 ~32:29/08/2019

2022/02234 ~ Complete ~54:SALT ~71:Nippon Shinyaku Co., Ltd., 14, Kisshoin Nishinosho Monguchicho, Minami-ku, KYOTO-SHI 6018550, KYOTO, JAPAN, Japan ~72: CROCCO, Domenico;KOKUBO, Yasushi;NAKAMICHI, Koji;YAMAMOTO, Toshitaka~ 33:JP ~31:2019-149945 ~32:19/08/2019

2022/02236 ~ Complete ~54:CROSS-FLOW WATER ELECTROLYSIS ~71:ThyssenKrupp Uhde Chlorine Engineers GmbH, Vosskuhle 38, DORTMUND 44141, GERMANY, Germany ~72: HOORMANN, Dirk;KOLBE, Jörg;KUHLMANN, Jens Wilhelm;LÜKE, Lukas;POLCYN, Gregor Damian~ 33:DE ~31:10 2019 123 858.7 ~32:05/09/2019

2022/02243 ~ Complete ~54:AQUEOUS PHARMACEUTICAL COMPOSITION OF ANTI-PD1 ANTIBODY PROLGOLIMAB AND THE USE THEREOF ~71:JOINT STOCK COMPANY "BIOCAD", Liter A, bld. 34, Svyazi st., Strelna, Petrodvortsoviy district, Russian Federation ~72: IAKOVLEV, Aleksandr Olegovich;KOZLOVA, Olesya Nikolaevna;LOMKOVA, Ekaterina Aleksandrovna;MOROZOV, Dmitry Valentinovich;SHITIKOVA, Viktoriia Olegovna;SHUSTOVA, Mariia Stanislavovna;TSUKUR, Alina Aleksandrovna~ 33:RU ~31:2019126511 ~32:22/08/2019

2022/02251 ~ Complete ~54:COMPOSITIONS AND METHODS FOR CONTROLLING PLANT GROWTH ~71:PLANTARC BIO LTD., 23b Hateena Street, Israel ~72: GRIMBERG, Noam;SHALITIN, Dror~ 33:US ~31:62/896,312 ~32:05/09/2019

2022/02185 ~ Provisional ~54:SECURITY APPARATUS ~71:DASRATH, Shaun Edward, 14 Klopper Avenue, Libradene, South Africa ~72: ALCOCK, Deane Garry;DASRATH, Shaun Edward~

2022/02200 ~ Complete ~54:A THERMOSTATIC WATER BATH DEVICE FOR PHYSICAL AND CHEMICAL EXPERIMENTS ~71:Inner Mongolia University of Technology, No.49, Aimin Road (North), Xincheng District, Hohhot, Inner Mongolia Autonomous Region, 010051, People's Republic of China ~72: Li Xuehua;Luo Yuhang;Ma Yingying~

2022/02210 ~ Complete ~54:RISK EARLY WARNING SYSTEM FOR INTENSIVE CARE UNIT ~71:XIANGYA HOSPITAL CENTRAL SOUTH UNIVERSITY, No.87 Xiangya Road, Kaifu District, Changsha, Hunan , 410008, People's Republic of China ~72: DING, Zhuofeng;LIU, Zhuoyi;SONG, Zongbin;ZHANG, Jie~ 33:CN ~31:202111338003.2 ~32:12/11/2021

2022/02211 ~ Complete ~54:METHOD FOR CONTROL STRAIN FIELD OF TWO-DIMENSIONAL ATOMIC LAYER MATERIAL ~71:Qingdao University of Science and Technology, No. 99, Songling Road, Laoshan District, Qingdao City, Shandong Province, 266061, People's Republic of China ~72: Wang Lei~

2022/02215 ~ Complete ~54:MULTIFUNCTIONAL COMPUTER DISPLAY PROTECTION DEVICE ~71:Shandong Labor Vocational and Technical College (Shandong Labor Technician College), No. 23266, Jingshi Road, Jinan City, Shandong Province, 250022, People's Republic of China ~72: LIANG, Jie;LIU, Yang;YANG, Shuodong~

2022/02218 ~ Complete ~54:FERULIC ACID DERIVATIVE CONTAINING EUGENOL (ISOEUGENOL) AS WELL AS PREPARATION METHOD AND APPLICATION THEREOF ~71:Guizhou University, Guizhou University, Huaxi District, Guiyang City, Guizhou Province, 550025, People's Republic of China ~72: GAN, Xiuhai;LIU, Dan;WANG, Zhengxing;YUAN, Ting;ZENG, Huanan~

2022/02226 ~ Complete ~54:PREPARATION METHOD OF BARLEY GREEN LEAF TEA ~71:INSTITUTE OF CROP RESOURCES, HEILONGJIANG ACADEMY OF AGRICULTURAL SCIENCES, No. 368, Xuefu Road, Nangang District, Harbin City, People's Republic of China ~72: DIAO, Henan;DIAO, Yanling;GONG, Xiujie;HAO, Yubo;JIANG, Yubo;LI, Dongmei;LIU, Guangyang;LIU, Huiying;LIU, Wenlin;LV, Guoyi;SHANG, Jiawei;SUN, Dan;SUN, Yan;TANG, Jingquan;WANG, Xiangyu;WANG, Xiujun;YU, Yang;ZHANG, Lili;ZHAO, Yang~

2022/02198 ~ Complete ~54:METHOD FOR GAS EXTRACTION AND SPONTANEOUS COMBUSTION PREVENTION IN UNDERGROUND COAL MINE ~71:China University of Mining and Technology, School of Mines, China University of Mining and Technology (Nanhu Campus), No.1 University Road, Tongshan District, Xuzhou City, Jiangsu Province, People's Republic of China ~72: Li Jinghua;Li Mingxue;Tang Jun;Tu Hongsheng;Tu Shihao;Zhang Lei~

2022/02214 ~ Complete ~54:RIVER SEDIMENT CONVENIENT COLLECTOR ~71:Tianjin Research Institute for Water Transport Engineering, M.O.T., No. 2618, Xingang 2nd Road, Tanggu, Binhai New Area, Tianjin, 300456, People's Republic of China ~72: Huang Faming;Liu Jiayi;Ma Dianguang;Wang Changhong;Wang Guanglu;Yu Guangnian;Zhao Jiaqiang~

2022/02216 ~ Complete ~54:FERULIC ACID DERIVATIVE CONTAINING AMIDES AS WELL AS PREPARATION METHOD AND APPLICATION THEREOF ~71:Guizhou University, Guizhou University, Huaxi

District, Guiyang City, Guizhou Province, 550025, People's Republic of China ~72: GAN, Xiuhai;LIU, Dan;WANG, Zhengxing;YUAN, Ting;ZENG, Huanan~

2022/02225 ~ Complete ~54:AN IOT BASED SMART ENTRANCE SYSTEMS AND A METHOD THEREOF ~71:BOSE, Dr. Rajesh, 398, Ramkrishnapur Road, Barasat, Near Jagadighata Market, Kolkata,, India;GUPTA, Sanjana, 398, Ramkrishnapur Road, Barasat, Near Jagadighata Market, Kolkata,, India;KARFORMA, Dr. Sunil, Dept. of Computer Science, The University of Burdwan Burdwan,, India;KUMARI, Anchal, 398, Ramkrishnapur Road, Barasat, Near Jagadighata Market, Kolkata,, India;NAG, Soham, 398, Ramkrishnapur Road, Barasat, Near Jagadighata Market, Kolkata,, India;NANDI, Subhadip, 398, Ramkrishnapur Road, Barasat, Near Jagadighata Market, Kolkata,, India;ROY, Dr. Sandip, 398, Ramkrishnapur Road, Barasat, Near Jagadighata Market, Kolkata,, India;ROY, Rintu, 398, Ramkrishnapur Road, Barasat, Near Jagadighata Market, Kolkata,, India;SAHA, Debasmita, 398, Ramkrishnapur Road, Barasat, Near Jagadighata Market, Kolkata,, India;SINHA, Rishi, 398, Ramkrishnapur Road, Barasat, Near Jagadighata Market, Kolkata,, India ~72: BOSE, Dr. Rajesh;GUPTA, Sanjana;KARFORMA, Dr. Sunil;KUMARI, Anchal;NAG, Soham;NANDI, Subhadip;ROY, Dr. Sandip;ROY, Rintu;SAHA, Debasmita;SINHA, Rishi~

2022/02241 ~ Complete ~54:PLANT SUPPLEMENT DELIVERY ASSEMBLIES, PLANT SUPPLEMENT DELIVERY ASSEMBLY INSERTS, AND METHODS FOR DELIVERING PLANT SUPPLEMENTS ~71:Battelle Memorial Institute, Dept. K1-53, P.O. Box 999, RICHLAND 99352, WA, USA, United States of America ~72: CLELLAND, Dustin T.;OWSLEY Jr., Stanley L.;SIMMONS, Kevin L.~ 33:US ~31:62/906,486 ~32:26/09/2019

2022/02247 ~ Complete ~54:UNIVERSAL DONOR CELLS ~71:CRISPR THERAPEUTICS AG, Baarerstrasse 14, 6300, Zug, Switzerland ~72: ALIREZA REZANIA;REBECA RAMOS-ZAYAS~ 33:US ~31:62/896,473 ~32:05/09/2019;33:US ~31:62/979,771 ~32:21/02/2020

2022/02186 ~ Provisional ~54:A DISPLACMENT MEASURING DEVICE FOR INSTALLATION IN A ROCK HOLE ~71:INNOVATIVE MINING PRODUCTS (PTY) LTD, 109 Adcock Ingram Avenue, Aeroton, South Africa ~72: ABREU, RUAL;KNOX, GREIG;PASTORINO, PAOLO~

2022/02197 ~ Complete ~54:EROSION SHIELD MECHANISM OF THROTTLE MANIFOLD ~71:Jiangsu Yidelong Petroleum Machinery Co., Ltd., 818 West Mingzhu Road, Jianhu County, Yancheng, Jiangsu Province, 224700, People's Republic of China ~72: XU, Jinjie;XU, Zhonghui~ 33:CN ~31:202110307984.8 ~32:23/03/2021

2022/02201 ~ Complete ~54:HIGHLY-ALIGNED HIGH-STRENGTH BACTERIAL CELLULOSE COMPOSITE MEMBRANE AS WELL AS PREPARATION AND APPLICATION ~71:Huazhong University of Science and Technology, Luoyu Road 1037, Wuhan, 430074, People's Republic of China ~72: MAO, Lin;QI, Fuyu;SHI, Zhijun;WANG, Li;YANG, Guang~ 33:CN ~31:202110314263.X ~32:24/03/2021

2022/02202 ~ Complete ~54:SCANNING METHOD, DEVICE AND SYSTEM BASED ON TOTAL STATION ~71:China Railway Construction Corporation (International) Limited, Part of the 1st floor, 2nd-4th Floor and 7th Floor, China Railway Construction Scientific Research Building, No. 40 Fuxing Road, Haidian District, Beijing, 100040, People's Republic of China ~72: Chen Lei;Huang Taorui;Li Bai;Lin Meikun;Liu Dawei;Ma Gaofeng;Shen Jiayong;Wu Jingjing;Zhang Jian;Zheng Tianli~ 33:CN ~31:202111054245.9 ~32:09/09/2021

2022/02209 ~ Complete ~54:METHOD FOR CONSTRUCTING THREE-DIMENSIONAL ISLAND LANDSCAPE INDEXES ~71:First Institute of Oceanography, Ministry of Natural Resources, No. 6 Xianxialing Road, Laoshan District, Qingdao, Shandong, 266061, People's Republic of China ~72: GUO, Zhen;WANG, Jing;WANG, Jue;XU, Hao;ZHANG, Zhiwei~

2022/02221 ~ Complete ~54:WATER-SAVING IRRIGATION METHOD FOR LARGE-SCALE PLANTING OF ECOLOGICAL PROTECTION PLANTS IN ARID DESERT ~71:XINJIANG INSTITUTE OF ECOLOGY AND

GEOGRAPHY CHINESE ACADEMY OF SCIENCES, No. 3, No. 40, Beijing South Road, Urumqi, Xinjiang, 830011, People's Republic of China ~72: GUO, Jingheng;LI, Changjun;LIU, Bo;MU, Guijin;ZENG, Fanjiang;ZHANG, Bo~

2022/02230 ~ Complete ~54:PERK INHIBITING PYRROLOPYRIMIDINE COMPOUNDS ~71:HIBERCELL, INC, 619 West 54th Street, New York, United States of America ~72: LI, An-Hu;MULVIHILL, Mark, J.;SURMAN, Matthew, David~ 33:US ~31:62/893,528 ~32:29/08/2019

2022/02235 ~ Complete ~54:METHODS OF PRODUCING ANTIBODY COMPOSITIONS ~71:Amgen Inc., One Amgen Center Drive, THOUSAND OAKS 91320-1799, CA, USA, United States of America ~72: DUFF, Robert J.;HUANG, Zhe;RAMIREZ, Jose G.~ 33:US ~31:62/906,709 ~32:26/09/2019

2022/02242 ~ Complete ~54:ISOLATED MODIFIED VP1 CAPSID PROTEIN OF AAV5 ~71:LIMITED LIABILITY COMPANY “ANABION”, Svyazi str., bld. 34, lit. A, part of room 1H: room N 117 Saint Petersburg, Russian Federation ~72: GERSHOVICH, Pavel Mikhailovich;IURLOVA, Elena Victorovna;KARABELSKII, Aleksandr Vladimirovich;MADERA, Dmitrij Aleksandrovich;MOROZOV, Dmitry Valentinovich;PEREPELKINA, Mariya Pavlovna;PROKOFYEV, Alexandr Vladimirovich;STRELKOVA, Anna Nikolaevna~ 33:RU ~31:2019126509 ~32:22/08/2019

2022/02237 ~ Complete ~54:NOVEL HETEROARYL-TRIAZOLE COMPOUNDS AS PESTICIDES ~71:Bayer Aktiengesellschaft, Kaiser-Wilhelm-Allee 1, LEVERKUSEN 51373, GERMANY, Germany ~72: ARLT, Alexander;CANCHO GRANDE, Yolanda;DAMIJONAITIS, Arunas Jonas;EBBINGHAUS-KINTSCHER, Ulrich;FÜßLEIN, Martin;HEISLER, Iring;JESCHKE, Peter;LÖSEL, Peter;LINKA, Marc;MANDZHULO, Oleksandr;SCHWARZ, Hans-Georg;TURBERG, Andreas~ 33:EP ~31:19187891.7 ~32:23/07/2019;33:EP ~31:19202312.5 ~32:09/10/2019

2022/02239 ~ Complete ~54:LIVESTOCK AND FEEDLOT DATA COLLECTION AND PROCESSING USING UHF-BAND INTERROGATION OF RADIO FREQUENCY IDENTIFICATION TAGS FOR FEEDLOT ARRIVAL AND RISK ASSESSMENT ~71:Performance Livestock Analytics, Inc., 2321 N. Loop Drive, AMES 50010, IA, USA, United States of America ~72: BALSLEY, Dustin C.;GRAY, Paul;KUPER, Dane T.;SEXTEN, William Justin~ 33:US ~31:16/569,503 ~32:12/09/2019

2022/02245 ~ Complete ~54:QUINOLINE DERIVATIVES AS PROTEIN KINASE INHIBITORS ~71:B.C.I. PHARMA, Avenue de l'Hôpital 11, 4000, Liège, Belgium ~72: CLAIRE AMIABLE;DOMINIQUE SURLERAUX;FRANÇOIS-XAVIER DIEUDONNÉ;REMI GUILLON;SABRINA DEROO;THIERRY LOUAT~ 33:EP ~31:19190898.7 ~32:08/08/2019

2022/02189 ~ Provisional ~54:JIGGING PROCESS ~71:RECORD MINING SUPPORT (PTY) LTD, 19 Bokmakierie Street, South Africa ~72: VAN NIEKERK, Abraham Jacobus~

2022/02191 ~ Provisional ~54:BLASTING ~71:AECI MINING LIMITED, AECI Place, 23/24 The Woodlands, Woodlands Drive, Woodmead,, SANDTON 2191, SOUTH AFRICA, South Africa ~72: BEZUIDENHOUT, Hendrik Cornelius;TSIKOSIE, Tondani Carol;VAN DEN BERG, Phillippus Rudolph~

2022/02212 ~ Complete ~54:C-ARM MACHINE IMAGE INTENSITIFER END LASER LOCATOR ~71:Sanmen People's Hospital, No. 171, Renmin Road, Haiyou Street, Sanmen County, Taizhou City, Zhejiang, 317100, People's Republic of China ~72: DENG, Qinglin;FANG, Zejun;HONG, Zhenghua;JIN, Peng;LU, Xiao;MEI, Haibo;WANG, Jiawen;YANG, Jiang;YANG, Jun;YAO, Xin;ZHOU, Tingjie~

2022/02227 ~ Complete ~54:AN AUTOMATICALLY ADJUSTABLE BONE BRACE FOR THORACIC SURGERY ~71:SUINING CENTRAL HOSPITAL, No. 127 Desheng West Road, Chuanshan District, Suining City, People's

Republic of China ~72: GUO, Haiyang;QIN, Chao;YAN, Hang;YANG, Li;YU, Li;YU, Qian;ZHANG, Jun;ZHOU, Haining~

2022/02231 ~ Complete ~54:OPTIMIZATION METHOD OF SULFIDE NANOCRYSTALS AND SN-S-CO NANOCRYSTALS AND OPTIMIZED PRODUCTS THEREOF ~71:NanJing XiaoZhuang University, 3601 hongjing street, jiangning district, Nanjing city, Jiangsu, 211171, People's Republic of China ~72: Chen Changyun;Cui Yujia;Liu Guangxiang;Mu Xueqin;Nie Haonan;Xu Dingtian;Yan Senlin~ 33:CN ~31:202011134054.9 ~32:21/10/2020

2022/02187 ~ Provisional ~54:ZIF BATTERY ~71:Thomas S Le Grange, 5 Lynndawn, 491 Dawn Ave, South Africa ~72: Thomas S Le Grange~

2022/02196 ~ Complete ~54:METHOD FOR CONTROLLING PARTIAL TOBACCO LEAVES TO RIPEN UNIFORMLY ~71:Sichuan Agricultural University, No.211, Huimin Road, Wenjiang District, Chengdu City, Sichuan Province, 611130, People's Republic of China;Sichuan Tobacco Company Yibin Company, No. 83, Minjiang North Road, Cuiping District, Yibin City, Sichuan Province, 644009, People's Republic of China ~72: Chen Foyuan;Guo Chong;Guo Shiping;Han Wei;Liu Lei;Liu Yajie;Yan Min;Yang Guowei;Yang Yang;Yang Yide;Zeng Shuhua~ 33:CN ~31:202111621415.7 ~32:28/12/2021

2022/02207 ~ Complete ~54:COMPOUND LACTIC ACID BACTERIA PREPARATION AND USE THEREOF, AND COMPOUND DEMOLDING AGENT AND USE THEREOF ~71:Qingdao Agricultural University, No. 700, Changcheng Road, Chengyang District, Qingdao City, Shandong Province, 266109, People's Republic of China;Shandong Provincial Animal Husbandry General Station, No. 4566, Tangye West Road, Licheng District, Jinan City, Shandong Province, 250010, People's Republic of China;Shandong Sinder Technology Co., Ltd., No. 195, Shungeng Road, Zhucheng City, Weifang City, Shandong Province, 262200, People's Republic of China ~72: CHEN, Fu;DIAO, Yanan;GUO, Yixuan;LIN, Yingting;QIAO, Yanliang;TAO, Jiashu;XU, Jindong;ZHANG, Beibei;ZHU, Fenghua;ZHU, Lianqin~

2022/02244 ~ Complete ~54:FORMULATIONS OF BENZAZEPINE CONJUGATES AND USES THEREOF ~71:SILVERBACK THERAPEUTICS, INC., 500 Fairview Avenue North, Suite 600, Seattle, Washington, 98109, United States of America ~72: SATEESH NATARAJAN;SEAN WESLEY SMITH~ 33:US ~31:62/887,335 ~32:15/08/2019

2022/02203 ~ Complete ~54:DRAIN BALL VALVE FOR HIGH TEMPERATURE AND HIGH PRESSURE POWER STATION ~71:OVIKO GROUP CO.,LTD., Heyi Village, Oubei Town, Yongjia County, Wenzhou City, Zhejiang Province, 325102, People's Republic of China ~72: CHEN, Changben;HU, Jiantian;MU, Zebing;SHAO, Jiahui;SHAO, Liping;WANG, Yexian;XU, Linjuan;YE, Kaiqiang;YE, Xianbin~ 33:CN ~31:202111174596.3 ~32:09/10/2021

2022/02208 ~ Complete ~54:METHOD OF INACTIVATING A VIRUS USING A GLUTARALDEHYDE COMPOSITION WITH POLYMER ~71:MARTIN, ANTONIETTA, 26 Totius Road, Amorosa, South Africa ~72: MARTIN, ANTONIETTA~ 33:ZA ~31:2021/01103 ~32:18/02/2021;33:ZA ~31:2021/05703 ~32:12/08/2021

2022/02998 ~ Provisional ~54:COVID-19 URINE TESTER ~71:MICHEL KEFENTSWE MACHETE, 14751 TJABADI STREET, MAMELODI EAST, GAUTENG, South Africa ~72: MICHEL KEFENTSWE MACHETE ~

2022/02238 ~ Complete ~54:NOVEL HETEROARYL-TRIAZOLE COMPOUNDS AS PESTICIDES ~71:Bayer Aktiengesellschaft, Kaiser-Wilhelm-Allee 1, LEVERKUSEN 51373, GERMANY, Germany ~72: ARLT, Alexander;CANCHO GRANDE, Yolanda;DAMIJONAITIS, Arunas Jonas;EBBINGHAUS-KINTSCHER, Ulrich;FÜSSLEIN, Martin;HEISLER, Iring;JESCHKE, Peter;LÖSEL, Peter;LINKA, Marc;MANDZHULO,

Oleksandr;SCHWARZ, Hans-Georg;TURBERG, Andreas~ 33:EP ~31:19187899.0 ~32:23/07/2019;33:EP ~31:19202319.0 ~32:09/10/2019

2022/02240 ~ Complete ~54:MONITORING GROUND-ENGAGING TOOL, SYSTEM, AND METHODS FOR EARTH WORKING EQUIPMENT ~71:ESCO Group LLC, 2141 NW 25th Avenue, PORTLAND 97210-2578, OR, USA, United States of America ~72: CARPENTER, Christopher M.;CLARKE, Rodney K.;MORRIS, Xudan X.~ 33:US ~31:62/894,635 ~32:30/08/2019

2022/02246 ~ Complete ~54:PYRIDAZINE COMPOUND AND HERBICIDE ~71:NIPPON SODA CO., LTD., 2-1, Ohtemachi 2-chome, Chiyoda-ku, Tokyo, 1008165, Japan ~72: KAZUSHIGE KATO;KEN MIHARA;YOJI IKEDA;YUKINA TAKI~ 33:JP ~31:2019-174532 ~32:25/09/2019

2022/02248 ~ Complete ~54:CHARACTERIZATION OF GENE THERAPY VIRAL PARTICLES USING SIZE EXCLUSION CHROMATOGRAPHY AND MULTI-ANGLE LIGHT SCATTERING TECHNOLOGIES ~71:BIOMARIN PHARMACEUTICAL INC., 105 Digital Drive, Novato, California, 94949, United States of America ~72: GEOFFREY YEHUDA BERGUIG;NICOLE LOUISE MCINTOSH;VIKAS BHAT~ 33:US ~31:62/907,509 ~32:27/09/2019;33:US ~31:63/043,571 ~32:24/06/2020

2022/02250 ~ Complete ~54:FIXTATION DEVICE AND INSTALLATION METHOD ~71:SUSTAINABLE MARINE ENERGY LIMITED, La Belle Esperance The Shore, United Kingdom ~72: CRESSWELL, Nicholas;HUNT, Andrew~ 33:GB ~31:1911535.1 ~32:12/08/2019;33:GB ~31:1911538.5 ~32:12/08/2019

2022/02327 ~ Provisional ~54:ARTIFICIAL INTELLIGENCE EXPERT SYSTEM HYPERSONIC DRONE. ~71:Ahmed Waseef Saib, 24 Park Avenue, Tongaat Beach, Desainager, South Africa ~72: Ahmed Waseef Saib~

2022/02223 ~ Complete ~54:A LOADING-HAULING-DUMPING (LHD) MACHINE ~71:YANTAI XINGYE MACHINERY CO., LTD., No. 186 Tianhua Street, Muping District, People's Republic of China ~72: Lin, Zhan;Shuai, Sun;Xi, Sui;Yunlong, Wang;Ziqing, Sui~ 33:CN ~31:202121991533.2 ~32:23/08/2021

2022/02233 ~ Complete ~54:CONTAINER CARRIER ~71:Illinois Tool Works Inc., 155 Harlem Avenue, GLENVIEW 60025, IL, USA, United States of America ~72: SAMARAS, Christopher J.;SLOVIK, Rachell L.~ 33:US ~31:62/925,068 ~32:23/10/2019

2022/02190 ~ Provisional ~54:JIGGING PROCESS ~71:RECORD MINING SUPPORT (PTY) LTD, 19 Bokmakierie Street, South Africa ~72: VAN NIEKERK, Abraham Jacobus~

2022/02199 ~ Complete ~54:CLEANING AND DISINFECTING DEVICE FOR ORAL MEDICAL INSTRUMENTS ~71:North China University of Science and Technology, 21 Bohai Avenue, Caofeidian new town, Tangshan City, Hebei Province, People's Republic of China ~72: Bai Yuhong;Xu Bin~

2022/02205 ~ Complete ~54:COBALT-BASED MOFS-DERIVED HOLLOW SPHERICAL CO9S8/NI3S4 HETEROJUNCTION MATERIAL, AND PREPARATION METHOD AND APPLICATION THEREOF ~71:Qingdao Meigao Group Co., Ltd., No. 28 Shuangyuan Road, Chengyang District, Qingdao, Shandong , 266000, People's Republic of China;Qingdao University of Science and Technology, No. 53, Zhengzhou Road, Shibei District, Qingdao, Shandong, 266045, People's Republic of China ~72: LI, Bin;LI, Binjie;WANG, Lei;XIAO, Zhenyu;ZHANG, Jiaxin~ 33:CN ~31:202110532376.7 ~32:17/05/2021

2022/02217 ~ Complete ~54:NOVEL STREET LAMP LIGHTING DEVICE CAPABLE OF GENERATING WIND POWER BASED ON VEHICLE TRAFFIC ~71:Qingdao University of Science and Technology, No. 99, Songling Road, Laoshan District, Qingdao City, Shandong Province, 266000, People's Republic of China ~72: LI, Junying;LIU, Jie;WANG, Ruocheng;ZHANG, Lin~ 33:CN ~31:202110544380.5 ~32:19/05/2021

2022/02222 ~ Complete ~54:A CONTAINER ~71:MPACT LIMITED, 4th Floor, 3 Melrose Boulevard, Melrose Arch, Johannesburg, Gauteng, 2196, South Africa ~72: EDZARD FREDERICK ALLEMANN~ 33:ZA ~31:2021/01159 ~32:22/02/2021

2022/02206 ~ Complete ~54:CERAMIC PHOTO-CURING THREE DIMENSIONAL (3D) PRINTER BASED ON ULTRASONIC ASSISTANCE AND PRINTING METHOD ~71:Dongguan Polytechnic, No.3, Daxue Rd., Songshan Lake High-tech Industrial Development Zone, Dongguan City, Guangdong Province, 523808, People's Republic of China;Dongguan University of Technology, No.1, Daxue Rd., Songshan Lake, Dongguan, Guangdong, 523808, People's Republic of China ~72: CHEN, Shenggui;LI, Longgen;WANG, Boqun;ZHOU, Danni~

2022/02219 ~ Complete ~54:LIPOSOME MIXTURE-COATED AFRICAN SWINE FEVER VIRUS (ASFV) MRNA VACCINE AND PREPARATION METHOD THEREOF ~71:Sichuan Agricultural University, No. 46 Xinkang Road, Yucheng District, Ya'an City, Sichuan Province, 625014, People's Republic of China;Sichuan Xinxingao Biotechnology Co., Ltd., No. 17, Huangjin Road, Liucheng, Wenjiang District, Chengdu City, Sichuan Province, 611100, People's Republic of China ~72: DENG, Huidan;LI, Fei;LI, Fengqin;XU, Zhiwen;YUAN, Xiaodong;ZHU, Ling~ 33:CN ~31:202111637583.5 ~32:29/12/2021

2022/02224 ~ Complete ~54:A NOZZLE ~71:Afri-Tech Mining Supplies (Pty) Limited, 25 Louis Friedman Street, Unit 13, Factoria Industrial Estate, Factoria, KRUGERSDORP 1739, SOUTH AFRICA, South Africa ~72: Richard, ARENDS~ 33:ZA ~31:2021/01414 ~32:02/03/2021

2022/02232 ~ Complete ~54:BIOLOGICAL FLUID TEST DEVICE, IN PARTICULAR A SALIVA TEST DEVICE ~71:TODA PHARMA, Bâtement B 2 rue du Rhin, Napoléon, Strasbourg, 67000, France ~72: BERROS, Yossi~ 33:FR ~31:FR1909663 ~32:03/09/2019

2022/02249 ~ Complete ~54:SOLID FORMS OF N-TERT-BUTYL-4[[2-(5-CHLORO-2-HYDROXY-PHENYL)ACETYL]AMINO]PYRIDINE-2-CARBOXAMIDE ~71:TMEM16A LIMITED, 6 Falcon Way, Shire Park, Welwyn Garden City, England, AL7 1TW, United Kingdom ~72: ROBERT MELLING;STEPHEN COLLINGWOOD~ 33:GB ~31:1910664.0 ~32:25/07/2019

. - APPLIED ON 2022-02-23 -

2022/02271 ~ Complete ~54:LAMP BOX FABRIC ~71:Weifang Hengcai Digital Photo Materials Co.,Ltd, East of Yishan Road (500 Meters South of Yingzi Village), Dongcheng Street Office, Linqu County, Weifang City, Shandong Province, 262600, People's Republic of China ~72: GENG, Pengfei;GONG, Xinjian;LI, Zhigang;PANG, Xinchang;WANG, Xin;WANG, Yongzhao~

2022/02275 ~ Complete ~54:METHOD FOR PREPARING HIGH-PURITY MAGNESIUM OXIDE FROM MAGNESIUM SULFATE SUBTYPE SALT LAKE BRINE AS RAW MATERIAL ~71:SDIC XINJIANG LUOBUPO POTASH CO.,LTD, No. 68, Jianshe West Road, Yizhou District, Hami City, Xinjiang, 839000, People's Republic of China ~72: DONG, Guangfeng;LEI, Guangyuan;LI, Jingfang;LI, Junliang;LI, Shoujiang;LU, Liling;MA, Songliang;TANG, Meijing;YANG, Yuming;YOUNUSI Zulikai'er~

2022/02286 ~ Complete ~54:TRIAXIAL TEST APPARATUS FOR RHEOLOGICAL DISTURBANCE EFFECT OF ROCK ~71:Henan University of Urban Construction, Henan University of Urban Construction, Longxiang Avenue, Xincheng District, Pingdingshan City, Henan Province, 467036, People's Republic of China ~72: BAI, Zhe;GE, Bingwei;GUO, Lulu;LI, Shuai;ZHAI, Juyun;ZHANG, Shuo;ZHENG, Chao~

2022/02265 ~ Complete ~54:FOREIGN OBJECT INTRUSION DETECTING SYSTEM FOR ROAD TRAFFIC BASED ON DEEP LEARNING AND BACKGROUND SUBTRACTION ~71:ANHUI UNIVERSITY OF SCIENCE

AND TECHNOLOGY, No. 168, Taifeng Road, Huainan City, Anhui Province, 232001, People's Republic of China ~72: JIANG, Feng;LIANG, Xingzhu;LIU, Huilin;LIU, Nan;WEI, Huazhang~

2022/02302 ~ Complete ~54:NEUROTOXIN COMPOSITIONS FOR USE IN TREATING HEADACHE ~71:AEON BIOPHARMA, INC., 5 PARK PLAZA, SUITE 1750 IRVINE, CA 92614, USA, United States of America ~72: BLUMENFELD, Andrew, M.;BROOKS, Gregory, F.~ 33:US ~31:62/894,540 ~32:30/08/2019;33:US ~31:62/950,775 ~32:19/12/2019;33:US ~31:63/011,168 ~32:16/04/2020;33:US ~31:63/029,304 ~32:22/05/2020

2022/02314 ~ Complete ~54:SYSTEMS AND METHODS FOR ALTERING ROTATION OF A SOLAR ROTATIONAL MANUFACTURING SYSTEM ~71:DEICK, Nicholas Peter, PO Box 1480, NIPOMO 93444, CA, USA, United States of America;VON KRIES, Karl, 1500 Main Street, Suite 2700, SPRINGFIELD 01115, MA, USA, United States of America ~72: DEICK, Nicholas Peter;VON KRIES, Karl~ 33:US ~31:16/285,127 ~32:25/02/2019

2022/02308 ~ Complete ~54:METHOD FOR SCHEDULING RETRANSMISSIONS FOR CONFIGURED GRANTS IN NR-UNLICENSED ~71:NOKIA TECHNOLOGIES OY, KARAKAARI 7, 02610 ESPOO, FINLAND, Finland ~72: LUNTTILA, Timo;ROSA, Claudio;SCHOBER, Karol~

2022/02323 ~ Complete ~54:ROTATING SUSPENSION POINT FOR USE WITH CONCRETE ANCHORS ~71:BRANDSAFWAY SERVICES, LLC, 1325 Cobb International Dr., Suite A-1, Kennesaw, Georgia, 30152, United States of America ~72: MATHIEU GRUMBERG~ 33:US ~31:62/882,378 ~32:02/08/2019

2022/02255 ~ Provisional ~54:FIRE SAFETY ~71:MALAN, Melt, 265 Auriga Street, Waterkloof Ridge, South Africa ~72: MALAN, Melt~

2022/02268 ~ Complete ~54:METHOD FOR IDENTIFYING MEDICINAL MATERIAL TETRASTIGMA HEMSLEYANUM DIELS ET GILG BASED ON POLYAMIDE THIN-LAYER CHROMATOGRAPHY ~71:TONGDE HOSPITAL OF ZHEJIANG PROVINCE, No.234, Gucui Road, Xihu District, Hangzhou, Zhejiang, 310012, People's Republic of China ~72: LI, Hongyu;SHOU, Dan;WANG, Nani;WU, Renjie;XU, Pingcui;YU, Zhongming;ZHANG, Hongxin~

2022/02273 ~ Complete ~54:RURAL SEWAGE TREATMENT METHOD ~71:CHONGQING ARCHITECTURAL DESIGN INSTITUTE CO., LTD., No.31, Renhe Road, Yuzhong District , Chongqing , 400015, People's Republic of China;Zunyi Normal University, Zunyi Normal University, Middle of Ping’an Avenue, Xinpu District, Zunyi, Guizhou, 563006, People's Republic of China ~72: GAO, Zhixi;HE, Li;TAN, Tao;ZENG, Boping~

2022/02325 ~ Complete ~54:SOLID STATE FORMS OF (S)-2-(((S)-6,8-DIFLUORO-1,2,3,4-TETRAHYDRONAPHTHALEN-2-YL)AMINO)-N-(1-(2-METHYL-1-(NEOPENTYLAMINO)PROPAN-2-YL)-1H-IMIDAZOL-4-YL)PENTANAMIDE AND USES THEREOF ~71:PFIZER INC., 235 East 42nd Street, New York, New York, 10017, United States of America ~72: EKATERINA ALBERT;ELAINE GREER;EMILY RIGSBEE;MARK MALONEY;SHU YU;STEPHEN ANDERSON~

2022/02292 ~ Complete ~54:SEA URCHIN-SHAPED SILICON-CARBON COMPOSITE MATERIAL AS WELL AS PREPARATION METHOD AND APPLICATION THEREOF ~71:QINGDAO UNIVERSITY OF SCIENCE AND TECHNOLOGY, 53 Zhengzhou Road, Qingdao City, People's Republic of China ~72: LI, Bin;LIN, Haifeng;MA, Yiru;WANG, Lei;XU, Guangrui;ZHANG, Xinghao~ 33:CN ~31:202111386379.0 ~32:22/11/2021

2022/02305 ~ Complete ~54:EXTRACTION OF ALIPHATIC ALCOHOLS ~71:EVONIK OPERATIONS GMBH, RELLINGHAUSER STRASSE 1-11, 45128 ESSEN, GERMANY, Germany ~72: HAAS, Thomas;RICHTER, Christian~ 33:EP ~31:19188881.7 ~32:29/07/2019

2022/02313 ~ Complete ~54:4-(IMIDAZO[1,2-A]PYRIDIN-3-YL) -PYRIMIDINE DERIVATIVES ~71:Merck Patent GmbH, Frankfurter Strasse 250, DARMSTADT 64293 , GERMANY, Germany ~72: BLUM, Andreas;BUCHSTALLER, Hans-Peter;DORSCH, Dieter~ 33:EP ~31:19188031.9 ~32:24/07/2019

2022/02263 ~ Complete ~54:METHOD FOR IDENTIFYING WINTER JUJUBE DAMAGE AND ELIMINATING INFERIOR JUJUBE BASED ON CONVOLUTIONAL NEURAL NETWORK ~71:Qingdao University of Technology, No. 777, Jialing River Road, Huangdao District, Qingdao City, Shandong Province, People's Republic of China ~72: Che Qinglun;Li Yang;Liang Siqi;Liu Yuying;Lu Jinkai;Wang Yuxuan;Xu Huiqun;Zhang Jianjun~

2022/02264 ~ Complete ~54:TUNNEL GRAVITY METHOD FOR DETERMINING DEEP EXTENSION OF LOW-DENSITY VERTICAL ORE BODY ~71:Kunming University of Science and Technology, No. 253, Xuefu Road, Wuhua District, Kunming City, Yunnan Province, 650093, People's Republic of China ~72: HAN, Runsheng;LI, Wenyao;WANG, Jiyu~ 33:CN ~31:202110209263.3 ~32:25/02/2021

2022/02266 ~ Complete ~54:METHOD FOR REALIZING AERATION AND OXYGENATION BY UTILIZING NATURAL WIND ENERGY TO LIFT WATER TO DRIVE EXTERNAL CIRCULATION OF WATER BODY ~71:CHANGJIANG WATER RESOURCES PROTECTION INSTITUTE, No. 515 Qintai Avenue, Hanyang District, Wuhan City, Hubei Province, 430051, People's Republic of China ~72: JIA, Haiyan;LI, Haiyan;LI, Quanhong;WANG, Chao;XIN, Xiaokang;XU, Jianfeng;YIN, Wei~

2022/02270 ~ Complete ~54:METHOD FOR PREPARING HIGH-CONTENT SLUDGE CERAMSITE ~71:City College of Dongguan University of Technology, No. 1, Wenchang Road, Liaobu Town, Dongguan City, Guangdong Province , 523419, People's Republic of China ~72: CHENG, Xingxing;FANG, Weicheng;SUN, Changrong~

2022/02272 ~ Complete ~54:TREATMENT METHOD OF COAL RUST WATER ~71:CHONGQING ARCHITECTURAL DESIGN INSTITUTE CO., LTD., No.31, Renhe Road, Yuzhong District, Chongqing, 400015, People's Republic of China;Zunyi Normal University, Zunyi Normal University, Middle of Ping'an Avenue, Xinpu District, Zunyi, Guizhou , 563006, People's Republic of China ~72: HE, Li;TAN, Tao;ZENG, Boping~

2022/02280 ~ Complete ~54:METHOD FOR SPHERICAL GRANULATION OF POTASSIUM SULFATE ~71:SDIC XINJIANG LUOBUPO POTASH CO.,LTD, No. 68, Jianshe West Road, Yizhou District, Hami City, Xinjiang, 839000, People's Republic of China ~72: CHEN, Liang;DONG, Guangfeng;HUANG, Lixue;LEI, Guangyuan;LI, Shoujiang;TANG, Meijing;WANG, Zhen;WEI, Hongzhen;YAO, Xuan;YU, Pingnian~

2022/02284 ~ Complete ~54:ROTARY SAMPLING DEVICE FOR SEDIMENT AT SOLID-LIQUID INTERFACE AND USING METHOD THEREOF ~71:SDIC XINJIANG LUOBUPO POTASH CO.,LTD, No. 68, Jianshe West Road, Yizhou District, Hami City, Xinjiang , 839000, People's Republic of China ~72: DONG, Guangfeng;HAN, Chunxiao;HUANG, Lixue;LI, Bo;LI, Shoujiang;QIN, He;TANG, Erfeng;WEI, Hongzhen;XU, Kekun;YAO, Mobai~

2022/02295 ~ Complete ~54:A COMPRESSION SEAL ~71:OXYMEM LIMITED, BLYRY BUSINESS & COMMERCIAL PARK, Ireland ~72: BYRNE, Wayne;HEFFERNAN, Barry;LYNCH, Donal;SYRON, Eoin~ 33:EP ~31:19193478.5 ~32:23/08/2019

2022/02298 ~ Complete ~54:PREPARATION OF LOW-DUSTING OR NON-DUSTING WATERDISPERSIBLE CROSSLINKED POLYVINYLPYRROLIDONE GRANULES ~71:BASF SE, CARL BOSCH STRASSE 38, 67056 LUDWIGSHAFEN AM RHEIN, GERMANY, Germany ~72: HASSE, Andreas;KRESS, Joerg;STAFF, Roland, Hinrich~ 33:EP ~31:19189935.0 ~32:05/08/2019

2022/02258 ~ Provisional ~54:ROOF SCOOTER ~71:Francois Swart, 39 Stander Street, Brackenhurst, South Africa ~72: Francois Swart~

2022/02262 ~ Complete ~54:TUNNEL GRAVITY METHOD FOR DETERMINING DEEP EXTENSION OF HIGH-DENSITY VERTICAL OREBODY ~71:Kunming University of Science and Technology, No. 253, Xuefu Road, Wuhua District, Kunming City, Yunnan Province, 650093, People's Republic of China ~72: CHENG, Ruihong;HAN, Runsheng;HU, Taotao;LI, Wenyao;WANG, Jiyu~ 33:CN ~31:202110209265.2 ~32:25/02/2021

2022/02287 ~ Complete ~54:INTELLIGENT URBAN PARKING SYSTEM ~71:Henan University of Urban Construction, Henan University of Urban Construction, Longxiang Avenue, Xincheng District, Pingdingshan City, Henan Province, 467036, People's Republic of China ~72: JIN, Hang;MA, Jilei;SONG, Xinsheng;TIAN, Jiao;ZHU, Yingfan~

2022/02293 ~ Complete ~54:A WHEELCHAIR ~71:TSHWANE UNIVERSITY OF TECHNOLOGY, Building 20, Office 133 Staatsartillery Road, Pretoria, Gauteng, 0002, South Africa ~72: JOHANNES JURGENS POTGIETER;KARIM DAFR ALLAH DJOUANI;NICO STEYN~ 33:ZA ~31:2021/02046 ~32:26/03/2021

2022/02253 ~ Provisional ~54:BATTERY ARRANGEMENT ~71:Herman REDELINGHUYS, 25 Winkle Way, South Africa ~72: Herman REDELINGHUYS~

2022/02260 ~ Complete ~54:A QUICK RELEASE PIN ~71:AERODYNE RESEARCH MANUFACTURING (PTY) LTD, 115 Marshall Drive, South Africa ~72: GODWIN, Robert Alexander~ 33:ZA ~31:2021/01263 ~32:25/02/2021

2022/02261 ~ Complete ~54:MANUAL FIDELITY SAMPLING DEVICE CAPABLE OF LOCKING SALT AND WATER AND USE METHOD THEREFOR ~71:SDIC XINJIANG LUOBUPO POTASH CO.,LTD, No. 68, Jianshe West Road, Yizhou District, Hami City, Xinjiang , 839000, People's Republic of China ~72: DONG, Guangfeng;HAN, Shaohua;HUANG, Lili;LI, Jingfang;LI, Shoujiang;MA, Songliang;WANG, Qingchang;WANG, Zhen;XIANG, Xiaocheng;XIE, Xiangliang;YAO, Mobai~

2022/02254 ~ Provisional ~54:FUSE DETECTION ARRANGEMENT ~71:Herman REDELINGHUYS, 25 Winkle Way, South Africa;Herman REDELINGHUYS, 25 Winkle Way, South Africa ~72: Herman REDELINGHUYS~

2022/02256 ~ Provisional ~54:HOT MELT ADHESIVE COMPOSITION ~71:SASOL SOUTH AFRICA LIMITED, Sasol Place, Katherine Street, SANDTON 2196, SOUTH AFRICA, South Africa ~72: DE JONGE, Johan Gerrit-Jan;VAN HELDEN, Pieter;VERMEULEN, Johannes Petrus~

2022/02259 ~ Complete ~54:FORMULATIONS OF POLYALKYLENE OXIDE-ASPARAGINASE AND METHODS OF MAKING AND USING THE SAME ~71:SERVIER IP UK LIMITED, Sefton House Sefton Park, Bells Hill, United Kingdom ~72: FORNASINI, Gianfranco;PHILLIPS, Christopher;SOUKHAREVA, Nadejda~ 33:US ~31:62,344,249 ~32:01/06/2016;33:US ~31:62/344,252 ~32:01/06/2016;33:US ~31:62/344,256 ~32:01/06/2016

2022/02274 ~ Complete ~54:IRON-REDUCING BACTERIUM TESSARACOCCUS OLEIAGRI DH10 STRAIN AND APPLICATION THEREOF ~71:Yangtze University, No. 1, Daxue Road, Caidian District, Wuhan City, Hubei Province, 430100, People's Republic of China ~72: DONG, Hao;LI, Yang;SHE, Yuehui;SU, Sanbao;SUN, Shanshan;WENG, Xue;YU, Gaoming;ZHANG, Fan;ZHANG, Han;ZHENG, Anying~

2022/02276 ~ Complete ~54:METHOD FOR IMPROVING GRANULATION STRENGTH OF POTASSIUM SULFATE ~71:SDIC XINJIANG LUOBUPO POTASH CO.,LTD, No. 68, Jianshe West Road, Yizhou District, Hami City, Xinjiang , 839000, People's Republic of China ~72: CHEN, Liang;DONG, Guangfeng;GUO, Xiang;HUANG, Lixue;LEI, Guangyuan;LI, Shoujiang;TANG, Erfeng;WANG, Zhen;YAO, Xuan;YU, Pingnian~

2022/02288 ~ Complete ~54:INTELLIGENT URBAN TRAFFIC CONTROL SYSTEM ~71:Henan University of Urban Construction, Henan University of Urban Construction, Longxiang Avenue, Xincheng District, Pingdingshan City, Henan Province, 467036, People's Republic of China ~72: JIN, Hang;MA, Jilei;SONG, Xinsheng;TIAN, Jiao;ZHU, Yingfan~

2022/02291 ~ Complete ~54:ROSE-PINE POLLEN-HONEY BUCCAL TABLET AND PREPARATION METHOD THEREOF ~71:ANQING NORMAL UNIVERSITY, No. 1318, Jixian North Road, Yixiu District, Anqing City, People's Republic of China ~72: LI, Wenjuan;TAO, Jun;WANG, Liping;XIE, Rujin;ZHANG, Wenhui;ZHU, Yu~

2022/02296 ~ Complete ~54:2,6-DIOXO-3, 6-DIHYDROPYRIMIDINE COMPOUND, AGRICULTURAL ANDHORTICULTURAL BACTERICIDE, NEMATICIDE, AND MEDICAL AND VETERINARY ANTIFUNGAL AGENT ~71:NIPPON SODA CO., LTD., 2-1, Ohtemachi 2-chome, Chiyoda-ku, Japan ~72: ISHIHARA, Takuma;IWATA, Jun;KAWASAKI, Tatsuhiro;KUWAHARA, Raito;MUNEI, Yohei;NISHINO, Chihiro;SAIGA, Tomoyuki;SHIMOMURA, Hajime;TERANISHI, Takaaki~ 33:JP ~31:2019-195484 ~32:28/10/2019;33:JP ~31:2020-053191 ~32:24/03/2020

2022/02299 ~ Complete ~54:ENERGY HARVESTING SYSTEM AND METHOD OF MANUFACTURE ~71:KATRICK TECHNOLOGIES LIMITED, THE GARMENT FACTORY, SUITE 8, 10 MONTROSE STREET, GLASGOW G1 1RE, UNITED KINGDOM, United Kingdom ~72: VELAYUTHAM, Karthikeyan~ 33:GB ~31:1911017.0 ~32:01/08/2019;33:GB ~31:2006829.2 ~32:07/05/2020

2022/02303 ~ Complete ~54:A METHOD OF EXTRACTING CARBONIC ACID, ALIPHATIC ACIDS, ESTERS AND ALCOHOLS FROM AN AQUEOUS MEDIUM ~71:EVONIK OPERATIONS GMBH, RELLINGHAUSER STRASSE 1-11, 45128 ESSEN, GERMANY, Germany ~72: HAAS, Thomas;RICHTER, Christian~ 33:EP ~31:19188880.9 ~32:29/07/2019

2022/02307 ~ Complete ~54:PROCESS FOR THE RECOVERY OF LITHIUM FROM WASTE LITHIUM ION BATTERIES ~71:BASF SE, CARL BOSCH STRASSE 38, 67056 LUDWIGSHAFEN AM RHEIN, GERMANY, Germany ~72: ADERMANN, Torben;GERKE, Birgit;ROHDE, Wolfgang;SCHIERLE-ARNDT, Kerstin;VOGELSANG, Regina;VOGES, Matthias~ 33:EP ~31:19188696.9 ~32:26/07/2019;33:EP ~31:20151674.7 ~32:14/01/2020

2022/02309 ~ Complete ~54:STABILIZER COMPOSITION ~71:BASF SE, CARL BOSCH STRASSE 38, 67056 LUDWIGSHAFEN AM RHEIN, GERMANY, Germany ~72: CLIFF, Nancy, N.;FINNEGAN, Gerard, R.;HUBER, Gregor~ 33:US ~31:62/880,407 ~32:30/07/2019

2022/02319 ~ Complete ~54:ORAL PHARMACEUTICAL COMPOSITION ~71:OTSUKA PHARMACEUTICAL CO., LTD., 2-9, Kanda Tsukasa-machi, Chiyoda-ku, Tokyo, 1018535, Japan ~72: MOTOYASU YOSHIMURA;NAOKI KAMADA;RYOHEI TOGASHI;RYUTA AONO;TAKUYA FUJII;XINYU WANG~ 33:JP ~31:PCT/JP2019/031895 ~32:13/08/2019

2022/02279 ~ Complete ~54:AUTOMATIC SAMPLE DILUTING METHOD ~71:Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Sciences, No. 320, Donggang West Road, Chengguan District, Lanzhou City, Gansu Province, 730000, People's Republic of China ~72: CUI, Xiaoqing;ZHANG, Yaonan~

2022/02294 ~ Complete ~54:INSTALLATION FOR THE STORAGE AND USE OF WATER-SOLUBLE POLYMERS ~71:SPCM SA, Zone d'Activité Commerciale de Milieux, France ~72: CHALIEUX, Nicolas;RIVAS, Christophe~ 33:FR ~31:2200495 ~32:20/01/2022

2022/02316 ~ Complete ~54:METHOD OF OBTAINING MITOCHONDRIA FROM CELLS AND OBTAINED MITOCHONDRIA ~71:LUCA Science Inc., 3-8-3, Nihonbashi Honcho, CHUO-KU 1030023, TOKYO, JAPAN, Japan ~72: KAWASE, Yoshie;OHTA, Yoshihiro;OKUTANI, Arima;SUGANUMA, Masashi;TAKAHASHI, Momoka~ 33:JP ~31:2019-136283 ~32:24/07/2019

2022/02322 ~ Complete ~54:EXPRESSION VECTOR AGAINST SEVERE ACUTE RESPIRATORY SYNDROME VIRUS SARS-COV-2 ~71:FEDERAL STATE BUDGETARY INSTITUTION "NATIONAL RESEARCH CENTRE FOR EPIDEMIOLOGY AND MICROBIOLOGY NAMED AFTER THE HONORARY ACADEMICIAN N.F. GAMALEYA" OF THE MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION, ul. Gamalei 18, Moscow, 123098, Russian Federation ~72: ALEKSANDR LEONIDOVICH GINTSBURG;ALEKSANDR SERGEEVICH SEMIKHIN;ALINA SERGEEVNA EROXOVA;ALINA SHAHMIROVNA DZHARULLAEVA;AMIR ILDAROVICH TUKHVATULIN;ANDREI GENNADEVICH BOTIKOV;BORIS SAVELIEVICH NARODITSKY;DARIA MIKHAILOVNA GROUSOVA;DENIS YURYEVICH LOGUNOV;DMITRII NIKOLAEVICH SHCHERBININ;DMITRII VIKTOROVICH SHCHEBLIAKOV;ELIZAVETA ALEXANDROVNA TOKARSKAYA;ILIAS BULATOVICH ESMAGAMBETOV;INNA VADIMOVNA DOLZHIKOVA;NATALIA MIKHAILOVNA TUKHVATULINA;NATALYA ANATOLEVNA NIKITENKO;OLGA POPOVA;OLGA VADIMOVNA ZUBKOVA;SERGEY VLADIMIROVICH BORISEVICH;TATIANA ANDREEVNA OZHAROVSKAIA~ 33:RU ~31:2020127979 ~32:22/08/2020

2022/02282 ~ Complete ~54:METHOD FOR PREPARING HIGH-GRADE POTASSIUM MAGNESIUM SULFATE FERTILIZER BY USING CRUDE POTASSIUM CHLORIDE AND CRUDE PICROMERITE ~71:SDIC XINJIANG LUOBUPO POTASH CO.,LTD, No. 68, Jianshe West Road, Yizhou District, Hami City, Xinjiang , 839000, People's Republic of China ~72: DONG, Guangfeng;GUO, Xiang;HUANG, Lixue;LI, Bo;LI, Jingfang;LI, Shoujiang;MA, Songliang;TANG, Erfeng;XU, Wei;YAO, Xuan~

2022/02289 ~ Complete ~54:CENTRIFUGAL SEPARATION DEVICE FOR DETECTING TRADITIONAL CHINESE MEDICINE INGREDIENTS, METHOD THEREOF AND APPLICATION THEREOF ~71:Tai’an Institute of Food and Drug Inspection and Testing (Tai’an Institute of Fiber Inspection), No. 2666, Fengtian Road, High-tech Industrial Development Zone, Tai'an City, Shandong Province, 271000, People's Republic of China ~72: LI, Haiyan~

2022/02306 ~ Complete ~54:METHOD AND APPARATUS FOR SESSION MANAGEMENT ~71:TELEFONAKTIEBOLAGET LM ERICSSON (PUBL), SE-164 83 STOCKHOLM, SWEDEN, Sweden ~72: HE, Yingjiao;WEI, Zhansheng;YANG, Yong;ZHU, Jinyin~ 33:CN ~31:PCT/CN2019/099298 ~32:05/08/2019

2022/02312 ~ Complete ~54:FLUID DISTRIBUTION ASSEMBLY ~71:CATERPILLAR GLOBAL MINING LLC, 875 W. Cushing Street, Tucson, United States of America ~72: BAUER, Candace;STRASHNY, Igor~ 33:GB ~31:1912276.1 ~32:27/08/2019

2022/02317 ~ Complete ~54:HETERODIMERIC PROTEINS ~71:Agenus Inc., 3 Forbes Road, LEXINGTON 02421, MA, USA, United States of America ~72: CHAND, Dhan Sidhartha;ILKOW, Veronica Franciszka;JAWAD, Zahra~ 33:US ~31:62/906,918 ~32:27/09/2019

2022/02320 ~ Complete ~54:ORAL PHARMACEUTICAL COMPOSITION CONTAINING HETEROCYCLIC COMPOUND ~71:OTSUKA PHARMACEUTICAL CO., LTD., 2-9, Kanda Tsukasa-machi, Chiyoda-ku, Tokyo, 1018535, Japan ~72: MOTOYASU YOSHIMURA;NAOKI KAMADA;RYOHEI TOGASHI;RYUTA AONO;TAKUYA FUJII;XINYU WANG~ 33:JP ~31:PCT/JP2019/031895 ~32:13/08/2019

2022/02326 ~ Complete ~54:BACK-UP GENERATOR AND ASSOCIATED ELECTRIC POWER SYSTEMS ~71:BLUE POWER SYSTEMS, INC., 6450A Mt. Madonna Rd., Gilroy, United States of America ~72: CAAMANO, Ramon A.;MILLER, Gregory P.~ 33:US ~31:62/896,956 ~32:06/09/2019

2022/02297 ~ Complete ~54:METHOD OF ISOLATING CIRCULATING NUCLEOSOMES ~71:BELGIAN VOLITION SRL, 22 Rue Phocas, Lejeune, Isnes, Belgium ~72: ECCLESTON, Mark, Edward;MICALLEF, Jacob,Vincent~ 33:GB ~31:1912251.4 ~32:27/08/2019;33:GB ~31:1916735.2 ~32:18/11/2019;33:GB ~31:2006547.0 ~32:04/05/2020

2022/02321 ~ Complete ~54:PHARMACEUTICAL AGENT FOR INDUCING SPECIFIC IMMUNITY AGAINST SARS-COV-2 ~71:FEDERAL STATE BUDGETARY INSTITUTION "NATIONAL RESEARCH CENTRE FOR EPIDEMIOLOGY AND MICROBIOLOGY NAMED AFTER THE HONORARY ACADEMICIAN N.F. GAMALEYA" OF THE MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION, ul. Gamalei 18, Moscow, 123098, Russian Federation ~72: ALEKSANDR LEONIDOVICH GINTSBURG;ALEKSANDR SERGEEVICH SEMIKHIN;ALINA SERGEEVNA EROXOVA;ALINA SHAHMIROVNA DZHARULLAEVA;AMIR ILDAROVICH TUKHVATULIN;ANDREI GENNADEVICH BOTIKOV;BORIS SAVELIEVICH NARODITSKIY;DARIA MIKHAILOVNA GROUSOVA;DENIS YURYEVICH LOGUNOV;DMITRII NIKOLAEVICH SHCHERBININ;DMITRII VIKTOROVICH SHCHEBLIAKOV;ELIZAVETA ALEXANDROVNA TOKARSKAYA;FATIMA MAGOMETOVNA IZHAEVA;ILIAS BULATOVICH ESMAGAMBETOV;INNA VADIMOVNA DOLZHIKOVA;NATALIA MIKHAILOVNA TUKHVATULINA;OLGA POPOVA;OLGA VADIMOVNA ZUBKOVA;SERGEY VLADIMIROVICH BORISEVICH;TATIANA ANDREEVNA OZHAROVSKAIA~ 33:RU ~31:2020127980 ~32:22/08/2020

2022/02334 ~ Complete ~54:TOWER STRUCTURE ~71:RTS TRUST, 7 CHARL CILLIERS STREET, South Africa ~72: DIRK VAN DER BANK BOTHMA~ 33:ZA ~31:2021/01194 ~32:23/02/2021

2022/02257 ~ Provisional ~54:ADJUSTABLE SUPPORT STRUCTURE ~71:CHRISTIAAN TALJAARD, 1 MAIN STREET, South Africa ~72: CHRISTIAAN TALJAARD~

2022/02267 ~ Complete ~54:METHOD AND SYSTEM FOR MANUFACTURING FLEXIBLE TRANSPARENT CONDUCTIVE FILM WITH EMBEDDED METAL MATERIAL ~71:QINGDAO 5D INTELLIGENT ADDITIVE MANUFACTURING TECHNOLOGY CO., LTD., No.266, Shuangzhu Road, Huangdao District, Qingdao, Shandong, 266000, People's Republic of China;QINGDAO UNIVERSITY OF TECHNOLOGY, No.777, Jialingjiang East Road, Huangdao District, Qingdao City, Shandong Province, 266520, People's Republic of China ~72: LAN, Hongbo;LI, Hongke;LI, Zhenghao;QI, Ximeng;XU, Quan;ZHAO, Jiawei;ZHU, Xiaoyang~

2022/02269 ~ Complete ~54:HANDHELD IMAGING DEVICE AND DRY EYE EXAMINATION APPARATUS ~71:West China Hospital of Sichuan University, No. 37, Guoxue Alley, Wuhou District, Chengdu, Sichuan Province, 610041, People's Republic of China ~72: WEI, Ran~ 33:CN ~31:202111021137.1 ~32:01/09/2021

2022/02277 ~ Complete ~54:PREPARATION METHOD OF FUNCTIONAL SWEET-WAXY CORN COMPOUND RECONSTITUTED MEAL ~71:Anhui Science And Technology University, No. 9 Donghua Road, Fengyang County, Chuzhou City, Anhui , 233100, People's Republic of China ~72: HUANG, Weidong;WANG, Sunyan;WU, Degong;YANG, Liping;YU, Haibing~

2022/02278 ~ Complete ~54:PHYSICAL EXAMINATION DEVICE AND PHYSICAL EXAMINATION SET FOR NEUROLOGY ~71:THE FIRST HOSPITAL OF JILIN UNIVERSITY, No. 1 Xinmin Street, Changchun City, Jilin Province, 130021, People's Republic of China ~72: CUI, Zhitao;JIANG, Wei;LI, Jia’ai;TAN, Xuanyu;XU, Mengmeng;YU, Zhi~ 33:CN ~31:202123043533.2 ~32:06/12/2021

2022/02301 ~ Complete ~54:MIXING SYSTEM FOR PRODUCING AQUEOUS COATING AGENTS WITH A LOW VOC ~71:BASF COATINGS GMBH, GLASURITSTRASSE 1, 48165 MÜNSTER, GERMANY, Germany ~72: HOFFMANN, Peter;LETTMANN, Bernhard;RADEMACHER, Josef;STEFFENS, Alexandra~ 33:EP ~31:19189323.9 ~32:31/07/2019

2022/02304 ~ Complete ~54:NEUROTOXIN COMPOSITIONS FOR USE IN TREATING NEUROLOGIC AND PSYCHIATRIC DISORDERS ~71:AEON BIOPHARMA, INC., 5 PARK PLAZA, SUITE 1750 IRVINE, CA 92614, USA, United States of America ~72: BROOKS, Gregory, F.~ 33:US ~31:62/894,533 ~32:30/08/2019

2022/02311 ~ Complete ~54:NOVEL PLATINUM COMPLEX ~71:HERAEUS DEUTSCHLAND GMBH & CO. KG, Heraeusstr. 12-14, Germany ~72: GOCK, Michael;RAUTER, Holger;SIEVI, Robert;ULLAND, Holger;WALTER, Richard~ 33:EP ~31:19199475.5 ~32:25/09/2019

2022/02315 ~ Complete ~54:CD8 BINDING AGENTS AND USES THEREOF ~71:Genentech, Inc., 1 DNA Way, SOUTH SAN FRANCISCO 94080-4990, CA, USA, United States of America ~72: DAVIES, Christopher Williamson;GILL, Herman Singh;KIEFER, Jr., James Richard;KOERBER, James Thomas;SRIRAMAN, Shravan Kumar;URRUTIA, Alejandra Beatrice Urpi;WILLIAMS, Simon-Peter~ 33:US ~31:62/895,865 ~32:04/09/2019

2022/02281 ~ Complete ~54:METHOD FOR IMPROVING PARTICLE SIZE OF POWDER POTASSIUM MAGNESIUM SULFATE FERTILIZER ~71:SDIC XINJIANG LUOBUPO POTASH CO.,LTD, No. 68, Jianshe West Road, Yizhou District, Hami City, Xinjiang , 839000, People's Republic of China ~72: CHEN, Liang;DONG, Guangfeng;GUO, Xiang;HUANG, Lixue;LEI, Guangyuan;LI, Shoujiang;MA, Songliang;QIN, He;TANG, Erfeng;WANG, Zhen~

2022/02283 ~ Complete ~54:METHOD FOR PREPARING GUARANTEED HIGH-GRADE POTASSIUM MAGNESIUM FERTILIZER BY HIGH-TEMPERATURE CONVERSION METHOD ~71:SDIC XINJIANG LUOBUPO POTASH CO.,LTD, No. 68, Jianshe West Road, Yizhou District, Hami City, Xinjiang , 839000, People's Republic of China ~72: CHEN, Liang;DONG, Guangfeng;FANG, Jingrong;GUO, Xiang;LI, Shoujiang;MA, Songliang;QIN, He;SIMAYI Reshalaiti;WANG, Zhen;WEI, Hongzhen;XIE, Xiangliang~

2022/02285 ~ Complete ~54:FIDELITY SAMPLING DEVICE FOR SOLID PHASE AND LIQUID PHASE BELOW BRINE AND METHOD ~71:SDIC XINJIANG LUOBUPO POTASH CO.,LTD, No. 68, Jianshe West Road, Yizhou District, Hami City, Xinjiang, 839000, People's Republic of China ~72: DONG, Guangfeng;LI, Jingfang;LI, Shoujiang;LIU, Zhongjian;LU, Liling;QIN, He;SHI, Rong;WANG, Qingchang;WANG, Zhen;YAO, Mobai~

2022/02318 ~ Complete ~54:GOODS PROTECTION INSERT AND USES THEREOF ~71:LIVA BIO PROTECTION TECHNOLOGIES LTD, 6/3 Frug Street, Israel ~72: HAMMER, Ifat~ 33:IL ~31:268855 ~32:22/08/2019

2022/02324 ~ Complete ~54:MONORAIL SYSTEM AND RELATED SCAFFOLD STRUCTURES, SYSTEMS AND METHODS OF USE ~71:BRANDSAFWAY SERVICES, LLC, 1325 Cobb International Dr., Suite A-1, Kennesaw, Georgia, 30152, United States of America ~72: MATHIEU GRUMBERG~ 33:US ~31:62/882,384 ~32:02/08/2019

2022/02290 ~ Complete ~54:PEST ERADICATION DEVICE FOR HAWTHORN TREE PLANTING ~71:Zhangye Academy of Forestry, Nine Miles from East Gate, Ganzhou District, Zhangye City, Gansu, 734000, People's Republic of China ~72: Junren Feng;Yin Miao;Ying Lu~

2022/02300 ~ Complete ~54:MIXER SYSTEM FOR PRODUCING AQUEOUS COATING MATERIALS WITH LOW VOC ~71:BASF COATINGS GMBH, GLASURITSTRASSE 1, 48165 MÜNSTER, GERMANY, Germany ~72: HOFFMANN, Peter;LETTMANN, Bernhard;RADEMACHER, Josef;STEFFENS, Alexandra~ 33:EP ~31:19189314.8 ~32:31/07/2019

2022/02310 ~ Complete ~54:SECURITY FENCING ~71:GUARDIAR EUROPE BVBA, Blokkestraat 34b, Belgium ~72: MESSELIS, Timothy~ 33:GB ~31:1907963.1 ~32:04/06/2019

. - APPLIED ON 2022-02-24 -

2022/02337 ~ Complete ~54:DIESEL ADDITIVE AND PREPARATION METHOD THEREFOR AND BLENDED DIESEL ~71:JIA, Wenbin, Pingzishang Formation, Qiaotou Village, Liangyan Town, Bijie City, Guizhou, 551799, People's Republic of China ~72: JIA, Hongwei;JIA, Wenbin;KONG, Yongquan;WANG, Lin;XIE, Jin~

2022/02344 ~ Complete ~54:QUANTUM DIALOGUE METHOD AND SYSTEM BASED ON ANONYMOUS ENTANGLEMENT DISTRIBUTION ~71:Qingdao University of Technology, No. 777 Jialingjiang East Road, Huangdao District, Qingdao City, Shandong, 266525, People's Republic of China ~72: MA, Hongyang;SONG, Zhaoyang;WANG, Haowen;WANG, Yinuo~

2022/02367 ~ Complete ~54:FILTERING MATERIAL AND FILTER FOR RETAINING POLYAROMATIC HYDROCARBONS, CARBONYLS AND OTHER COMPOUNDS FROM SMOKE FROM TOBACCO PRODUCTS ~71:Compañia Industrial De Tabacos Monte Paz S.A., San Ramón 716, MONTEVIDEO, URUGUAY, Uruguay;Universidad De La República, 18 de Julio de 1824, MONTEVIDEO, URUGUAY, Uruguay ~72: BANCHERO ISASMENDI, Magela María;BENSE CANDELA, Tomás;FACCIO, Ricardo;MOMBRÚ, Alvaro;PARDO, Helena;RUFENER, Cristina;UMPIÉRREZ VÁZQUEZ, Eleuterio Francisco;VILLANUEVA, Juan Pablo~ 33:UY ~31:38364 ~32:10/09/2019

2022/02368 ~ Complete ~54:USE OF A NEUTROPHIL ELASTASE INHIBITOR IN LUNG DISEASE ~71:pH Pharma Co., Ltd., B-804, U-Space 2, 670 Daewangpangyo-ro, Bundang-gu, SEONGNAM-SI 13494, GYEONGGI-DO, REPUBLIC OF KOREA, Republic of Korea ~72: HUH, Hoyoung;SATYAL, Sanjeev~ 33:US ~31:62/890,774 ~32:23/08/2019

2022/02369 ~ Complete ~54:TRIAZOLOPYRIMIDINES AS A2A / A2B INHIBITORS ~71:Incyte Corporation, 1801 Augustine Cut-Off, WILMINGTON 19803, DE, USA, United States of America ~72: HAN, Heeoon;WANG, Xiaozhao;YAO, Wenqing;ZHAO, Le~ 33:US ~31:62/891,685 ~32:26/08/2019

2022/02374 ~ Complete ~54:A METHOD FOR OBTAINING DATA FROM AN IMAGE OF AN OBJECT OF A USER THAT HAS A BIOMETRIC CHARACTERISTIC OF THE USER ~71:Identy Inc., 8 The Green, Suite 7471, DOVER 19901, DE, USA, United States of America ~72: BHASKARAN, Saneesh;GUPTA, Hardik;MURUGAN, Satheesh~ 33:IN ~31:201941036800 ~32:12/09/2019

2022/02376 ~ Complete ~54:DIFLUOROHALOALLYLAMINE SULFONE DERIVATIVE INHIBITORS OF LYSYL OXIDASES, METHODS OF PREPARATION, AND USES THEREOF ~71:PHARMAXIS LTD., 20 Rodborough Road, Frenchs Forest, New South Wales, 2086, Australia ~72: ALISON DOROTHY FINDLAY;ANGELIQUE ELSA GRECO;CRAIG IVAN TURNER;DIETER WOLFGANG HAMPRECHT;MANDAR DEODHAR;WENBIN ZHOU;WOLFGANG JAROLIMEK~ 33:AU ~31:2019902641 ~32:25/07/2019

2022/02348 ~ Complete ~54:METHOD FOR MACHINE TRANSLATION OF AFRIKAANS PLACE NAMES ~71:Chinese Academy of Surveying And Mapping, No. 28, Lianhuachi West Road, Haidian District, Beijing , 100036, People's Republic of China ~72: DU, Chuan;GAO, Wujun;MA, Weijun;MAO, Xi;WANG, Jizhou;WANG, Zhangpeng;YANG, Xuejiao~

2022/02353 ~ Complete ~54:METHOD AND SYSTEM FOR OPTIMIZING OPEN-PIT MINE LIMITS BASED ON CONSIDERATION OF ECOLOGICAL ENVIRONMENT ~71:Northeastern University, No. 3-11, Wenhua Road, Heping District, Shenyang City, Liaoning Province, 110819, People's Republic of China ~72: GU, Xiaowei;WANG, Hao;WANG, Qing;XU, Xiaochuan~ 33:CN ~31:202111513471.9 ~32:13/12/2021

2022/02359 ~ Complete ~54:ROTARY-PERCUSSIVE HYDRAULIC PERFORATOR PROVIDED WITH A STOP PISTON AND A BRAKING CHAMBER ~71:MONTABERT, 203, route de Grenoble, France ~72: CHEYLUS, François-Xavier;ESCOLLE, Michel~ 33:FR ~31:21/01950 ~32:01/03/2021

2022/02362 ~ Complete ~54:KRAS G12D INHIBITORS ~71:ARRAY BIOPHARMA INC, 3200 Walnut St., Boulder, United States of America;MIRATI THERAPEUTICS, INC., 3545 Cray Court, United States of America ~72: ALLEN, Shelley;BLAKE, James Francis;BURNS, Aaron Craig;CHICARELLI, Mark Joseph;CHRISTENSEN, James Gail;DAHLKE, Joshua Ryan;DAI, Donghua;FELL, Jay Bradford;FISCHER, John Peter;GAUDINO, John;HILTON, Michael Christopher;KAHN, Dean Russell;KETCHAM, John Michael;LAWSON, John David;MARX, Matthew Arnold;MEJIA, Macedonio J.;NEWHOUSE, Brad;NGUYEN, Phong;O'LEARY, Jacob Matthew;PAJK, Spencer;RODRIGUEZ, Martha E.;SAVECHENKOV, Pavel;SMITH, Christopher Ronald;TANG, Tony P.;VIGERS, Guy P.A.;WANG, Xiaolun;ZHAO, Qian~ 33:US ~31:62/893,604 ~32:29/08/2019;33:US ~31:63/052,840 ~32:16/07/2020;33:US ~31:63/058,188 ~32:29/07/2020

2022/02364 ~ Complete ~54:ANTI-PTCRA ANTIBODY-DRUG CONJUGATES AND USES THEREOF ~71:REGENERON PHARMACEUTICALS, INC., 777 Old Saw Mill River Road, Tarrytown, United States of America ~72: KUHNERT, Frank;NITTOLI, Thomas;VAN METER, Michael~ 33:US ~31:62/902,674 ~32:19/09/2019

2022/02365 ~ Complete ~54:ELECTRIC MAGNETIC MOTOR ~71:LEE, Shou-hsun, No. 58, Ln. 181, Sec. 1, Zhonghua N. Rd., North Dist., Tainan City, 70464, Taiwan, People's Republic of China;LI, Chun-i, No. 58, Ln. 181, Sec. 1, Zhonghua N. Rd., North Dist., Tainan City, 70464, Taiwan, People's Republic of China ~72: LEE, Shou-hsun;LI, Chun-i~

2022/02370 ~ Complete ~54:COMPOSITIONS AND METHODS FOR TREATING VIRAL INFECTIONS ~71:G Tech Bio LLC, Century City Medical Plaza, 2080 Century Park East, Suite 710, LOS ANGELES 90067, CA, USA, United States of America ~72: GUMRUKCU, Serhat~ 33:US ~31:62/893,460 ~32:29/08/2019;33:US ~31:62/968,387 ~32:31/01/2020;33:US ~31:62/976,491 ~32:14/02/2020;33:US ~31:62/985,597 ~32:05/03/2020

2022/02333 ~ Provisional ~54:DRILL RIGS ~71:VAN HEERDEN, Willem Frederik, 47 18th Street, Menlo Park, Pretoria 0081, Gauteng, SOUTH AFRICA, South Africa ~72: VAN HEERDEN, Willem Frederik~

2022/02342 ~ Complete ~54:USE OF SOLANUM PENNELLII CALCIUM-DEPENDENT PROTEIN KINASE 33 (SPCPK33) GENE AND ENCODED PROTEIN THEREOF IN REGULATION OF TOMATO DROUGHT TOLERANCE ~71:Institute of Horticultural Crops, Xinjiang Academy of Agricultural Sciences, No. 403, Nanchang Road, Shayibake District, Urumqi City, Xinjiang Uygur Autonomous Region, 830091, People's Republic of China ~72: GUO, Bin;HU, Jiahui;LI, Ning;WANG, Baike;WANG, Juan;WANG, Qiang;YANG, Tao;YU, Qinghui~ 33:CN ~31:202110546583.8 ~32:19/05/2021

2022/02383 ~ Complete ~54:METHOD FOR MAKING MICRONEEDLES USING A HIGH VISCOSITY COMPOSITION ~71:INNOTURE IP LIMITED, 2nd Floor, 58 Davies Street, United Kingdom ~72: BAMSEY, Ryan;CAMELIU ICHIM, Ionut~ 33:GB ~31:1911910.6 ~32:20/08/2019

2022/02332 ~ Provisional ~54:ACCESSORY FOR A MOTORCYCLE ~71:SNYMAN, George Frederik, 1287 Elandsfontein, LICHTENBURG 2740, SOUTH AFRICA, South Africa ~72: SNYMAN, George Frederik~

2022/02336 ~ Complete ~54:PREFABRICATED ANTI-SEISMIC WALL OF COMPOSITE STRUCTURE AND FABRICATION METHOD THEREFOR ~71:China Construction Eighth Engineering Division Henan Construction Co., Ltd., Room 1605, No. 136, Zhengkai Avenue, Zhengdong New District, Zhengzhou City, Henan Province, 450046, People's Republic of China;Zhengzhou University, No. 100 Science Avenue, High-tech Development Zone, Zhengzhou City, Henan Province, 450001, People's Republic of China;Zhengzhou University of Technology, No. 18, Yingcai Street, Huiji District, Zhengzhou City, Henan Province, 450044, People's Republic of China ~72: FAN, Jianwei;HE, Xueqing;LI, Yongming;LIU, Kai;LIU, Zihui;LOU, Zhantao;WANG, Baogui;WANG, Xinling;WANG, Zhijie;ZHU, Juntao;ZHU, Renbo;ZOU, Xuyan~

2022/02378 ~ Complete ~54:HETEROTANDEM BICYCLIC PEPTIDE COMPLEX ~71:BICYCLETX LIMITED, Building 900, Babraham Research Campus, Cambridge, CB22 3AT, United Kingdom ~72: GEMMA MUDD;JOHANNA LAHDENRANTA;KEVIN MCDONNELL;PUNIT UPADHYAYA~ 33:US ~31:62/880,191 ~32:30/07/2019;33:US ~31:62/910,088 ~32:03/10/2019;33:US ~31:62/931,442 ~32:06/11/2019;33:US ~31:63/022,667 ~32:11/05/2020;33:US ~31:63/024,715 ~32:14/05/2020

2022/02379 ~ Complete ~54:HETEROTANDEM BICYCLIC PEPTIDE COMPLEXES ~71:BICYCLETX LIMITED, Building 900, Babraham Research Campus, Cambridge, CB22 3AT, United Kingdom ~72: GEMMA MUDD;JOHANNA LAHDENRANTA;KEVIN MCDONNELL;PUNIT UPADHYAYA~ 33:US ~31:62/880,191 ~32:30/07/2019;33:US ~31:62/910,088 ~32:03/10/2019;33:US ~31:62/931,442 ~32:06/11/2019;33:US ~31:63/022,667 ~32:11/05/2020;33:US ~31:63/024,715 ~32:14/05/2020

2022/02381 ~ Complete ~54:APPARATUS AND METHOD FOR DRYING AND STYLING HAIR ~71:JEMELLA LIMITED, Bridgewater Place, Water Lane, Leeds, Yorkshire, LS11 5BZ, United Kingdom ~72: ADAM STONE;ALEX HARRISON;ANTHONY SARGEANT;ED SURRIDGE;LIAM WRIGHT;RICHARD GOLD;ROBERT WEATHERLY;TIM HONE;TIMOTHY MOORE~ 33:GB ~31:1910869.5 ~32:30/07/2019

2022/02382 ~ Complete ~54:METHOD FOR IMPROVING ENGINE PERFORMANCE WITH RENEWABLE LUBRICANT COMPOSITIONS ~71:CHEVRON U.S.A. INC., 6001 Bollinger Canyon Road, San Ramon, California, 94583, United States of America ~72: DAVID S LEE;MIHIR K PATEL;WILLEM VAN DAM~ 33:US ~31:62/886,407 ~32:14/08/2019

2022/02329 ~ Provisional ~54:METHOD OF BATTERY ASSEMBLY AND BATTERY SYSTEM OBTAINED ~71:Neill Human, 18 Dianthus Street, South Africa ~72: Neill Human~

2022/02343 ~ Complete ~54:SESSION KEY UPDATING METHOD APPLIED TO DYNAMIC QUANTUM NETWORK ~71:Qingdao University of Technology, No. 777 Jialingjiang East Road, Huangdao District, Qingdao City, Shandong, 266525, People's Republic of China ~72: HUA, Nan;LI, Wei;LIU, Guangzhe;LIU, Hanyang;MA, Hongyang~

2022/02330 ~ Provisional ~54:DICEROCARYUM ERIOCARPUM PLANT EXTRACT-METAL NANOPARTICLES FOR WATER PURIFICATION AND DISINFECTION ~71:UNIVERSITY OF VENDA, University Road, South Africa ~72: ADEEYO, Adeyemi Ojutalayo;ENITAN-FOLAMI, Abimbola Motunrayo;MAKUNGO, Rachel;ODIYO, John Ogony~

2022/02340 ~ Complete ~54:LOW-CARBON ENVIRONMENTALLY FRIENDLY BIOLOGICAL LIQUID FUEL AND APPLICATION THEREOF ~71:JIA, Wenbin, Pingzishang Formation, Qiaotou Village, Liangyan Town, Bijie City, Guizhou, 551799, People's Republic of China ~72: JIA, Hongwei;JIA, Wenbin;KONG, Yongquan;WANG, Lin;XIE, Jin~

2022/02350 ~ Complete ~54:HIGH-SILICON IRON TAILING CEMENTING MATERIAL AND PREPARATION METHOD THEREOF ~71:Shenyang University of Technology, 111 Shenliao West Road, Economic and Technological Development Zone, Shenyang City, Liaoning Province, 110870, People's Republic of China ~72: HU, Ziyang;LI, Jian;LIU, Jianping;LIU, Peng;MENG, Jin;NING, Baokuan;TIAN, Yulin;WANG, Hengyi;WANG, Xingchen~

2022/02352 ~ Complete ~54:MEDICINAL INDUSTRIAL HEMP TRAY SEEDLING SUBSTRATE ~71:Institute of Cash Crops, Heilongjiang Academy of Agricultural Sciences, No.368 Xue Fu Road, Nan Gang District, Harbin, Hei Long Jiang Province, People's Republic of China ~72: Cheng Lili;Fan Chao;Li Min;Liu Dandan;Song Xixia;Tang Lili;Wu Guangwen;Yuan Hongmei;Zhang Shuquan~

2022/02358 ~ Complete ~54:A NEW TYPE OF STAINLESS STEEL CORE DOUBLE-SIDED PVT HYBRID ELECTRIC HEATING COMPONENT ~71:Gansu Natural Energy Research Institute (United Nations Industrial Development Organization International Solar Technology Promotion and Transfer Center), 20 Renmin Road, Chengguan District, Lanzhou City, Gansu province, 730046, People's Republic of China ~72: Lv Weizhong~ 33:CN ~31:202111074514.8 ~32:14/09/2021

2022/02360 ~ Complete ~54:HYDRAULIC ROTARY-PERCUSSIVE HAMMER DRILL PROVIDED WITH A STOP PISTON ~71:MONTABERT, 203, route de Grenoble, France ~72: CHEYLUS, François-Xavier;ESCOLLE, Michel~ 33:FR ~31:21/01949 ~32:01/03/2021

2022/02361 ~ Complete ~54:TREATMENT OF HIDRADENITIS SUPPURATIVA USING JAK INHIBITORS ~71:Incyte Corporation, 1801 Augustine Cut-Off, WILMINGTON 19803, DE, USA, United States of America ~72: HOWELL, Michael D.;SMITH, Paul~ 33:US ~31:62/650,600 ~32:30/03/2018

2022/02371 ~ Complete ~54:RECOMBINANT HERPESVIRUS OF TURKEY VECTORS EXPRESSING ANTIGENS OF AVIAN PATHOGENS AND USES THEREOF ~71:Zoetis Services LLC, 10 Sylvan Way, PARSIPPANY 07054, NJ, USA, United States of America ~72: BROWN, Tyler;LUO, Yugang;RONG, Sing~ 33:US ~31:62/898,651 ~32:11/09/2019

2022/02375 ~ Complete ~54:PHARMACEUTICAL COMPOUNDS ~71:REVIRAL LIMITED, Stevenage Bioscience Catalyst, United Kingdom ~72: AVERY, Craig Alex;COCHRANE, Edward James;COCKERILL, George Stuart;GOOD, James;WARNER, Andrew Joseph~ 33:GB ~31:1911944.5 ~32:20/08/2019

2022/02377 ~ Complete ~54:HETEROTANDEM BICYCLIC PEPTIDE COMPLEX ~71:BICYCLETX LIMITED, Building 900, Babraham Research Campus, Cambridge, CB22 3AT, United Kingdom ~72: GEMMA MUDD;JOHANNA LAHDENRANTA;KEVIN MCDONNELL;PUNIT UPADHYAYA~ 33:US ~31:62/880,191 ~32:30/07/2019;33:US ~31:62/910,088 ~32:03/10/2019;33:US ~31:62/931,442 ~32:06/11/2019;33:US ~31:63/022,667 ~32:11/05/2020;33:US ~31:63/024,715 ~32:14/05/2020

2022/02380 ~ Complete ~54:ANTI-HUMAN P40 PROTEIN DOMAIN ANTIBODY AND USE THEREOF ~71:AKESO BIOPHARMA, INC, No. 6 Shennong Road, Torch Development Zone, Zhongshan, Guangdong, 528437, People's Republic of China ~72: BAIYONG LI;PENG ZHANG;YU XIA;ZHONGMIN MAXWELL WANG~ 33:CN ~31:201910706137.1 ~32:30/07/2019;33:CN ~31:201911040745.X ~32:29/10/2019;33:CN ~31:201911171754.2 ~32:25/11/2019

2022/02366 ~ Complete ~54:TOOL COOLING MECHANISM ~71:GUILIN CHAMPION UNION DIAMOND CO., LTD., No. 8 Chuangxin Road, Qixing District , Guilin, Guangxi , 541004, People's Republic of China ~72: DU, Hai;GUO, Xinling;LIANG, Anning;LIU, Renjie;LONG, Huiling;SONG, Jingxin;WANG, Zhiyong;YE, Yong~ 33:CN ~31:201910813402.6 ~32:30/08/2019;33:CN ~31:201921429751.X ~32:30/08/2019;33:CN ~31:202010295353.4 ~32:15/04/2020;33:CN ~31:202020556608.3 ~32:15/04/2020;33:CN ~31:202010414830.4 ~32:15/05/2020;33:CN ~31:202010414837.6 ~32:15/05/2020;33:CN ~31:202020813767.7 ~32:15/05/2020;33:CN ~31:202020814608.9 ~32:15/05/2020

2022/02372 ~ Complete ~54:DYNAMIC BONE PLATE AND METHOD OF USE ~71:Paragon 28, Inc., 14445 Grasslands Drive, ENGLEWOOD 80112, CO, USA, United States of America ~72: ALLARD, Randy;BARMES, Francis D.;BRINKER, Laura Zagrocki;DACOSTA, Albert;HUNT, Richard David;KARAS, Kaitlin;LIPKER, Garrett Jeffrey;ROGGOW, Kenneth Allan~ 33:US ~31:62/883,501 ~32:06/08/2019

2022/02384 ~ Provisional ~54:ALERT21 PERSONAL SAFETY AND SECURITY APP ~71:SHELDON CHARLES ERASMUS, 14 DOVER ROAD, HEATHFIELD, WESTERN CAPE, South Africa ~72: SHELDON CHARLES ERASMUS ~

2022/02335 ~ Complete ~54:SHIPBORNE SAILING TYPE AIR-SEA FLUX OBSERVATION SYSTEM ~71:Institute of Oceanology, Chinese Academy of Sciences, No. 7 Nanhai Road, Qingdao City, Shandong, 266071, People's Republic of China ~72: CHEN, Lei;DIAO, Xinyuan;FAN, Conghui;WEI, Chuanjie~

2022/02356 ~ Complete ~54:METHOD AND SYSTEM FOR OPTIMIZING FINAL BOUNDARY OF METAL OPEN-PIT MINE ~71:Northeastern University, No. 3-11, Wenhua Road, Heping District, Shenyang City, Liaoning Province, 110819, People's Republic of China ~72: GU, Xiaowei;WANG, Hao;WANG, Qing;XU, Xiaochuan~ 33:CN ~31:202111513843.8 ~32:13/12/2021

2022/02355 ~ Complete ~54:METHOD AND SYSTEM FOR OPTIMIZING MINING PLAN BASED ON CONSIDERATION OF ECOLOGICAL ENVIRONMENT ~71:Northeastern University, No. 3-11, Wenhua Road, Heping District, Shenyang City, Liaoning Province, 110819, People's Republic of China ~72: GU, Xiaowei;WANG, Hao;WANG, Qing;XU, Xiaochuan~ 33:CN ~31:202111526170.X ~32:14/12/2021

2022/02345 ~ Complete ~54:INTELLIGENT VEHICLE OBSTACLE AVOIDANCE SYSTEM BASED ON STEREO VISION ~71:Huzhou University, NO.759 Erhuandong Road, Huzhou, Zhejiang, 313000, People's Republic of China ~72: Ci Wenyan~

2022/02341 ~ Complete ~54:HETEROGENEOUS WIRELESS COMMUNICATION METHOD AND SYSTEM BASED ON PHOTON HYPER-ENTANGLEMENT STATE ~71:Qingdao University of Technology, No. 777 Jialingjiang East Road, Huangdao District, Qingdao City, Shandong, 266525, People's Republic of China ~72: KE, Zhiheng;LIU, Hanyang;MA, Hongyang;SONG, Zhaoyang;WANG, Haowen~

2022/02347 ~ Complete ~54:ORGANIC ACTIVE DROUGHT-RESISTANT FERTILIZER AND PREPARATION METHOD THEREOF ~71:Heilongjiang Nongken Qianyuan Fertilizer Co., Ltd., No. 1-3, Industrial Park, Direct 2 Committee, Hongxinglong Administration Bureau, Youyi County, Shuangyashan City, Heilongjiang, 155811, People's Republic of China ~72: WANG, Mingzhe~

2022/02349 ~ Complete ~54:DEVICE AND A METHOD FOR EVALUATING PERFORMANCE OF FOAMING AGENT BASED ON BUBBLE COALESCENCE TIME TESTS ~71:Zhengzhou University, No. 100 Science Avenue, High-tech Zone, Zhengzhou City, Henan Province , 450001, People's Republic of China ~72: CAO, Yijun;DENG, Lijun;FAN, Guixia;LI, Guosheng;ZHOU, Guoli~

2022/02339 ~ Complete ~54:LOW-SHRINKAGE AND HIGH-DUCTILITY ENGINEERING REPAIR MATERIAL AND PREPARATION METHOD THEREOF ~71:China Construction Eighth Engineering Division Henan Construction Co., Ltd., Room 1605, No. 136, Zhengkai Avenue, Zhengdong New District, Zhengzhou City, Henan Province, 450046, People's Republic of China;Henan Urban and Rural Planning and Design Research Institute Co., Ltd., No. 298, Wenhua North Road, Huiji District, Zhengzhou City, Henan Province, 450000, People's Republic of China;Zhengzhou University, No. 100 Science Avenue, High-tech Development Zone, Zhengzhou City, Henan Province, 450001, People's Republic of China ~72: FAN, Jianwei;LI, Ke;LI, Yongming;LIU, Kai;LIU, Zihui;LOU, Yubao;LOU, Zhantao;WANG, Baogui;WANG, Zhijie;ZHU, Juntao;ZHU, Renbo;ZOU, Xuyan~

2022/02328 ~ Provisional ~54:SELF-POWERED ELECTRIC VEHICLE (EVS) ~71:Ahmed Waseef Saib, 24 Park Avenue, Tongaat Beach, Desainager, South Africa ~72: Ahmed Waseef Saib~

2022/02338 ~ Complete ~54:CARGO HANDLING DEVICE OF SMART FACTORY BASED ON INTERNET OF THINGS ~71:Lu'an Xiangchuan Technology Co., Ltd., 80 Meters East of Huaibin Road and Linfeng Road, Linhuaigang Township, Huoqiu County, Lu'an City, Anhui , 237484, People's Republic of China ~72: HUANG, Minghui;JIANG, Zhixiang;SHEN, Jiyun;WANG, Wenwen~ 33:CN ~31:202111579380.5 ~32:22/12/2021

2022/02354 ~ Complete ~54:MULTI-PARAMETER OBSERVATION SYSTEM FOR UNDERWATER LIGHT FIELD AND MARINE ENVIRONMENT ~71:China University of Petroleum East China）, No. 66, Changjiang West Road, Huangdao District, Qingdao City, Shandong, 266580, People's Republic of China;Institute of Oceanology, Chinese Academy of Sciences, No. 7 Nanhai Road, Qingdao City, Shandong, 266071, People's Republic of China ~72: CHEN, Lei;DIAO, Xinyuan;FAN, Conghui;WEI, Chuanjie;ZHANG, Jie~

2022/02373 ~ Complete ~54:1,2,4-OXADIAZOL-5-ONE DERIVATIVES FOR THE TREATMENT OF CANCER ~71:Basilea Pharmaceutica International AG, Grenzacherstrasse 487, BASEL 4058, SWITZERLAND, Switzerland ~72: GRONER, Anna;LANE, Heidi;NUOFFER, Claude;REINELT, Stefan;RICHALET, Florian;WEILER, Sven~ 33:EP ~31:19188935.1 ~32:29/07/2019;33:EP ~31:20155922.6 ~32:06/02/2020;33:EP ~31:20162120.8 ~32:10/03/2020

2022/02357 ~ Complete ~54:FOOD DETECTION SAMPLE HARMLESS TREATMENT DEVICE AND METHOD OF USE ~71:Jinzhou Medical University, No. 40, Section 3, Songpo Road, Linghe District, Jinzhou City, Liaoning Province, 121001, People's Republic of China ~72: Liu Zheng;Wang Hui;Yu Xiaolei~

2022/02363 ~ Complete ~54:ANTIBODIES AGAINST ILT2 AND USE THEREOF ~71:BIOND BIOLOGICS LTD., Yarok Street., P.O. Box 4, Misgav Industrial Park, Israel ~72: ALISHEKEVITZ, Dror;BEN-MOSHE, Tehila;FRIDMAN-DROR, Anna;GOLDSHTEIN, Ilana;HAKIM, Motti;HAVES ZIV, Dana;MANDEL, Ilana;PERETZ, Tsuri;SAPIR, Yair;SHULMAN, Avidor~ 33:US ~31:62/885,374 ~32:12/08/2019;33:US ~31:63/034,569 ~32:04/06/2020

2022/02331 ~ Provisional ~54:CARBON BLACK ACTIVATION PLANT ~71:Nufuel Recycling Holdings (Pty) Ltd, Reg num 2012/118557/07, 46 Curalynn, 865 Cura ave, South Africa ~72: Hans Lodewyk Mitchell~

2022/02351 ~ Complete ~54:MEASUREMENT METHOD AND SYSTEM FOR INTERNAL TEMPERATURE FIELD OF BEARING ~71:Qingdao University of Technology, No. 777 Jialingjiang East Road, Huangdao District, Qingdao City, Shandong 266520, People's Republic of China ~72: GUO, Feng;HAN, Suli;LIANG, Peng;LIU, Yujian;SHAO, Jing~

2022/02346 ~ Complete ~54:WIND TURBINE TOWER SURFACE PRESSURE MEASURING METHOD SUITABLE FOR WIND TUNNEL EXPERIMENT ~71:Yangzhou University, No. 88, Daxue South Road, Yangzhou City, Jiangsu, 225009, People's Republic of China ~72: LI, Nailu;WANG, Xiangjun;YANG, Hua;YANG, Junwei~

. - APPLIED ON 2022-02-25 -

2022/02390 ~ Complete ~54:METHOD FOR IDENTIFYING DISEASE RESISTANCE OF WALNUT BY STOMATAL DENSITY OF WALNUT LEAVES ~71:Liaoning Institute of Economic Forestry, No. 31, Zhonghua West Road, Ganjingzi District, Dalian City, Liaoning Province, 116031, People's Republic of China;Research Institute of Forestry Chinese Academy of Forestry, No.1, Dongxiaofu, Xiangshan Road, Haidian District, Beijing, 100091, People's Republic of China ~72: GONG, Yonghong;HE, Youchao;LI, Dongsheng;LIU, Feng;MA, Qingguo;PEI, Dong;QU, Hui;ZHANG, Junpei;ZHAO, Baojun~ 33:CN ~31:202111664286.X ~32:31/12/2021

2022/02402 ~ Complete ~54:AN ELECTROPLATING PROCESS FOR BLACKENING OF ULTRA-LOW-PROFILE COPPER FOILS ~71:JIANGSU MINGFENG ELECTRONIC MATERIALS CO., LTD., Intensive Industrial Park, Shezhu Town, Liyang County, Changzhou City,, People's Republic of China ~72: WANG, Haijun;WANG, Pengju;WANG, Shuanglu;ZHANG, Zhi~

2022/02415 ~ Complete ~54:THIENOPYRIMIDONES AS TRPA1 INHIBITORS ~71:BOEHRINGER INGELHEIM INTERNATIONAL GMBH, Binger Strasse 173, Germany ~72: BINDER, Florian, Paul, Christian;DAHMANN,

Georg;FLECK, Martin,Thomas;HEHN, Joerg, P.;HEIMANN, Annekatrin, Charlotte;LESSEL, Uta, Friederike;WILLWACHER, Jens~ 33:EP ~31:19203173.0 ~32:15/10/2019

2022/02430 ~ Complete ~54:PROTEINS COMPRISING KALLIKREIN RELATED PEPTIDASE 2 ANTIGEN BINDING DOMAINS AND THEIR USES ~71:Janssen Biotech, Inc., 800/850 Ridgeview Drive, HORSHAM 19044, PA, USA, United States of America ~72: BRITTINGHAM, Raymond;GANESAN, Rajkumar;LA PORTE, Sherry Lynn;LEE, John;LUO, Jinquan;MCDEVITT, Theresa;SHEN, Fei;SINGH, Sanjaya;SONG, Degang;VENKATARAMANI, Sathyadevi;YI, Fang;ZHAO, Yonghong~ 33:US ~31:62/878,964 ~32:26/07/2019;33:US ~31:62/910,650 ~32:04/10/2019;33:US ~31:63/030,445 ~32:27/05/2020

2022/02436 ~ Complete ~54:A COMPOSITION FOR MUCOSAL ADMINISTRATION TO AVIANS ~71:Phibro Animal Health Corporation, Glenpointe Centre East, 3rd Floor, 300 Frank W. Burr Blvd., Suite 21, TEANECK 07666, NJ, USA, United States of America ~72: BROWN, Karen;CERVANTES, Hector;CHRISTENBERRY, Sam;GRIFFEL, Jeremy;GUO, Hailong;MATHIESEN, Michelle;QUINN, Meghan;WINTER, Peter;ZEKARIAS, Bereket~ 33:US ~31:62/880,458 ~32:30/07/2019

2022/02440 ~ Provisional ~54:LEACHING AND RECOVERY OF LITHIUM ION BATTERY CATHODE COMPONENTS ~71:Lesego Siwela, Edenvale, South Africa ~72: Ed Hardwick;Lesego Siwela~

2022/02392 ~ Complete ~54:METHOD FOR RESTORING HEAVY METAL-CONTAMINATED WETLAND ~71:Central South University of Forestry and Technology, No. 498, Shaoshan South Road, Changsha City, Hunan Province, People's Republic of China ~72: Jin Xingjian;Lin Yang;Wang Zihe~

2022/02410 ~ Complete ~54:RNA PARTICLES COMPRISING POLYSARCOSINE ~71:BIONTECH SE, An der Goldgrube 12, 55131, Mainz, Germany;JOHANNES GUTENBERG-UNIVERSITÄT MAINZ, Saarstrasse 21, 55122, Mainz, Germany ~72: ANNE SCHLEGEL;BENJAMIN WEBER;HEINRICH HAAS;MATTHIAS BARZ;PHILIPP HELLER;SARA NOGUEIRA~ 33:EP ~31:PCT/EP2018/076633 ~32:01/10/2018;33:EP ~31:PCT/EP2019/069551 ~32:19/07/2019

2022/02424 ~ Complete ~54:ANTI-HK2 CHIMERIC ANTIGEN RECEPTOR (CAR) ~71:Janssen Biotech, Inc., 800/850 Ridgeview Drive, HORSHAM 19044, PA, USA, United States of America ~72: BRITTINGHAM, Raymond;GANESAN, Rajkumar;LA PORTE, Sherry;LEE, John;LUO, Jinquan;MCDEVITT, Theresa;SHEN, Fei;SINGH, Sanjaya;SONG, Degang;VENKATARAMANI, Sathyadevi;YI, Fang;ZHAO, Yonghong~ 33:US ~31:62/878,958 ~32:26/07/2019;33:US ~31:62/898,635 ~32:11/09/2019;33:US ~31:62/910,645 ~32:04/10/2019;33:US ~31:63/030,522 ~32:27/05/2020

2022/02426 ~ Complete ~54:IL-38-SPECIFIC ANTIOBODIES ~71:Immunome, Inc., 665 Stockton Drive, Suite 300, EXTON 19341, PA, USA, United States of America ~72: DOWLING, John P.;HARMAN, Ben;LUNDGREN, Karen;NIKITIN, Pavel A.;ROBINSON, Matthew K.~ 33:US ~31:62/880,265 ~32:30/07/2019

2022/02439 ~ Complete ~54:METHOD FOR PARTITIONING CURVED SURFACE OF REFLECTOR ANTENNA BASED ON EQUALIZED AREA AND MULTIPLE SHAPES ~71:THE 54TH RESEARCH INSTITUTE OF CHINA ELECTRONICS TECHNOLOGY GROUP CORPORATION, Antenna and Servo Department, No. 589 West Zhongshan Road, Shijiazhuang City, Hebei, 050081, People's Republic of China ~72: BIAO DU;GUOXI LIU;JINRONG YANG;LONG CHEN;WENNING YANG;XIAOLEI NING;YANG WU;YUANPENG ZHENG~ 33:CN ~31:201910682965.6 ~32:26/07/2019

2022/02404 ~ Complete ~54:SEMI-AUTOMATIC MANIPULATOR TRANSPORT VEHICLE AND USE METHOD THEREOF ~71:ANHUI UNIVERSITY OF SCIENCE AND TECHNOLOGY, No. 168, Taifeng Street, Shannan New District, Huainan City,, People's Republic of China ~72: DENG, Jiayi;LI, Yihua;WANG, Yupeng;YAO, Jintao;ZUO, Cheng~

2022/02414 ~ Complete ~54:MULTI-SPECIFIC BINDING PROTEINS FOR CANCER TREATMENT ~71:BOEHRINGER INGELHEIM INTERNATIONAL GMBH, Binger Strasse 173, Germany ~72: ADAM, Paul;DZIEGELEWSKI, Michael;GANESAN, Rajkumar;GORMAN, Philip, Nicholas;GUPTA, Pankaj;GUPTA, Priyanka;HIPP, Susanne;LASARO, Marcio;SCHEER, Justin, M.;VOYNOV, Vladimir H~ 33:EP ~31:19201200.3 ~32:02/10/2019

2022/02428 ~ Complete ~54:SYSTEMS AND METHODS FOR HONEYCOMB BODY INSPECTION ~71:Corning Incorporated, 1 Riverfront Plaza, CORNING 14831, NY, USA, United States of America ~72: BARNES, Joshua Andrew;MADARA, Russell Wayne;O'LOUGHLIN Jr., Robert Joseph;SUBER, Christie James;TREACY, Eric Daniel;WASHBURN, Paul Edward;WU, Michael Yen-Ting;ZOU, Xiaotian~ 33:US ~31:62/893,906 ~32:30/08/2019

2022/02389 ~ Complete ~54:APPLICATION OF TARAXASTEROL IN PREPARING DRUGS FOR ENHANCING THE ANTI-TUMOR IMMUNITY OF T CELLS ~71:Xinxiang Medical University, No. 601, Jinsui Avenue, Hongqi District, Xinxiang City, Henan, 453003, People's Republic of China ~72: LI, Jian;QIN, Yuanhua;REN, Feng;SHANG, Jingli;YANG, Yingying;ZHANG, Yu;ZHAO, Tiesuo~

2022/02412 ~ Complete ~54:FILM-LESS PAPER REAM WRAPPER ~71:SEAL CHEMISTRY (PTY) LTD, 10 Darby Crescent, South Africa ~72: ANGAMUTHOO, Gonaseelan;KNOX, Douglas Alistair Herbert~ 33:ZA ~31:2019/02965 ~32:13/05/2019

2022/02416 ~ Complete ~54:THIENOPYRIMIDONES AS TRPA1 INHIBITORS ~71:BOEHRINGER INGELHEIM INTERNATIONAL GMBH, Binger Strasse 173, Germany ~72: BINDER, Florian, Paul, Christian;DAHMANN, Georg;FLECK, Martin,Thomas;HEHN, Joerg, P.;HEIMANN, Annekatrin, Charlotte;WILLWACHER, Jens~ 33:EP ~31:19203171.4 ~32:15/10/2019

2022/02397 ~ Complete ~54:PORTABLE TURNOUT OPERATION DEVICE AND TURNOUT OPERATION METHOD ~71:CHINA RAILWAY 14TH BUREAU GROUP THE ELECTRIFICATION ENGINEERING CO., LTD, No. 1, Heping Road, Lixia District, Jinan City, Shandong Province, 250013, People's Republic of China ~72: CAO, Ruqing;FENG, Liqun;GUAN, Xiaoyu;SUN, Shisheng;YANG, Hongjian;YU, Changshui~

2022/02405 ~ Complete ~54:MARKER FOR TESTING ADULTERATING COW MILK IN HORSE MILK BASED ON BOVINE-DERIVED POLYPEPTIDE AND APPLICATION THEREOF ~71:QINGDAO AGRICULTURAL UNIVERSITY, No. 700 Changcheng Road, Chengyang District, Qingdao,, People's Republic of China;XINJIANG AGRICULTURAL UNIVERSITY, No. 42, Nanchang Road, Shaybak District, People's Republic of China ~72: FAN, Rongbo;HAN, Rongwei;JI, Zhongyuan;JIANG, Hongning;WANG, Jun;YANG, Yongxin;YU, Zhongna;ZANG, Changjiang;ZHAO, Xiaowei~

2022/02418 ~ Complete ~54:UNDERGROUND CHAMBER ARRANGEMENT ~71:Luke Stanton RADEMAN, 7 Sandvygie Street, South Africa ~72: Luke Stanton RADEMAN~ 33:ZA ~31:2019/05806 ~32:03/09/2019

2022/02385 ~ Provisional ~54:3 SYSTEMS SHARING THE SAME PURPOSE ~71:Mike Junior McKerson, 7 Quibeba, South Africa ~72: Mike Junior McKerson~

2022/02394 ~ Complete ~54:A METHOD FOR CONSTRUCTING A DNA CYCLE-INDUCED OPEN TYPE DNA FLUORESCENT NANOROBOT ~71:Shenzhen Institute of Geriatrics, No.3002, Sungang West Road, Futian District, Shenzhen, Guangdong Province, People's Republic of China;Wu Zhengzhi, No.3002, Sungang West Road, Futian District, Shenzhen, Guangdong Province, People's Republic of China ~72: Li Limin;Li Zhiyue;Li Ziwen;Wu Zhengzhi;Zhang Peng~

2022/02401 ~ Complete ~54:A FILLING MATERIAL AND ITS PREPARATION METHOD, AND A METHOD FOR PREPARING ELECTROLYTIC COPPER FOILS FOR HIGH-FREQUENCY SIGNAL TRANSMISSION ~71:JIANGSU MINGFENG ELECTRONIC MATERIALS CO., LTD., Intensive Industrial Park, Shezhu Town, Liyang County, Changzhou City,, People's Republic of China ~72: CAO, Qianying;CHEN, Zhidong;MING, Xiaoqiang;WANG, Pengju;WANG, Wenchang;WU, Minxian~

2022/02417 ~ Complete ~54:LIFT ENHANCEMENT ASSEMBLY OF AN AERIAL VEHICLE WITH FIXED WINGS ~71:UBIFLY TECHNOLOGIES PRIVATE LIMITED, First Floor, IIT Madras Research Park, India ~72: R, Gowdham;R, Sree Raghav;RAVICHANDRAN, Ramprakash;S R, Chakravarthy;WALVEKAR, Omkar Narendra~ 33:IN ~31:201941030390 ~32:26/07/2019

2022/02387 ~ Provisional ~54:A PIT TOILET ~71:JOHANNES JACOBUS PETRUS VAN WYK, 1 Jellicoe Place, Trafalgar, South Africa ~72: JOHANNES JACOBUS PETRUS VAN WYK~

2022/02422 ~ Complete ~54:INJECTION DEVICE WITH ERGONOMIC HOUSING FORM FACTOR ~71:Janssen Pharmaceuticals, Inc., 1125 Trenton-Harbourton Road, TITUSVILLE 08560, NJ, USA, United States of America ~72: CANNAMELA, Michael;FOLEY, Nick;GLENCROSS, James;KRULEVITCH, Peter;MARTIN, Scott;MCLUSKY, James;MOWER, Jimmy~ 33:US ~31:62/880,838 ~32:31/07/2019

2022/02433 ~ Complete ~54:SCALABLE BIOREACTOR SYSTEMS AND METHODS FOR TISSUE ENGINEERING ~71:PEREIRA-TAVERES, Antonio J., 2885 Zanker Road, SAN JOSE 95134, CA, USA, United States of America;VitroLabs Inc, 2885 Zanker Road, SAN JOSE 95134, CA, USA, United States of America ~72: ENGELMAYR. JR. , George C.;HELGASON, Ingvar;PEREIRA-TAVERES, Antonio J.~ 33:US ~31:62/879,773 ~32:29/07/2019;33:US ~31:62/991,958 ~32:19/03/2020

2022/02386 ~ Provisional ~54:SYSTEM AND METHOD FOR MULTI VITAL SIGN DETERMINATION ~71:MARTINS, George, Therry, 20 MIRAGE DRIVE, HELDERKRUIN, 1724, SOUTH AFRICA, South Africa;MARTINS, Lebogang, Dorah, 20 MIRAGE DRIVE, HELDERKRUIN, 1724, SOUTH AFRICA, South Africa ~72: MARTINS, George, Therry;MARTINS, Lebogang, Dorah~

2022/02400 ~ Complete ~54:GEOPOLYMER MORTAR AND PREPARATION METHOD THEREOF ~71:Huzhou Vocational and Technical College (Huzhou Radio and Television University) (Huzhou Community University), No. 299, Xuefu Road, Wuxing District, Huzhou City, Zhejiang Province, 313099, People's Republic of China ~72: Li Chao;Li Jianhua;Liu Xiaoqin;Xu Xueyong;Xu Ying;Yang Xiaonan~ 33:CN ~31:202210128171.7 ~32:11/02/2022

2022/02420 ~ Complete ~54:RECOVERY OVER SIDELINK ~71:TELEFONAKTIEBOLAGET LM ERICSSON (PUBL), SE-164 83, Sweden ~72: ORSINO, Antonino~ 33:US ~31:62/891004 ~32:23/08/2019

2022/02427 ~ Complete ~54:ALGINATE-BASED FACIAL MASK ~71:Beiersdorf AG, Unnastraße 48, HAMBURG 20253, GERMANY, Germany ~72: BURR, Franziska;FÖLSTER, Heike;GALLINAT, Stefan;LÜGGER, Svenja;RASCHKE, Thomas;SCHÖNDIENST, Petra~ 33:DE ~31:10 2019 211 138.6 ~32:26/07/2019;33:DE ~31:10 2019 007 508.0 ~32:28/10/2019

2022/02438 ~ Complete ~54:UNIFORMLY-PARTITIONED HIGH-PRECISION SUB-REFLECTOR DEVICE WITH A TWO-STAGE POSITION AND POSE ADJUSTMENT FUNCTION ~71:THE 54TH RESEARCH INSTITUTE OF CHINA ELECTRONICS TECHNOLOGY GROUP CORPORATION, Antenna and Servo Department, No. 589 West Zhongshan Road, Shijiazhuang City, Hebei, 050081, People's Republic of China ~72: BIAO DU;GUOXI LIU;JINRONG YANG;JUNHONG ZHAO;LONG CHEN;SHENGWEN LIU;WENNING YANG;XIAOLEI NING;YANG WU;YUANPENG ZHENG~ 33:CN ~31:201910682977.9 ~32:26/07/2019

2022/02399 ~ Complete ~54:METHOD FOR ECOLOGICAL RESTORATION OF HEAVY METALS IN WETLAND WATER ~71:Central South University of Forestry and Technology, No. 498, Shaoshan South Road, Changsha, Hunan, People's Republic of China ~72: Li Yixiao;Lin Yang;Wang Runzhe;Wang Xiaoya;Wang Youan~

2022/02408 ~ Complete ~54:IDENTIFYING COLOSTRUM AND ORDINARY MILK OF GOAT BASED ON BRANCHED-CHAIN FATTY ACIDS AND APPLICATION THEREOF ~71:QINGDAO AGRICULTURAL UNIVERSITY, No. 700 Changcheng Road, Chengyang District, Qingdao, People's Republic of China;YEEPER DAIRY GROUP (QINGDAO) CO., LTD, No. 168 Weihai West Road, Guhe Sub-district Office, Laixi, Qingdao,, People's Republic of China ~72: FAN, Rongbo;HAN, Rongwei;WANG, Jun;WEN, Jing;XIE, Shubin;YANG, Yongxin;YU, Zhongna~

2022/02429 ~ Complete ~54:METHOD, APPARATUS, AND COMPUTER-READABLE MEDIUM FOR ADAPTIVE NORMALIZATION OF ANALYTE LEVELS ~71:SomaLogic, Inc., 2945 Wilderness Pl., BOULDER 80301, CO, USA, United States of America ~72: PERRY, Darryl John;TABACMAN, Eduardo Daniel;WESTACOTT, Matthew Joel;ZICHI, Dominic Anthony~ 33:US ~31:62/880,791 ~32:31/07/2019

2022/02423 ~ Complete ~54:METHOD AND SYSTEM FOR TIME OF POLLINATING CEREAL CROPS ~71:Accelerated Ag Technologies, LLC, 2302 SE Creekview Drive, Suite 6, ANKENY 50021, IA, USA, United States of America ~72: COPE, Jason;GEE, Mark;KRAMER, Chase;KRONE, Todd;LAUER, Michael J.;SINGLETARY, George;STEFANI, Anthony;TRECKER, Elizabeth Ann;VALVERDE, Federico~ 33:US ~31:62/894,354 ~32:30/08/2019

2022/02435 ~ Complete ~54:CYSTATHIONINE BETA-SYNTHASE ENZYME THERAPY FOR TREATMENT OF ELEVATED HOMOCYSTEINE LEVELS ~71:Travere Therapeutics Switzerland GmbH, Zentrum Sonnenhof, Zürcherstrasse 6, RAPPERSWIL-JONA 8640, SWITZERLAND, Switzerland ~72: BUBLIL, Erez Moshe;GLAVIN, Frank;SELLOS-MOURA, Marcia~ 33:US ~31:62/895,230 ~32:03/09/2019;33:US ~31:62/983,862 ~32:02/03/2020

2022/02413 ~ Complete ~54:AUTHENTICATION VIA USSD ~71:CRITICAL IDEAS, INC. DBA CHIPPER, 814 Mission St., 6th Floor, United States of America ~72: MOUJALED, Maijid;TRIEST, Patrick Nelson~ 33:US ~31:62/885,083 ~32:09/08/2019

2022/02396 ~ Complete ~54:MULTI-CHANNEL OVERHEAD CONTACT LINE COMPENSATION DEVICE FATIGUE TEST SYSTEM ~71:China Academy of Railway Sciences Corporation Limited, No. 2, Daliushu Road, Haidian District, Beijing , 100081, People's Republic of China;China Railway Test and Certification Center Limited, No. 2, Daliushu Road, Haidian District, Beijing , 100081, People's Republic of China;Standards and Metrology Research Institute, China Academy of Railway Sciences Corporation Limited, No. 2, Daliushu Road, Haidian District, , Beijing, 100081, People's Republic of China ~72: CHEN, Liming;DAI, Wenrui;HUANG, Yuequn;LEI, Dong;PAN, Like;QIAO, Kaiqing;SUN, Jianxiang;WANG, Jiawei;WANG, Wei;WANG, Xiaoya;WANG, Xinwei;WEI, Zhongtang;XING, Tong;YANG, Caizhi;YUAN, Yuan;ZHANG, Haibo;ZHANG, Zhiguo;ZHAO, Yingxin~ 33:CN ~31:202111233466.2 ~32:22/10/2021

2022/02406 ~ Complete ~54:METHOD FOR PRODUCING FEED ADDITIVE FOR IMPROVING HEALTH STATUS OF LACTATING DAIRY COWS AND APPLICATION THEREOF ~71:QINGDAO AGRICULTURAL UNIVERSITY, No. 700 Changcheng Road, Chengyang District, Qingdao,, People's Republic of China;QINGDAO HOLSTEIN DAIRY FARMING CO., LTD., Qujiatun Village, Wangcheng Sub-district Office, Laixi, Qingdao,, People's Republic of China ~72: DU, Qijing;HAN, Rongwei;PAN, Junyu;WANG, Yijian;YANG, Yongxin;YU, Zhongna;ZHAO, Xiaowei~

2022/02411 ~ Complete ~54:STRAW EFFICIENT FERMENTATION BACTERIA AGENT AND STRAW BIOLOGICAL FEED ~71:GUIZHOU INSTITUTE OF ANIMAL HUSBANDRY AND VETERINARY SCIENCE,

Guizhou Institute of Animal Husbandry and Veterinary Science, Jianlong Community Service Center, Nanming District, Guiyang City, People's Republic of China ~72: CHEN, Haolin;HAN, Yong;LONG, Yong;SHEN, Xiaoyun;SU, Chaozhi;WANG, Defeng;WANG, Hua;XIAO, Wen;YANG, Yang;YUAN, Chao~

2022/02425 ~ Complete ~54:SMART OSCILLATING POSITIVE EXPIRATORY PRESSURE DEVICE ~71:Trudell Medical International, 725 Baransway Drive, LONDON N5V 5G4, ONTARIO, CANADA, Canada ~72: ALIZOTI, Neritan;NOWAK, Bart;SUGGETT, Jason~ 33:US ~31:62/892,355 ~32:27/08/2019

2022/02442 ~ Provisional ~54:WHEEL ARCH STORAGE ~71:SP Terblanche, 22 Steenbok, South Africa ~72: Stephanus Petrus Terblanche~

2022/02391 ~ Complete ~54:EXTRUSION DEVICE SUITABLE FOR PASTE PACKED IN COLLAPSIBLE TUBE ~71:Henan University, 85 Minglun Street, Kaifeng City, Henan Province, 475001, People's Republic of China ~72: CUI, Hongwei;GU, Lei~ 33:CN ~31:202220022685.X ~32:06/01/2022

2022/02403 ~ Complete ~54:ANCHORING DEVICE AND METHOD FOR REINFORCED CONCRETE PIER COLUMN ATTACHMENT APPARATUS ~71:SHANDONG HI-SPEED JINAN WEST RING ROAD CO., LTD., 801-29, Chuangxin Building, East Section of Furong Road, Guyunhu Street, Changqing District, Jinan City, Shandong Province, 250307, People's Republic of China;Shandong University, 27 Shanda South Road, Jinan City, Shandong Province, 250109, People's Republic of China ~72: WANG, Dongming;WANG, Yang;WANG, Yilin;ZHANG, Baoshuo;ZHANG, Feng;ZHANG, Luke;ZHAO, Guohao;ZHAO, Lin~

2022/02431 ~ Complete ~54:TREATMENT OF IMMUNE EVASIVE TUMORS ~71:onCOUR Pharma, Inc., 2215 Sanders Rd., Suite 428, NORTHBROOK 60062, IL, USA, United States of America ~72: BOYNE, Michael;ELHOFY, Adam;MURTHY, Tushar;PODOJIL, Joseph;PUISIS, John~ 33:US ~31:62/881,326 ~32:31/07/2019;33:US ~31:63/018,026 ~32:30/04/2020

2022/02437 ~ Complete ~54:COMBINATIONS OF MEK INHIBITORS WITH CAP-DEPENDENT ENDONUCLEASE INHIBITORS ~71:ATRIVA THERAPEUTICS GMBH, Eisenbahnstrasse 1, Germany ~72: EWESS, Hazem;PLANZ, Oliver~ 33:LU ~31:101372 ~32:27/08/2019

2022/02388 ~ Complete ~54:PORTABLE FETAL HEART MONITOR ~71:THE SECOND AFFILIATED HOSPITAL OF SHANDONG FIRST MEDICAL UNIVERSITY, No. 366, Taishan Street, Tai'an City, People's Republic of China ~72: CHENG, Weiguo;CHENG, Weihong~

2022/02393 ~ Complete ~54:CONTACT LINE RESISTANCE MEASUREMENT DEVICE ~71:China Academy of Railway Sciences Corporation Limited, No. 2, Daliushu Road, Haidian District , Beijing, 100081, People's Republic of China;China Railway Test and Certification Center Limited, No. 2, Daliushu Road, Haidian District, Beijing , 100081, People's Republic of China;Standards and Metrology Research Institute, China Academy of Railway Sciences Corporation Limited, No. 2, Daliushu Road, Haidian District, Beijing , 100081, People's Republic of China ~72: CHEN, Liming;PAN, Like;QIAO, Kaiqing;WEI, Zhongtang;XING, Tong;YANG, Caizhi;YUAN, Yuan;ZHANG, Haibo~ 33:CN ~31:202111232469.4 ~32:22/10/2021

2022/02395 ~ Complete ~54:MULTI-CHANNEL OVERHEAD CONTACT LINE PART FATIGUE TEST DEVICE ~71:China Academy of Railway Sciences Corporation Limited, No. 2, Daliushu Road, Haidian District, Beijing , 100081, People's Republic of China;China Railway Test and Certification Center Limited, No. 2, Daliushu Road, Haidian District, Beijing , 100081, People's Republic of China;Standards and Metrology Research Institute, China Academy of Railway Sciences Corporation Limited, No. 2, Daliushu Road, Haidian District , Beijing, 100081, People's Republic of China ~72: CHEN, Liming;LEI, Dong;PAN, Like;QIAO, Kaiqing;WANG, Wei;WANG, Xiaoya;XING, Tong;YANG, Caizhi;YUAN, Yuan;ZHANG, Haibo;ZHANG, Zhiguo;ZHAO, Yingxin;ZHUANG, Nan~ 33:CN ~31:202111233470.9 ~32:22/10/2021

2022/02409 ~ Complete ~54:FRY COUNTING APPARATUS BASED ON INFRARED COUNTING AND ITS APPLICATION ~71:QINGDAO STARFISH INSTRUMENT CO., LTD., Rm A039, No. 1 Wan'an Branch Rd, Shibei District, Qingdao, People's Republic of China;YELLOW SEA FISHERIES RESEARCH INSTITUTE, CHINESE ACADEMY OF FISHERY SCIENCES, No. 106 Nanjing Road, Shinan District, Qingdao, People's Republic of China ~72: JIA, Yudong;LI, Jiao;LIU, Bin;LIU, Xinfu;MENG, Zhen;ZHANG, Yuefeng;ZHANG, Zheng~ 33:CN ~31:202210121009.2 ~32:09/02/2022

2022/02421 ~ Complete ~54:MOLYBDENUM DISULFIDE/GRAPHENE/CARBON COMPOSITE MATERIAL AND USE THEREOF ~71:QINGDAO UNIVERSITY, College of Chemistry and Chemical Engineering 7 Xianggang East Road, Laoshan , Qingdao, Shandong, 266071, People's Republic of China ~72: CHEN, Zhaojun;DU, Hui;DUAN, Yajing;FU, Hui;FU, Jinzhe~ 33:CN ~31:201910804766.8 ~32:28/08/2019

2022/02432 ~ Complete ~54:MODIFICATION OF ASPHALT FORMULATIONS CONTAINING RECYCLED MATERIALS WITH POLYMERS DERIVED FROM DEPOLYMERIZED PLASTICS ~71:GreenMantra Recycling Technologies Ltd., 81 Elgin Street, BRANTFORD N3S 5A1, ONTARIO, CANADA, Canada ~72: ALMEY, John;DI MONDO, Domenic~ 33:US ~31:62/892,129 ~32:27/08/2019

2022/02398 ~ Complete ~54:HIGH-STRENGTH RAPID WATER-ABSORBENT RESIN AND PREPARATION METHOD THEREOF ~71:Qingdao SOCO New Material Co., Ltd, Room 1102, Building 1, No. 51-2, Wuyang Road, Shibei District, Qingdao City, Shandong Province , 266000, People's Republic of China;Qingdao University of Science and Technology, No.53, Zhengzhou Road, Shibei District, Qingdao City, Shandong Province , 266000, People's Republic of China ~72: HU, Haiqing;XU, Yaqin;ZENG, Xiankui~

2022/02407 ~ Complete ~54:COMPOSITE MATERIAL FOR CONSTRUCTING ECOLOGICAL ARTIFICIAL REEF AND MANUFACTURING METHOD THEREOF ~71:Ocean University of China, No.238, Songling Road, Laoshan District, QINGDAO 266100, SHANDONG, CHINA (P.R.C.), People's Republic of China ~72: FANG, Guangjie;LONG, Xiangyu;TANG, Lulu;TANG, Yanli;WANG, Jiaqi;WANG, Xinmeng~

2022/02419 ~ Complete ~54:DEBLOCKING FILTER SELECTION IN VIDEO OR IMAGE CODING ~71:TELEFONAKTIEBOLAGET LM ERICSSON (PUBL), SE-164 83, Sweden ~72: ANDERSSON, Kenneth;ENHORN, Jack~ 33:US ~31:62/897,004 ~32:06/09/2019

2022/02434 ~ Complete ~54:RADIATION CURABLE INTAGLIO INKS ~71:SICPA HOLDING SA, Avenue de Florissant 41, PRILLY 1008, SWITZERLAND, Switzerland ~72: ANNUNZIATA, Liana;BONNEFOI, Caroline;GOLLUT, Sébastien;MAGNIN, Patrick;SPITTELER, Jean-Daniel~ 33:EP ~31:19189054.0 ~32:30/07/2019

2022/02441 ~ Provisional ~54:DETOXIFICATION OF LITHIUM ION BATTERY ELECTROLYTE ~71:Lesego Siwela, Edenvale, South Africa ~72: Ed Hardwick;Lesego Siwela~

. - APPLIED ON 2022-02-28 -

2022/02597 ~ Complete ~54:DRILL RIG ~71:SULZER (SOUTH AFRICA) HOLDINGS (PTY) LTD, 9 GERHARDUS ROAD, ELANDSFONTEIN, South Africa ~72: MARIUS IMANIEL ACKERMANN~ 33:ZA ~31:2021/02083 ~32:29/03/2021

2022/02595 ~ Complete ~54:TRADITIONAL CHINESE MEDICINE COMPOSITION FOR TREATING ARTHRITIS OF MIN PIG AND PREPARATION METHOD AND APPLICATION THEREOF ~71:INSTITUTE OF ANIMAL HUSBANDRY, HEILONGJIANG ACADEMY OF AGRICULTURAL SCIENCES, NO. 368, XUEFU ROAD, NANGANG DISTRICT, HARBIN, People's Republic of China ~72: FENG, Yanzhong;HE, Haijuan;HE, Xinmiao;LI, Zhongqiu;LIU, Di;QI, Meiyu;TIAN, Ming;WANG, Wentao;YU, Xiaolong;ZHANG, Haifeng~

2022/02444 ~ Provisional ~54:BETPAY ~71:Nkazimulo, 26A Koraalboom Avenue, 26A Koraalboom Avenue, South Africa ~72: Nkazimulo~

2022/02454 ~ Complete ~54:METHOD FOR PROCESSING ROASTED-FLAVOR MACADAMIA NUTS ~71:Guizhou Subtropical Crops Research Institute, No. 1, Fenglin East Road, Xiawutun, Xingyi City, Guizhou Province, 562400, People's Republic of China ~72: HAN, Shuquan;LUO, Lina~

2022/02462 ~ Complete ~54:AGRICULTURAL FARMING TRACTOR ~71:LU, Baoguo, 404, Building 1, No. 23, Zhongxing North Road, Hengshan Town, Huoshan County, Lu 'an city, Anhui Province, 237200, People's Republic of China ~72: LU, Baoguo~

2022/02452 ~ Complete ~54:METHOD FOR BIOSCALE DETECTION IN OLD CITY PIPE NETWORK ~71:Jilin Jianzhu University, No.5088, Xincheng Street, Jingyue Zone, People's Republic of China ~72: Guolong XIE;Jiahui REN;Jiajie LIU;Jianhui WANG;Mingdong LI;Ruqi SUN;Xin QI;Xingyu ZHU~

2022/02476 ~ Complete ~54:A PROCESS FOR SYNTHESIS OF ANTICANCER DERIVATIVES OF SUBSTITUTED 4-QUINOLONES AND ITS COMPOSITION ~71:DAKE, SHRUTI GORAKHNATH, Shreeyash Institute of Pharmacy, Gut No. 258, Satara Parisar, Beed bypass Road, Aurangabad, India;TAPADIYA, GANESH GOKULDAS, Shreeyash Institute of Pharmaceutical Education and Research, Gut No. 258, Satara Parisar, Beed bypass Road, Aurangabad, India;TOSHNIWAL, SANJAY SHIVNARAYAN, VIDARBHA INSTITUTE OF PHARMACY, Anjankhed, Borala Phata, Hingoli Road, Washim, India ~72: DAKE, SHRUTI GORAKHNATH;TAPADIYA, GANESH GOKULDAS;TOSHNIWAL, SANJAY SHIVNARAYAN~

2022/02486 ~ Complete ~54:SYSTEM AND METHOD FOR CONTROLLING METAL OXIDE GEL PARTICLE SIZE ~71:X ENERGY, LLC, SUITE 300, 801 THOMPSON AVENUE, ROCKVILLE, MARYLAND 20852, USA, United States of America ~72: LINNEEN, Nicholas~ 33:US ~31:16/530,695 ~32:02/08/2019

2022/02491 ~ Complete ~54:HAIR COSMETIC COMPOSITIONS CONTAINING CATIONIC POLYMERS, ACRYLATE-BASED POLYMERS, GUMS, AND POLYOLS ~71:L'OREAL, 14 Rue Royale, France ~72: COMERON-DECARLO, Vanessa;DESAI, Prashansa Mayank;SULEIMAN, Aziza Khader~ 33:US ~31:16/587,384 ~32:30/09/2019

2022/02495 ~ Complete ~54:ANTIMICROBIAL VACCINE COMPOSITIONS ~71:Onebiopharma, Inc., 124 Marlborough Street, BOSTON 02111, MA, USA, United States of America ~72: DABORA, Rebecca;DINGLEY, Amy;PATEL, Suman;SWISS, Gerald F.~ 33:US ~31:62/892,400 ~32:27/08/2019

2022/02503 ~ Complete ~54:ANTIVIRAL PRODRUGS AND PHARMACEUTICAL COMPOSITIONS THEREOF ~71:The Scripps Research Institute, 10550 North Torrey Pines Road, LA JOLLA 92037, CA, USA, United States of America ~72: CHATTERJEE, Arnab Kumar;ELIASEN, Anders Mikal;GUPTA, Anil Kumar;JOSEPH, Sean Barry~ 33:US ~31:62/898,679 ~32:11/09/2019

2022/02507 ~ Complete ~54:NITRIFICATION INHIBITORS ~71:THE UNIVERSITY OF MELBOURNE, Grattan Street, The University of Melbourne, Australia ~72: CHEN, Deli;TAGGERT, Bethany Isabel;WILLE, Uta~ 33:AU ~31:2019903269 ~32:05/09/2019

2022/02465 ~ Complete ~54:SCREEN-FREE PROGRAMMING LEARNING SYSTEM AND PROGRAMMING METHOD THEREOF ~71:Jiangxi fufang technology co., ltd, West Building of high-speed railway station, High-tech Industrial Park, Yichun, Jiangxi, People's Republic of China ~72: Hu Bin;Sun Hao;Tian Xiangzhang;Zhao Shuying~

2022/02475 ~ Complete ~54:GROUND PENETRATING RADAR FEATURE EXTRACTION METHOD AND SYSTEM BASED ON COMPRESSED SENSING ~71:Hunan Normal University, No. 36 Lushan Road, Yuelu District, Changsha City, Hunan Province, 410081, People's Republic of China ~72: Du Baoqiang;Wang Yuming;Yu Huimin~

2022/02489 ~ Complete ~54:COMPLEX DEPRESSANT FOR CONTROLLING ZINC AND IRON IN POLYMETALLIC-ORE FLOTATION, PRODUCTION PROCESS AND APPLICATION AS A SUBSTITUTE FOR ZINC SULFATES AND COPPER SULFATES ~71:REY BUSTAMANTE, Felipe José, Ant. Panamericana Sur Km. 19.5, Sub Lote 2A, Ex Fundo El Olivar, Villa El Salvador, Lima 42, Peru ~72: REY BUSTAMANTE, Felipe José~ 33:PE ~31:001520-2019/DIN ~32:01/08/2019

2022/02505 ~ Complete ~54:ENCODING AND DECODING METHOD, DEVICE AND APPARATUS ~71:Hangzhou Hikvision Digital Technology Co., Ltd., No.555 Qianmo Road, Binjiang District, HANGZHOU 310051, ZHEJIANG, CHINA (P.R.C.), People's Republic of China ~72: CHEN, Fangdong~ 33:CN ~31:201910901352.7 ~32:23/09/2019

2022/02999 ~ Complete ~54:METHOD AND DEVICE FOR CODING/DECODING IMAGE USING INTRA PREDICTION ~71:B1 INSTITUTE OF IMAGE TECHNOLOGY, INC., 1213-ho, 525, Gonghangdae-ro Gangseo-gu, Republic of Korea ~72: KIM, Ki Baek~ 33:KR ~31:10-2018-0107250 ~32:07/09/2018;33:KR ~31:10-2018-0110815 ~32:17/09/2018;33:KR ~31:10-2018-0112528 ~32:19/09/2018;33:WO ~31:PCT/KR2019/011556 ~32:06/09/2019

2022/02458 ~ Complete ~54:FE/GRAPHENE/BIOCHAR AND A CARBON-BASED SLOW-RELEASE COMPOUND FERTILIZER SPECIAL FOR CORN AND APPLICATION THEREOF ~71:Qingdao Agricultural University, 700 Changcheng Road, Chengyang District, Qingdao, Shandong Province, 266109, People's Republic of China ~72: HUANG, Xiaoli;ZHANG, Yuna~

2022/02470 ~ Complete ~54:METHOD AND APPARATUS FOR MONITORING OPERATIONAL CHARACTERISTICS OF AN INDUSTRIAL GAS PLANT COMPLEX ~71:AIR PRODUCTS AND CHEMICALS, INC., 1940 Air Products Blvd., Allentown, Pennsylvania, 18106-5500, United States of America ~72: PRATIK MISRA;SANJAY MEHTA~ 33:US ~31:17/193,040 ~32:05/03/2021

2022/02500 ~ Complete ~54:UNIVERSAL DONOR SELECTION METHOD TO IDENTIFY NK-CELL-DONORS ~71:The Research Institute at Nationwide Children's Hospital, 700 Children''s Drive, COLUMBUS 43205, OH, USA, United States of America ~72: LEE, Dean~ 33:US ~31:62/900,245 ~32:13/09/2019;33:US ~31:63/049,325 ~32:08/07/2020;33:US ~31:17/018,681 ~32:11/09/2020

2022/02596 ~ Complete ~54:TRADITIONAL CHINESE MEDICINE COMPOSITION FOR TREATING COCCIDIOSIS OF MIN PIG AND PREPARATION METHOD AND APPLICATION THEREOF ~71:INSTITUTE OF ANIMAL HUSBANDRY, HEILONGJIANG ACADEMY OF AGRICULTURAL SCIENCES, NO. 368, XUEFU ROAD, NANGANG DISTRICT, HARBIN, People's Republic of China ~72: CHEN, Heshu;FENG, Yanzhong;HE, Xinmiao;LIU, Di;LIU, Ziguang;TIAN, Ming;WANG, Wentao;WU, Saihui;ZHANG, Haifeng~

2022/02599 ~ Complete ~54:THRUST LEG ~71:SULZER (SOUTH AFRICA) HOLDINGS (PTY) LTD, 9 GERHARDUS ROAD, ELANDSFONTEIN, South Africa ~72: MARIUS IMANIEL ACKERMANN~ 33:ZA ~31:2020/07466 ~32:30/11/2020

2022/02459 ~ Complete ~54:IMMERSIVE FIVE-TONE IMAGE BIONIC ACUPOINT STIMULATION SYSTEM ~71:The Second Affiliated Hospital of Shandong University of traditional Chinese medicine (Shandong integrated traditional Chinese and Western Medicine Hospital), West Hospital, the Second Affiliated Hospital of Shandong

University of traditional Chinese medicine, No. 85, Jingyi Road, Jinan City, Shandong Province, 250000, People's Republic of China ~72: Li Li;Zhou Xia~

2022/02467 ~ Complete ~54:IMPLANT PLACEMENT AND REMOVAL SYSTEMS ~71:INTARCIA THERAPEUTICS, INC., One Marina Park Drive, Suite 1300, Boston, Massachusetts, 02210, United States of America ~72: AMY K WHITSON;JAMES M SELLERS;JAY S SMITH;MATTHEW WEBER;MICHAEL R COLE;SCOTT D LAUTENBACH~ 33:US ~31:62/170,561 ~32:03/06/2015;33:US ~31:62/170,994 ~32:04/06/2015

2022/02490 ~ Complete ~54:HAIR COSMETIC COMPOSITIONS CONTAINING GUMS FATTY ALCOHOL, AND ESTERS ~71:L'OREAL, 14 Rue Royale, France ~72: COMERON-DECARLO, Vanessa;NAIBERK, Emma;PARIKH, Dhara;SULEIMAN, Aziza Khader~ 33:US ~31:16/584,238 ~32:26/09/2019

2022/02497 ~ Complete ~54:NOVEL MOLECULES FOR DIAGNOSIS ~71:AC Immune SA, EPFL Innovation Park, Building B, LAUSANNE 1015, SWITZERLAND, Switzerland ~72: ADOLFSSON, Oskar;PIORKOWSKA, Katarzyna Ewa~ 33:EP ~31:19196512.8 ~32:10/09/2019;33:EP ~31:20184340.6 ~32:06/07/2020

2022/02506 ~ Complete ~54:A SYSTEM FOR THE SAFE COUPLING OF A RE-USABLE BAG TO A BANKNOTE HANDLING AND STORING MACHINE AND RELEVANT USE METHOD ~71:CIMA S.P.A., Via di Mezzo 2-4, 41037, Mirandola (MO), Italy ~72: NICOLETTA RAZZABONI;VITTORIO RAZZABONI~ 33:IT ~31:102019000015638 ~32:05/09/2019

2022/02445 ~ Provisional ~54:BRIDGE REHABILITATION SYSTEM AND METHOD ~71:ARROW POINT ENGINEERING (PTY) LTD, 26 Victoria Street, Oaklands, South Africa ~72: GEBREMESKEL, Amanuel~

2022/02450 ~ Complete ~54:AEROBIC CO-METABOLIC TREATMENT OF LIGNITE UPGRADING WASTEWATER ~71:Jilin Jianzhu University, No.5088, Xincheng Street, Jingyue Zone, People's Republic of China ~72: Jing LUO;Tianni CHI;Xiaoling WANG;Yin YIN;Yucheng JIN;Yuting ZHOU~

2022/02463 ~ Complete ~54:THREE-DIMENSIONAL DATA ACQUISITION SHED AND SHOOTING METHOD THEREOF ~71:Hunan Normal University, 36 Yuelu Mountain, Yuelu District, Changsha City, Hunan Province, 410000, People's Republic of China ~72: Wang Wei;Wu Yuheng;Yang Chen;Zhang Hedi;Zhang Rui~ 33:CN ~31:202110612986.8 ~32:02/06/2021

2022/02469 ~ Complete ~54:A METHOD AND APPARATUS FOR MANAGING PREDICTED POWER RESOURCES FOR AN INDUSTRIAL GAS PLANT COMPLEX ~71:AIR PRODUCTS AND CHEMICALS, INC., 1940 Air Products Blvd., Allentown, Pennsylvania, 18106-5500, United States of America ~72: PRATIK MISRA;SANJAY MEHTA~ 33:US ~31:17/193,029 ~32:05/03/2021

2022/02479 ~ Complete ~54:FLEXIBLE MANUFACTURING UNIT BASED ON CNC MACHINE ~71:QINGDAO VOCATIONAL AND TECHNICAL COLLEGE, No. 369, Qiantangjiang Road, Economic and Technological Development Area, Qingdao, People's Republic of China ~72: GAO, Jian;LI, Wen~

2022/02481 ~ Complete ~54:METHOD FOR ASSISTING IN THE DETECTION OF ELEMENTS, ASSOCIATED DEVICE AND PLATFORM ~71:THALES, Tour Carpe Diem, Place des Corolles Esplanade Nord, France ~72: BECHE, Arnaud;HENAFF, Gilles;LE MEUR, Alain;SEGUINEAU DE PREVAL, Benoît~ 33:FR ~31:1909431 ~32:27/08/2019

2022/02483 ~ Complete ~54:DISSIPATION STRUCTURE FOR DEBRIS FLOW PREVENTION OF BRIDGE ENGINEERING AND DESIGN METHOD ~71:JIAXING JINXILAI TECHNOLOGY CO. LTD, Lv Yan 299 Hangfu Road, Chongfu Town, Tongxiang City, Jiaxing, Zhejiang, 314511, People's Republic of China ~72: LV, Yan~

2022/02487 ~ Complete ~54:COMPOSITION TO ENHANCE NUTRIENT CONTENT IN PLANTS ~71:CHINTHALA, Venkat Reddy, 6-46/B, Old Alwal, India ~72: CHINTHALA, Venkat Reddy~ 33:IN ~31:201941031393 ~32:02/08/2019

2022/02499 ~ Complete ~54:ANTIBODY COMPOSITIONS AND METHODS FOR TREATING HEPATITIS B VIRUS INFECTION ~71:Vir Biotechnology, Inc., 499 Illinois Street, Suite 500, SAN FRANCISCO 94158, CA, USA, United States of America ~72: CONNOLLY, Lynn E.;GALL, Jonathan;MOGALIAN, Erik;PANG, Phillip S.~ 33:US ~31:62/893,742 ~32:29/08/2019

2022/02502 ~ Complete ~54:MODULATION OF T CELL RESPONSES BY UL18 OF HUMAN CYTOMEGALOVIRUS ~71:Oregon Health & Science University, 0690 SW Bancoft Street, Mail Code L106TT, PORTLAND 97239, OR, USA, United States of America ~72: FRUEH, Klaus J.;HANSEN, Scott G.;MALOULI, Daniel;PICKER, Louis J.~ 33:US ~31:62/889,310 ~32:20/08/2019

2022/02493 ~ Complete ~54:ANTIBODIES BINDING TO VISTA AT ACIDIC PH ~71:Bristol-Myers Squibb Company, Rte. 206 & Province Line Road, P.O. Box 4000, PRINCETON 08543, NJ, USA, United States of America ~72: MUELLER, Sabrina;SU, Lin Hui~ 33:US ~31:62/902,741 ~32:19/09/2019;33:US ~31:62/916,690 ~32:17/10/2019

2022/02446 ~ Provisional ~54:A CARD GAME SYSTEM FOR PLAYING A CARD GAME ~71:SUN INTERNATIONAL (IP) LIMITED, 6 Sandown Valley Crescent, SANDTON 2196, Gauteng, SOUTH AFRICA, South Africa ~72: OLCKERS, Maartin~

2022/02449 ~ Complete ~54:A SPIRAL-TYPE DOUBLE-JAW VACUUM PUMP ROTOR ~71:North University of China, No.3 Xueyuan Road, Jiancaoping District, People's Republic of China ~72: Dong ZHANG;Jinghong LI;Shitong LUO;Tao WU;Yafeng DONG;Zhen DONG~

2022/02460 ~ Complete ~54:PREPARATION METHOD AND APPLICATION OF SANGHUANGPORUS VANINII EXTRACT ~71:Institute of Chinese Materia Medica China Academy of Chinese Medical Sciences, No.16, Nanxiaojie Street, DongzhimenNei, Dongcheng District, Beijing, 100700, People's Republic of China ~72: Dai Yang;Duan Wenwen;Gu Xuezhu;Guo Shanshan;Li Raorao;Wang Yaxin;Xue Qinghai;Zhang Haiyan;Zhang Zhijie~

2022/02464 ~ Complete ~54:HIGHWAY ENGINEERING MAINTENANCE MATERIAL AND PREPARATION METHOD THEREOF ~71:GuangXi Beitou Transportation Maintenance Technology Group Co.,Ltd., Room 1501, Block D, Guangxi Energy Building, No.2 Jinlong Road, Wuxiang Avenue, Liangqing District, Nanning City, Guangxi Zhuang Autonomous Region, People's Republic of China ~72: Chang Zhenchao;Chen Jiangcai;Chen Qinglin;Huang Haifeng;Huang Xiaofeng;Liao Laixing;Liu Haobin;Lu Yeqing;Luo Junhui;Ming Yang;Mo Peng;Ren Tiankun;Wang Qimin;Wu Chunwei;Xie Cheng~

2022/02466 ~ Complete ~54:METHOD FOR PREPARING GRAPHENE OXIDE ANTIMICROBIAL COATING FABRIC ~71:Qingdao University, No. 308, Ningxia Road, Shinan District, QINGDAO 266071, SHANDONG PROVINCE, CHINA (P.R.C.), People's Republic of China ~72: QU, Lijun;TIAN, Mingwei;ZHU, Shifeng~

2022/02471 ~ Complete ~54:LUBRICANT PUMPING SYSTEM ~71:SKF LUBRICATION SYSTEMS GERMANY GMBH, Heinrich-Hertz-Straße 2-8, 69190, Walldorf, Germany ~72: ANDREAS SCHOENFELD (DECEASED);DIETER HESS;JUERGEN KREUTZKAEMPER;STEFAN SCHUERMANN~ 33:DE ~31:102021204102.7 ~32:26/04/2021

2022/02480 ~ Complete ~54:METHOD FOR IN-SITU CADMIUM REMOVAL FROM GROUNDWATER ~71:Jilin Jianzhu University, No.5088, Xincheng Street, Jingyue Zone, People's Republic of China ~72: Bing HAN;Chunyan SHI;Guang LI;Xingyu LI;Yunyong YU~

2022/02482 ~ Complete ~54:METHOD FOR ASSISTING WITH THE DETECTION OF ELEMENTS, ASSOCIATED DEVICE AND PLATFORM ~71:THALES, Tour Carpe Diem, Place des Corolles Esplanade Nord, France ~72: BECHE, Arnaud;HENAFF, Gilles;LE MEUR, Alain;SEGUINEAU DE PREVAL, Benoît~ 33:FR ~31:19 09428 ~32:27/08/2019

2022/02488 ~ Complete ~54:METHOD AND MEASUREMENT SYSTEM FOR DETECTING AND LOCALIZING INCORRECT POSITIONING OF SUPPORT ROLLERS IN BELT CONVEYOR INSTALLATIONS ~71:OTTO-VON-GUERICKE-UNIVERSITÄT MAGDEBURG, Universitätsplatz 2, Germany ~72: André KATTERFELD;Hendrik OTTO;Lisa WONNER~ 33:DE ~31:10 2019 126 060.4 ~32:26/09/2019

2022/02498 ~ Complete ~54:APPARATUS, ROCK DRILLING RIG AND METHOD FOR MINING NAVIGATION ~71:Sandvik Mining and Construction Oy, Pihtisulunkatu 9, TAMPERE 33330, FINLAND, Finland ~72: MUONA, Jouko~ 33:EP ~31:19200041.2 ~32:27/09/2019

2022/02501 ~ Complete ~54:ANTI-CD73 ANTIBODIES ~71:Symphogen A/S, Pederstrupvej 93, BALLERUP 2750 , DENMARK, Denmark ~72: FRÖHLICH, Camilla;GJETTING, Torben;GRANDAL, Michael Monrad;HANSEN, Randi Westh;JAKOBSEN, Janus Schou;LANTTO, Johan~ 33:US ~31:62/896,908 ~32:06/09/2019

2022/02598 ~ Complete ~54:DRILL ~71:SULZER (SOUTH AFRICA) HOLDINGS (PTY) LTD, 9 GERHARDUS ROAD, ELANDSFONTEIN, South Africa ~72: MARIUS IMANIEL ACKERMANN~ 33:ZA ~31:2021/00940 ~32:11/02/2021

2022/03000 ~ Complete ~54:IMAGE ENCODING/DECODING METHOD AND DEVICE ~71:B1 INSTITUTE OF IMAGE TECHNOLOGY, INC., 1213-ho, 525, Gonghangdae-ro Gangseo-gu, Republic of Korea ~72: KIM, Ki Baek~ 33:KR ~31:10-2018-0107256 ~32:07/09/2018;33:WO ~31:PCT/KR2019/011648 ~32:09/09/2019

2022/02453 ~ Complete ~54:REVERSED-PHASE MICROEMULSION METHOD FOR PREPARING KAOLIN/TITANIUM DIOXIDE COMPOSITE FILLERS ~71:Hangzhou Huawang New Material Technology Co., Ltd., No. 18, Binhe North Road, Qingshanhu Street, Lin'an District, Hangzhou City, Zhejiang Province, 311305, People's Republic of China;Zhejiang University of Science and Technology, No. 318 Liuhe Road, Xihu District, Hangzhou City, Zhejiang Province, 310023, People's Republic of China ~72: LIU, Zhong;SHA, Lizheng;WANG, Huile;WU, Haibiao;YE, Bin;ZHANG, Yan;ZHAO, Huifang~

2022/02504 ~ Complete ~54:ANTIVIRAL PRODRUGS AND FORMULATIONS THEREOF ~71:The Scripps Research Institute, 10550 North Torrey Pines Road, LA JOLLA 92037, CA, USA, United States of America ~72: CHATTERJEE, Arnab Kumar;ELIASEN, Anders Mikal;GUPTA, Anil Kumar;JOSEPH, Sean Barry~ 33:US ~31:62/898,679 ~32:11/09/2019

2022/02443 ~ Provisional ~54:DIGITAL SUPPLY CHAIN FOR ALL AUTOMOTIVE INDUSTRY PARTS AND EQUIPMENT ~71:I NEED A PART (PTY) LIMITED, 1 Begonia Str, South Africa ~72: I NEED A PART (PTY) LTD~

2022/02447 ~ Provisional ~54:VIRTUAL REALITY (VR) WITH RECHARGEABLE BATTERY BUILT-IN APP FOR ONLINE PROVIDER OF ENTERTAINMENT (MUSIC, MOVIES, ETC.) AND VOICE RECOGNITION. ~71:Ahmed Waseef Saib, 24 Park Ave, Desainager, Tongaat Beach, South Africa ~72: Ahmed Waseef Saib~

2022/02451 ~ Complete ~54:A METHOD FOR TREATING DOUBLE-SLUDGE SEWAGE BASED ON HPA/HYDROGEN AUTOTROPHIC DENITRIFICATION COUPLING MECHANISM ~71:Jilin Jianzhu University, No.5088, Xincheng Street, Jingyue Zone, People's Republic of China ~72: Ang DONG;Guosong PENG;Ke ZHAO;Qian WANG;Yinze ZHU~

2022/02455 ~ Complete ~54:LASER PROCESSING DEVICE AND METHOD WITH BEAM SHAPING ~71:Qingdao University of Technology, Qingdao University of Technology, No.777, Jialingjiang Road, Huangdao District, Qingdao City, Shandong Province, 266000, People's Republic of China ~72: DONG, Hao;HAN, Suli;LI, Zhuo;LIN, Haibo;SHAO, Jing;SUN, Shufeng;WANG, Yingming~

2022/02457 ~ Complete ~54:AGRICULTURAL INSECTICIDAL COMPOSITION AND APPLICATION THEREOF ~71:Jiangxi Dronephon Technologies Co. Ltd, Room 802, Area A, Chuangye Building, No.698 Jingdong Avenue, Nanchang High-tech Industrial Development Zone, Nanchang City, Jiangxi Province, 330006, People's Republic of China ~72: LI, Xiang;LIANG, Beida;WANG, Bin~

2022/02461 ~ Complete ~54:DEEP PLOUGHING SEEDING MACHINE ~71:LU, Baoguo, 404, Building 1, No. 23, Zhongxing North Road, Hengshan Town, Huoshan County, Lu 'an city, Anhui Province, 237200, People's Republic of China ~72: LU, Baoguo~

2022/02468 ~ Complete ~54:A METHOD AND APPARATUS FOR CONTROLLING AN INDUSTRIAL GAS PLANT COMPLEX ~71:AIR PRODUCTS AND CHEMICALS, INC., 1940 Air Products Blvd., Allentown, Pennsylvania, 18106-5500, United States of America ~72: PRATIK MISRA;SANJAY MEHTA~ 33:US ~31:17/193,052 ~32:05/03/2021

2022/02472 ~ Complete ~54:METHOD FOR PREPARING PEA PROTEIN FERMENTED MILK ~71:QINGDAO AGRICULTURAL UNIVERSITY, No. 700 Changcheng Road, Chengyang District, Qingdao, People's Republic of China ~72: DU, Qijing;FAN, Rongbo;HAN, Rongwei;JIANG, Hongning;QIN, Yang;WANG, Jun;YANG, Yongxin~

2022/02474 ~ Complete ~54:CONNECTING COMPONENT ~71:PERI SE, Rudolf-Diesel-Strasse 19, Germany ~72: NEUWIRTH, Detlef;WINTER, Franz~ 33:DE ~31:20 2021 101 627.2 ~32:26/03/2021

2022/02477 ~ Complete ~54:A HYBRID MODEL FOR FORECASTING INFECTIOUS DISEASES ~71:GUNJAN, Dr., SRM University, Delhi-NCR, Sonipat, India;GUPTA, Aditya, SRM University, Delhi-NCR, Sonepat,, India;JAIN, Vibha, Netaji Subhas University of Technology,, India;KAUR, Arshpreet, Alliance University, Bangalire, India;RAJPUT, Ishwari Singh, SRM University, Delhi-NCR, Sonepat,, India;SHASHVAT, Dr., Alliance University, Bangalore, India;SINGH, Raushan Kumar, CSED KNIT Sultanpur, India;TYAGI, Sonam, Sports Authority of India, Northern Regional Centre, Chauhan Joshi G.T.Road, Bahalgarh, Sonipat,, India;VARTIKA, Dr., Alliance University, Bangalore, India ~72: GUNJAN, Dr.;GUPTA, Aditya;JAIN, Vibha;KAUR, Arshpreet;RAJPUT, Ishwari Singh;SHASHVAT, Dr.;SINGH, Raushan Kumar;TYAGI, Sonam;VARTIKA, Dr.~

2022/02485 ~ Complete ~54:METHOD FOR STORING HYDROGEN USING STRUCTURE-H HYDRATE ~71:SOUTH CHINA UNIVERSITY OF TECHNOLOGY, No. 381 Wushan Road, Tianhe District, Guangzhou, Guangdong , 510640, People's Republic of China ~72: FAN, Shuanshi;LANG, Xuemei;LI, Gang;WANG, Shenglong;WANG, Yanhong;YIN, Kaidong;YU, Chi~ 33:CN ~31:202010041161. 0 ~32:15/01/2020

2022/02492 ~ Complete ~54:LARGE VECTORS AND METHODS FOR HIGH-YIELD PRODUCTION ~71:KATHOLIEKE UNIVERSITEIT LEUVEN, KU Leuven R&D Waaistraat 6, Belgium ~72: AUWERX, Joeri;DALLMEIER, Kai;GORIS, Nesya;JANSSEN, Melody;ONGENAE, Nicolas;VANSALEN, Cédric~ 33:EP ~31:19199473.0 ~32:25/09/2019

2022/02494 ~ Complete ~54:SURFACE HARMONIZATION FOR EMBEDDED FUNCTIONAL LAYERS ~71:UVEX SAFETY Gloves GmbH & Co. KG, Elso-Klöver-Straße 6, LÜNEBURG 21337 , GERMANY, Germany ~72: BARTUSCH, Matthias;BURGHART, Markus;KESTING, Wolfgang~ 33:DE ~31:10 2019 123 664.9 ~32:04/09/2019

2022/02496 ~ Complete ~54:HPK1 ANTAGONISTS AND USES THEREOF ~71:Nimbus Saturn, Inc., 130 Prospect Street, Suite 301, CAMBRIDGE 02139, MA, USA, United States of America ~72: ALBANESE, Steven K.;COTE, Alexandre;GREENWOOD, Jeremy Robert;KAILA, Neelu;LEFFLER, Abba;LINNEY, Ian;SEVERANCE, Daniel L.;WARD, Stuart;WHITTAKER, Ben;WISHART, Grant~ 33:US ~31:62/900,152 ~32:13/09/2019;33:US ~31:63/032,070 ~32:29/05/2020

2022/02448 ~ Provisional ~54:HEADER BOARD ~71:CRAIG DAVID DAVIES, 3 Martha Street, Kloofendal Ext. 3, Roodepoort, South Africa;GORDON DANIEL DAVIES, 12 Maroela Road, Dal Fouche, Springs, Gauteng, 1559, South Africa ~72: CRAIG DAVID DAVIES;GORDON DANIEL DAVIES~

2022/02456 ~ Complete ~54:HIGH-ENTROY ALLOY WITH DESIRABLE HOT WORKING PERFORMANCE AND PREPARATION METHOD THEREFOR ~71:Shenyang University of Technology, No. 111, Shenliao West Road, Economic and Technological Development Zone, Shenyang City, Liaoning , 110027, People's Republic of China ~72: DONG, Fuyu;YUAN, Xiaoguang;YUAN, Ye;ZHANG, Yue;ZHOU, Guishen~

2022/02473 ~ Complete ~54:IN FIELD IMAGE ANALYSIS OF CHEMICAL OR BIOLOGICAL FORMULATION DEPOSITION ON A NATURAL SURFACE ~71:DROPSIGHT (PTY) LTD, Kathrein Wine Estate, Annandale Road, South Africa ~72: MEYER, Jacobus Esias;RAS, Marthinus Christoffel David;VAN ZYL, Johannes Gideon;VON WIELLIGH, Christiaan Lodewyk;WESSELS, Johannes Petrus Bekker~ 33:ZA ~31:2021/01603 ~32:10/03/2021

2022/02478 ~ Complete ~54:CULTURE MEDIUM APPLICABLE TO LIQUID FERMENTATION PRODUCTION OF PHELLINUS IGNIARIUS ~71:HEZE UNIVERSITY, No. 2269, Daxue Road, Heze City, People's Republic of China ~72: DU, Ruiqi;XU, Qian~

2022/02484 ~ Complete ~54:ANTI-IMPACT DUAL-CAVITY IMPACT-MITIGATION-TYPE DISSIPATION STRUCTURE FOR BRIDGE PROJECT AND DESIGN METHOD ~71:JIAXING JINXILAI TECHNOLOGY CO. LTD, Lv Yan 299 Hangfu Road, Chongfu Town, Tongxiang City, Jiaxing, Zhejiang, 314511, People's Republic of China ~72: LV, Yan~

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2022/02511 ~ Complete ~54:TRADITIONAL CHINESE MEDICINE COMPOSITION FOR TREATING BRONCHIAL ASTHMA AND PREPARATION METHOD THEREOF ~71:Changchun University of Traditional Chinese Medicine, No. 1035, Boshuo Road, Jingyue Economic Development Zone, Changchun City, Jilin Province, 130117, People's Republic of China ~72: HU, Shaodan;SHI, Li;WANG, Tan;YANG, Bo~

2022/02534 ~ Complete ~54:MOVABLE WET-TYPE VIBRATING WIRE AND CYCLONE DUST COLLECTOR FOR MINE ~71:HUAWEI NATIONAL ENGINEERING RESEARCH CENTER FOR EFFICIENT RECYCLING OF METAL MINERAL RESOURCES CO., LTD., No. 666, Xitang Road, Economic and Technological Development Zone, Ma'anshan City, People's Republic of China;SINOSTEEL MAANSHAN GENERAL INSTITUTE OF MINING RESEARCH CO, LTD, No. 666, Xitang Road, Economic and Technological Development Zone, Ma'anshan City, People's Republic of China ~72: LI, Gang;WU, Jiangyou;XU, Xiuping~

2022/02516 ~ Complete ~54:TREATED TIMBER AND A METHOD FOR TREATING TIMBER ~71:Scott Murray Sargent, 17 Roxburghe avenue, South Africa ~72: Sargent, Scott Murray~ 33:ZA ~31:2021/00285 ~32:15/01/2021

2022/02520 ~ Complete ~54:CHARGING PLUGGING DEVICE FOR UPWARD BLAST HOLE OF COAL SEAM ROOF AND USING METHOD THEREOF ~71:Anhui University of Science and Technology, 168 Taifeng street, Nanxin District, Huainan City, Anhui Province, 232001, People's Republic of China ~72: Fang Ligang;Fu Jugen;Li

Chongqing;Li Sizhao;Liu Mohan;Liu Zhichao;Luo Lingfeng;Mao Longfei;Wang Haibo;Wang Hao;Wang Mengxiang;Xu Ying;Ye Shuangshuang;Yu Yang;Zong Qi~

2022/02524 ~ Complete ~54:RECOMBINANT PSEUDORABIES VIRUS, AND PREPARATION METHOD AND USE THEREOF ~71:Sichuan Agricultural University, No. 46 Xinkang Road, Yucheng District, Ya'an City, Sichuan Province, 625014, People's Republic of China;Sichuan Xinxingao Biotechnology Co., Ltd., No. 17, Huangjin Road, Liucheng, Wenjiang District, Chengdu City, Sichuan Province, 611100, People's Republic of China ~72: GU, Sirui;XU, Zhiwen;YUAN, Xiaodong;ZHU, Ling~ 33:CN ~31:202111521948.8 ~32:13/12/2021

2022/02531 ~ Complete ~54:PRIMER-PROBE SET, APPLICATION THEREOF AND KIT FOR DETECTING AFRICAN SWINE FEVER VIRUS AND PORCINE EPIDEMIC DIARRHEA VIRUS ~71:SHANDONG BINZHOU ANIMAL SCIENCE AND VETERINARY MEDICINE ACADEMY, 480 Bohai Jiu Road, Binzhou City, People's Republic of China;SHENZHEN COMBINED BIOTECH CO., LTD, 6F, Building A, Changyuan New Material Port, Xinyuan North Road, Nanshan District, People's Republic of China ~72: CHEN, Jinlong;DENG, Fenglin;DONG, Lin;HU, Shaoliang;MENG, Weiqin;WANG, Jinliang;XU, Chongyou;YAO, Chunyang~

2022/02508 ~ Provisional ~54:VIRTUAL REALITY (VR) WITH RECHARGEABLE BATTERY BUILT-IN WIRELESS CELLULAR INTERNET ACCESS AND NEAR FIELD COMMUNICATION TAG READER AND VOICE RECOGNITION. ~71:Ahmed Waseef Saib, 24 Park Ave, Tongaat Beach, Desainager, South Africa ~72: Ahmed Waseef Saib~

2022/02513 ~ Complete ~54:METHOD FOR PRODUCING NURSERY SUBSTRATE WITH VEGETABLE STRAW-BASED COMPOST ~71:Shandong Colorful Manor Vegetable And Food Co.,Ltd, 8th Floor, Block A, Vegetable Building, No. 9 Haoyuan Road, Luocheng Street, Shouguang City, Shandong, 262700, People's Republic of China;Shandong Shouguang Vegetable Industry Group Co.,Ltd., No. 9 Haoyuan Road, Luocheng Street, Shouguang City, Shandong, 262700, People's Republic of China;Shandong Vegetable Engineering Technology Research Center Co., Ltd., (in the courtyard of Shouguang Vegetable Seed Industry Group) West of Beishunhe Road, Shengcheng East Street, Shouguang City, Shandong, 262700, People's Republic of China;Weifang University of Science and Technology, No. 1299 Jinguang Street, Shouguang City, Shandong, 262700, People's Republic of China ~72: DING, Junyang;GUO, Jiajin;GUO, Yanchun;HU, Yongjun;LI, Yingjie;LIN, Guiyu;TIAN, Subo;WEI, Hong;XIN, Xiaofei;ZHAO, Haiyang~

2022/02521 ~ Complete ~54:LASER CLADDING POWDER ~71:Ma'anshan Shenma Machinery Manufacturing Co., Ltd., No. 4598, Cihuhe Road, Cihu High-tech Zone, Ma'anshan City, Anhui Province, 243000, People's Republic of China ~72: FANG, Zhao~

2022/02526 ~ Complete ~54:SYSTEM FOR ENHANCING THE DAMPING CAPACITY AND ASEISMIC CAPACITY OF THE UNDERGROUND INTEGRATED PIPE RACK ~71:Hebei GEO University, No. 136 East Huai'an Road, Yuhua Distirict, Shijiazhuang, Hebei, 050031, People's Republic of China ~72: Haiyan Xu;Hongyan Feng;Junfeng Wang;Muci Yue;Qingyao Li;Song Chen;Xiuling Cao;Yuzhang Wang~ 33:CN ~31:202111465944.2 ~32:03/12/2021

2022/02537 ~ Complete ~54:CONCRETE VARIABLE CROSS-SECTION PREFABRICATED SQUARE PILE ~71:ZHOU, Zhaodi, No. 18, Puqian Xiaogang Street, Beilun District Ningbo, People's Republic of China ~72: ZHOU, Zhaodi~ 33:CN ~31:201921464635.1 ~32:04/09/2019;33:CN ~31:202010371564.1 ~32:06/05/2020

2022/02614 ~ Complete ~54:SPLIT-TYPE VANE PUMP CAPABLE OF ASSISTING IN OPERATION OF MOTORS ~71:JIANGSU JINHU FUEL FEED PUMP CO., LTD., NO. 222 HUANCHENG WEST ROAD, JINHU COUNTY, People's Republic of China ~72: CHEN, Yaobang;HUANG, Xiao;JI, Wenbin;LI, Chuanjin;XU, Junzhong~ 33:CN ~31:202110885363.8 ~32:03/08/2021

2022/02536 ~ Complete ~54:METHODS AND COMPOSITIONS FOR TREATING A DISEASE OR DISORDER ~71:THE REGENTS OF THE UNIVERSITY OF COLORADO, A BODY CORPORATE, 1800 Grant Street, 8th Floor, United States of America;YALE UNIVERSITY, Two Whitney Avenue, New Haven, Connecticut, United States of America ~72: CHEN, Lieping;SCHULICK, Richard, D.;SUN, Yi;ZHU, Yuwen~ 33:US ~31:62/906,282 ~32:26/09/2019

2022/02586 ~ Provisional ~54:RECYCLED PLASTIC PRODUCTS ~71:JACQUES ROUX, NO.2 MORRISON RD, GREAT BRAK RIVER, South Africa ~72: JACQUES ROUX~

2022/02518 ~ Complete ~54:FILM-SIDE AIR SUCTION TYPE MAIZE SOWER ACHIEVING USAGE AMOUNT REDUCTION, POLLUTION REDUCTION AND EASY RECYCLE OF MULCH FILM ~71:Inner Mongolia Academy of Agricultural and Animal Husbandry Sciences, No. 22, Zhaojun Road, Yuquan District, Hohhot City, Inner Mongolia Autonomous Region, 010070, People's Republic of China ~72: CHEN, Liyu;CHENG, Yuchen;GUO, Xiaoxia;HE, Xiaoyong;LU, Zhanyuan;TIAN, Lu;XIAN, Feng;ZHANG, Jianwei;ZHANG, Xiangqian;ZHAO, Xiaoqing~

2022/02530 ~ Complete ~54:A LIPOSOMAL FORMULATION WITH DUAL PAYLOAD OF BIOWASTE DERIVED CARBON DOT AND ENZALUTAMIDE FOR THERAGNOSTIC MANAGEMENT OF TRIPLE NEGATIVE BREAST CANCER ~71:BHATTACHARYA, Joyeeta, Department of Pharmaceutical Technology, School of Medical Sciences, Adamas University, Kolkata, India;DAS, Suvadra, University of Engineering and Management, Kolkata, New town, Action Area -III Kolkata, India;ROY, Partha, Department of Pharmaceutical Technology, School of Medical Sciences, Adamas University, Kolkata, India;SREEHARSHA, Nagaraja, Department of Pharmaceutical Sciences, College of Clinical Pharmacy, King Faisal University,, Saudi Arabia;SUR, Srija, Department of Pharmaceutical Technology, School of Medical Sciences, Adamas University, Kolkata, India ~72: BHATTACHARYA, Joyeeta;DAS, Suvadra;ROY, Partha;SREEHARSHA, Nagaraja;SUR, Srija~

2022/02533 ~ Complete ~54:HOUSEHOLD INTELLIGENT PLANTER ENERGY-SAVING LIGHT SUPPLEMENT SYSTEM AND METHOD ~71:SUZHOU POLYTECHNIC INSTITUTE OF AGRICULTURE, No. 279, Xiyuan Road, Gusu District, Suzhou City, People's Republic of China ~72: CHEN, Guoyuan;CHEN, Jun;CHEN, Sujuan;LI, Huimin;PANG, Xin;WANG, Zhen~

2022/02509 ~ Provisional ~54:SOLAR DEHYDRATOR ~71:Hilda Forsythe, 14 Goldman Street, South Africa ~72: Hilda Forsythe~

2022/02514 ~ Complete ~54:LASER SELF-MIXING INTERFERENCE-BASED PUPILLARY LIGHT REFLECTOMETER FOR AUTISTIC CHILD ~71:Lingnan Normal University, Lingnan Normal University, Zhanjiang City, Guangdong , 524048, People's Republic of China ~72: HUANG, Minglang;HUANG, Zhen;JIN, Xiao;LI, Dongyu;LI, Qinghua;LIU, Huixuan;RUAN, Haijing;XU, Bing;ZHANG, Tingting;ZHANG, Yiqing;ZHANG, Zhenghe;ZHENG, Jianhong~

2022/02517 ~ Complete ~54:A KIND OF DESULFURIZATION WASTE LIQUID RECYCLING ENVIRONMENTAL PROTECTION CO-PROCESSING SYSTEM AND METHOD ~71:Qingdao Technological University, No.777, Jialingjiang East Road, Huangdao District, Qingdao, Shandong Province, People's Republic of China;Shandong Qingye Energy Conservation Industry Research Institute Co., Ltd., No. 413, Boyi Building, No. 308, Ningxia Road, Laoshan District, Qingdao City, Shandong Province, People's Republic of China ~72: Lv Yang;Wang Dong;Wang Xiao;Yang Feng ling;Yi Chui jie;Zhou Yang min~

2022/02522 ~ Complete ~54:FTO INHIBITOR ZINC202913277 AND APPLICATION THEREOF ~71:Xinxiang Medical University, Xinyan Road, Hongqi District, Xinxiang City, Henan , 453000, People's Republic of China ~72: DUAN, Yingchao;GAO, Qinghe;HU, Kua;LV, Haixia;NIU, Bingxuan;SONG, Yu;YIN, Yanyan~

2022/02527 ~ Complete ~54:A KIND OF PRODUCTION METHOD OF COWHIDE UPPER LEATHER FOR DANCE SHOES ~71:Zhengzhou Machinery Research Institute Co., Ltd, No. 149, science Avenue, high tech Development Zone, Zhengzhou, Henan, People's Republic of China ~72: Fan Changhua;Fan Enyuan;Fan Yaxi;Qiang Taotao;Xia Haofan;Zhang Yajuan~

2022/02538 ~ Complete ~54:PROCESS FOR PREPARING (R)-4-AMINOINDANE AND CORRESPONDING AMIDES ~71:FMC AGRICULTURAL PRODUCTS INTERNATIONAL AG, Baarerstrasse no. 14, 6300 Zug, Switzerland ~72: GIAMPAOLO ZANARDI;PAOLO BELLANDI;PIERANGELO MEREGHETTI~ 33:IT ~31:102019000017330 ~32:26/09/2019

2022/02512 ~ Complete ~54:METHOD FOR RETURNING SOLANACEOUS FRUIT VEGETABLE STRAWS TO FIELD IN SITU ~71:Qingdao Green Silicon Valley Technology Co., Ltd., No. 1, Songyun Road, Zhangjialou Town, Huangdao District, Qingdao City, Shandong, 266400, People's Republic of China;Shandong Caijin Agricultural Technology Co., Ltd., Northwest corner of the intersection of Yangtian Road and 308 National Road, Shouguang City, Shandong, 262700, People's Republic of China;Shandong Shouguang Vegetable Industry Group Co.,Ltd., No. 9 Haoyuan Road, Luocheng Street, Shouguang City, Shandong, 262700, People's Republic of China;Weifang Seed Valley Agricultural Technology Development Co., Ltd., Room 1001, 10th Floor, Block C, Food Valley Headquarters Base, Food Valley Central Street, Hanting District, Weifang City, Shandong, 261100, People's Republic of China ~72: DING, Junyang;DU, Mingxia;GUO, Jiajin;HU, Hao;LI, Suying;QI, Ye;TIAN, Subo;WANG, Guanjie;WANG, Yuejuan;XIN, Xiaofei;ZHANG, Ronghuan~

2022/02525 ~ Complete ~54:PREPARATION METHOD OF HOLLOW VEGETABLE CAPSULE ~71:Shandong Healsee Capsule Co., Ltd, No. 1111, Northwest Outer Ring Road, Zhoucun Economic Development Zone, Zibo City, Shandong Province, 255300, People's Republic of China ~72: AN, Mengqi;GONG, Yu'ang;LI, Zhiqiang;NIU, Mengxiao~ 33:CN ~31:202110313263.8 ~32:24/03/2021

2022/02532 ~ Complete ~54:MULTIFUNCTIONAL STEADY-STATE FLAT THERMAL CONDUCTIVITY INSTRUMENT LOADING SYSTEM WITH CONTROLLABLE LOAD AND DEFORMATION ~71:QINGDAO UNIVERSITY OF SCIENCE AND TECHNOLOGY, No. 53, Zhengzhou Road, Shibei District, Qingdao, People's Republic of China ~72: CHENG, Junmei;LI, Wei;LIU, Jiwen;SUN, Chong;YU, Guangshui;ZHUANG, Tao~

2022/02535 ~ Complete ~54:SPRAYING AND DUST SUPPRESSION DEVICE FOR ELIMINATING DUST POLLUTION IN SHOVELING AND LOADING OPERATION OF LOAD-HAUL-DUMP LOADER ~71:HUAWEI NATIONAL ENGINEERING RESEARCH CENTER FOR EFFICIENT RECYCLING OF METAL MINERAL RESOURCES CO., LTD., No. 666, Xitang Road, Economic and Technological Development Zone, Ma'anshan City, People's Republic of China;SINOSTEEL MAANSHAN GENERAL INSTITUTE OF MINING RESEARCH CO, LTD, No. 666, Xitang Road, Economic and Technological Development Zone, Ma'anshan City, People's Republic of China ~72: LI, Gang;WU, Jiangyou;XU, Xiuping~

2022/02540 ~ Complete ~54:PHARMACEUTICAL FORMULATIONS AND DOSAGE REGIMENS FOR MULTI-SPECIFIC BINDING PROTEINS THAT BIND HER2, NKG2D, AND CD16 FOR CANCER TREATMENT ~71:Dragonfly Therapeutics, Inc., 35 Gatehouse Drive, WALTHAM 02451, MA, USA, United States of America ~72: CHANG, Gregory P.;CHEUNG, Ann F.;CUILLEROT, Jean-Marie;FALLON, Daniel;GRINBERG, Asya;HANEY, William;MORGAN, Christopher Ryan;NAILL, Michael C.;O'NEIL, Steven;WAGTMANN, Nicolai;WEI, Ronnie~ 33:US ~31:62/894,047 ~32:30/08/2019;33:US ~31:62/895,320 ~32:03/09/2019;33:US ~31:62/916,935 ~32:18/10/2019

2022/02510 ~ Provisional ~54:PENDULUM UNIT ~71:Dirk Leon Erasmus, 22 Aloe Street, Casa Valde Retirement Estate, Waterfall East, Rustenburg, South Africa ~72: Dirk Leon Erasmus~

2022/02515 ~ Complete ~54:YOUNG SILKWORM CO-REARING METHOD FOR NUCLEAR-POLYHEDROSIS-RESISTANT SILKWORMS ~71:Guizhou Canlayuan Technology Co., Ltd., No.14 Wujiang East Road, Xinpu New District, Zunyi City, Guizhou Province , 563000, People's Republic of China;Guizhou Sericulture Research Institute (Guizhou Pepper Research Institute), Jinzhu Town, Huaxi District, Guiyang City, Guizhou Province, 550025, People's Republic of China;Guizhou Xinong Sericulture Technology Co., Ltd., Hebin Road, Longping Town, Luodian County, Qiannan Prefecture, Guizhou Province , 550100, People's Republic of China ~72: LIU, Zhongming;LUO, Chaobin;LUO, Zehu;QING, Zhuo;SHI, Chuanyong;YANG, Hongzhang;YE, Zhanfeng~

2022/02523 ~ Complete ~54:INTEGRATED INTELLIGENT KOJI-MAKING MACHINE ~71:Zhenjiang Hengwei Koji Making Machine Co., Ltd., (next to National Highway 312) Jiashan, Zhengdong Village, Gaozi Street, Dantu District, Zhenjiang City, Jiangsu, 202100, People's Republic of China ~72: SUN, Qiliang;SUN, Yi~

2022/02528 ~ Complete ~54:A METHOD OF PRODUCTION OF SYNTHETIC SEEDS AND PLANTLET REGENERATION ~71:GRAPHIC ERA (DEEMED TO BE) UNIVERSITY, 566/6, Bell Road, Clement Town, Dehradun , Uttarakhand, 248002, India ~72: Dr. MANU PANT;Er. ANKITA LAL~ 33:IN ~31:202111032282 ~32:17/06/2021

2022/02539 ~ Complete ~54:METHOD FOR THE MANUFACTURE OF PRODUCTS MADE FROM FIBROUS MATERIAL AND DISPOSABLE PRODUCTS MANUFACTURED ACCORDING TO THE METHOD ~71:FIBERDOM OY, HENRY FORDIN KATU 5 K, 00150 HELSINKI, FINLAND, Finland ~72: KETTUNEN, Timo~ 33:FI ~31:20195657 ~32:02/08/2019

2022/02519 ~ Complete ~54:QUERY SYSTEM BASED ON SQL QUERIER ~71:Beijing Lanhai Yixin Technology Co., Ltd., 6th Floor, Longwei Fashion Hotel, Longwei Plaza, South of Zhengwangfen, Yuquanying Road, Fengtai District, Beijing, 100000, People's Republic of China ~72: LI, Xin~ 33:CN ~31:202111165442.8 ~32:30/09/2021

2022/02529 ~ Complete ~54:MINE ROOF INDICATOR ~71:PIERRE CHRISTIAAN CRONJE, 52 Church Street, South Africa ~72: CRONJE, Pierre Christiaan~

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2022/02546 ~ Complete ~54:MAGNETIC FERRITE CARBON-BASED NANOFIBER WAVE-ABSORBING MATERIAL AS WELL AS PREPARATION METHOD AND APPLICATION THEREOF ~71:Qingdao University of Technology, No. 777 Jialingjiang East Road, Huangdao District, Qingdao City, Shandong Province, 266520, People's Republic of China ~72: CHEN, Yan;LIAO, Zijian;LIU, Yanyan;MA, Mingliang;SU, Xuewei;TONG, Zhouyu;WAN, Fei;XING, Qiyang~

2022/02550 ~ Complete ~54:PREPARATION METHOD OF GRAPHENE AEROGEL/POLYURETHANE FOAM CONDUCTIVE COMPOSITE MATERIAL ~71:Guizhou Education University, No. 115, Gaoxin Road, Wudang District, Guiyang City, Guizhou Province, 550018, People's Republic of China ~72: WEI, Liangqiang;ZHAI, Tianliang;ZHAN, Chao;ZHANG, Chunmei;ZHAO, Feng~

2022/02551 ~ Complete ~54:METHOD AND DEVICE FOR PREPARING HEALTHY CONDIMENT WITH HIGH POTASSIUM CONCENTRATION AND LOW SODIUM CONCENTRATION ~71:Qingdao University of Science and Technology, No. 53 Zhengzhou Road, Shibei District, Qingdao City, Shandong , 266042, People's Republic of China ~72: CUI, Zhenzhen;LIU, Yang;TAN, Ming;WANG, Xitong;ZHANG, Yang;ZHOU, Guizhong~ 33:CN ~31:202111192270.3 ~32:13/10/2021

2022/02555 ~ Complete ~54:EARLY WARNING METHOD FOR OIL WELL PARAFFIN PRECIPITATION BASED ON LOAD CHANGE IN PUMP INDICATOR DIAGRAM ~71:UPC BLUE SKY (QINGDAO) PETROLEUM TECHNOLOGY CO., LTD., Room 612, Changjiang International, No. 177, Changjiang West Road, Huangdao

District, Qingdao City, Shandong Province, 266555, People's Republic of China ~72: CHEN, Dechun;FENG, Xiao;LI, Hongbo;LI, Kaikai;LIU, Deliang;SUN, Zhenhua;WANG, Jincheng;WEI, Weizhong;WEI, Zhihao;XU, Enfang;YANG, Maofeng;YU, Yingchao;YUAN, Jie;ZHANG, Lu;ZHOU, Tong;ZOU, Bing~

2022/02573 ~ Complete ~54:SINGLE SHOT CHIKUNGUNYA VIRUS VACCINE ~71:VALNEVA SE, 6 RUE ALAIN BOMBARD, SAINT-HERBLAIN, 44800 NANTES, FRANCE, France ~72: HOCHREITER, Romana;WRESSNIGG, Nina~ 33:EP ~31:19191030.6 ~32:09/08/2019;33:EP ~31:20158557.7 ~32:20/02/2020

2022/02543 ~ Provisional ~54:PYLON PROTECTION ~71:COCHRANE STEEL PRODUCTS (PTY) LTD, 125 Fitter Road, Spartan, South Africa ~72: TBA~

2022/02566 ~ Complete ~54:OPTICAL IMAGE ENCRYPTION AND DECRYPTION METHOD ~71:DONGGUAN UNIVERSITY OF TECHNOLOGY, No. 1, Daxue Rd., Songshan Lake, Dongguan, People's Republic of China ~72: LI, Jiaosheng;LING, Dongxiong;LIU, Jingbo;WEI, Dongshan;ZHANG, Qinnan~ 33:CN ~31:202111649439.3 ~32:30/12/2021

2022/02549 ~ Complete ~54:FERTILIZATION AND IRRIGATION METHOD FOR GREENHOUSE TOMATOES IN WINTER AND SPRING ~71:Shandong Agricultural Technology Extension Center, No.15 Jiefang Road, Lixia District, Jinan City, Shandong Province, People's Republic of China ~72: Jiang Lihua;Ma Ronghui;Shi Jing;Yang Yan;Zhang Hui;Zhang Wenxiao~

2022/02559 ~ Complete ~54:KRAS G12C INHIBITORS AND METHODS OF USING THE SAME ~71:Amgen Inc., One Amgen Center Drive, THOUSAND OAKS 91320-1799, CA, USA, United States of America ~72: ALLEN, Jennifer Rebecca;ALLEN, John Gordon;BOOKER, Shon;CEE, Victor J.;CHEN , Jian;KOPECKY, David John;LANMAN, Brian Alan;LIU, Longbin;LOPEZ, Patricia;NGUYEN, Thomas T.;NISHIMURA, Nobuko;REED, Anthony B.;SHIN, Youngsook;TAMAYO, Nuria A.;WURZ, Ryan Paul~ 33:US ~31:62/509,629 ~32:22/05/2017

2022/02579 ~ Complete ~54:N-TERMINAL EXTENSION SEQUENCE FOR EXPRESSION OF RECOMBINANT THERAPEUTIC PEPTIDES ~71:BIOLOGICAL E LIMITED, 18/1 & 3, Azamabad, India ~72: DATLA, Mahima;MANTENA, Narender Dev;MATUR, Ramesh Venkat;REGATTI, Pavan Reddy;SRIRAMAN, Rajan~ 33:IN ~31:201941009728 ~32:13/09/2019

2022/02584 ~ Complete ~54:ANTIMICROBIAL TOPICAL COMPOSITIONS CONTAINING MANUKA OIL ~71:CAIRNS, Stuart H., 39C Orakei Road, Remuera, AUCKLAND 1050, NEW ZEALAND, New Zealand;Manuka Therapeutics Ltd., P.O. Box 99712, Newmarket, AUCKLAND 1449, NEW ZEALAND, New Zealand ~72: CAIRNS, Stuart H.;GILMOUR, Robert F.;HAMES, Christine J.~ 33:US ~31:62/882,672 ~32:05/08/2019

2022/02571 ~ Complete ~54:NEUROTOXIN COMPOSITIONS FOR USE IN TREATING GASTROPARESIS ~71:AEON BIOPHARMA, INC., 5 PARK PLAZA, SUITE 1750 IRVINE, CA 92614, USA, United States of America ~72: BROOKS, Gregory, F.;CARTER, Eric~ 33:US ~31:62/897,520 ~32:09/09/2019;33:US ~31:62/950,794 ~32:19/12/2019

2022/02578 ~ Complete ~54:UPPER PART FOR A SPICE MILL ~71:JOMA KUNSTSTOFFTECHNIK GMBH, Wolfholzgasse 14-16, Austria ~72: FRIES, Rudolf~ 33:AT ~31:A 50900/2019 ~32:18/10/2019

2022/02581 ~ Complete ~54:MACHINE LEARNING BASED TRAIN CONTROL ~71:PROGRESS RAIL SERVICES CORPORATION, 1600 Progress Drive, United States of America ~72: BRAND, John;HOWARD, Bradley~ 33:US ~31:16/561,468 ~32:05/09/2019

2022/02547 ~ Complete ~54:INTELLIGENT MANAGEMENT SYSTEM FOR MINE AUXILIARY TRANSPORTATION BASED ON RFID TECHNOLOGY ~71:ANHUI UNIVERSITY OF SCIENCE AND

TECHNOLOGY, No. 168, Taifeng Road, Huainan City, Anhui Province, 232001, People's Republic of China ~72: JIN, Huawei;WANG, Guorong;WANG, Xu~

2022/02548 ~ Complete ~54:ROCK PERMEABILITY TEST SYSTEM DURING DYNAMIC LOAD DISTURBANCE PROCESS ~71:Henan University of Urban Construction, Henan University of Urban Construction, Longxiang Avenue, Xincheng District, Pingdingshan City, Henan Province, 467036, People's Republic of China ~72: LI, Peng;LI, Shuai;YUAN, Yanzhao;ZHANG, Shuo;ZHENG, Chao~

2022/02564 ~ Complete ~54:MULTI-MODAL ENGLISH TEACHING APPARATUS FOR ENGLISH TEACHING ~71:HEBEI CHEMICAL AND PHARMACEUTICAL COLLEGE, No. 88 Fangxing Road, Yuhua District, Shijiazhuang City, People's Republic of China ~72: WANG, Di~

2022/02544 ~ Provisional ~54:THE ECOLOGICAL COTTON SWAB ~71:Angelique Greyling, 29b Diaz Avenue, Eastleigh, South Africa ~72: Angelique Greyling~

2022/02561 ~ Complete ~54:INKJET PRINTING ULTRA-THIN CERAMIC DECORATIVE MATERIAL AND PREPARATION METHOD THEREOF ~71:Shandong University of Technology, Room 313, Block A, Gaochuang Park, High-tech Development Zone, Zibo City, Shandong Province, People's Republic of China ~72: Han Kejie;Li Xiaoxue;Liu Dong;Lu Xin;Meng Yubo;Sun Shaohui;Tang Shiyu~

2022/02569 ~ Complete ~54:LIGAND-2'-MODIFIED NUCLEIC ACIDS, SYNTHESIS THEREOF AND INTERMEDIATE COMPOUNDS THEREOF ~71:DICERNA PHARMACEUTICALS, INC, 75 Hayden Avenue, Lexington, United States of America ~72: NAZEF, Naim;WANG, Weimin~ 33:US ~31:62/894,071 ~32:30/08/2019

2022/02576 ~ Complete ~54:ELECTRICAL SWITCHING DEVICE AND VEHICLE COMPRISING SUCH A DEVICE ~71:ALSTOM HOLDINGS, 48 Rue Albert Dhalenne, France ~72: AUDEMAR, Christophe;QUENTIN, Nicolas~ 33:FR ~31:1909679 ~32:03/09/2019

2022/02553 ~ Complete ~54:LONG-DISTANCE FISH CONVEYING SYSTEM OF FISH LIFT ENGINEERING AND METHOD ~71:POWERCHINA KUNMING ENGINEERING CORPORATION LIMITED, No. 115, Renmin East Road, Panlong District, Kunming City, Yunnan Province, 650051, People's Republic of China ~72: FU, Rui;LI, Zengjia;WANG, Wenxi;WU, Cheng;YANG, Yiwen;ZHAO, Dan~

2022/02563 ~ Complete ~54:DEVICE FOR PURIFYING AND REMOVING SO2 IN FLUE GAS AND APPLICATION METHOD THEREOF ~71:HUAWEI NATIONAL ENGINEERING RESEARCH CENTER FOR EFFICIENT RECYCLING OF METAL MINERAL RESOURCES CO., LTD., No. 666, Xitang Road, Economic and Technological Development Zone, Ma'anshan City, People's Republic of China;SINOSTEEL MAANSHAN GENERAL INSTITUTE OF MINING RESEARCH CO, LTD, No. 666, Xitang Road, Economic and Technological Development Zone, Ma'anshan City, People's Republic of China ~72: LI, Gang~

2022/02585 ~ Complete ~54:5G-ENABLED INTEGRATED ROOFING ACCESSORY AND METHODS OF USE THEREOF ~71:BMIC LLC, 2600 Singleton Blvd., DALLAS 75212, TX, USA, United States of America ~72: RILEY, Xavier;ROBINSON, Rich~ 33:US ~31:62/895,855 ~32:04/09/2019

2022/02588 ~ Provisional ~54:DOCSEMUR,CAPSULES,TEABAGS,PURE HEALTH DRINKS ~71:ABDUL NASSER OMAR, No28-6th Avenue Rondebosch East, South Africa ~72: ABDUL NASSER OMAR~

2022/02587 ~ Provisional ~54:METHOD AND PLAN TO REDUCE FATALITIES ON SOUTH AFRICAN ROADS,SPECIFICALLY IN RELATION TO DRIVING UNDER THE INFLUENCE OF ALCOHOL ~71:Ramatlho Jacob Thipe, 25 Estate Esperanza, South Africa ~72: Ramatlho Jacob Thipe~

2022/02554 ~ Complete ~54:FISH TRAPPING SYSTEM OF FISH LIFT ENGINEERING FOR MOUNTAIN RIVERS AND METHOD ~71:POWERCHINA KUNMING ENGINEERING CORPORATION LIMITED, No. 115, Renmin East Road, Panlong District, Kunming City, Yunnan Province , 650000, People's Republic of China ~72: FU, Rui;SHAO, Rong;WU, Cheng;YANG, Meilin;YANG, Yiwen;ZHANG, Xin~

2022/02567 ~ Complete ~54:A CENTRIFUGAL ELECTROSTATIC SPINNING DEVICE ASSISTED BY AIRFLOW ~71:BEIJING UNIVERSITY OF CHEMICAL TECHNOLOGY, No. 15, Beisanhuan East Road, Chaoyang District, People's Republic of China ~72: CHEN, Jia;LIU, Yong~

2022/02557 ~ Complete ~54:PREPARATION METHOD OF DUAL-TARGETING MAGNETIC NANOPARTICLES FOR HEPATOCELLULAR CARCINOMA (HCC) ~71:Zhejiang University, No. 38, Zheda Road, Xihu District, Hangzhou City, Zhejiang Province, 310058, People's Republic of China ~72: AI, Jing;CHEN, Xinhua;REN, Zhigang;SUN, Junhui;WU, Liming;ZHANG, Yuelin;ZHOU, Guanhui;ZHOU, Min;ZHOU, Tanyang;ZHU, Tongyin~

2022/02560 ~ Complete ~54:MATERIAL CONTAINER TRANSFERRING SYSTEM SUITABLE FOR UNDERGROUND COAL MINE ELECTRIC LOCOMOTIVE AND MONORAIL CRANE ~71:Anhui University Of Science and Technology, 168 Taifeng Street, Huainan City, Anhui Province , 232001, People's Republic of China ~72: JI, Haitao;JIN, Huawei;YAN, Fangzheng~

2022/02572 ~ Complete ~54:LIQUID PODS FOR RECIRCULATING WATER SYSTEMS ~71:BIO-LAB, INC., 1725 NORTH BROWN ROAD, LAWRENCEVILLE, GEORGIA 30043, USA, United States of America ~72: SAYRE, Curtis;SWANSON, Anjelica;WEBER, John;WOOTEN, Jordan~ 33:US ~31:62/883,146 ~32:06/08/2019

2022/02580 ~ Complete ~54:MAINTENANCE OF DISTRIBUTED TRAIN CONTROL SYSTEMS USING MACHINE LEARNING ~71:PROGRESS RAIL SERVICES CORPORATION, 1600 Progress Drive, United States of America ~72: BRAND, John;HOWARD, Bradley~ 33:US ~31:16/561,421 ~32:05/09/2019

2022/02583 ~ Complete ~54:STABLE LOW PH PERSONAL CARE COMPOSITIONS AND METHODS FOR THE SAME ~71:Colgate-Palmolive Company, 300 Park Avenue, NEW YORK 10022, NY, USA, United States of America ~72: BOYKE, Christine;DEWDNEY, Nadine~

2022/02545 ~ Complete ~54:DEVICE WITH DISPOSABLE ELEMENT ~71:BRUIN BIOMETRICS, LLC, 10877 Wilshire Blvd.,, Suite 1600, United States of America ~72: BURNS, Martin, F.;CAMPBELL, Bill;GIUNTOLI, David, M.;RAPTIS, Mark;ROSS, Graham, O.~ 33:US ~31:62/744,513 ~32:11/10/2018;33:US ~31:62/804,095 ~32:11/02/2019

2022/02562 ~ Complete ~54:METHOD FOR REMOVING SULFUR DIOXIDE IN FLUE GAS ~71:HUAWEI NATIONAL ENGINEERING RESEARCH CENTER FOR EFFICIENT RECYCLING OF METAL MINERAL RESOURCES CO., LTD., No. 666, Xitang Road, Economic and Technological Development Zone, Ma'anshan City, People's Republic of China;SINOSTEEL MAANSHAN GENERAL INSTITUTE OF MINING RESEARCH CO, LTD, No. 666, Xitang Road, Economic and Technological Development Zone, Ma'anshan City, People's Republic of China ~72: LI, Gang~

2022/02568 ~ Complete ~54:METHOD AND SYSTEM OF OPTIMIZING STOCK AVAILABILITY AND SALES OPPORTUNITY ~71:BOSMAN, Philippus Johannes, 47 13th Street, South Africa ~72: BOSMAN, Franita;BOSMAN, Philippus Johannes~ 33:ZA ~31:2019/05180 ~32:06/08/2019

2022/02575 ~ Complete ~54:SHARING HARQ PROCESSES BY MULTIPLE CONFIGURED GRANTS RESOURCES ~71:NOKIA TECHNOLOGIES OY, KARAKAARI 7, 02610 ESPOO, FINLAND, Finland ~72: KUO, Ping-Heng;ROSA, Claudio;SEBIRE, Benoist;TURTINEN, Samuli;WU, Chunli~

2022/02558 ~ Complete ~54:KRAS G12C INHIBITORS AND METHODS OF USING THE SAME ~71:Amgen Inc., One Amgen Center Drive, THOUSAND OAKS 91320-1799, CA, USA, United States of America ~72: ALLEN, Jennifer Rebecca;ALLEN, John Gordon;BOOKER, Shon;CEE, Victor J.;CHEN , Jian;KOPECKY, David John;LANMAN, Brian Alan;LIU, Longbin;LOPEZ, Patricia;NGUYEN, Thomas T.;NISHIMURA, Nobuko;REED, Anthony B.;SHIN, Youngsook;TAMAYO, Nuria A.;WURZ, Ryan Paul~ 33:US ~31:62/509,629 ~32:22/05/2017

2022/02565 ~ Complete ~54:ENGLISH TEACHING AID FOR IMPROVING ENGLISH TEACHING EFFICIENCY ~71:HEBEI CHEMICAL AND PHARMACEUTICAL COLLEGE, No. 88 Fangxing Road, Yuhua District, Shijiazhuang City, People's Republic of China ~72: WANG, Di~

2022/02582 ~ Complete ~54:CONJUGATED HEPCIDIN MIMETICS ~71:Protagonist Therapeutics, Inc., 7707 Gateway Boulevard, Suite 140, NEWARK 94560-1160, CA, USA, United States of America ~72: BOURNE, Gregory Thomas;GUPTA, Suneel Kumar;LIU, David Y.;MODI, Nishit Bachulal;TARANATH, Roopa~ 33:US ~31:62/895,201 ~32:03/09/2019;33:US ~31:62/983,515 ~32:28/02/2020;33:US ~31:63/020,945 ~32:06/05/2020;33:US ~31:63/059,747 ~32:31/07/2020

2022/02552 ~ Complete ~54:EVALUATION METHOD OF HIGH-TEMPERATURE PERFORMANCE OF ASPHALT MIXTURE ~71:Chang’an University, No. 126, Middle-section of Nan'er Huan Road, Yanta District, Xi'an City , Shaanxi Province, 710064, People's Republic of China ~72: BAI, Chenfan;FAN, Jiangtao;JIANG, Yingjun;TAN, Ya;TIAN, Tian;YI, Yong;YUAN, Kejia~

2022/02541 ~ Provisional ~54:BUSHING ~71:GANELEC (PTY) LTD, 6 Roan Road, River Club, South Africa ~72: GANDER, Eric Stewart~

2022/02542 ~ Provisional ~54:BARRIER ~71:COCHRANE STEEL PRODUCTS (PTY) LTD, 125 Fitter Road, Spartan, South Africa ~72: TBA~

2022/02556 ~ Complete ~54:CHICKEN FEED COMPOSITION, FEEDING METHOD, PREPARED CHICKEN PRODUCT AND APPLICATION THEREOF ~71:The Central Hospital of Enshi Tujia and Miao Autonomous Prefecture, 3rd Floor, Administration Building, No. 158 Wuyang Street, Enshi City, Enshi Tujia and Miao Autonomous Prefecture, Hubei Province, 445000, People's Republic of China ~72: GU, Wenyan;HAN, Changyou;LI, Shunzhen;WU, Longhui;XIAO, Xueqin;YANG, Yanhua;ZHANG, Weizhen~ 33:CN ~31:202210052566.3 ~32:18/01/2022

2022/02570 ~ Complete ~54:SIDELINK CONFIGURATION ~71:TELEFONAKTIEBOLAGET LM ERICSSON (PUBL), SE-164 83 STOCKHOLM, SWEDEN, Sweden ~72: LYAZIDI, Yazid;ORSINO, Antonino;ZHANG, Congchi;ZHANG, Zhang~ 33:CN ~31:PCT/CN2019/099303 ~32:05/08/2019

2022/02577 ~ Complete ~54:IMPROVEMENTS IN OR RELATING TO CONVEYORS ~71:INNOVATIVE MINING SERVICES (AUST) PTY LTD, C/- Connolly & Assoc, Level 1, Office 4, 649 Beaufort Street, Australia ~72: NORMAN, Russell;WATERS, Darren~ 33:AU ~31:2019903181 ~32:30/08/2019;33:AU ~31:2020902216 ~32:30/06/2020

2022/02574 ~ Complete ~54:CHIKUNGUNYA VACCINE FORMULATIONS ~71:VALNEVA SE, 6 RUE ALAIN BOMBARD, SAINT-HERBLAIN, 44800 NANTES, FRANCE, France ~72: HEINDL-WRUSS, Jürgen;REINISCH, Christoph;SCHLEGL, Robert~ 33:EP ~31:19190999.3 ~32:09/08/2019

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2022/02591 ~ Provisional ~54:WATER-SAVING DEVICE CONTAINER ~71:Jacques Cloete, 112b Northdene rd, South Africa ~72: Jacques Cloete~

2022/02594 ~ Provisional ~54:SYSTEMS WITH THE SAME PURPOSE ~71:Mike Junior McKerson, 7 Quibeba, Arboretum, South Africa ~72: Mike Junior McKerson~

2022/02600 ~ Complete ~54:MULTIVALENT PNEUMOCOCCAL POLYSACCHARIDE-PROTEIN CONJUGATE COMPOSITION ~71:SK Bioscience Co., Ltd., 310, Pangyo-ro, Bundang-gu, SEONGNAM-SI 13494, GYEONGGI-DO, REPUBLIC OF KOREA, Republic of Korea;Sanofi Pasteur Inc., 1 Discovery Drive, SWIFTWATER 18370, PA, USA, United States of America ~72: AN, Kyungjun;HAM, Dongsoo;HOPFER, Robert;KENSINGER, Richard D.;KIM, Hun;KIM, Sunghyun;KYAW, Moe;SHIN, Jinhwan;TALAGA, Philippe~ 33:US ~31:62/626,509 ~32:05/02/2018;33:KR ~31:10-2018-0045246 ~32:18/04/2018

2022/02603 ~ Complete ~54:A METHOD FOR ANALYZING AMERICAN OPTION PRICING UNDER THE NON-ZERO-CORRELATION DOUBLE STOCHASTIC VOLATILITY MODEL ~71:Xi’an University of Posts and Telecommunications, No.618, West Chang 'an Street, Chang 'an District, Xi 'an City, Shaanxi Province, People's Republic of China ~72: LIAO, Zihao;LIU, Panni;ZHANG, Sumei;ZHAO Jun~ 33:CN ~31:202111527076.6 ~32:14/12/2021

2022/02619 ~ Complete ~54:BICYCLIC CARBOXYLATES AS MODULATORS OF TRANSPORTERS AND USES THEREOF ~71:NIROGY THERAPEUTICS, INC., 175 Crossing Boulevard, Suite 520, United States of America ~72: GORECZNY, Gregory;SANDANAYAKA, Vincent~ 33:US ~31:62/905,606 ~32:25/09/2019

2022/02593 ~ Provisional ~54:SPILL-PROOF SYSTEM ~71:Mike Junior McKerson, 7 Quibeba, Arboretum, South Africa ~72: Mike Junior McKerson~

2022/02607 ~ Complete ~54:COMBINED FLOOR SLAB OF PROFILED STEEL PLATE-PHOSPHOGYPSUM-CALCIUM SILICATE PLATE AND MANUFACTURING METHOD THEREOF ~71:Guizhou University, Guizhou University, No. 2708, south section of Huaxi Avenue, Huaxi District, Guiyang City, Guizhou Province, People's Republic of China ~72: CHEN Bo;HUANG Yong;ZHOU Li~

2022/02610 ~ Complete ~54:COLLECTION BOX FOR MEDICAL SHARP INSTRUMENTS ~71:The Fifth People's Hospital of Wuxi, The Fifth People's Hospital of Wuxi, Affiliated Hospital of Jiangnan University, Guangrui Road, Liangxi District, Wuxi, Jiangsu Province, 214000, People's Republic of China ~72: Yan Yan~

2022/02611 ~ Complete ~54:TELEHANDLER WITH FACILITATED ASCENT AND DESCENT ~71:MANITOU ITALIA S.R.L., via Cristoforo Colombo, 2 Località Cavazzona, Castelfranco Emilia (Modena), 41013, Italy ~72: MARCO IOTTI~ 33:IT ~31:102021000008540 ~32:06/04/2021

2022/02613 ~ Complete ~54:A SLUDGE THICKENING AND DEWATERING AGENT AND ITS PREPARATION METHOD ~71:Jilin Jianzhu University, No.5088, Xincheng Street, Jingyue Zone,, People's Republic of China ~72: Hai LU;Jing WANG;Qingpo LI;Wenluo CHEN;Xiaoyan WANG~

2022/02618 ~ Complete ~54:CARD AND METHOD FOR PRODUCING THE CARD ~71:GIESECKE+DEVRIENT ADVANCE52 GMBH, Prinzregentenstr. 159, München, Germany ~72: FABIAN, Cristina;SAUER, Thorsten;TARANTINO, Thomas~ 33:DE ~31:10 2019 006 799.1 ~32:30/09/2019

2022/02620 ~ Complete ~54:CLASSIFICATION OF TUMOR MICROENVIRONMENTS ~71:OncXerna Therapeutics, Inc., 300 Fifth Avenue, Suite 6040, WALTHAM 02451, MA, USA, United States of America ~72: AUSEC, Luka;BENJAMIN, Laura E.;PYTOWSKY, Bronislaw;ROSENGARTEN, Rafael;STRAND-TIBBITTS, Kristen;ZGANEC, Matjaz;ŠTAJDOHAR, Miha~ 33:US ~31:62/932,307 ~32:07/11/2019;33:US ~31:63/008,367 ~32:10/04/2020;33:US ~31:63/060,471 ~32:03/08/2020;33:US ~31:63/070,131 ~32:25/08/2020

2022/02627 ~ Complete ~54:RELEASING STOPPER, CONTAINER PROVIDED WITH STOPPER AND KITS AND RELEASING METHOD ASSOCIATED THERETO ~71:COPAN ITALIA S.P.A., Via Perotti, 10, 25125 Brescia, Italy ~72: GIORGIO MARTELLO~ 33:IT ~31:102019000016112 ~32:11/09/2019

2022/02589 ~ Provisional ~54:SHEDSAVE ~71:Lionel Skeffers, 24 Karee Street, South Africa ~72: Lionel Skeffers~

2022/02606 ~ Complete ~54:A KIND OF RETROREFLECTIVE MATERIAL AND MAKING METHOD THEREOF ~71:Qingdao University of Technology, No.11 Fushun Road, Shibei District, Qingdao, Shandong Province, People's Republic of China ~72: Cheng Ran;Gao Yuchen;Li Han;Liu Chao;Meng Xi;Zang Xiaolin~

2022/02612 ~ Complete ~54:OXIDATION DISINFECTION SYSTEM FOR CIRCULATING WATER IN A DIVING POOL ~71:Jilin Jianzhu University, No.5088, Xincheng Street, Jingyue Zone,, People's Republic of China ~72: Changfu WANG;Ming NIE;Tianni CHI;Yin YIN;Yucheng JIN;Yuting ZHOU~

2022/02604 ~ Complete ~54:PNEUMATIC AGRICULTURAL FILM RECYCLING MACHINE ~71:Science and Technology Guarantee Center of Sichuan Academy of Agricultural Sciences, No. 20, Jingjusi Road, Jinjiang District, Chengdu City, Sichuan , 610066, People's Republic of China ~72: BAI, Sheng;BAI, Yuantao;DENG, Xianping;HU, Sixue;JIANG, Haohong;LI, Yiji;XIA, Wuqi;YANG, Shengying;ZENG, Zhi;ZHOU, Ni;ZHU, Liang;ZHU, Runhua~ 33:CN ~31:202111115030.3 ~32:23/09/2021

2022/02608 ~ Complete ~54:A NOVEL ADJUVANT CPG-ODN BIVALENT INACTIVATED VACCINE AGAINST STREPTOCOCCUS SUIS TYPE 2 + 9 AND ITS PREPARATION METHOD ~71:Institute of Animal Health, Guangdong Academy of Agricultural Sciences, Wushan Street, Tianhe District, Guangzhou, Guangdong Province, People's Republic of China ~72: CHUNLING LI;DONGXIA YANG;HONGCHAO GOU;PINPIN CHU;RUJIAN CAI;SHUI SONG;YAN LI;ZHIYONG JIANG~

2022/02609 ~ Complete ~54:VARIABLE DOPPLER SHIFT-RESISTANT UNDERWATER ACOUSTIC COMMUNICATION METHOD ~71:JiMei University, No. 185, Yinjiang Road, Jimei District, Xiamen City, Fujian , 361021, People's Republic of China ~72: CHEN, Wen;FENG, Wen;LI, Tiejun;XING, Haitao;ZHU, Peibin~ 33:CN ~31:202110325219.9 ~32:26/03/2021

2022/02615 ~ Complete ~54:USE OF THE ANTI-P-SELECTIN ANTIBODY CRIZANLIZUMAB FOR TREATING SICKLE CELL NEPHROPATHY AND CHRONIC KIDNEY DISEASE ASSOCIATED WITH SICKLE CELL DISEASE ~71:NOVARTIS AG, Lichtstrasse 35, Switzerland ~72: ATAGA, Kenneth;BARTOLUCCI, Pablo;DEBONNETT, Laurie;DEREBAIL, Vimal;HAN, Guangyang;INATI, Adlette;KANTER, Julie;LEBENSBURGER, Jeffrey;SARAF, Santosh;SHARPE, Claire;STANKOVIC, Miona~ 33:US ~31:62/884,313 ~32:08/08/2019

2022/02617 ~ Complete ~54:TREATMENT OF CANCER USING A COMBINATION COMPRISING MULTI-TYROSINE KINASE INHIBITOR AND IMMUNE CHECKPOINT INHIBITOR ~71:BEIGENE, LTD., c/o Mourant Ozannes Corporate Services (Cayman) Limited, 94 Solaris Avenue, Camana Bay, Cayman Islands ~72: CHEN, Cheng;JIANG, Beibei;YANG, Liu~ 33:CN ~31:PCT/CN2019/105418 ~32:11/09/2019

2022/02621 ~ Complete ~54:FABRIC CARE COMPOSITIONS HAVING IMPROVED MICROBIOLOGICAL ROBUSTNESS AND METHODS FOR THE SAME ~71:Colgate-Palmolive Company, 300 Park Avenue, NEW YORK 10022, NY, USA, United States of America ~72: INTRIAGO, Ana;MALDONADO, Raul Arellano;PEREZ CASTILLO, Gabriela;SANCHEZ, Andrea~

2022/02623 ~ Complete ~54:LED LAMP FOR INSECT TRAP ~71:GARDNER MANUFACTURING COMPANY, INC., 1201 W. Lake Street P.O. Box 147, Horicon, Wisconsin, 53032, United States of America ~72: BRUCE R STUDER;TIMOTHY M JONES~ 33:US ~31:16/733,277 ~32:03/01/2020;33:US ~31:16/825,105 ~32:20/03/2020

2022/02624 ~ Complete ~54:ENABLING REMOTE UNLOCK OF A LOCK ~71:ASSA ABLOY AB, P.O. Box 70340, 107 23, Stockholm, Sweden ~72: FREDRIK EINBERG~ 33:SE ~31:1951100-5 ~32:30/09/2019

2022/02626 ~ Complete ~54:7-OXA-3,4-DIAZABICYCLO [4.1.0] HEPT-4-EN-2-ONE COMPOUND AND HERBICIDE ~71:NIPPON SODA CO., LTD., 2-1, Ohtemachi 2-chome, Chiyoda-ku, Tokyo, 1008165, Japan ~72: HIROHITO OOKA;KAZUSHIGE FUJII;KAZUSHIGE KATO;KEN MIHARA;YOJI IKEDA;YUKINA TAKI~ 33:JP ~31:2019-174531 ~32:25/09/2019

2022/02592 ~ Provisional ~54:MISTING DEVICES ~71:PENNY, Hilton Lesley, 328 Alpine Way, Lynnwood, South Africa ~72: PENNY, Hilton Lesley~

2022/02629 ~ Complete ~54:METHOD AND DEVICE FOR LOADING A MATERIAL IN LAYERS, AND SYSTEM COMPRISING SUCH A DEVICE ~71:JUA, CS 37777, 672 rue du Mas de Verchant, 34967 , Montpellier Cedex 2, France ~72: JEAN-LUC SALLUSTRO~ 33:FR ~31:FR1909707 ~32:04/09/2019

2022/02590 ~ Provisional ~54:GUSSET BAG HANDLING SYSTEM ~71:MAAREN, Jeroen, 213 Eureka St, Pomona AH, South Africa;MAAREN, Wynand, 213 Eureka St, Pomona AH, South Africa ~72: MAAREN, Jeroen;MAAREN, Wynand~

2022/02622 ~ Complete ~54:LIGHT EMITTING DEVICE ~71:SEOUL VIOSYS CO., LTD., 65-16, Sandan-ro 163 beon-gil, Danwon-gu, Ansan-si, Gyeonggi-do, 15429, Republic of Korea ~72: CHOI, Jae Young;JO, Ji Hyun;JU, Byeong Cheol~ 33:KR ~31:10-2019-0111037 ~32:06/09/2019

2022/02628 ~ Complete ~54:NOVEL CRISPR DNA TARGETING ENZYMES AND SYSTEMS ~71:ARBOR BIOTECHNOLOGIES, INC., 20 Acorn Park Drive, Tower 500, Cambridge, Massachusetts, 02140, United States of America ~72: DAVID A SCOTT;DAVID R CHENG;TIA M DITOMMASO;WINSTON X YAN~ 33:US ~31:62/897,859 ~32:09/09/2019

2022/02601 ~ Complete ~54:PROCESSING OF COMMERCIALLY REJECTED FRESH PRODUCE ~71:UNIVERSITY OF PRETORIA, Lynnwood Road, Hillcrest, PRETORIA 0002, SOUTH AFRICA, South Africa ~72: MAPENGO, Clarity;NEKHUDZHIGA, Humbulani~ 33:ZA ~31:2020/07799 ~32:15/12/2020

2022/02602 ~ Complete ~54:MULTICHANNEL INDOOR DENITRIFICATION CULTURE APPARATUS AND ITS CULTURE METHOD ~71:Guangdong University of Petrochemical Technology, No. 139, Guandu Second Road, Maonan District, Maoming City, Guangdong Province, 525000, People's Republic of China;Institute of Intelligent Simulation and Early Warning for Subsurface Environment, Jilin University, No. 938, West Minzhu Street, Chaoyang District, Changchun City, Jilin Province, 130026, People's Republic of China ~72: CAO, Jianping;LIAN, Peng;LU, Yan;ZHANG, Xiaoying~

2022/02605 ~ Complete ~54:AN IOT BASED AUTOMATIC FISH DISEASE DIAGNOSIS SYSTEM FOR BIOFLOC ~71:Ashish Sharma, Executive Director , Data And Platform , 1050 George Street, Apartment 17 E, New Brunswick , New Jersey , USA, 08901, United States of America;Dr Harvinder Singh, Adj Associate Professor, Torrens University Australia, 90 Lower Bowen Tce, Fortitude Valley QLD , 4006, Australia;Dr. Jolly Masih, Associate Professor, Head Techno Managerial Research, PIEMR , Plot1, Mission Compound, Swaroop Sagar, Udaipur, Rajasthan, 313001, India;Dr. Mital Bhayani, Associate Professor, MET Institute of Management , Bhujbal Knowledge City, Nasik, Maharashtra, 400050, India;Mr. Yogender Kumar, Master of Technology in Artificial Intelligence (Pursuing) , Dr B.R. Ambedkar National Institute of Technology, Barnala - Amritsar Bypass

Road, Jalandhar, Punjab, 144011, India;Mr. Yogesh Kumar Dewangan, Assistant Fisheries Officer, Department of Fisheries (Government of Chhattisgarh), Kondagaon, Chhattisgarh, 494226, India;Neha Sharma, Assistant Professor, PIEMR, AL149, Sukhliya, Indore, Madhya Pradesh , 452010, India;Om Prakash, Senior Scientist & Head, Fisheries Specialist, IGKV - Krishi Vigyan Kendra, Purvi Borgaon, NH-30, Pharasgaon, Kondagaon, Chhattisgarh , 494229, India;Ronhit Neema, Associate Researcher, Vellore Institute of Technology, Vellore Campus, Tiruvalam Road, Katpadi, Vellore, Tamil Nadu, 632014, India;Sadhana Tiwari, Assistant Professor, PIEMR , F-37, Rajat Jayanti Complex Scheme No. 54, Vijay Nagar , Indore , Madhya Pradesh , 452010, India;Shashwat Mishra, Student, 149, Trimurti Nagar , Dhar, Madhya Pradesh , 454001, India;Vaidehi Sharma, Student , 1050 George Street, Apartment 17 E, New Brunswick , New Jersey , USA, 08901, United States of America;Yogesh Kumar, Research Associate, Robotics Innovations Lab, CPDM Department, Indian Institute of Science, Bengaluru, Karnataka , 560012, India ~72: Ashish Sharma;Dr Harvinder Singh;Dr. Jolly Masih;Dr. Mital Bhayani;Mr. Yogender Kumar;Mr. Yogesh Kumar Dewangan;Neha Sharma;Om Prakash;Ronhit Neema;Sadhana Tiwari;Shashwat Mishra;Vaidehi Sharma;Yogesh Kumar~

2022/02616 ~ Complete ~54:LACTIC ACID BACTERIA FOR A HEAT-TREATED FOOD PRODUCT FOR STORAGE AT AMBIENT TEMPERATURE ~71:CHR. HANSEN A/S, Bøge Allé 10-12, DK-2970, Denmark ~72: GILLELADEN, Christian;PREBNER, Victoria;SOERENSEN, Kim Ib~ 33:EP ~31:19196915.3 ~32:12/09/2019

2022/02625 ~ Complete ~54:ENGINEERED LIPASE VARIANTS ~71:CODEXIS, INC., 200 Penobscot Drive, Redwood City, California, 94063, United States of America;SOCIETE DES PRODUITS NESTLE S.A., Avenue Nestle 55, 1800, Vevey, Switzerland ~72: CHINPING CHNG;JUDY VICTORIA ANTONIO VIDUYA;KRISTEN JEAN VALLIEU;NIKKI DELLAS;STEPHANIE SUE GALANIE;WILLIAM CASEY HALLOWS~ 33:US ~31:62/894,019 ~32:30/08/2019

2022/02641 ~ Complete ~54:DIVERSE ANTIGEN BINDING DOMAINS, NOVEL PLATFORMS AND OTHER ENHANCEMENTS FOR CELLULAR THERAPY ~71:UNIVERSITY OF SOUTHERN CALIFORNIA, 1150 South Olive Street, United States of America ~72: CHAUDHARY, Preet, M.~ 33:US ~31:62/679,741 ~32:01/06/2018;33:ZA ~31:2020/07393 ~32:26/11/2020

. - APPLIED ON 2022-03-04 -

2022/02633 ~ Complete ~54:A PRESSURE STABILITY CONTROL SYSTEM FOR A NON-NEGATIVE PRESSURE WATER SUPPLY SYSTEM ~71:Jilin Jianzhu University, No.5088, Xincheng Street, Jingyue Zone, People's Republic of China ~72: Bin ZHANG;Jiajie LIU;Jianhui WANG;Mingdong LI;Ruifeng MING;Ruqi SUN;Xingyu ZHU~

2022/02634 ~ Complete ~54:COMBINED CORROSION INHIBITOR FOR COALBED METHANE WELLBORE AND USE THEREOF ~71:NATIONAL ENGINEERING RESEARCH CENTER OF COALBED METHANE DEVELOPMENT & UTILIZATION, Floor 1-5, Building 1, Yard 7, Dijin Road, People's Republic of China;PETROCHINA COALBED METHANE CO., LTD., Rm. 2366, Block B, No. 9 (Bldg. 3), Chaoqian Rd., Science and Technology Park, People's Republic of China;SOUTHWEST PETROLEUM UNIVERSITY, No. 8 Xindu Avenue, Xindu District, Chengdu City, People's Republic of China ~72: CHENG, Fuping;FAN, Hongbo;FENG, Kun;JIANG, Jianxun;LI, Jing;LIU, Qihu;LU, Qian;SONG, Dongbin;WANG, Fenglin;XIAO, Dong~

2022/02639 ~ Complete ~54:A PRODUCT COMPOSITION OF PRECISION MEDICATIVE DIET FOR PREVENTING AND TREATING PREMATURE OVARIAN FAILURE AND PREPARATION METHOD THEREOF ~71:Shenzhen Institute of Geriatrics, No.3002, Sungang West Road, Futian District, Shenzhen, Guangdong Province, People's Republic of China;Wu Zhengzhi, No.3002, Sungang West Road, Futian District, Shenzhen,

Guangdong Province, People's Republic of China ~72: Jia Dan;Li Ziwen;Liang Shaoyu;Liu Zhanyan;Wang Mengxia;Wu Zhengzhi~

2022/02643 ~ Complete ~54:ABNORMAL DETECTION SYSTEM OF WIND POWER GENERATOR ~71:Ningbo University of Finance & Economics, No.899 Xueyuan Road, Haishu District, Ningbo City, Zhejiang Province, People's Republic of China ~72: He Runqin;Lyu Huanpei;Wang Huafeng;Zhang Yubin;Zhu Huomei~

2022/02648 ~ Complete ~54:TRADITIONAL KOREAN MEDICINE COMPOSITION, PREPARATION METHOD AND USE THEREOF ~71:Yanbian University, No. 977, Gongyuan Road, Yanji City, Jilin Province , 133002, People's Republic of China ~72: CUI, Haozhen;CUI, Heying;GUO, Jianpeng;JIN, Chengshan;JIN, Mingyu;LI, Fuzi;LI, Jingyu;PIAO, Shuqing;SONG, Ning;XU, Yujin;YU, Xing;ZHENG, Yanze~

2022/02652 ~ Complete ~54:METHOD FOR EVALUATING TIME OF VIRTUALLY ASSEMBLING ENGINES USING BP ALGORITHM ~71:Xi’an Technological University, No. 4, Jinhua North Road, Beilin District, Xi'an City, Shaanxi Province , 710032, People's Republic of China ~72: BAI, Yu;CAO, Sen;CAO, Yan;DU, Jiang;FANG, Zhou;XIE, Biao;YAO, Hui~

2022/02654 ~ Complete ~54:ADAPTATIVE TRAINING DEVICE FOR SPORTS MEDICINE ATHLETES TO RECOVER ~71:Jilin Sport University, 2476 Ziyou Road, Changchun City, Jilin Province, 130022, People's Republic of China ~72: He Lin~

2022/02684 ~ Provisional ~54:AFRICAN CULTURAL FESTIVAL ~71:Dr Kabelo Roy Simo, Flat 312, Beverly View Building, 22 Baywater Road,Kensington B, Randburg,2194, South Africa ~72: Dr Kabelo Roy Simo~ 33:ZA ~31:African Cultural Festival ~32:03/03/2022

2022/02668 ~ Complete ~54:A HIGH-PERFORMANCE ASPHALT EMULSIFIER FOR COLD MIXING AND COLD PAVING AND ITS PREPARATION METHOD ~71:JIANGSU JINYANG NEW MATERIAL TECHNOLOGY CO., LTD, Yuehe Street No.168, New Material Industrial Park, Zhenjiang New District, Zhenjiang City, People's Republic of China ~72: CAO, Chunxia;LU, Feng;XIAO, Furong;XU, Hujun~

2022/02673 ~ Complete ~54:METHODS AND COMPOSITIONS FOR TREATING ENDOMETRIOSIS ~71:AIM IMMUNOTECH INC., 2117 SW Highway 484, Ocala, Florida 34473, United States of America ~72: DAVID R STRAYER;THOMAS K EQUELS~ 33:US ~31:62/924,591 ~32:22/10/2019;33:US ~31:62/931,098 ~32:05/11/2019;33:US ~31:63/065,475 ~32:13/08/2020;33:US ~31:63/065,476 ~32:13/08/2020

2022/02662 ~ Complete ~54:TISSUE CULTURE AND RAPID PROPAGATION METHOD OF CLINACANTHUS NUTANS ~71:Shandong Agricultural University, No. 61, Daizong street, Tai'an City, Shandong Province, People's Republic of China ~72: Chen Danling;Shen Xiang;Wang Peng;Wang Wenli~ 33:CN ~31:202210113530.1 ~32:30/01/2022

2022/02663 ~ Complete ~54:FLOOD FORECASTING METHOD AND SYSTEM CONSIDERING INITIAL VALUE CORRECTION ~71:China Institute of Water Resources and Hydropower Research, A-1, Fuxing Road, Haidian District, Beijing, 100038, People's Republic of China;China Three Gorges Corporation, NO.1, Liuhe Road, Jiangan District, Wuhan City, Hubei Province, 430010, People's Republic of China ~72: CAO Daling;LI Kuang;LI Mengjie;LIANG Lili;LIU Kun;LIU Zhiwu;YIN Zhaokai;ZHAI Ran~

2022/02681 ~ Complete ~54:IMPROVED SYNTHETIC METHODS OF MAKING (2H-1,2,3-TRIAZOL-2-YL)PHENYL COMPOUNDS AS OREXIN RECEPTOR MODULATORS ~71:Janssen Pharmaceutica NV, Turnhoutseweg 30, BEERSE 2340, BELGIUM, Belgium ~72: CHEN, Cheng Yi;DEPRÉ, Dominique Paul M.;MATCHA, Kiran;MEDINA, Florian Damien;WESTERDUIN, Pieter~ 33:US ~31:62/883,857 ~32:07/08/2019;33:US ~31:62/971,265 ~32:07/02/2020

2022/02631 ~ Provisional ~54:SELF LUBRICATING UNIVERSAL THROUGH ROTATIONAL FORCE ~71:Jean Bensch, 58 Plantation Road, South Africa ~72: Jean Bensch~

2022/02664 ~ Complete ~54:CABLE WITH LOAD OPERATION MONITORING FUNCTION AS WELL AS PARTICLES FOR ARC TEMPERATURE-SENSITIVE COLOR BARS AND CO-EXTRUSION METHOD FOR ARC TEMPERATURE-SENSITIVE COLOR BARS THEREOF ~71:SINOSTAR CABLE CO., LTD., No. 8, Jiunan Road, Huankeyuan, Yixing City, Wuxi City, Jiangsu Province, 214206, People's Republic of China ~72: LIU, Xuebao;TANG, Min;WU, Kangjie;WU, Xiaomin;YU, Shuai~ 33:CN ~31:202110724375.2 ~32:29/06/2021

2022/02670 ~ Complete ~54:METHODS FOR QUANTIFICATION OF CARBOHYDRATES ~71:BIOLOGICAL E LIMITED, Plot No. 18/1 & 3, Azamabad, India ~72: BURKI, Rajendar;DATLA, Mahima;MANTENA, Narender Dev;MATUR, Ramesh Venkat~ 33:IN ~31:201941039796 ~32:01/10/2019

2022/02683 ~ Complete ~54:A DEVICE FOR REMOVING A WEAR MEMBER ~71:CQMS PTY LTD, Building 5, Level 3, 747 Lytton Road, Australia ~72: ASHBY, Ian;NIENABER, Quintin;PLANT, Ben;VANDERSEE, David~ 33:AU ~31:2019903528 ~32:23/09/2019

2022/02635 ~ Complete ~54:METHOD FOR MEASUREMENT AND FATIGUE TEST OF ULTIMATE STRENGTH OF STIFFENED PANEL ~71:NAVAL UNIVERSITY OF ENGINEERING, No. 717, Jiefang Avenue, Qiaokou District, People's Republic of China;WUHAN INSTITUTE OF SHIPBUILDING TECHNOLOGY, No. 2, Tieqiaonan Village, Yuehu Street, Hanyang District, People's Republic of China ~72: HU, Zhiyuan;HUA, Lin;MIN, Shaosong;WU, Chunfang;WU, Fan~ 33:CN ~31:CN202110343117.X ~32:31/03/2021

2022/02640 ~ Complete ~54:INTELLIGENT INDUCTION TYPE MODIFIED ASPHALT STIRRING DEVICE AND USING METHOD THEREOF ~71:GuangXi Beitou Transportation Maintenance Technology Group Co.,Ltd., Room 1501, Block D, Guangxi Energy Building, No.2 Jinlong Road, Wuxiang Avenue, Liangqing District, Nanning City, Guangxi Zhuang Autonomous Region, People's Republic of China ~72: Chang Zhenchao;Chen Jiangcai;Chen Qinglin;Huang Haifeng;Huang Xiaofeng;Liao Laixing;Liu Haobin;Lu Yeqing;Luo Junhui;Ming Yang;Mo Peng;Ren Tianzeng;Wang Qimin;Wu Chunwei;Xie Cheng~

2022/02650 ~ Complete ~54:VEGETABLE STICKY TRAP FOR THRIPS ~71:Shandong Colorful Manor Vegetable And Food Co.,Ltd, 8th Floor, Block A, Vegetable Building, No. 9 Haoyuan Road, Luocheng Street, Shouguang City, Shandong, 262700, People's Republic of China;Shandong Shouguang Vegetable Industry Group Co.,Ltd., No. 9 Haoyuan Road, Luocheng Street, Shouguang City, Shandong, 262700, People's Republic of China;Weifang University, No. 5147, Dongfeng East Street, High-tech Development Zone, Weifang City, Shandong, 261061, People's Republic of China ~72: Guo, Jiajin;QI, Ye;TIAN, Subo;ZHAO, Jing~

2022/02656 ~ Complete ~54:ENTERPRISE INFORMATIZATION MANAGEMENT SYSTEM ~71:Xi’an Technological University, No. 4, Jinhua North Road, Beilin District, Xi'an City, Shaanxi Province, 710032, People's Republic of China ~72: CAO, Yan;FU, Leijie;KOU, Xiaoxi;WU, Yujia~

2022/02658 ~ Complete ~54:MULTI-CARRIER SHALLOW SEA UNDERWATER ACOUSTIC COMMUNICATION METHOD WITH SHORT GUARD INTERVAL ~71:JiMei University, No. 185, Yinjiang Road, Jimei District, Xiamen City, Fujian, 361021, People's Republic of China ~72: CHEN, Wen;FENG, Wen;LI, Tiejun;XING, Haitao;YANG, Guangsong;ZHU, Peibin~ 33:CN ~31:202110434171.5 ~32:22/04/2021

2022/02661 ~ Complete ~54:NOVEL SOL-GEL METHOD FOR PREPARING TITANIUM DIOXIDE/TALCUM POWDER COMPOSITE FILLER ~71:ZHEJIANG UNIVERSITY OF SCIENCE AND TECHNOLOGY, No.318, Liuhe Road, Xihu District, Hangzhou City, Zhejiang Province, 310023, People's Republic of China ~72: SUN, Xindi;WANG, Huile;XU, Yutong;YU, Yingying;ZHANG, Yan;ZHAO, Huifang~

2022/02677 ~ Complete ~54:HEPATITIS B VIRUS VACCINES ~71:TRIAD NATIONAL SECURITY, LLC, Los Alamos National Laboratory, LC/TAS, P.O. Box 1663, Los Alamos, New Mexico, 87545, United States of America;VIR BIOTECHNOLOGY, INC., 499 Illinois Street, Suite 500, San Francisco, California, 94158, United States of America ~72: BETTE KORBER;EMILY MARSHALL;ERIC BRUENING;JAMES THEILER;JANET DOUGLAS;KARINA YUSIM (DECEASED)~ 33:US ~31:62/893,546 ~32:29/08/2019;33:US ~31:62/941,125 ~32:27/11/2019

2022/02666 ~ Complete ~54:ACQUISITION FOOTPRINT NOISE REMOVAL METHOD, ELECTRONIC DEVICE AND COMPUTER READABLE STORAGE MEDIUM ~71:Institute of Geology and Geophysics, Chinese Academy of Sciences, No.19 Beitucheng West Road, Chaoyang District, Beijing, 100029, People's Republic of China ~72: HUANG, Liang;HUO, Shoudong;MU, Shengqiang;SHI, Taikun;ZHOU, Xuhui;ZOU, Jiaru~

2022/02672 ~ Complete ~54:COMPOSITIONS COMPRISING TIGOLANER FOR CONTROLLING PARASITES ~71:VETOQUINOL SA, 70200, Magny-Vernois, France ~72: DAVID SIEGEL;ELISABETH FELDHUES;GABRIELE PETRY;IRIS HEEP;VENKATA-RANGARAO KANIKANTI~ 33:EP ~31:19191727.7 ~32:14/08/2019

2022/02676 ~ Complete ~54:RNA-GUIDED NUCLEASES AND ACTIVE FRAGMENTS AND VARIANTS THEREOF AND METHODS OF USE ~71:LIFEEDIT THERAPEUTICS, INC., 507 Airport Boulevard, Suite 101, Morrisville, North Carolina, 27560, United States of America ~72: ALEXANDRA BRINER CRAWLEY;MICHAEL COYLE;TEDD D ELICH;TYSON D BOWEN~ 33:US ~31:62/885,483 ~32:12/08/2019;33:US ~31:62/901,875 ~32:18/09/2019;33:US ~31:63/030,088 ~32:26/05/2020

2022/02679 ~ Complete ~54:BLOCK-BASED ADAPTIVE RESOLUTION MANAGEMENT ~71:OP SOLUTIONS, LLC, 368 Middle Street, Amherst, Massachusetts, 01002, United States of America ~72: BORIVOJE FURHT;HARI KALVA;VELIBOR ADZIC~ 33:US ~31:62/883,407 ~32:06/08/2019

2022/02659 ~ Complete ~54:MODIFIED CORNCOB BIOCHAR-BASED SLOW-RELEASE COMPOUND FERTILIZER AS WELL AS PREPARATION METHOD AND APPLICATION THEREOF ~71:Qingdao Agricultural University, No. 700 Changcheng Road, Chengyang District, Qingdao City, Shandong Province, 266109, People's Republic of China;Qingdao Drainage Operations Service Center, Hongbin Building, Garden Hotel, No. 6 Zhanghua Road, Shinan District, Qingdao City, Shandong Province, 266000, People's Republic of China ~72: HUANG, Xiaoli;ZHANG, Yuna;ZHAO, Junxing~

2022/02632 ~ Provisional ~54:SURVEY MARKET RESEARCH CONSULTING ~71:Vutivi Chauke, Unit 43, 800 Vermoonten Road, Grobler park, Roodepoort, South Africa ~72: Vutivi Chauke~

2022/02680 ~ Complete ~54:BIOLOGICAL FLUID TEST DEVICE, IN PARTICULAR A SALIVA TEST DEVICE ~71:TODA GROUPE, Bâtement B 2 rue du Rhin, Napoléon, Strasbourg, 67000, France ~72: BERROS, Yossi~ 33:FR ~31:FR1909663 ~32:03/09/2019

2022/02636 ~ Complete ~54:ACTUATOR FOR SORTING DEVICE OF BAD KIWI FRUITS BASED ON DIFFERENCES OF STATIC FRICTIONAL ANGLES ~71:NORTHWEST AGRICULTURE AND FORESTRY UNIVERSITY, NO.3 TAICHENG ROAD, YANGLING DISTRICT, People's Republic of China ~72: FANG, Wentai;FU, Longsheng;GAO, Changqing;GAO, Fangfang;HE, Leilei;JIANG, Hanhui;JING, Xudong;LI, Guo;LI, Rui;SUN, Xiaoming;SUO, Rui;WANG, Zhuoran;WU, Zhenchao;YANG, Ruizhe;ZHAO, Guan’ao~

2022/02638 ~ Complete ~54:A SAFE ASYNCHRONOUS MOTOR WITH A GOOD NOISE REDUCTION EFFECT ~71:West Anhui University, Moon Island, Yu'an District, Lu'an City, Anhui Province, People's Republic of China ~72: Cheng Junhui;Lu Chengling;Zhang Jinsi;Zhang Lei~

2022/02642 ~ Complete ~54:NOVEL SMOKE AND DUST SAFETY DETECTION SYSTEM ~71:ANHUI UNIVERSITY OF SCIENCE AND TECHNOLOGY, No. 168 Taifeng Street, Shannan New District, Huainan City, Anhui Province, 232001, People's Republic of China ~72: BAI, Fangyan;OUYANG, Mingsan;WANG, Yunlong~

2022/02646 ~ Complete ~54:A MANUAL PRODUCTION METHOD OF A BRIDLE LEATHER BELT ~71:Xuzhou Industrial Vocational and Technical College, 1 Xiangwang South Road, Gulou District, Xuzhou City, Jiangsu Province, People's Republic of China ~72: CONG Houluo;WANG Zaixue;XU Yunhui;ZANG Yanan;ZHANG Tongyu;ZHOU Yujiao~

2022/02678 ~ Complete ~54:COMPOSITIONS AND METHODS FOR TREATMENT OF INFLUENZA A INFECTION ~71:VIR BIOTECHNOLOGY, INC., 499 Illinois Street, Suite 500, San Francisco, California, 94158, United States of America ~72: ERIK MOGALIAN;LYNN E CONNOLLY;PHILLIP S PANG~ 33:US ~31:62/893,747 ~32:29/08/2019;33:US ~31:62/993,519 ~32:23/03/2020;33:US ~31:63/040,966 ~32:18/06/2020

2022/02647 ~ Complete ~54:GRAPHENE REINFORCED NICKEL-BASED ALLOY COMPOSITE MATERIAL AND PREPARATION METHOD THEREOF ~71:Ningbo University of Finance & Economics, No.899 Xueyuan Road, Haishu District, Ningbo City, Zhejiang Province, People's Republic of China ~72: Lyu Huanpei;Wang Huafeng;Zhang Yubin;Zhao Xiaoyun;Zhu Huomei~

2022/02682 ~ Complete ~54:IMPROVING PLANT HEALTH WITH IN SITU FORMED WATER ABSORBING HYDROGELS ~71:Bayer CropScience LP, 800 North Lindbergh Boulevard, ST. LOUIS 63167, MO, USA, United States of America ~72: PALANICHAMY, Krishnan;RUTLEDGE, James M.;SHIEH, Aileen;ZHANG, Chenxi~ 33:US ~31:62/883,888 ~32:07/08/2019

2022/02657 ~ Complete ~54:STABLE WATER SAMPLE STORAGE AND TEST INTEGRATED BOX ~71:Institute Of Water Resources for Pastoral Area, MWR, No. 16, University East Road, Saihan District, Hohhot, Inner Mongolia Autonomous Region, 010020, People's Republic of China ~72: CUI, Liping;FENG, Xiu;HAO, Weigang;LIU, Tiejun;WANG, Lixia;WANG, Xingtian;WANG, Yaqiong;XU, Bing;YIN, Ruiping;YUCHI, Wensi~ 33:CN ~31:202111635355.4 ~32:29/12/2021

2022/02644 ~ Complete ~54:3-DOF BIONIC EYE MOVEMENT BASED ON MAGNETIC LEVITATION DRIVE, AND MOVEMENT METHOD THEREOF ~71:Shanghai Baosight Software Co., Ltd., No. 515, Guoshoujing Road, (Shanghai) Pilot Free Trade Zone , 201203, People's Republic of China;Shanghai Daojian Jidian Technology Co., Ltd., Area A, 2nd Floor, Building 9, No.758, Huixian Road, Jiading District, Shanghai, 201806, People's Republic of China;Shanghai University, 99 Shangda Road, Shanghai, 200436, People's Republic of China ~72: CHEN, Xin;FU, Zhongzhong;LI, Hengyu;LI, Lei;LUO, Jun;PU, Huayan;TAO, Jun;YANG, Xiaokang~

2022/02649 ~ Complete ~54:RECOGNITION METHOD FOR SUB-ASSEMBLIES IN ASSEMBLY SEQUENCE PLANNING ~71:Xi'an Technological University, No. 4, Jinhua North Road, Beilin District, Xi'an City, Shaanxi Province , 710032, People's Republic of China ~72: CAO, Yan;DU, Jiang;KOU, Xiaoxi;WANG, Qiangfeng~

2022/02651 ~ Complete ~54:VEGETABLE STICKY TRAP FOR ALEYRODIDS ~71:National Vegetable Quality Standard Center, East Road, 200 meters south of the intersection of Wensheng East Street and Mihe West Dam, Shouguang City, Shandong, 262700, People's Republic of China;Shandong Shouguang Vegetable Industry Group Co.,Ltd., No. 9 Haoyuan Road, Luocheng Street, Shouguang City, Shandong, 262700, People's Republic of China;Weifang University, No. 5147, Dongfeng East Street, High-tech Development Zone, Weifang City, Shandong, 261061, People's Republic of China ~72: Guo, Jiajin;HU, Yongjun;TIAN, Subo;ZHAO, Jing~

2022/02655 ~ Complete ~54:MACHINE TOOL FIXTURE LIBRARY MANAGEMENT SYSTEM DEFINED BY ASSEMBLY KNOWLEDGE ~71:Xi’an Technological University, No. 4, Jinhua North Road, Beilin District, Xi'an City, Shaanxi Province , 710032, People's Republic of China ~72: BAI, Yu;CAO, Sen;CAO, Yan;DU, Jiang;FANG, Zhou;YANG, Lina;YANG, Yanli;YAO, Hui;ZHANG, Xiaofen~

2022/02675 ~ Complete ~54:METHOD AND APPARATUS FOR OPERATION OF RAILWAY SYSTEMS ~71:TECHNOLOGICAL RESOURCES PTY. LIMITED, C/-Michael Buck IP, PO Box 78, Red Hill, Brisbane, Queensland, 4059, Australia ~72: ANDREW JOHN HILL;ROBIN VUJANIC;SHAUN THOMAS ROBERTSON~ 33:AU ~31:2019903427 ~32:13/09/2019

2022/02637 ~ Complete ~54:A SPHERICAL BEARINGLESS SWITCHED RELUCTANCE MOTOR ~71:West Anhui University, Moon Island, Yu'an District, Lu'an City, Anhui Province, People's Republic of China ~72: Cheng Junhui;Lu Chengling;Zhang Gang;Zhang Jinsi~

2022/02645 ~ Complete ~54:A SHOE WITH ADJUSTABLE LENGTH AND GIRTH ~71:Xuzhou Industrial Vocational and Technical College, 1 Xiangwang South Road, Gulou District, Xuzhou City, Jiangsu Province, People's Republic of China ~72: CONG Houluo;DAI Xi;LIU Jie;WANG Zaixue;WANG Zhongguang;XU Xinjiang,;XU Yunhui;YANG Liu,;ZANG Yanan;ZHANG Tongyu;ZHANG Zhaohong;ZHAO Guiying;ZHAO Xuan~

2022/02653 ~ Complete ~54:A METHOD FOR EXTRACTING FISH GENOMIC DNA ~71:Heilongjiang River Fisheries Research Institute, Chinese Academy of Fishery Sciences (CAFS), Room 206, Office Building, Helongjiang River Fisheries Research Institute, No. 232, Hesong Street, Daoli District, Harbin, Heilongjiang Province, 150070, People's Republic of China ~72: Ge Yanlong;Zhang Yuyong~

2022/02665 ~ Complete ~54:METHOD FOR EFFICIENT GERMINATION AND SEEDLING SURVIVAL OF BLUEBERRY SEEDS ~71:Liaoning Institute of Pomology, Tiedong Street, Xiongyue Town, Bayuquan District, Yingkou City, Liaoning Province, 115009, People's Republic of China ~72: GAO, Shuqing;LI, Jiaqi;LIU, Cheng;LIU, Xiuli;LIU, Youchun;WANG, Hongguang;WANG, Xingdong;YANG, Yanmin;YANG, Yuchun~

2022/02669 ~ Complete ~54:A GRADIENT GATHER CORRELATION WEIGHTED PREPROCESSING METHOD FOR LEAST SQUARE INVERSE TIME MIGRATION ~71:OCEAN UNIVERSITY OF CHINA, No. 238 Songling Road, Laoshan District, Qingdao City, People's Republic of China ~72: DU, Guoning;JIANG, Xiuping;LI, Jinshan;MAO, Shibo;SONG, Peng;TAN, Jun;WANG, Qianqian;WANG, Shaowen;XIA, Dongming;XIE, Chuang;ZHAO, Bo~ 33:CN ~31:202110999970.7 ~32:30/08/2021

2022/02671 ~ Complete ~54:ARTICLES AND METHODS FOR ADMINISTRATION OF THERAPEUTIC AGENTS ~71:MASSACHUSETTS INSTITUTE OF TECHNOLOGY, 77 Massachusetts Avenue, Cambridge, Massachusetts 02139, United States of America;THE BRIGHAM AND WOMEN'S HOSPITAL, INC., 75 Francis Street, Boston, Massachusetts 02115, United States of America ~72: CARLO GIOVANNI TRAVERSO;CHRISTOPH WINFRIED JOHANNES STEIGER;JOSHUA KORZENIK;ROBERT S LANGER~ 33:US ~31:62/885,450 ~32:12/08/2019

2022/02674 ~ Complete ~54:SYNTHESIS AND USE OF ZEOLITIC MATERIAL HAVING THE ITH FRAMEWORK STRUCTURE TYPE ~71:BASF SE, Carl-Bosch-Strasse 38, 67056, Ludwigshafen am Rhein, Germany ~72: ANDREI-NICOLAE PARVULESCU;FENG-SHOU XIAO;QINMING WU;TREES MARIA DE BAERDEMAEKER;ULRICH MUELLER;XIANGJU MENG~ 33:CN ~31:PCT/CN2019/107018 ~32:20/09/2019

2022/02660 ~ Complete ~54:EXPERIMENTAL OPERATION PLATFORM FOR FLOODING TOLERANCE OF PLANTS ~71:Huazhong Agricultural University, No. 1 Lion Mountain Street, Hongshan District, Wuhan, Hubei Province, People's Republic of China;Institute of Hydroecology, MWR&CAS, No. 578, Zhuo Daoquan

Xiongchu Street, Hongshan District, Wuhan, Hubei Province, People's Republic of China ~72: Hu Lian;Peng Jianhua;Shen Zhenfeng;Yuan Yujie;Zhang Zhiyong;Zheng Zhiwei~

2022/02667 ~ Complete ~54:VENTILATION, ANTICORROSION AND TEMPERATURE CONTROL STORAGE CABINET FOR HAZARDOUS CHEMICALS ~71:The Fifth People's Hospital of Wuxi, The Fifth People's Hospital of Wuxi, Affiliated Hospital of Jiangnan University, No.1215 Guangrui Road, Liangxi District, Wuxi City, Jiangsu Province, 214000, People's Republic of China ~72: Lu Zhonghua;Yan Yan~

. - APPLIED ON 2022-03-07 -

2022/02743 ~ Complete ~54:METHOD OF MANUFACTURING MICROSTRUCTURES ~71:INNOTURE IP LIMITED, 2nd Floor, 58 Davies Street, United Kingdom ~72: BAMSEY, Ryan;CAMELIU ICHIM, Ionut~ 33:GB ~31:1911909.8 ~32:20/08/2019

2022/02697 ~ Complete ~54:POSITIONING METHOD AND SYSTEM OF MAGNETIC CONTROLLED CAPSULE ROBOT BASED ON MAGNETIC SENSOR ARRAY ~71:China University of Mining and Technology, Nanhu Campus, China University of Mining and Technology, Daxue Road, Xuzhou City, Jiangsu Province, 221000, People's Republic of China ~72: FANG, Congmin;HUA, Dezheng;LIU, Hao;LIU, Xiaofan;LIU, Xinhua;LU, He;PENG,Lai;SHEN, Yurui;WANG, Qiyu;ZHOU, Hao~

2022/02704 ~ Complete ~54:EFFICIENT CULTIVATION METHOD OF WINTER RAPE-SILAGE MAIZE ~71:ShiJiaZhuang Academy of Agricultural and Forestry Sciences, 479 Shengli North Street, Chang'an District, Shijiazhuang City, Hebei Province, 050041, People's Republic of China ~72: Fu Yali;Liang Lipeng;Song Juhong;Tian Dongliang;Tian Guoying;Wang Haishan~

2022/02725 ~ Complete ~54:SYSTEMS AND METHODS FOR THERMAL CONTROL OF AN ENERGY STORAGE SYSTEM ~71:General Electric Company, 1 River Road, SCHENECTADY 12345, NY, USA, United States of America ~72: DUGGAL, Anil Raj;HART, Richard Louis;HOFER, Douglas Carl~

2022/02733 ~ Complete ~54:CARTRIDGE PIN ASSEMBLY COMPRISING A SLEEVE BEARING HAVING A FLARED END AND TRACK CHAIN ASSEMBLY COMPRISING CARTRIDGE PIN ASSEMBLY ~71:CATERPILLAR INC., 100 NE Adams Street, Peoria, United States of America ~72: JONES, Benjamin I.;WANG, Jianjun~ 33:US ~31:16/564,305 ~32:09/09/2019

2022/02740 ~ Complete ~54:GENETICALLY ENGINEERED T CELLS HAVING IMPROVED PERSISTENCE IN CULTURE ~71:CRISPR THERAPEUTICS AG, Baarerstrasse 14, 6300, Zug, Switzerland ~72: DEMETRIOS KALAITZIDIS;HANSPETER WALDNER;JONATHAN ALEXANDER TERRETT~ 33:US ~31:62/897,016 ~32:06/09/2019;33:US ~31:62/927,764 ~32:30/10/2019;33:US ~31:63/034,646 ~32:04/06/2020

2022/02685 ~ Provisional ~54:HELMET ~71:Haydn Clive Everitt-Penhale, 89 Geneva Drive, Camp's Bay, Western Cape, South Africa ~72: Haydn Clive Everitt-Penhale~

2022/02687 ~ Provisional ~54:METHOD FOR RECHARGING AN AEROSOL CONTAINER AND A RECHARGEABLE CONTAINER ~71:KAD EMPORIUM T/A EXXTRA, 35 KINGSTON ROAD, PERRIDGEVALE, South Africa ~72: ALEXANDER LAWSON CLARK;DAVID PAUL CLARK~

2022/02692 ~ Complete ~54:METHOD AND SYSTEM FOR PREDICTING DISINFECTION BY-PRODUCTS IN DRINKING WATER ~71:Jilin Jianzhu University, No. 5088, Xincheng Street, Changchun City, Jilin Province, 130118, People's Republic of China ~72: LIN, Yingzi;LIU, Gen;LIU, Wanqing;WANG, Gaoqi;WEI, Yuhang;YANG, Hao;ZHANG, Daihua~

2022/02695 ~ Complete ~54:NEW METHOD FOR REPLACING SERUM ANTIBODY MONITORING WITH EGG YOLK ANTIBODY AGAINST H5 SUBTYPE AVIAN INFLUENZA ~71:LINYI UNIVERSITY, Linyi University, Middle Section of Shuangling Road, Linyi City, Shandong Province, 276000, People's Republic of China ~72: SUN, Peiming;WANG, Fang;WANG, Yan~

2022/02686 ~ Provisional ~54:BARRIER ARRANGEMENT ~71:AFFIRM MANUFACTURING SERVICES (PROPRIETARY) LIMITED T/A ROTOTANK, Plot 123 Van der Hoff Road, Pretoria, Gauteng, South Africa ~72: TERRENCE CLIVE STANLEY~

2022/02691 ~ Complete ~54:DARK SEPTATE ENDOPHYTE STRAIN IN BLUEBERRY ROOT AND USE THEREOF ~71:Anqing Normal University, No. 1318, Jixian North Road, Yixiu District, Anqing City, Anhui Province, 246011, People's Republic of China ~72: LI, Ping;LI, Yankai;LIU, Dong;SONG, Xiaohe;SONG, Yaling;YIN, Liwei;YU, Daoping;ZHOU, Duoqi~

2022/02703 ~ Complete ~54:COAL SEAM PERMEABILITY ENHANCEMENT METHOD AND DEVICE WITH LIQUID NITROGEN FRACTURING ~71:China University of Mining and Technology, School of Mines, China University of Mining and Technology (Nanhu Campus), No.1 University Road, Tongshan District, Xuzhou City, Jiangsu Province, People's Republic of China;Chongqing University, State Key Laboratory of Coal Mine Disaster Dynamics and Control, Chongqing University, No.174 Shazheng Road, Shapingba District, Chongqing City, People's Republic of China ~72: Fang Xinqiu;Lu Shuo;Tang Jun;Zhang Cun;Zhang Lei;Zhang Zhenyu~

2022/02737 ~ Complete ~54:OPTIMIZED ANALYTE DERIVATIZATION FOR SYNERGISTIC APPLICATION WITH CRYSTAL SPONGE METHOD ~71:MERCK PATENT GMBH, Frankfurter Strasse 250, 64293, Darmstadt, Germany ~72: WOLFGANG HIERSE~ 33:EP ~31:19194201.0 ~32:28/08/2019;33:EP ~31:PCT/EP2019/073021 ~32:28/08/2019

2022/02744 ~ Complete ~54:EXPRESS-LABEL PRINTING APPARATUS DURING LOGISTICS AND TRANSPORTATION ~71:ANQING NORMAL UNIVERSITY, No.1318, Jixian North Road, Anqing City, People's Republic of China ~72: LIANG, Bo;SHI, Peicheng;WANG, Hong;ZHANG, Yu;ZHOU, Hongbo~ 33:CN ~31:202110492815.6 ~32:30/04/2021

2022/02688 ~ Provisional ~54:ELECTROKINETIC DISRUPTION GENERATION ~71:HOWARD FRANCIS ALBOROUGH, PO Box 20, South Africa;PAMELA ST CLARE ALBOROUGH, PO Box 20, South Africa ~72: ALBOROUGH, Howard Francis;ALBOROUGH, Pamela St Clare~

2022/02701 ~ Complete ~54:A COMPOUND BACTERIA FERMENTATION SUPERFINE PULVERIZED TRADITION CHINESE MEDICINE MACHINE FOR AQUATIC PRODUCTS AND PREPARATION METHOD THEREOF ~71:Xiamen Kehuan Marine Biotechnology Co., Ltd., No. 110-111, Siming Park, Industrial Concentration Zone, Tong’an District, Xiamen City, Fujian Province, 361000, People's Republic of China ~72: CHANG, Youmin;JIANG, Qiucen;LIN, Weibin~

2022/02706 ~ Complete ~54:DETERGENT FOR WASHING DOWN FEATHER AND PREPARATION METHOD THEREOF ~71:Lu'an Fengyu Environmental Protection Technology Co., Ltd., University Science and Technology Park, Centralized Demonstration Park, Lu'an City, Anhui Province, 237100, People's Republic of China;Lu'an Sea Feather Co., Ltd., Gaocheng East Road, Economic Development Zone, Lu'an City, Anhui Province, 237006, People's Republic of China;West Anhui University, West of Yunlu Bridge, Lu'an City, Anhui Province, 237012, People's Republic of China ~72: LI, Lingang;LI, Xuemei;QIN, Yu;ZHANG, Wei~

2022/02708 ~ Complete ~54:A CHINESE MEDICINAL COMPOSITION FOR PREVENTING AND TREATING MALIGNANT TUMOR, AND ITS PREPARATION METHOD AND PREPARATIONS ~71:Shenzhen Institute of Geriatrics, No.3002, Sungang West Road, Futian District, Shenzhen, Guangdong Province, People's Republic of

China;Wu Zhengzhi, No.3002, Sungang West Road, Futian District, Shenzhen, Guangdong Province, People's Republic of China ~72: Jia Dan;Li Ziwen;Liang Shaoyu;Liu Zhanyan;Wang Mengxia;Wu Zhengzhi;Zeng Yongchang~

2022/02709 ~ Complete ~54:A PRODUCT COMPOSITION OF MEDICINAL DIET DIETOTHERAPY FOR PREVENTING AND TREATING DEPRESSION AND PREPARATION METHOD THEREOF ~71:Shenzhen Institute of Geriatrics, No.3002, Sungang West Road, Futian District, Shenzhen, Guangdong Province, People's Republic of China;Wu Zhengzhi, No.3002, Sungang West Road, Futian District, Shenzhen, Guangdong Province, People's Republic of China ~72: Hu Shengquan;Liang Shaoyu;Liu Jieren;Wang Mengxia;Wu Zhengzhi;Zeng Yongchang~

2022/02711 ~ Complete ~54:SUSTAINED-RELEASE DOSAGE FORMS OF RUXOLITINIB ~71:Incyte Holdings Corporation, 1801 Augustine Cut-Off, WILMINGTON 19803, DE, USA, United States of America ~72: ERICKSON-VIITANEN, Susan;NI, Yong;PARIKH, Bhavnish;WILLIAMS, William V.;YELESWARAM, Krishnaswamy~ 33:US ~31:61/726,893 ~32:15/11/2012;33:US ~31:61/769,408 ~32:26/02/2013

2022/02713 ~ Complete ~54:A STEPPED MAST LIFTING GEAR ~71:JIANGSU BEIER MACHINERY CO., LTD., North 2nd Road No. 318, Economic Development Zone, Zhangjiagang City, People's Republic of China ~72: CAI, Lihua;CAO, Jin;CHEN, Sijie;FAN, Jihua;FANG, Haifeng;LIU, Rui;LUO, Jiachao;PAN, Ao;WU, Qunbiao;ZHANG, Yonghong;ZHAO, Shibo~

2022/02716 ~ Complete ~54:HIGH-EFFICIENCY AND HIGH-SPEED SINGLE SCREW WITH A LARGE LENGTH-DIAMETER RATIO ~71:JIANGSU BEIER MACHINERY CO., LTD., North 2nd Road No. 318, Economic Development Zone, Zhangjiagang City, People's Republic of China ~72: CAI, Lihua;CHEN, Sijie;FAN, Jihua;FANG, Haifeng;HE, Defang;HE, Xiaokun;MIAO, Chengshang;WANG, Qi;WU, Qunbiao;YAO, Jiang~

2022/02718 ~ Complete ~54:BOOM EXTENSION DEVICE FOR DOCKSIDE CONTAINER CRANE, AND EXTENSION METHOD FOR SAME ~71:SHANGHAI ZHENHUA HEAVY INDUSTRIES CO. LTD, No. 3261 Dongfang Road, Pudong New District,, People's Republic of China ~72: FENG, Zhiwen;JIA, Cong;SU, Hongya;SUN, Xianhai;ZHU, Min~ 33:CN ~31:201910788151.0 ~32:26/08/2019

2022/02720 ~ Complete ~54:DIRECTED CONJUGATION TECHNOLOGIES ~71:KLEO PHARMACEUTICALS, INC., 25 Science Park, Suite 2D 150 Munson Street, United States of America ~72: ALVAREZ, Enrique;BERBASOVA, Tetyana;BUNIN, Anna;CUKAN, Michael, C.;IBEN, Lawrence, Gerald;RASTELLI, Luca;SPIEGEL, David, Adam;VAILL, Ada, Margaret;VIDAL, Christian Marcel;WELSCH, Matthew, Ernest~ 33:US ~31:62/937,131 ~32:18/11/2019;33:US ~31:63/063,902 ~32:10/08/2020

2022/02724 ~ Complete ~54:METHODS AND APPARATUSES FOR HANDLING CONFIGURED AND DYNAMIC DOWNLINK TRANSMISSIONS IN A WIRELESS COMMUNICATION NETWORK ~71:TELEFONAKTIEBOLAGET LM ERICSSON (PUBL), 164 83, Sweden ~72: NIMBALKER, Ajit;NORY, Ravikiran~ 33:US ~31:62/914,268 ~32:11/10/2019

2022/02727 ~ Complete ~54:OIL LIQUID FUNGICIDAL COMPOSITIONS ~71:Adama Makhteshim Ltd., P O Box 60, BEER SHEVA 8410001, ISRAEL, Israel ~72: COLLA, Luiz Fernando;MACHADO, Silvio Luiz~ 33:US ~31:62/895,602 ~32:04/09/2019

2022/02731 ~ Complete ~54:ACTIVE COMPOUND COMBINATIONS HAVING INSECTICIDAL PROPERTIES ~71:Bayer Aktiengesellschaft, Kaiser-Wilhelm-Allee 1, LEVERKUSEN 51373, GERMANY, Germany ~72: GALLOW, Roland;JOHN, Marita~ 33:EP ~31:19190752.6 ~32:08/08/2019

2022/02735 ~ Complete ~54:WATER REPELLENT COMPOSITION ~71:ETEX BUILDING PERFORMANCE INTERNATIONAL SAS, 500 rue Marcel Demonque Zone du Pôle, Technologique Agroparc, 84915, Avignon, France ~72: DANIEL MARTIN~ 33:EP ~31:19195153.2 ~32:03/09/2019

2022/02738 ~ Complete ~54:NEW COMPOUNDS ~71:VICORE PHARMA AB, Kornhamnstorg 53, SE-111 27, Stockholm, Sweden ~72: BENGT OHLSSON;TOMAS FEX~ 33:GB ~31:1913603.5 ~32:20/09/2019

2022/02741 ~ Complete ~54:METHOD FOR SENDING NETWORK PACKET, DEVICE AND NETWORK PROCESSOR ~71:ZTE CORPORATION, ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, People's Republic of China ~72: XIAOYU BAO;ZHEN LIN;ZHONGYUN YU~ 33:CN ~31:201910734622.X ~32:09/08/2019

2022/02742 ~ Complete ~54:FIBER OPTIC CONNECTORS AND FIBER OPTIC CONNECTION SYSTEMS ~71:COMMSCOPE TECHNOLOGIES LLC, 1100 CommScope Place SE, Hickory, North Carolina, 28602, United States of America ~72: RYAN KOSTECKA;YU LU~ 33:US ~31:62/891,842 ~32:26/08/2019;33:US ~31:63/003,988 ~32:02/04/2020

2022/02747 ~ Complete ~54:SECURE COMMUNICATION BETWEEN DEVICES IN A BLASTING SYSTEM ~71:OMNIA GROUP (PROPRIETARY) LIMITED, 13 Sloane Street, Epsom Downs, Bryanston, South Africa ~72: POSTHUMUS, Andries Willem;RORKE, Anthony John~ 33:ZA ~31:2019/05422 ~32:16/08/2019

2022/02689 ~ Provisional ~54:SYSTEM FOR AND METHOD OF IDENTIFYING AND MARKETING SERVICE PROVIDERS ~71:IZZAT (PTY) LTD., 61 Summerset Estate, 53 Garden Road, MIDRAND 1685, Gauteng, SOUTH AFRICA, South Africa ~72: SITSHINGA, Vumile~

2022/02700 ~ Complete ~54:PIEZOELECTRIC AND CONDUCTIVE GRAFTED POLYURETHANE-BASED COMPOSITE DAMPING MATERIAL AND PREPARATION METHOD THEREOF ~71:Yantai Research Institute of Harbin Engineering University, No.1 Qingdao Street, Economic and Technological Development Zone, Yantai, Shandong Province, People's Republic of China ~72: Chen Rongrong;Guo Yanhong;Song Chuan~

2022/02707 ~ Complete ~54:A KIND OF PRECISION PRODUCT COMPOSITION OF MEDICINAL DIET DIETOTHERAPY FOR SLEEP DISORDER AND PREPARATION METHOD THEREOF ~71:Shenzhen Institute of Geriatrics, No.3002, Sungang West Road, Futian District, Shenzhen, Guangdong Province, People's Republic of China;Wu Zhengzhi, No.3002, Sungang West Road, Futian District, Shenzhen, Guangdong Province, People's Republic of China ~72: Li Yan;Liang Shaoyu;Liu Jieren;Liu Zhanyan;Wu Junhong;Wu Zhengzhi~

2022/02714 ~ Complete ~54:AN AUTOMATIC SEPARATING DEVICE FOR PACKAGING BAGS ~71:JIANGSU BEIER MACHINERY CO., LTD., North 2nd Road No. 318, Economic Development Zone, Zhangjiagang City, People's Republic of China ~72: CAI, Lihua;CAO, Jin;FAN, Jihua;FANG, Haifeng;GAO, Jinke;LIU, Zhongtao;MIAO, Zhenyu;SHE, Hongbin;WU, Qunbiao;XU, Lei;XUE, Liang;ZHOU, Ta~

2022/02721 ~ Complete ~54:DICE SHAKING MECHANISM ~71:TCS JOHN HUXLEY EUROPE LIMITED, Festival Trade Park Unit 6 Crown Road Stoke-on-Trent, United Kingdom ~72: JACKSON, Gavin~ 33:GB ~31:1914772.7 ~32:11/10/2019

2022/02728 ~ Complete ~54:TREATMENT OF OPIOID WITHDRAWAL ~71:Kinoxis Therapeutics Pty Ltd, Suite 201, 697 Burke Road, CAMBERWELL 3124, VICTORIA, AUSTRALIA, Australia ~72: BOWEN, Michael Thomas;MCGREGOR, Iain Stewart~ 33:AU ~31:2019903299 ~32:06/09/2019

2022/02736 ~ Complete ~54:ELECTRONIC DEVICE FOR ADJUSTING TRANSMISSION POWER BASED ON SAR AND METHOD FOR OPERATING SAME ~71:SAMSUNG ELECTRONICS CO., LTD., 129, Samsung-ro,

Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Republic of Korea ~72: JAEMOON CHA;SEONYUN KIM;SUNMIN HWANG;SUYOUNG PARK;YEONJOO LEE~ 33:KR ~31:10-2019-0099812 ~32:14/08/2019

2022/02693 ~ Complete ~54:LYONIRESINOL COMPOUND AND PREPARATION METHOD THEREOF AND APPLICATION THEREOF ~71:Xinxiang Medical University, No. 601, Jinsui Avenue, Hongqi District, Xinxiang City, Henan, 453003, People's Republic of China;Zhengzhou University of Light Industry, No. 136, Science Avenue, High-tech Industrial Development Zone, Zhengzhou City, Henan , 450000, People's Republic of China ~72: LI, Peng;LIU, Hua;LU, Junxiu;REN, Kaidi;YANG, Pengfei;ZHANG, Weifang;ZHAO, Fanrong;ZHU, Tiantian~

2022/02712 ~ Complete ~54:ANTIMITOSCINS: TARGETED INHIBITORS OF MITOCHONDRIAL BIOGENESIS FOR ERADICATING CANCER STEM CELLS ~71:LUNELLA BIOTECH, INC., 145 Richmond Road, Ottawa, Ontario, K1Z 1A1, Canada ~72: FEDERICA SOTGIA;MICHAEL P LISANTI~ 33:US ~31:62/508,702 ~32:19/05/2017

2022/02719 ~ Complete ~54:ANTIBODY GENE THERAPY FOR TREATMENT AND PREVENTION OF INFECTION BY RABIES LYSSAVIRUS ~71:AUBURN UNIVERSITY, Office of Innovation Adv. and Commercialization, 570 Devall Drive, Suite 102, United States of America;UNIVERSITY OF MASSACHUSETTS MEDICAL SCHOOL, 365 Plantation Street, Suite 130, United States of America ~72: BAKER, Henry, J.;MARTIN, Douglas, R.;SENA-ESTEVES, Miguel;VAN KAMPEN, Kent, R.~ 33:US ~31:62/901,426 ~32:17/09/2019

2022/02726 ~ Complete ~54:OCULAR DEVICE AND DRUG DELIVERY SYSTEM, WITH CASE ~71:LABOMBARD, Denis E., 7 Boardman Street, GEORGETOWN 01833-1607, MA, USA, United States of America ~72: LABOMBARD, Denis E.~ 33:US ~31:62/925,695 ~32:24/10/2019

2022/02732 ~ Complete ~54:POUCHED PRODUCTS WITH ENHANCED FLAVOR STABILITY ~71:NICOVENTURES TRADING LIMITED, Globe House, 1 Water Street, United Kingdom ~72: GERARDI, Anthony R.;HUTCHENS, Ronald K.;KELLER, Christopher;POOLE, Thomas H.~ 33:US ~31:16/568,034 ~32:11/09/2019

2022/02751 ~ Complete ~54:STUDENT ATTENDANCE MANAGEMENT SYSTEM AND METHOD BASED ON BIG DATA ~71:SHENZHEN QICHENG ZHIYUAN NETWORK TECHNOLOGY CO., LTD., ROOM 606, XINGHE BUILDING, NO. 100, SHANGXING CENTER ROAD, SHANGXING COMMUNITY, XINQIAO STREET, BAO'AN DISTRICT, People's Republic of China ~72: LI, Qundi;LI, Wen;LI, Xueyong;ZENG, Hong;ZHOU, Chengtao~ 33:CN ~31:202111035509.6 ~32:06/09/2021

2022/02710 ~ Complete ~54:WIRELESS STRESS MONITORING EARLY WARNING INSTRUMENT AND MONITORING EARLY WARNING METHOD ~71:SHANDONG UNIVERSITY OF SCIENCE AND TECHNOLOGY, No.579 Qianwangang Road, Huangdao District, Qingdao City, Shandong Province, 266590, People's Republic of China ~72: TAN, Yunliang;XU, Liangke;YU, Fenghai;ZHAO, Tongbin~

2022/02702 ~ Complete ~54:UNMANNED AERIAL VEHICLE SURVEYING DATA ACQUISITION DEVICE ~71:Shandong Jianzhu University, Fengming Road, Lingang Development Zone, Jinan City, Shandong Province, 250101, People's Republic of China ~72: MA, Dongling;MAO, Libo;ZHANG, Guoyu~

2022/02717 ~ Complete ~54:DRUM SUPPORTING STRUCTURE IN DRUM SEPARATOR ~71:JIANGSU BEIER MACHINERY CO., LTD., North 2nd Road No. 318, Economic Development Zone, Zhangjiagang City, People's Republic of China ~72: HE, Defang;WANG, Mudi;YA, Kefu~

2022/02723 ~ Complete ~54:ALLOWING A MATRIX BASED INTRA PREDICTION BLOCK TO HAVE MULTIPLE TRANSFORM BLOCKS ~71:TELEFONAKTIEBOLAGET LM ERICSSON (PUBL), 164-83, Sweden ~72:

ANDERSSON, Kenneth;SAFFAR, Davood;SJÖBERG, Rickard;STRÖM, Jacob;YU, Ruoyang;ZHANG, Zhi~ 33:US ~31:62/902,635 ~32:19/09/2019

2022/02730 ~ Complete ~54:METHOD OF PREPARING PHOSPHORUS-CONTAINING FLAME RETARDANTS AND THEIR USE IN POLYMER COMPOSITIONS ~71:LANXESS Corporation, 111 RIDC Park West Drive, PITTSBURGH 15275, PA, USA, United States of America ~72: BONYHADY, Simon J.;HE, Qingliang;LEE, Julia Yue;SHARMA, Ramesh~ 33:US ~31:62/923,444 ~32:18/10/2019

2022/02739 ~ Complete ~54:IMMUNOTHERAPY TARGETING TUMOR NEOANTIGENIC PEPTIDES ~71:INSERM (INSTITUT NATIONAL DE LA SANTÉ ET DE LA RECHERCHE MÉDICALE), 101, rue de Tolbiac, 75013, Paris, France;INSTITUT CURIE, 26 rue d'Ulm, 75005, Paris, France;MNEMO THERAPEUTICS, 101 boulevard Murat, 75016, Paris, France ~72: ALEXANDRE HOUY;ANTONELA MERLOTTI IPPOLITO;BENJAMIN SADACCA;JOSHUA WATERFALL;MARC-HENRI STERN;MARIANNE BURBAGE;SEBASTIAN AMIGORENA;YAGO ARRIBAS DE SANDOVAL~ 33:EP ~31:19306064.7 ~32:02/09/2019;33:EP ~31:19218556.9 ~32:20/12/2019;33:EP ~31:20305743.5 ~32:01/07/2020

2022/02690 ~ Complete ~54:CARRIER AND CARRIER KIT FOR A HOOKAH ~71:SELAMOLELA, Tshepo, 562 Bela-Bela, Motsisi Street, South Africa ~72: SELAMOLELA, Tshepo~ 33:ZA ~31:2021/07607 ~32:11/10/2021

2022/02694 ~ Complete ~54:FLUORESCENT MATERIAL WITH ON-OFF RESPONSE TO ACID-BASE PH CHANGE AND APPLICATION THEREOF ~71:Dezhou University, No. 566 University West Road, Dezhou City, Shandong Province , 253023, People's Republic of China ~72: CHEN, Yuting;GENG, Longlong;WANG, Qian;YAN, Jingjie;ZHANG, Dashuai;ZHANG, Xiuling;ZHANG, Yongzheng~ 33:CN ~31:202111537166.3 ~32:16/12/2021

2022/02696 ~ Complete ~54:BLASTING METHOD FOR GOB-SIDE ENTRY RETAINING WITH EXTREMELY THICK ROOF BROKEN AND CUT ~71:Anhui University of Science and Technology, 168 Taifeng street, Nanxin District, Huainan City, Anhui Province, 232001, People's Republic of China ~72: Fu Jugen;Huang Wenyao;Li Chongqing;Liu Jian;Liu Mohan;Liu Zhichao;Luo Lingfeng;Mao Longfei;Wang Haibo;Wang Hao;Wang Mengxiang;Xu Ying;Ye Shuangshuang;Zong Qi~

2022/02699 ~ Complete ~54:THREE-DIMENSIONAL MESO-SCALE MODELING METHOD OF FULLY-GRADED CONCRETE WITH RANDOMLY DISTRIBUTED PORE DEFECTS ~71:Taiyuan University of Technology, No.79 YingZe west street, Taiyuan City, Shanxi Province, 030024, People's Republic of China ~72: Chen Qingqing;Shu Xuefeng;Wang Zhihua;Wang Zhiyong;Zhang Jie~

2022/02715 ~ Complete ~54:AN ADJUSTABLE SUPPORT DEVICE FOR LARGE-CALIBER PIPE PRODUCTION ~71:JIANGSU BEIER MACHINERY CO., LTD., North 2nd Road No. 318, Economic Development Zone, Zhangjiagang City, People's Republic of China ~72: FANG, Haifeng;HE, Defang;LIU, Shengwei;MIAO, Chengshang;WANG, Qi~

2022/02722 ~ Complete ~54:METHOD FOR SCHEDULING PRODUCTION ON A CONTINUOUS GALVANIZING LINE ~71:ARCELORMITTAL, 24-26, Boulevard d'Avranche, Luxembourg ~72: David MENDEZ HERES;Diego DIAZ FIDALGO;Segundo ALVAREZ GARCIA;Silvino FERNANDEZ ALZUETA~ 33:IB ~31:PCT/IB2019/059691 ~32:12/11/2019

2022/02729 ~ Complete ~54:SYSTEM AND METHOD OF MULTI-DRUG DELIVERY ~71:AbbVie Inc., 1 North Waukegan Road, NORTH CHICAGO 60064, IL, USA, United States of America ~72: CHEN, Yisheng;GONG, Jian;GONG, Yuchuan;HAN, Jian-Hwa;LI, Min;METZGER, David;MOHAMED, Ahmed;NG, Juki Wing-Keung;QIU, Yihong;RUGGLES, Alexander;SHAO, Xi;SHEBLEY, Mohamad;ZHOU, Deliang;ZU, Hui~ 33:US ~31:62/893,567

~32:29/08/2019;33:US ~31:62/893,573 ~32:29/08/2019;33:US ~31:62/981,180 ~32:25/02/2020;33:US ~31:63/022,823 ~32:11/05/2020

2022/02734 ~ Complete ~54:DATA PROCESSING DEVICE, DATA PROCESSING SYSTEM, AND DATA PROCESSING METHOD ~71:MITSUBISHI ELECTRIC CORPORATION, 7-3, Marunouchi 2-chome, Chiyoda-Ku, Tokyo, 1008310, Japan ~72: AKIRA MINEZAWA~

2022/02745 ~ Complete ~54:SAFELY TESTING OR PROGRAMMING DETONATORS IN AN ELECTRONIC BLASTING SYSTEM ~71:OMNIA GROUP (PROPRIETARY) LIMITED, 13 Sloane Street, Epsom Downs, Bryanston, South Africa ~72: POSTHUMUS, Andries Willem;RORKE, Anthony John~ 33:ZA ~31:2019/05420 ~32:16/08/2019

2022/02746 ~ Complete ~54:SECURE ARMING AND FIRING IN AN ELECTRONIC BLASTING SYSTEM ~71:OMNIA GROUP (PROPRIETARY) LIMITED, 13 Sloane Street, Epsom Downs, Bryanston, South Africa ~72: POSTHUMUS, Andries Willem;RORKE, Anthony John~ 33:ZA ~31:2019/05421 ~32:16/08/2019

2022/02752 ~ Complete ~54:INTERNET-BASED TEACHING RESOURCE SHARING SYSTEM AND METHOD ~71:SHENZHEN QICHENG ZHIYUAN NETWORK TECHNOLOGY CO., LTD., ROOM 606, XINGHE BUILDING, NO. 100, SHANGXING CENTER ROAD, SHANGXING COMMUNITY, XINQIAO STREET, BAO'AN DISTRICT, People's Republic of China ~72: LI, Minbo;LI, Qundi;LI, Wen;LI, Xueyong;ZHOU, Chengtao~ 33:CN ~31:202110893773.7 ~32:05/08/2021

2022/02698 ~ Complete ~54:ROCK STRENGTHENING AND GAS DRAINAGE BOREHOLE SEALING DEVICE AND METHOD ~71:China University of Mining and Technology, School of Mining Engineering, China University of Mining and Technology (Nanhu Campus), No.1, University Road, Tongshan District, Xuzhou City, Jiangsu Province, People's Republic of China ~72: Li Jinghua;Tang Jun;Tu Hongsheng;Tu Shihao;Wu Gang;Zhang Lei~

2022/02705 ~ Complete ~54:DEVICE FOR MEASURING WIND SPEED IN COAL MINE ROADWAY ~71:China University of Mining and Technology, School of Mines, China University of Mining and Technology (Nanhu Campus), No.1 University Road, Tongshan District, Xuzhou City, Jiangsu Province, People's Republic of China ~72: Li Jinghua;Li Mingxue;Liang Minfu;Xue Xiaomei;Zhang Lei~

. - APPLIED ON 2022-03-08 -

2022/02759 ~ Complete ~54:PUNCTURE TYPE DISINFECTION DEVICE FOR NOVEL CORONAVIRUSES OF COLD CHAIN SUPPLIES AND METHOD ~71:Guangdong University of Petrochemical Technology, No. 139, Guandu 2nd Road, Maoming City, Guangdong Province, 525000, People's Republic of China ~72: CAO, Gengyu;WANG, Qun~

2022/02765 ~ Complete ~54:WHEAT QUALITY THZ SPECTRUM CLASSIFICATION METHOD BASED ON DS EVIDENCE THEORY ~71:Henan University of Technology, No. 100 Lianhua Street, Zhengzhou High-tech Development Zone, Henan, 450001, People's Republic of China ~72: GE, Hongyi;HAN, Zhongze;JI, Xiaodi;JIA, Zhiyuan;JIANG, Yuying;LI, Li;LI, Pengpeng;LI, Zhi;LIAN, Feiyu;MA, Haihua;WANG, Fei;YANG, Xingxing;ZHANG, Yuan~

2022/02769 ~ Complete ~54:ENDOPHYTIC BACILLUS ALTITUDINIS AND APPLICATION THEREOF ~71:Bijie Jiaxiangmei Agricultural Comprehensive Development Co., Ltd., Zhuchang Town, Qixingguan District, Bijie City, Guizhou Province, People's Republic of China ~72: Hu Xiang;Li Yuhuan;Li Zhu;Liu Jianrui;Nie Yuying;Peng Qiuju;Xiao Yang;Zhou Yi~

2022/02773 ~ Complete ~54:A MOBILE CAM-TYPE AUTOMATIC PALLET MAGAZINE ~71:JIANGSU BEIER MACHINERY CO., LTD., North 2nd Road No. 318, Economic Development Zone, Zhangjiagang City, People's Republic of China ~72: CAI, Lihua;CAO, Jin;CHEN, Guiliang;FANG, Haifeng;LI, Zhiyuan;LIU, Rui;MIAO, Zhenyu;SUN, Zhongrui;ZHANG, Deyi;ZHANG, Lihua;ZHOU, Ta~

2022/02775 ~ Complete ~54:A BLOW PIN SCRAPING DEVICE IN A HOLLOW BLOW MOLDING MACHINE ~71:SUZHOU BESTAR BLOW MOLDING MACHINERY CO., LTD., North 2nd Road No. 318, Economic Development Zone, Zhangjiagang City, People's Republic of China ~72: FEI, Shiming;HE, Defang~

2022/02781 ~ Complete ~54:A DEVICE FOR ATTACHING AN IMPLEMENT TO A POWERED VEHICLE ~71:Unitrans Africa (Pty) Ltd, P O BOX 36361, South Africa ~72: UNITRANS AFRICA (PTY) LTD~

2022/02784 ~ Complete ~54:A DEVICE FOR ATTACHING A TRAILER TO A POWERED VEHICLE ~71:UNITRANS AFRICA (PTY) LIMITED, P O BOX 36361, South Africa ~72: UNITRANS AFRICA (PTY) LTD~

2022/02793 ~ Complete ~54:ANTI-NRP1A ANTIBODIES AND THEIR USES FOR TREATING EYE OR OCULAR DISEASES ~71:BOEHRINGER INGELHEIM INTERNATIONAL GMBH, Binger Strasse 173, Germany ~72: GUPTA, Pankaj;HAN, Fei;HUANG, Yining;LOW, Sarah;PRESTLE, Juergen;THOMAS, Leo;ZIPPEL, Nina~ 33:EP ~31:19199099.3 ~32:24/09/2019;33:EP ~31:20150942.9 ~32:09/01/2020

2022/02813 ~ Complete ~54:SIMPLIFIED SULPHATE REMOVAL FOR EFFLUENT TREATMENT ~71:MINTEK, 200 Malibongwe Drive, South Africa ~72: NETSHIKHUDINI, Tshamano;VAN STADEN, Petrus Johannes~ 33:ZA ~31:2019/06328 ~32:26/09/2019

2022/02758 ~ Complete ~54:SHUTTLE TYPE DISINFECTION DEVICE FOR MEANS OF COLD CHAIN LOGISTICS TRANSPORT AND METHOD ~71:Guangdong University of Petrochemical Technology, No. 139, Guandu 2nd Road, Maoming City, Guangdong Province, 525000, People's Republic of China ~72: CAO, Gengyu;WANG, Qun~

2022/02767 ~ Complete ~54:PLANT-DERIVED FINING CLARIFYING AGENT AND PREPARATION METHOD THEREOF ~71:Taishan University, No. 525, Dongyue Street, Daiyue District, Tai'an City, Shandong Province, 271000, People's Republic of China ~72: LI, Cuixia;ZHAO, Xianhua~

2022/02770 ~ Complete ~54:PREPARATION METHOD OF CHICKEN MEATBALL ADDED WITH DEODORIZED CLAM MEAT ~71:Hebei Agricultural University, No. 2596, Lekai South Street, Lianchi District, Baoding City, Hebei Province, 071001, People's Republic of China ~72: DENG, Wenyi;HOU, Yakun;SANG, Yaxin;SUN, Jilu;TIAN, Guifang;WANG, Xianghong~

2022/02774 ~ Complete ~54:HOLLOW BLOW MOLDING MACHINE ~71:SUZHOU BESTAR BLOW MOLDING MACHINERY CO., LTD., North 2nd Road No. 318, Economic Development Zone, Zhangjiagang City, People's Republic of China ~72: FEI, Shiming;HE, Defang~

2022/02782 ~ Complete ~54:METHOD FOR INHIBITING RETROGRADATION OF STARCHY FOODS ~71:QINGDAO AGRICULTURAL UNIVERSITY, 700 Changcheng Road, Chengyang District, Qingdao City, People's Republic of China ~72: DAI, Lei;JI, Na;NAN, Chong;QIN, Yang;SUN, Qingjie;WANG, Yanfei;XIONG, Liu~

2022/02795 ~ Complete ~54:HBV VACCINES AND METHODS TREATING HBV ~71:Gilead Sciences, Inc., 333 Lakeside Drive Foster City, United States of America ~72: AHMADI-ERBER, Sarah M.;BALSITIS, Scott J.;DAFFIS, Stephane;SCHIPPERS, Timo;SCHMIDT, Sarah~ 33:US ~31:62/908,494 ~32:30/09/2019

2022/02798 ~ Complete ~54:PHARMACEUTICAL COMPOSITION FOR TOPICAL WOUND TREATMENT ~71:CONSEJO NACIONAL DE INVESTIGACIONES CIENTIFICAS Y TECNICAS, Godoy Cruz 2290, Argentina;UNIVERSIDAD NACIONAL DE TUCUMAN, Ayacucho 491, Argentina;UNTECH INC., 16192 Coastal Highway, United States of America ~72: CERUSICO, Nicolas Abel;CHAVEZ JARA, Romina Mabel;DE LOS ANGELES LAZARTE, Maria;VERNIERI, Alberto Ramos~ 33:US ~31:62/896,784 ~32:06/09/2019

2022/02806 ~ Complete ~54:SEPARATION OF ACETATE FROM FERMENTATION BROTH ~71:LANZATECH, INC., 8045 Lamon Avenue, Suite 400, Skokie, Illinois, 60077, United States of America ~72: RICHARD R ROSIN~ 33:US ~31:62/924,666 ~32:22/10/2019;33:US ~31:17/074,342 ~32:19/10/2020

2022/02811 ~ Complete ~54:METHODS OF TREATING PSYCHOLOGICAL AND BRAIN DISORDERS ~71:UNIVERSITY OF MARYLAND, BALTIMORE, 620 W. Lexington Street, Baltimore, United States of America ~72: THOMPSON, Scott~ 33:US ~31:62/886,090 ~32:13/08/2019

2022/02799 ~ Complete ~54:METHODS AND COMPOSITIONS FOR GENOMIC INTEGRATION ~71:MYELOID THERAPEUTICS, INC., 300 Technology Square, Suite 203, United States of America ~72: BISARIA, Namita;GETTS, Daniel;WANG, Yuxiao~ 33:US ~31:62/895,441 ~32:03/09/2019;33:US ~31:62/908,800 ~32:01/10/2019;33:US ~31:63/039,261 ~32:15/06/2020

2022/02802 ~ Complete ~54:SCRUBBING TOOL HAVING A DISSOLVABLE CLEANING HEAD ~71:SCRUB DADDY, INC., 6 Horne Drive, Folcroft, Pennsylvania, 19032, United States of America ~72: AARON KRAUSE;ALEKSANDRS TITOVS;JOE VACCARO;JOHN O'BRIEN~ 33:US ~31:62/888,680 ~32:19/08/2019

2022/02808 ~ Complete ~54:SYSTEMS AND METHODS FOR GRID SCALE ENERGY STORAGE ~71:Ambri Inc., 53 Brigham Street, Unit 8, MARLBOROUGH 01752, MA, USA, United States of America ~72: BISHOP, Eliza;BRADWELL, David J.;CUI, Jianyi;ELLIOTT, Alexander W.;LANGHAUSER, William B.;MCCLEARY, David A. H.;TIMSON, William;VAI, Alex T.~ 33:US ~31:62/899,400 ~32:12/09/2019

2022/02812 ~ Complete ~54:A COVERING DEVICE ~71:JOMAC INVESTMENTS CC, 10 MEDICAL CENTRE, GOVERNMENT AVENUE, VIRGINIA 9430, REPUBLIC OF SOUTH AFRICA, South Africa ~72: VAN DEN BERG, Jan, Dirk, Johannes~ 33:ZA ~31:2019/02916 ~32:10/08/2019;33:ZA ~31:2019/08039 ~32:04/12/2019

2022/02754 ~ Complete ~54:METHOD FOR PREPARING FUNCTIONAL MASK MATERIAL BY EXTRACTING SERICIN FROM SILK GLANDS OF CASTOR SILKWORMS ~71:Yancheng polytechnic college, No. 285, Jiefang South Road, Yancheng City, Jiangsu, 224000, People's Republic of China ~72: CHEN, Jiali;FAN, Lishan;GAO, Yuan;GU, Zhengkai;JIANG, Ziao;WANG, Huiling;ZHAO, Jumei;ZHAO, Shiyuan;ZHOU, Bin;ZHOU, Hongtao~ 33:CN ~31:202111143029.1 ~32:28/09/2021

2022/02789 ~ Complete ~54:METHOD FOR IMPROVING QUALITY OF GRAIN PRODUCTS ~71:QINGDAO AGRICULTURAL UNIVERSITY, 700 Changcheng Road, Chengyang District, Qingdao City, People's Republic of China ~72: DAI, Lei;JI, Na;LI, Man;QIN, Yang;SUN, Qingjie;XIONG, Liu;XU, Xingfeng;ZHAO, Yunxia~

2022/02794 ~ Complete ~54:USP30 INHIBITORS AND USES THEREOF ~71:VINCERE BIOSCIENCES, INC., 245 Main Street, Floor 2, United States of America ~72: BEHROUZ, Bahareh;FRITZEN JR., Edward, Lawrence;JOHNSON, Michael, Garrett;LEE, Andrew, David;ROMERO, Donna, L.~ 33:US ~31:62/898,820 ~32:11/09/2019;33:US ~31:63/022,165 ~32:08/05/2020

2022/02750 ~ Provisional ~54:VETHORA MAINFRAME ~71:Sizwe Luvuno, 5689 Taukobong Street, South Africa ~72: Sizwe Luvuno~ 33:ZA ~31:001 ~32:01/09/2018

2022/02757 ~ Complete ~54:ELECTRICALLY EXTRUDED AND PROPELLED WINGED INTELLIGENT UNMANNED UNDERWATER VEHICLE ~71:Guangdong University of Petrochemical Technology, No. 139, Guandu 2nd Road, Maoming City, Guangdong Province, 525000, People's Republic of China ~72: CAO, Gengyu;WANG, Qun~

2022/02766 ~ Complete ~54:METHOD AND APPLICATION OF OBTAINING A DETECTION CURVE OF POTASSIUM SORBATE IN WHEAT FLOUR ~71:Henan University of Technology, No. 100 Lianhua Street, Zhengzhou High-tech Development Zone, Henan, 450001, People's Republic of China ~72: GE, Hongyi;GUAN, Aihong;JI, Xiaodi;JIA, Zhiyuan;JIANG, Yuying;LI, Li;LI, Pengpeng;LI, Zhi;LIAN, Feiyu;WANG, Fei;WU, Yake;ZENG, Yuting;ZHANG, Yuan~

2022/02771 ~ Complete ~54:INTELLIGENT CONTROL APPARATUS AND METHOD FOR AN UNMANNED ELECTRIC LOCOMOTIVE USED IN MINE AND AN ELECTRIC LOCOMOTIVE ~71:Anhui University of Science and Technology, No. 168 Taifeng Road, Shannan New District, Huainan City, Anhui Province, People's Republic of China ~72: Huaping ZHOU;Ting WANG~ 33:CN ~31:202110268014.1 ~32:12/03/2021

2022/02776 ~ Complete ~54:BLOW PIN DEVICE IN A HOLLOW BLOW MOLDING MACHINE ~71:SUZHOU BESTAR BLOW MOLDING MACHINERY CO., LTD., North 2nd Road No. 318, Economic Development Zone, Zhangjiagang City, People's Republic of China ~72: FEI, Shiming;HE, Defang~

2022/02783 ~ Complete ~54:A PIN OPERATED VALVE ~71:EDUAN TEK VERVAARDIGING BK, 12 Arend avenue, Windsor Glen, South Africa ~72: JOHANNES JACOBUS NAUDÉ~ 33:ZA ~31:2021/01606 ~32:10/03/2021

2022/02791 ~ Complete ~54:WATER DRIVEN PASSIVE AUTONOMOUS RETRACTABLE SIGNAL DEVICE FOR DEEP-SEA AUV ~71:HARBIN ENGINEERING UNIVERSITY, 45 Nantong street, Nangang District, People's Republic of China ~72: CAO, Jian;HE, Jiayu;JIANG, Yanqing;LI, Ye;LI, Yueming;LIAO, Yulei;MA, Teng;WANG, Bo;ZHANG, Qiang~

2022/02800 ~ Complete ~54:KIT AND MOLECULE FOR CAPTURING A MOLECULE WITH MAGNETIC MEANS ~71:CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, 3 rue Michel-Ange, 75016, Paris, France;INSTITUT POLYTECHNIQUE DE GRENOBLE, 46 avenue Félix Viallet, 38031 Grenoble, Cedex 1, France ~72: GUILLAUME BLAIRE;ORPHÉE CUGAT;VICTOR VIEILLE~ 33:FR ~31:FR1909561 ~32:30/08/2019

2022/02768 ~ Complete ~54:PINE NEEDLE-SHAPED STEAMED POMEGRANATE GREEN TEA AND PREPARATION METHOD THEREOF ~71:Guizhou University, Jiaxiu South Road, Huaxi District, Guiyang City, Guizhou Province, 550025, People's Republic of China ~72: Li Meifeng;Liu Jianjun;Liu Xiaobo;Wen Beibei;Zhang Jing;Zhang Jinyu;Zhang Xuehan~

2022/02787 ~ Complete ~54:WINTER VENTILATION DEVICE FOR ENVIRONMENTAL PROTECTION BACTERIAL BED BREEDING HOUSE IN COLD AREA ~71:INSTITUTE OF ANIMAL HUSBANDRY, HEILONGJIANG ACADEMY OF AGRICULTURAL SCIENCES, NO. 368, XUEFU ROAD, NANGANG DISTRICT, HARBIN, People's Republic of China ~72: CHEN, Heshu;HE, Xinmiao;LIU, Di;QI, Meiyu;WANG, Wentao;WU, Saihui;YU, Xiaolong~

2022/02805 ~ Complete ~54:NOVEL METHODS FOR REARING AND CONTROLLED RELEASE OF PREDATORY MITES ~71:BIO-BEE SDE ELIYAHU LTD., Kibbutz Sde Eliyahu, Emmek H'maayanot , 1081000, Israel ~72: AMIR GROSMAN;ARNON TABIC;SHIMON STEINBERG;TOM KATZ~

2022/02815 ~ Provisional ~54:RESIDENTIAL WARNING SIGN ~71:Steffens Gordon Botha, 524 Riekert street, South Africa ~72: Steffens Gordon Botha~

2022/02763 ~ Complete ~54:DUAL-PISTON CLAMPABLE AND SEPARABLE CONNECTION TYPE UNDERWATER 3D PRINTER ~71:Guangdong University of Petrochemical Technology, No. 139, Guandu 2nd Road, Maoming City, Guangdong Province, 525000, People's Republic of China ~72: CAO, Gengyu;WANG, Qun~

2022/02777 ~ Complete ~54:A HOT BLADE PARISON CUTTING DEVICE IN A HOLLOW BLOW MOLDING MACHINE ~71:SUZHOU BESTAR BLOW MOLDING MACHINERY CO., LTD., North 2nd Road No. 318, Economic Development Zone, Zhangjiagang City, People's Republic of China ~72: FEI, Shiming;HE, Defang~

2022/02792 ~ Complete ~54:A BIOMETRIC-BASED AUTOMATED LIQUID DISPENSER SYSTEM AND A METHOD THEREOF ~71:SHARMA, VIJAY KUMAR, School of Electronics & Communication Engineering, Shri Mata Vaishno Devi University, Katra, India;YADAV, AYUSH, H. No. 106, Girja Nagar, Kanpur, India ~72: SHARMA, VIJAY KUMAR;YADAV, AYUSH~

2022/02796 ~ Complete ~54:COMBINATION THERAPIES FOR TREATING MYELODYSPLASTIC SYNDROMES AND ACUTE MYELOID LEUKEMIA ~71:Forty Seven, Inc., 333 Lakeside Drive Foster City, United States of America ~72: CAO, Yinuo;CHAO, Mark Ping;MAJETI, Ravindra;MAUTE, Roy Louis;TAKIMOTO, Chris Hidemi Mizufune;TRAN, Kelly~ 33:US ~31:62/916,949 ~32:18/10/2019;33:US ~31:62/944,851 ~32:06/12/2019;33:US ~31:63/031,438 ~32:28/05/2020

2022/02809 ~ Complete ~54:ROTARY ENGINE, PARTS THEREOF, AND METHODS ~71:Astron Aerospace LLC, 325 E. Madison Ave., DERBY 67037, KS, USA, United States of America ~72: RILEY, Matthew~ 33:US ~31:62/884,771 ~32:09/08/2019;33:US ~31:62/894,567 ~32:30/08/2019;33:US ~31:16/732,318 ~32:01/01/2020

2022/02797 ~ Complete ~54:ANTI-CD47 AND ANTI-CD20 BASED TREATMENT OF BLOOD CANCER ~71:Forty Seven, Inc., 333 Lakeside Drive, Foster City, United States of America ~72: AGORAM, Balaji;CHAO, Mark Ping;HUANG, Jie;MAUTE, Roy Louis;TAKIMOTO, Chris Hidemi Mizufune;WEISSMAN, Irving L.~ 33:US ~31:62/928,988 ~32:31/10/2019;33:US ~31:63/031,418 ~32:28/05/2020

2022/02760 ~ Complete ~54:INTEGRATED WARD ILLUMINATION DEVICE AND WARD INCLUDING SAME ~71:Guangdong University of Petrochemical Technology, No. 139, Guandu 2nd Road, Maoming City, Guangdong Province, 525000, People's Republic of China ~72: CAO, Gengyu;WANG, Qun~

2022/02779 ~ Complete ~54:METHOD AND SYSTEM OF DETERMINING AN EFFECTIVE BRAIN NETWORK ~71:TAIYUAN UNIVERSITY OF TECHNOLOGY, No. 79 Yingze West Street, Wanbailin District, Taiyuan, People's Republic of China ~72: CHEN, Guijun;HUANG, Lixia;LI, Fenglian;SUN, Ying;WANG, Suzhe;ZHANG, Jing;ZHANG, Wei;ZHANG, Xueying~

2022/02801 ~ Complete ~54:ESTIMATING FUEL ECONOMY ~71:CAMBRIDGE MOBILE TELEMATICS INC., 314 Main Street, Suite 1200, Cambridge, Massachusetts, 02142, United States of America ~72: JUAN MARTIN MUNOZ VALDEZ;WILLIAM BRADLEY~ 33:US ~31:16/545,303 ~32:20/08/2019

2022/02814 ~ Complete ~54:METHOD AND DEVICE FOR PRODUCING DIRECT REDUCED, CARBURIZED METAL ~71:GREENIRON H2 AB, Edsängsvägen 5B, Sweden ~72: MURRAY, Hans E.H.~ 33:SE ~31:1951070-0 ~32:23/09/2019

2022/02748 ~ Provisional ~54:A BUILDING ELEMENT ~71:CHRISTIE, Warren, James, Alexander, 93 ADRIANA CR., ROOIHUISKRAAL, CENTURION, 0157, SOUTH AFRICA, South Africa ~72: CHRISTIE, Warren, James, Alexander~

2022/02755 ~ Complete ~54:COLD CHAIN LOGISTICS TRANSPORTATION SYSTEM DEVICE CAPABLE OF KILLING NOVEL CORONAVIRUSES AND METHOD ~71:Guangdong University of Petrochemical Technology, No. 139, Guandu 2nd Road, Maoming City, Guangdong Province, 525000, People's Republic of China ~72: CAO, Gengyu;WANG, Qun~

2022/02762 ~ Complete ~54:METHOD FOR CUTTING PROPAGATION OF TEA SEEDLINGS IN HIGH ALTITUDE ARID AREAS ~71:Agricultural Research Institute of Mountain Characteristic of Weining Autonomous County, No.18, Renming north road, Caohai Town, Weining County, Bijie City, Guizhou Province, 553199, People's Republic of China;Guizhou Institutes of Biology, No.1, longjiang road, Huaxi District, Guiyang City, Guizhou Province, 550009, People's Republic of China ~72: Liu Yan;Luo Wenmin;Qin Wei;Yang Xiuzhong;Zeng WeiJun~

2022/02786 ~ Complete ~54:METHOD FOR PREPARING STARCH WITH CONTROLLABLE VISCOSITY BY MIXING STARCH AND PROTEIN ~71:QINGDAO AGRICULTURAL UNIVERSITY, 700 Changcheng Road, Chengyang District, Qingdao City, People's Republic of China ~72: DAI, Lei;JI, Na;LI, Yang;QIN, Yang;QIU, Chao;SUN, Qingjie;XIONG, Liu~

2022/02807 ~ Complete ~54:IMPACT-RESISTANT BALANCE OIL CYLINDER HAVING FUNCTIONS OF PRESSURE RELIEF AND BUFFER PROTECTION ~71:SHANDONG UNIVERSITY OF SCIENCE AND TECHNOLOGY, 579 Qianwangang Road, Huangdao District, Qingdao, Shandong Province, 266590, People's Republic of China ~72: CHEN, Baolong;LI, Zhaoji;MA, Dejian;QI, Guoqing;WAN, Lirong;WANG, Jiantao;XIN, Fengwen;YU, Xuehui~ 33:CN ~31:202011425245.0 ~32:09/12/2020

2022/02749 ~ Provisional ~54:CAR DOOR/BRUSH MAT ~71:SITHEMBISO ITUMELENG AMONIA MAOKO, 1657 BLOCKL, South Africa ~72: SITHEMBISO ITUMELENG AMONIA MAOKO~

2022/02753 ~ Complete ~54:TEXTILE FABRIC WITH HEALTH CARE FUNCTION ~71:Yancheng polytechnic college, No. 285, Jiefang South Road, Yancheng City, Jiangsu, 224000, People's Republic of China ~72: WANG, Yuanyang;WEI, Xinyu;XIE, Haoyang;ZHOU, Bin;ZHOU, Hongtao~ 33:CN ~31:202122401638.4 ~32:06/10/2021

2022/02756 ~ Complete ~54:HYDRAULICALLY EXTRUDED AND PROPELLED WINGED INTELLIGENT UNMANNED UNDERWATER VEHICLE ~71:Guangdong University of Petrochemical Technology, No. 139, Guandu 2nd Road, Maoming City, Guangdong Province , 525000, People's Republic of China ~72: CAO, Gengyu;WANG, Qun~

2022/02761 ~ Complete ~54:TOP-AND-BOTTOM PARALLEL CONNECTION TYPE UNDERWATER 3D PRINTER ~71:Guangdong University of Petrochemical Technology, No. 139, Guandu 2nd Road, Maoming City, Guangdong Province, 525000, People's Republic of China ~72: CAO, Gengyu;WANG, Qun~

2022/02764 ~ Complete ~54:LOCAL DIFFERENCE POLARIZATION BASED METHOD FOR DETECTING FINGERPRINT ACTIVITY ~71:Nanjing University of Information Science and Technology, No. 219, Ningliu Road, Pukou District, Nanjing City, Jiangsu Province, 210044, People's Republic of China ~72: CHEN, Mingyu;YUAN, Chengsheng~

2022/02772 ~ Complete ~54:PREVENTION AND CONTROL METHOD OF WATER DISASTER CAUSED BY SEPARATION OF COAL SEAM ROOF IN MINE ~71:Anhui University of Science and Technology, 168 Taifeng street, Nanxin District, Huainan City, Anhui Province, 232001, People's Republic of China ~72: Fang Ligang;Fu

Jugen;Li Chongqing;Li Sizhao;Liu Mohan;Liu Zhichao;Luo Lingfeng;Mao Longfei;Wang Haibo;Wang Hao;Wang Mengxiang;Xu Ying;Ye Shuangshuang;Yu Yang;Zong Qi~

2022/02778 ~ Complete ~54:A MULTI-SECTION HOLLOW PRODUCT CUTTING DEVICE ~71:SUZHOU BESTAR BLOW MOLDING MACHINERY CO., LTD., North 2nd Road No. 318, Economic Development Zone, Zhangjiagang City, People's Republic of China ~72: FEI, Shiming;HE, Defang~

2022/02803 ~ Complete ~54:METHODS FOR TREATING CLN2 DISEASE IN PEDIATRIC SUBJECTS ~71:BIOMARIN PHARMACEUTICAL INC., 105 Digital Drive, Novato, California, 94949, United States of America ~72: DAVID JACOBY;JOSHUA HENSHAW~ 33:US ~31:62/893,535 ~32:29/08/2019

2022/02780 ~ Complete ~54:PREPARATION OF RESISTANT STARCH NANOPARTICLES, PRODUCT AND APPLICATION THEREOF ~71:QINGDAO AGRICULTURAL UNIVERSITY, 700 Changcheng Road, Chengyang District, Qingdao City, People's Republic of China ~72: DAI, Lei;JI, Na;LI, Yang;QIN, Yang;SUN, Qingjie;XIONG, Liu;ZHOU, Liyang~

2022/02785 ~ Complete ~54:PHARMACEUTICAL COMPOSITION FOR TREATING ECTOPARASITE OF MIN PIG AND PREPARATION METHOD AND APPLICATION THEREOF ~71:INSTITUTE OF ANIMAL HUSBANDRY, HEILONGJIANG ACADEMY OF AGRICULTURAL SCIENCES, NO. 368, XUEFU ROAD, NANGANG DISTRICT, HARBIN, People's Republic of China ~72: CHEN, Heshu;FENG, Yanzhong;HE, Liuqin;HE, Xinmiao;LIU, Di;LIU, Ziguang;TIAN, Ming;WANG, Wentao;YU, Xiaolong;ZHANG, Haifeng~

2022/02788 ~ Complete ~54:ENZYMATIC METHOD FOR IMPROVING FUNCTIONAL PROPERTIES OF PEANUT PROTEIN ~71:QINGDAO AGRICULTURAL UNIVERSITY, 700 Changcheng Road, Chengyang District, Qingdao City, People's Republic of China ~72: DAI, Lei;DONG, Xuyan;JI, Na;QIN, Yang;SUN, Qingjie;XIA, Mingtao;XIONG, Liu~

2022/02790 ~ Complete ~54:MOLECULAR MARKER OF 12-WEEK-OLD WEIGHTS OF RHINE GEESE AND APPLICATION ~71:INSTITUTE OF ANIMAL HUSBANDRY, HEILONGJIANG ACADEMY OF AGRICULTURAL SCIENCES, NO. 368, XUEFU ROAD, NANGANG DISTRICT, HARBIN, People's Republic of China ~72: LI, Manyu;LIU, Guojun;SUN, Jinyan;ZHAO, Xiuhua~

2022/02804 ~ Complete ~54:HIGH MODULUS GLASS FIBER COMPOSITION, GLASS FIBER THEREOF, AND COMPOSITE MATERIAL ~71:JUSHI GROUP CO., LTD., Jushi Science & Technology Building, 669 Wenhua Road (South), Tongxiang Economic Development Zone, Tongxiang City, Zhejiang, 314500, People's Republic of China ~72: GUORONG CAO;LIN ZHANG;WENZHONG XING;ZHONGHUA YAO~ 33:CN ~31:202010664254.9 ~32:10/07/2020

2022/02810 ~ Complete ~54:CONTROL SYSTEM FOR TIRE INJECTION FILLING MIXING MACHINE ~71:Carlisle Construction Materials, LLC, 1555 Ritner Highway, CARLISLE 17013, PA, USA, United States of America ~72: BISHOP, John;LITTLE, Jeff~ 33:US ~31:62/899,318 ~32:12/09/2019

. - APPLIED ON 2022-03-09 -

2022/02842 ~ Complete ~54:INTELLIGENT INTERACTIVE SYSTEM FOR EDUCATIONAL INNOVATION AND ENTREPRENEURSHIP TRAINING ~71:Anqing Normal University, No. 1318 Jixian North Road, Anqing City, Anhui , 246133, People's Republic of China ~72: TANG, Fengxia~

2022/02854 ~ Complete ~54:PRODUCTION OF MALIC ACID USING TUBULAR AND STIRRED TANK REACTORS ~71:Thirumalai Chemicals Limited, Thirumalai House, Plot No. 101-102, Road No. 29, SION (EAST)

400 022, MUMBAI, INDIA, India ~72: RANGASWAMY, Parthasarathy~ 33:IN ~31:201921040419 ~32:04/10/2019

2022/02859 ~ Complete ~54:A FAST TESTING METHOD FOR ANNULAR CONCAVE ASPHERIC SURFACES CLOSE TO PARABOLOID ~71:NANTONG UNIVERSITY, No. 9, Siyuan Road, Nantong City, People's Republic of China ~72: GE, Yichen;GONG, Tianlin;HU, Qi;HUANG, Shiwen;JIANG, Shuhao;PAN, Baozhu;TANG, Jing;WU, Di~

2022/02862 ~ Complete ~54:A SULFUR DOPED IRON SELENIDE NANOROD MATERIAL, PREPARATION METHOD AND APPLICATION ~71:Qingdao University of Science and Technology, No.99 Songling Road, Laoshan District, People's Republic of China ~72: Dehua ZHENG;Huizhong XU;Jianjian LIN;Lei SUN;Mengyou GAO;Zhongxin JING~

2022/02875 ~ Complete ~54:ENHANCED PFCP ASSOCIATION PROCEDURE FOR SESSION RESTORATION ~71:TELEFONAKTIEBOLAGET LM ERICSSON (PUBL), SE-164 83, Sweden ~72: YANG, Yong;ZHU, Jinyin~ 33:WO ~31:PCT/CN2019/109817 ~32:03/10/2019

2022/02883 ~ Complete ~54:IMMUNE CHECKPOINT INHIBITOR, THERAPEUTIC AGENT FOR IMMUNE CHECKPOINT-RELATED DISEASE, IMMUNOSUPPRESSANT, ANTI-FIBRONECTIN ANTIBODY OR DERIVATIVE THEREOF, FIBRONECTIN ANALOG, KIT FOR DETECTING FIBRONECTIN OR PARTIAL PROTEIN THEREOF, AND METHOD FOR DETECTING FIBRONECTIN OR PARTIAL PROTEIN THEREOF ~71:TOHOKU UNIVERSITY, 2-1-1, Katahira, Aoba-ku, Sendai-shi, Miyagi, 9808577, Japan ~72: MASANORI INUI;MEI TZU SU;SHOTA ENDO;TOSHIYUKI TAKAI~ 33:JP ~31:2019-148423 ~32:13/08/2019

2022/02820 ~ Provisional ~54:ANTI-THEFT LOCKING APPARATUS FOR A WHEEL ~71:Loadtech Load Cells (Pty) Ltd, 134 Sarel Baard Crescent, Gateway Industrial Park, South Africa ~72: KLOPPERS, Jacques~

2022/02822 ~ Complete ~54:A MODIFICATION OF A RAILWAY WAGON FOR TRANSPORTING GOODS ~71:UNITRANS AFRICA (PTY) LTD, P O BOX 36361, South Africa ~72: Unitrans Africa (Pty) Ltd~ 33:ZA ~31:2021/01812 ~32:18/03/2021

2022/02823 ~ Complete ~54:A RECEPTACLE FOR THE STORAGE AND TRANSPORTATION OF FREIGHT ~71:UNITRANS AFRICA (PTY) LTD, P O BOX 36361, South Africa ~72: UNITRANS AFRICA (PTY) LTD~ 33:ZA ~31:2021/01811 ~32:18/03/2021

2022/02825 ~ Complete ~54:AN ARRANGEMENT OF ONE OR MORE TIPPER BODIES ON A FRAME OF A VEHICLE ~71:UNITRANS AFRICA (PTY) LTD, P O BOX 36361, South Africa ~72: UNITRANS AFRICA (PTY) LTD~ 33:ZA ~31:2021/02719 ~32:23/04/2021

2022/02830 ~ Complete ~54:COMPOUND A3 AND PREPARATION METHOD AND APPLICATION AS PRANOPROFEN IMPURITY THEREOF ~71:SHANDONG RUIAN PHARMACEUTICAL CO., LTD., BUILDING 1, MERHEAL INDUSTRIAL PARK, NO.4 TAIXING WEST ROAD, JIBEI STREET, JIYANG DISTRICT, JINAN CITY, SHANDONG PROVINCE, 251400, People's Republic of China ~72: CAO, Huimin;LI, Jiayuan;LIU, Zongyin;REN, Xia~ 33:CN ~31:202110495144.9 ~32:07/05/2021

2022/02834 ~ Complete ~54:METHOD AND SYSTEM FOR DETERMINING FIBERIZATION DIAMETER FOR MOLTEN RED MUD FIBERIZATION ~71:North China University of Science and Technology, 21 Bohai Road, Caofeidian Xincheng, Tangshan, Hebei, 063210, People's Republic of China ~72: CAO, Yaran;DU, Peipei;LI, Zhihui;LONG, Yue;REN, Qianqian;TIAN, Tielei;XING, Lei;XU, Bo;ZHAO, Pengyue~ 33:CN ~31:202111473814.3 ~32:30/11/2021

2022/02855 ~ Complete ~54:CONFIGURABLE HANDHELD BIOLOGICAL ANALYZERS FOR IDENTIFICATION OF BIOLOGICAL PRODUCTS BASED ON RAMAN SPECTROSCOPY ~71:Amgen Inc., One Amgen Center Drive, THOUSAND OAKS 91320-1799, CA, USA, United States of America ~72: MERIAGE, David;SOTO, Robert~ 33:US ~31:62/925,893 ~32:25/10/2019;33:US ~31:63/043,976 ~32:25/06/2020

2022/02863 ~ Complete ~54:COMPOUNDS SUITABLE FOR THE TREATMENT AND PROPHYLAXIS OF MUSCLE WASTING AND OTHER CONDITIONS ~71:ADAMS, Volker, THIERSCHSTRASSE 12, 04289 LEIPZIG, GERMANY, Germany;LABEIT, Siegfried, IM BIENGARTEN 36, 69151 NECKARGEMÜND, GERMANY, Germany ~72: ADAMS, Volker;LABEIT, Siegfried~ 33:EP ~31:19192107.1 ~32:16/08/2019

2022/02865 ~ Complete ~54:UNIVERSAL KEYLESS GUIDED SURGERY SYSTEM ~71:VERSAH, LLC, 2000 SPRING ARBOR ROAD, SUITE D, JACKSON, MI 49203, USA, United States of America ~72: MARSHALL, Todd~ 33:US ~31:62/886,427 ~32:14/08/2019

2022/02869 ~ Complete ~54:METHOD AND ENTITY FOR TRANSMITTING A PLURALITY OF MAC ADDRESSES ~71:TELEFONAKTIEBOLAGET LM ERICSSON (PUBL), SE-164 83 STOCKHOLM, SWEDEN, Sweden ~72: BIONDIC, Nevenka;FERNANDEZ ALONSO, Susana;GARCIA AZORERO, Fuencisla;XU, Wenliang~ 33:CN ~31:PCT/CN2019/101098 ~32:16/08/2019

2022/02874 ~ Complete ~54:A METHOD OF MANUFACTURING A FILM INCLUDING CAVITIES, WITH PROFILES BEING DETERMINED FOR STRETCH, DENSITY, THICKNESS AND/OR POROSITY OF THE FILM ~71:ALEPH SAS, Savoie Technolac, 108 Avenue Lac Leman, BP 264, France ~72: GAUDAEN, Jan~ 33:FR ~31:FR1910947 ~32:03/10/2019

2022/02876 ~ Complete ~54:ANTI-VSIG4 ANTIBODY OR ANTIGEN BINDING FRAGMENT AND USES THEREOF ~71:PIERRE FABRE MEDICAMENT, Les Cauquillous, France;Y-BIOLOGICS INC., 3rd Fl., 29 Techno 4-ro Yuseong-gu, Republic of Korea ~72: BAYCHELIER-TINE, Florence;FERRÉ, Pierre;KIM, Soo Young;LEE, Hyun Mi;LOUKILI, Noureddine;PARK, Bum-Chan;PARK, Jae Eun;PARK, Young Woo~ 33:KR ~31:10-2019-0109365 ~32:04/09/2019

2022/02881 ~ Complete ~54:DETERGENT COMPOSITION ~71:UNILEVER GLOBAL IP LIMITED, Port Sunlight, Wirral, Merseyside, CH62 4ZD, United Kingdom ~72: NEIL STEPHEN BURNHAM;STEPHEN NORMAN BATCHELOR~ 33:EP ~31:19201647.5 ~32:07/10/2019

2022/02882 ~ Complete ~54:COMPOSITIONS AND METHODS FOR TREATMENT OF LIQUID CANCERS ~71:BEAM THERAPEUTICS INC., 26 Landsdowne Street 2nd Floor, Cambridge, Massachusetts, 02139, United States of America;UCL BUSINESS LTD., University College London Gower Street, London, WC1E 6BT, United Kingdom ~72: AARON D EDWARDS;JASON MICHAEL GEHRKE;RYAN MURRAY;WASEEM QASIM~ 33:US ~31:62/907,254 ~32:27/09/2019

2022/02884 ~ Complete ~54:BLOOD-BASED ASSAY FOR DIAGNOSING AND TREATING BASED ON SITE-SPECIFIC TAU PHOSPHORYLATION ~71:WASHINGTON UNIVERSITY, One Brookings Drive, St. Louis, Missouri, 63130, United States of America ~72: NICOLAS BARTHELEMY;RANDALL BATEMAN~ 33:US ~31:62/898,407 ~32:10/09/2019

2022/02827 ~ Complete ~54:BLAST HOLE PLUG ~71:LUBBE, Gert, Petrus, 74 GRIETJIE HOEWES, PHALABORWA, 1390, SOUTH AFRICA, South Africa ~72: LUBBE, Gert, Petrus~

2022/02828 ~ Complete ~54:DETECTION METHOD FOR TACROLIMUS OINTMENT RELATED SUBSTANCES ~71:SHANDONG TEKING PHARMACEUTICAL CO., LTD., ROOM 203, MARKETING CENTER 2ND FLOOR, BAOSHIDA SCIENCE & TECHNOLOGY INDUSTRIAL PARK, NO. 8 KAIYUAN ROAD, LICHENG

DISTRICT, JINAN CITY, SHANDONG PROVINCE, 250132, People's Republic of China ~72: CAO, Huimin;DONG, Shuangxi;LIU, Zongyin;LV, Min;WANG, Shoubin;ZHU, Zhaozhen~ 33:CN ~31:202110623436.6 ~32:04/06/2021

2022/02836 ~ Complete ~54:INTELLIGENT SMOKE-FREE MOXIBUSTION INSTRUMENT ~71:Shanghai Shengyi Precision Machinery Co.,Ltd., Area A, Ground Floor, Building 3, No. 199, Leyuan Road, China (Shanghai) Pilot Free Trade Zone, 201206, People's Republic of China ~72: SUN, Chenggang;TAO, Lizhao~ 33:CN ~31:202111325226.5 ~32:10/11/2021

2022/02837 ~ Complete ~54:APPARATUS AND METHOD FOR SIMULATING VISUAL GROUTING OF SATURATED SANDY SOIL STRATUM ~71:Central South University, Zuojialong, Yuelushan, Changsha City, Hunan Province, 410000, People's Republic of China;Central South University of Forestry and Technology, No. 498, Shaoshan South Road, Changsha City, Hunan Province, 410000, People's Republic of China ~72: CAO, Lei;CHEN, Xingyou;FAN, Wenchen;JIANG, Xueliang;LIU, Xu;PENG, Yuyang;SUN, Guangchen;XIE, Mengshan;XIE, Yipeng;YANG, Junsheng;ZHANG, Cong~ 33:CN ~31:202110319116.1 ~32:25/03/2021

2022/02841 ~ Complete ~54:METHOD FOR PREPARING HIGH-PURITY LUTEOLIN BY ZINC SALT ~71:Changyi Yinjiang Biological Technology Co.,Ltd., Binhai (Xiaying) Economic Development Zone, Changyi City, Weifang City, Shandong, 261300, People's Republic of China;Shandong Changyi Aoli Salt Chemical Co., Ltd, East of Aoli Village, Buzhuang Town, Changyi City, Shandong , 261300, People's Republic of China ~72: JIANG, Yali;LI, Linqiang;XU, Xiuwei~

2022/02845 ~ Complete ~54:SSRIS ANTIDEPRESSANT PHARMACEUTICAL COMPOSITION ~71:FIRST HOSPITAL OF SHANXI MEDICAL UNIVERSITY, 85 Jiefang Southern Road, Taiyuan, Shanxi, 030001, People's Republic of China ~72: HAO, Meng;HE, Xiao;HOU, Qinqiang;HU, Caoyang;LANG, Xiaoe;LIANG, Ying~

2022/02850 ~ Complete ~54:PROTEIN-MACROMOLECULE CONJUGATES AND METHODS OF USE THEREOF ~71:Beijing Xuanyi PharmaSciences Co., Ltd., No. 13, Guangyuan West Street, Tongzhou District, BEIJING 101113, CHINA (P.R.C.), People's Republic of China ~72: LI, Hui;LIAO, Chuan;SONG, Yuntao;ZHOU, Haiping~ 33:US ~31:62/908,435 ~32:30/09/2019

2022/02857 ~ Complete ~54:A SYSTEM FOR EFFICIENT MPPT TRACKING WITH VARIABLE WIND SPEED USING AN ARTIFICIAL NEURAL NETWORK ~71:AGARWAL, Anshul, Electrical Engineering Department, National Institute of Technology Delhi (NIT Delhi), Plot No. FA7, Zone P1, GT Karnal Road,, India;SINGH, Shubham Kumar, House No. 3, Kahinaur, Mau,, India ~72: AGARWAL, Anshul;SINGH, Shubham Kumar~

2022/02861 ~ Complete ~54:METHOD FOR DETECTING TEXTURE OF TAKIFUGU OBSCURUS ~71:SHANGHAI OCEAN UNIVERSITY, No. 999 Hucheng Ring Road, Lingang New Town, Pudong New District, People's Republic of China ~72: CHEN, Yueming;LI, Peiyun;WANG, Jinfeng;XIE, Jing~

2022/02816 ~ Provisional ~54:TAMPER PROOF ~71:Sonette Elizabeth EHLERS, 6A Botha Street, South Africa ~72: Sonette Elizabeth EHLERS~

2022/02933 ~ Provisional ~54:MANICU'RE ~71:SIMPHIWE MTHANDAZO MONARENG, 22 BLOCK V, MABOPANE,GAUTENG, South Africa ~72: SIMPHIWE MTHANDAZO MONARENG~

2022/02937 ~ Complete ~54:AN ARRANGEMENT OF TWO TIPPER BODIES ON A FRAME OF A VEHICLE ~71:UNITRANS AFRICA (PTY) LTD, P O BOX 36361, South Africa ~72: UNITRANS AFRICA (PTY) LTD~ 33:ZA ~31:2021/01813 ~32:18/03/2021

2022/02832 ~ Complete ~54:COMPOUND A2, PREPARATION METHOD THEREOF AND APPLICATION THEREOF AS PRANOPROFEN IMPURITY ~71:SHANDONG RUIAN PHARMACEUTICAL CO., LTD., BUILDING 1, MERHEAL INDUSTRIAL PARK, NO.4 TAIXING WEST ROAD, JIBEI STREET, JIYANG DISTRICT, JINAN CITY, SHANDONG PROVINCE, 251400, People's Republic of China ~72: LI, Jiayuan;LI, Qianqian;LIU, Zongyin;REN, Xia~ 33:CN ~31:202110494454.9 ~32:07/05/2021

2022/02838 ~ Complete ~54:SYSTEM FOR ANALYZING NETWORK STRUCTURE VULNERABILITY BASED ON IMPORTANT NODE SET ~71:Army Academy of Armored forces of PLA, 21 Dujiakan, Fengtai District, Beijing, 100072, People's Republic of China ~72: CHEN, Caisen;CHEN, Zhimin;DONG, Zhiming;LI, Liang;WANG, Sijie;WU, Dongya;WU, Xiupeng;WU, Xixi;XU, Renjie;XU, Xiangzhong;ZHAI, Xiaoning;ZHANG, Yong;ZHAO, Zhanbiao~

2022/02840 ~ Complete ~54:METHOD FOR PREPARING HIGH-PURITY LUTEOLIN BY FERROUS SALT ~71:Changyi Yinjiang Biological Technology Co.,Ltd., Binhai (Xiaying) Economic Development Zone, Changyi City, Weifang City, Shandong, 261300, People's Republic of China;Shandong Changyi Aoli Salt Chemical Co., Ltd., East of Aoli Village, Buzhuang Town, Changyi City, Shandong, 261300, People's Republic of China ~72: JIANG, Yali;LI, Linqiang;XU, Xiuwei~

2022/02846 ~ Complete ~54:HUMAN ANTIBODIES TO FEL D1 AND METHODS OF USE THEREOF ~71:REGENERON PHARMACEUTICALS, INC., 777 Old Saw Mill River Road, Tarrytown, United States of America ~72: MURPHY, Andrew, J.;ORENGO, Jamie~ 33:US ~31:61/642,083 ~32:03/05/2012;33:US ~31:61/718,044 ~32:24/10/2012;33:US ~31:61/783,312 ~32:14/03/2013

2022/02851 ~ Complete ~54:ANTI-PATHOGEN COMPOSITIONS ~71:CLAW Biotech Holdings, LLC, 12710 Wyndrose Ct., ST. LOUIS 63131, MO, USA, United States of America ~72: DUDDING, Jeffery L.;PARANJPE, Amod P.~ 33:US ~31:62/893,513 ~32:29/08/2019;33:US ~31:63/007,743 ~32:09/04/2020

2022/02856 ~ Complete ~54:WEAR ASSEMBLY ~71:ESCO Group LLC, 2141 NW 25th Avenue, PORTLAND 97210-2578, OR, USA, United States of America ~72: CHEYNE, Mark A.;CONKLIN, Donald M.;COWGILL, Noah;HAINLEY, Chris J.;ROSKA, Michael B.;ZENIER, Scott H.~ 33:US ~31:61/507,726 ~32:14/07/2011;33:US ~31:61/576,929 ~32:16/12/2011

2022/02858 ~ Complete ~54:A FORMULATION AND A METHOD THEREOF FOR AUGMENTATION OF POOL BHT PERFORMANCE OF R-134A ON MICROPOROUS AL-GNPS COMPOSITE COATINGS ~71:BELGAMWAR, Sachin Ulhasrao, Department of Mechanical Engineering, Birla Institute of Technology & Science (BITS), Pilani, (Pilani Campus), India;BHAUMIK, Swapan, Department of Mechanical Engineering, National Institute of Technology Agartala,, India;KATARKAR, Anil Shankar, Department of Mechanical Engineering, National Institute of Technology Agartala, India;MAJUMDER, Biswajit, Department of Mechanical Engineering, National Institute of Technology Agartala,, India;PINGALE, Ajay Dadabhau, Department of Mechanical Engineering, Birla Institute of Technology & Science (BITS), Pilani, (Pilani Campus), India ~72: BELGAMWAR, Sachin Ulhasrao;BHAUMIK, Swapan;KATARKAR, Anil Shankar;MAJUMDER, Biswajit;PINGALE, Ajay Dadabhau~

2022/02860 ~ Complete ~54:POST-HARVEST FRESH-KEEPING PACKAGING PRODUCT AND PACKAGING METHOD FOR KIDNEY BEANS ~71:ZHEJIANG UNIVERSITY, 866 Yuhangtang Road, Xihu District, People's Republic of China ~72: CAO, Jinping;JIANG, Anze;KANG, Chen;SUN, Chongde;WANG, Yue;WU, Jue;ZHANG, He~

2022/02818 ~ Provisional ~54:POWA BALLS ~71:LLOYD, 1309 TLEBEBEB SECTION, South Africa ~72: LLOYD~ 33:ZA ~31:202101572 ~32:08/03/2022

2022/02885 ~ Complete ~54:APPARATUS AND METHOD RELATING TO MANAGED PRESSURE DRILLING (MPD) WHILST USING A SUBSEA RCD SYSTEM ~71:OIL STATES INDUSTRIES (UK) LIMITED, Site E6, Moss Road, Gateway Business Park, Nigg, Aberdeen, Aberdeenshire, AB12 3GQ, United Kingdom ~72: GARRY ROBERT STEPHEN;KEVIN WILSON;RICHARD JOHNSTON~ 33:GB ~31:1916384.9 ~32:11/11/2019

2022/02839 ~ Complete ~54:METHOD AND SYSTEM FOR DETERMINING STRUCTURAL STABILITY OF MOLTEN RED MUD FIBERIZATION SYSTEM ~71:North China University of Science and Technology, 21 Bohai Road, Caofeidian Xincheng, Tangshan, Hebei, 063210, People's Republic of China ~72: DU, Peipei;LI, Zhihui;LONG, Yue;QIU, Mingwei;REN, Qianqian;TIAN, Tielei;WANG, Zhengzheng;XING, Lei;XU, Bo;ZHANG, Jiansong~ 33:CN ~31:202111443789.4 ~32:30/11/2021

2022/02847 ~ Complete ~54:METHOD FOR ANALYZING IMPORTANCE OF DISEASE RISK FACTORS BASED ON MIXED MODEL ~71:University of Electronic Science and Technology of China, No.2006, Xiyuan Ave., West Hi-Tech., Chengdu, Sichuan, 611731, People's Republic of China ~72: Jiahui LI;Jiajing ZHU;Qiaoqin LI;Shangming YANG;Xin LU;Yongguo LIU;Yun ZHANG~ 33:CN ~31:202110965479.2 ~32:23/08/2021

2022/02849 ~ Complete ~54:DATA GENERATION METHOD AND SYSTEM FOR SYNDROME DIFFERENTIATION IN TRADITIONAL CHINESE MEDICINE (TCM) ~71:University of Electronic Science and Technology of China, No.2006, Xiyuan Ave., West Hi-Tech., Chengdu, Sichuan, 611731, People's Republic of China ~72: Jiajing ZHU;Liao WU;Qiaoqin LI;Shangming YANG;Yongguo LIU;Yun ZHANG~ 33:CN ~31:202110874696.0 ~32:30/07/2021

2022/02866 ~ Complete ~54:PACKAGING TECHNIQUE FOR INDUCTIVE CONDUCTIVITY SENSORS ~71:R-WATER LLC, 2061 CLOVIS BARKER ROAD 4B, SAN MARCOS, TEXAS, 78666, USA, United States of America ~72: REZANEZHAD GATABI, Javad~

2022/02873 ~ Complete ~54:SYSTEM AND METHOD FOR ESTIMATING BOTH THICKNESS AND WEAR STATE OF REFRACTORY MATERIAL OF A METALLURGICAL FURNACE ~71:ARCELORMITTAL, 24-26, Boulevard d'Avranches, Luxembourg ~72: Carlos Javier SUÁREZ LÁZARE;Enol FERNÁNDEZ DIÉGUEZ;Ignacio BAQUET GONZÁLEZ;Ignacio HERRERO BLANCO;José Paulino FERNANDEZ ALVAREZ;José Tomás SÍMARO;Pablo GÓMEZ GARCÍA~ 33:IB ~31:PCT/IB2019/060326 ~32:29/11/2019

2022/02878 ~ Complete ~54:FLOOR PANEL FOR FORMING A FLOOR COVERING ~71:FLOORING INDUSTRIES LIMITED, SARL, 10b, rue des Mérovingiens (Z.I. Bourmicht) L-8070, Bertrange, Luxembourg ~72: JAN DE RICK~ 33:BE ~31:2019/5659 ~32:08/10/2019

2022/02843 ~ Complete ~54:LOW-COST IOT ENABLED ANTI-THEFT DEVICE FOR TWO-WHEELED VEHICLES ~71:MANIPAL UNIVERSITY JAIPUR, Dehmi Kalan, Off Jaipur-Ajmer Expressway, Jaipur, Rajasthan, 303007, India ~72: Dr. Princy Randhawa;Dr. ShivaPrasad H C;Mr. Akshet Bharat Patel;Mr. Raj Sudarshan Pallikonda~

2022/02853 ~ Complete ~54:TREATMENT OF HIDRADENITIS WITH JAK INHIBITORS ~71:Pfizer Inc., 235 East 42nd Street, NEW YORK 10017, NY, USA, United States of America ~72: FENSOME , Andrew;GERSTENBERGER, Brian Stephen;OWEN, Dafydd Rhys~ 33:US ~31:62/899,133 ~32:11/09/2019

2022/02819 ~ Provisional ~54:TRIP MOVIE GENERATOR SYSTEM AND ASSOCIATED METHODS - V02 ~71:MARK WYNESS VOSLOO, 47 NORTHOAKS PRIVATE ESTATE, NORTHOAKS AVENUE, HOUT BAY, South Africa ~72: MARK WYNESS VOSLOO~ 33:ZA ~31:2021/05038 ~32:19/07/2021

2022/02821 ~ Complete ~54:DIRECT ENHANCED VIEW OPTIC ~71:MARSUPIAL HOLDINGS, INC., 49 Fiddlers Green, Waitsfield, United States of America ~72: PARKER, William;STRAUSS, Michael~ 33:US ~31:62/764,725 ~32:15/08/2018;33:US ~31:62/790,294 ~32:09/01/2019

2022/02868 ~ Complete ~54:INK COMPOSITION, KIT, METHOD OF MANUFACTURING A DEFORMABLE CONDUCTOR UTILIZING THE INK COMPOSITION, DEFORMABLE CONDUCTOR, ELECTRONIC DEVICE COMPRISING THE DEFORMABLE CONDUCTOR, METHOD OF MANUFACTURING A CONDUCTOR, CONDUCTOR AND ELECTRONIC DEVICE COMPRISING THE CONDUCTOR ~71:MONTANUNIVERSITÄT LEOBEN, FRANZ-JOSEF-STR. 18, 8700 LEOBEN, AUSTRIA, Austria ~72: GRIESSER, Thomas;KRAWCZYK, Krzysztof, Konrad~ 33:GB ~31:1911512.0 ~32:12/08/2019

2022/02871 ~ Complete ~54:PROCESS FOR THE RECOVERY AND DEVULCANIZATION OF CROSS-LINKED RUBBER ~71:F.LLI MARIS S.P.A., Corso Moncenisio 22, Italy ~72: MARIS, Gianfranco~ 33:IT ~31:102019000016061 ~32:11/09/2019

2022/02880 ~ Complete ~54:REDUCING FRICTION IN COMBUSTION ENGINES THROUGH FUEL ADDITIVES ~71:CHEVRON ORONITE COMPANY LLC, 6001 Bollinger Canyon Road, San Ramon, California, 94583, United States of America;CHEVRON U.S.A. INC., 6001 Bollinger Canyon Road, San Ramon, California, 94583, United States of America ~72: AMIR GAMAL MARIA;RICHARD EUGENE CHERPECK;THERESA LIANG GUNAWAN~ 33:US ~31:62/898,398 ~32:10/09/2019

2022/02844 ~ Complete ~54:METHOD FOR GENERATING HERBICIDE-RESISTANT SUGARCANE MEDIATED BY AGROBACTERIUM ~71:Guangxi Academy of Agricultural Sciences, No.174 Daxue Road, Nanning City, Guangxi Province, 530007, People's Republic of China ~72: Chen Zhongliang;Huang Dongliang;Li Aomei;Liao Fen;Qin Cuixian;Wang Miao;Zhou Li~

2022/02852 ~ Complete ~54:BINDER COMPOSITION AND METHOD COMPRISING MICROFIBRILLATED CELLULOSE AND RECYCLED CELLULOSIC MATERIALS ~71:FiberLean Technologies Limited, Par Moor Centre, Par Moor Road, PAR PL24 2SQ, CORNWALL, UNITED KINGDOM, United Kingdom ~72: IRELAND, Sean;LARSON, Thomas Phillip;SKUSE, David;YUN, Jin~ 33:US ~31:62/930,774 ~32:05/11/2019

2022/02824 ~ Complete ~54:MULTIFUNCTIONAL IMMUNE CELL THERAPIES ~71:ARCELLX, INC., 25W Watkins Mill Road, United States of America ~72: HILBERT, David, M;LAFLEUR, David, W;SWERS, Jeffrey, S~ 33:US ~31:62/585,770 ~32:14/11/2017;33:US ~31:62/717,165 ~32:10/08/2018;33:ZA ~31:2020/03502 ~32:11/06/2020

2022/02826 ~ Complete ~54:FANO BASED CRAB SENSOR AND SYSTEM FOR FUEL QUALITY, LEVEL, AND VOLUME MONITORING FOR IRREGULAR SHAPED FUEL TANKS ~71:AFRICAN NEW ENERGIES LIMITED, Villa Florita, East Road, St George's Hill, WEYBRIDGE, England KT13 0LF, UNITED KINGDOM, United Kingdom ~72: KHAN, Saad Saleem;LARKIN, Stephen;OMAR, Muhammad;RAW, Brendon;USMAN, Muhammad~ 33:ZA ~31:2022/00674 ~32:14/01/2022

2022/02829 ~ Complete ~54:PRETREATMENT METHOD FOR TACROLIMUS OINTMENT ISOMER DETERMINATION ~71:SHANDONG TEKING PHARMACEUTICAL CO., LTD., ROOM 203, MARKETING CENTER 2ND FLOOR, BAOSHIDA SCIENCE & TECHNOLOGY INDUSTRIAL PARK, NO. 8 KAIYUAN ROAD, LICHENG DISTRICT, JINAN CITY, SHANDONG PROVINCE, 250132, People's Republic of China ~72: CAO, Huimin;LIU, Zongyin;LV, Min;WANG, Shoubin;ZHU, Zhaozhen~ 33:CN ~31:202110624011.7 ~32:04/06/2021

2022/02835 ~ Complete ~54:CONSTRUCTION METHOD OF BUILDING COMPLEX SAFETY BLASTING DEMOLITION AND APPLICATION THEREOF ~71:Qingdao Baoli Construction Co., Ltd., No. 1502, 15th Floor,

Building 3, No. 666, Jiangshan South Road, Economic and Technological Development Zone, Qingdao City, Shandong Province, People's Republic of China ~72: GUO, Shiguo;LI, Ming;LUAN, Jian;LUAN, Yuanbo;WANG, Chengwu;YU, Yonggang~ 33:CN ~31:202111134263.8 ~32:27/09/2021

2022/02864 ~ Complete ~54:NETWORK NODES AND METHODS IN A WIRELESS COMMUNICATION NETWORK ~71:TELEFONAKTIEBOLAGET LM ERICSSON (PUBL), SE-164 83 STOCKHOLM, SWEDEN, Sweden ~72: CENTONZA, Angelo;ENGSTRÖM, Stefan;HENRIKSSON, Daniel;WERNER, Peter~ 33:US ~31:62/887,752 ~32:16/08/2019

2022/02870 ~ Complete ~54:A METHOD AND A SYSTEM FOR ABATING H2S AND CO2 FROM H2S AND CO2 RICH GAS MIXTURES SUCH AS GEOTHERMAL NON-CONDENSABLE GAS MIXTURES ~71:CARBFIX, Bæjarhals 1, Iceland ~72: ARNARSON, Magnús Þór;EINARSSON, Jóhann Garðar;GUNNARSSON, Ingvi;GUNNARSSON, Teitur;SIGFÚSSON, Bergur~ 33:EP ~31:19197831.1 ~32:17/09/2019

2022/02877 ~ Complete ~54:ELASTIC PROSTHETICS OF RIBS ~71:EMEDICAL SOCIEDAD ANONIMA, Luis P. Piera 1921, PISO 5, Montevideo, Uruguay;OROMI, Gaston Enrique, Luis P. Piera 1921, PISO 5, Montevideo, Uruguay ~72: LOPEZ, Federico~ 33:UY ~31:38363 ~32:09/09/2019

2022/02817 ~ Provisional ~54:LOW VISIBILITY OPERATING SYSTEM ~71:ADRIAN LANDMAN, 19 PONY STREET, South Africa ~72: ADRIAN LANDMAN~

2022/02867 ~ Complete ~54:MEDICAL IMPLANT, DELIVERY DEVICE, METHOD OF PRODUCING A MEDICAL IMPLANT, AND METHOD OF DELIVERING A MEDICAL IMPLANT ~71:HOLISTICK MEDICAL, 53 RUE DE TURBIGO, 75003 PARIS, FRANCE, France ~72: BRUNEAU, Maëlle;BURDICK, Jason, Alan;GARD, Marco;KEILLOR, Matthew;PAU, Antoine;POULETTY, Philippe;ROCHE, Ellen;SPENCER, Andrew;WARNACK, Boris;WEISS, Tony~ 33:IB ~31:PCT/IB2019/001058 ~32:13/09/2019

2022/02872 ~ Complete ~54:HYDRAULIC POWER REGENERATION SYSTEM ~71:VDM SUPPLY CHAIN SOLUTIONS (PTY) LTD, FARM NO. 127/1, YZERVARKENSRUG, 7395 SALDANHA, SOUTH AFRICA, South Africa ~72: SCHOEMAN, Pieter, Conrad;VAN ZYL, Petrus, Johannes, Adriaan~

2022/02879 ~ Complete ~54:PROCESS FOR PREPARING AN E-SELECTIN INHIBITOR INTERMEDIATE ~71:GLYCOMIMETICS, INC., 9708 Medical Center Drive, Rockville, Maryland, 20850, United States of America ~72: ANDREAS HELMUT BERND KYAS;ARUN K. SARKAR;DANIEL SCHWIZER;GERD OSSWALD;HENRY H FLANNER;JOHN L. MAGNANI;JOHN M PETERSON;MARC LANZ~ 33:US ~31:62/889,326 ~32:20/08/2019

2022/02848 ~ Complete ~54:METHOD FOR SELECTING MAIN SYMPTOM BASED ON FEATURE SELECTION IN TRADITIONAL CHINESE MEDICINE (TCM) ~71:University of Electronic Science and Technology of China, No.2006, Xiyuan Ave., West Hi-Tech., Chengdu, Sichuan, 611731, People's Republic of China ~72: Jiajing ZHU;Qiaoqin LI;Shangming YANG;Yongbo CHEN;Yongguo LIU;Yun ZHANG~ 33:CN ~31:202110874740.8 ~32:30/07/2021

2022/02938 ~ Complete ~54:A MULTIFUNCTIONAL EXCAVATOR ~71:UNITRANS AFRICA (PTY) LTD, P O BOX 36361, South Africa ~72: UNITRANS AFRICA (PTY) LTD~ 33:ZA ~31:2021/01814 ~32:18/03/2021

2022/02831 ~ Complete ~54:DARCY-EXPERIMENT-LIKE DEVICE AND USE METHOD THEREFOR ~71:Shandong University of Science and Technology, No. 579, Qianwangang Road, Huangdao District, Qingdao City, Shandong Province, 266590, People's Republic of China ~72: CHEN, Qiao;FENG, Jianguo;GAO, Zongjun;LIU, Jiutan;LIU, Wenyue;TIAN, Hong;WANG, Min;WANG, Shu;WANG, Zhenyan;XIA, Lu;ZHANG, Chunrong~

2022/02833 ~ Complete ~54:COMPOUND A1, PREPARATION METHOD THEREOF AND APPLICATION THEREOF AS PRANOPROFEN IMPURITY ~71:SHANDONG RUIAN PHARMACEUTICAL CO., LTD., BUILDING 1, MERHEAL INDUSTRIAL PARK, NO.4 TAIXING WEST ROAD, JIBEI STREET, JIYANG DISTRICT, JINAN CITY, SHANDONG PROVINCE, 251400, People's Republic of China ~72: CAO, Huimin;LI, Jiayuan;LIU, Zongyin;REN, Xia~ 33:CN ~31:202110494473.1 ~32:07/05/2021

. - APPLIED ON 2022-03-10 -

2022/02913 ~ Complete ~54:5-OXA-2-AZASPIRO[3.4]OCTANE DERIVATIVES AS M4 AGONISTS ~71:NOVARTIS AG, Lichtstrasse 35, Switzerland ~72: CALHOUN, Amy;CHEN, Xin;GARDINIER, Kevin, Matthew;HALL, Edward, Charles;JENDZA, Keith;LABBE-GIGUERE, Nancy;NEEF, James;PALACIOS, Daniel, Steven;QIAN, Ming;SHULTZ, Michael David;THOMSON, Christopher G.;WANG, Kate, Yaping;YANG, Fan~ 33:US ~31:62/912,986 ~32:09/10/2019

2022/02916 ~ Complete ~54:ORAL PRODUCT WITH CELLULOSIC FLAVOR STABILIZER ~71:NICOVENTURES TRADING LIMITED, Globe House, 1 Water Street, United Kingdom ~72: GERARDI, Anthony R.;HUTCHENS, Ronald K.;KELLER, Christopher;POOLE, Thomas H.~ 33:US ~31:16/568,003 ~32:11/09/2019

2022/02886 ~ Provisional ~54:MONITORING DEVICE ~71:DETNET SOUTH AFRICA (PTY) LTD, AECI Place, The Woodlands, Woodlands Drive, Woodmead, South Africa ~72: KRUGER, Michiel Jacobus;LO, Cory;YATES, Marinus~

2022/02895 ~ Complete ~54:5G TECHNOLOGY-BASED SMART FACTORY PATROL ROBOT ~71:West Anhui University, Moon Island, West of Yunluqiao, Lu'an City, Anhui Province , 237012, People's Republic of China ~72: CHENG, Junhui;HUANG, Ji;HUANG, Xiaojiao;JI, Tiantian;WANG, Chuansheng;WANG, Wenming;ZHAO, Jiangdong~

2022/02911 ~ Complete ~54:DEVICE FOR MONITORING FLUCTUATIONS IN DPN SEVERITY THROUGH AUTOMATED MEASUREMENT OF NERVE CONDUCTION PARAMETERS ~71:BHOWMICK, Dr. Mithun, Bengal College of Pharmaceutical Sciences and Research, Durgapur,, India;KARTHICKEYAN, Dr. K., Department of Pharmacy Practice, School of Pharmaceutical Sciences, Vels Institute of Science, Technology and advance Studies (VISTAS) Pallavaram, Chennai,, India;KARUNAKARAN, Dr. Rohini, Unit of Biochemistry, Faculty of Medicine, AIMST University, Bedong, Malaysia;KHANDAI, Dr. Madhusmruti, Royal College of Pharmacy and Health Sciences, Berhampur, India;KUMAR, Dr. Satendra, L.N. Pharmacy College, Govindpur, Baitalpur, Deoria, India;SINGH, Namrata, Institute of Pharmaceutical Sciences, University of Lucknow, Lucknow,, India;SINGH, Ruchi, Goel Institute of Pharmaceutical Sciences, Lucknow, India;VED, Dr. Akash, Goel Institute of Pharmaceutical Sciences, Lucknow, India;WAL, Dr. Pranay, Pranveer Singh Institute of Technology, Kanpur, India ~72: BHOWMICK, Dr. Mithun;KARTHICKEYAN, Dr. K.;KARUNAKARAN, Dr. Rohini;KHANDAI, Dr. Madhusmruti;KUMAR, Dr. Satendra;SINGH, Namrata;SINGH, Ruchi;VED, Dr. Akash;WAL, Dr. Pranay~

2022/02922 ~ Complete ~54:ANTIPERSPIRANT EMULSION ~71:UNILEVER GLOBAL IP LIMITED, Port Sunlight, Wirral, Merseyside, CH62 4ZD, United Kingdom ~72: HUAJIN JIN;XIAOKE LI~ 33:CN ~31:PCT/CN2019/111460 ~32:16/10/2019;33:EP ~31:19209021.5 ~32:14/11/2019

2022/02928 ~ Complete ~54:SUBCUTANEOUSLY INJECTABLE INSULIN FORMULATIONS AND METHODS OF ADMINISTRATION ~71:Cass Pharmaceuticals, Inc., 1465 Willowbrooke Circle, FRANKLIN 37069, TN, USA, United States of America ~72: D'SOUZA, Lawrence;RHODES, Christopher A.;STEINER, Solomon S.~ 33:US ~31:62/901,408 ~32:17/09/2019

2022/02891 ~ Complete ~54:METHOD AND APPARATUS FOR GENERATING FROM A COEFFICIENT DOMAIN REPRESENTATION OF HOA SIGNALS A MIXED SPATIAL/COEFFICIENT DOMAIN REPRESENTATION OF SAID HOA SIGNALS ~71:DOLBY INTERNATIONAL AB, Apollo Building, 3E, Herikerbergweg 1-35, NL-1101 , CN Amersterdam Zuidoost, Netherlands ~72: ALEXANDER KRUEGER;SVEN KORDON~ 33:EP ~31:13305986.5 ~32:11/07/2013

2022/02893 ~ Complete ~54:TELEHANDLER PROVIDED WITH IMPROVED CAB ~71:MANITOU ITALIA S.R.L., via Cristoforo Colombo, 2 Località Cavazzona, Castelfranco Emilia (Modena), 41013, Italy ~72: MARCO IOTTI~ 33:IT ~31:102021000006734 ~32:19/03/2021

2022/02897 ~ Complete ~54:RUBBER AND STEEL PLATE COMBINED MODULAR BRIDGE DECK DAMPING EXPANSION JOINT STRUCTURE AND ITS APPLICATION METHOD ~71:Shandong Expressway Jinan Ring West Line Highway Co., Ltd., 801-29, Innovation Building, East Furong Road, Guyunhu Street, Changqing District, Jinan City, Shandong Province, People's Republic of China;Shandong University, No. 27 Shanda South Road, Jinan City, Shandong Province, People's Republic of China ~72: AN Ran;GAO Xiang;SHANG Jin;WANG Shimin;WANG Youzhi;XU Gangnian;YOU Weijie;ZHANG Baoshuo;ZHANG Xue;ZHOU Chunlin;ZHOU Qinggang~

2022/02930 ~ Complete ~54:DIAGNOSTIC CHROMOSOME MARKER ~71:OXFORD BIODYNAMICS PLC, Building 3140, Oxford Business Park, United Kingdom ~72: AKOULITCHEV, Alexandre;HUNTER, Ewan;RAMADASS, Aroul Selvam~ 33:US ~31:62/898,969 ~32:11/09/2019

2022/02908 ~ Complete ~54:FEED FOR LARIMICHTHYS CROCEA LARVAE AND PROCESSING PROCESS THEREOF ~71:Ocean University of China, No. 238, Songling Road, Laoshan District,, Qingdao, Shandong, 266100, People's Republic of China ~72: AI, Qinghui;MAI, Kangsen;WAN, Min;WANG, Zhen;XU, Wei;XUE, Min;ZHANG, Lu;ZHANG, Yanjiao;ZHOU, Huihui~

2022/02931 ~ Complete ~54:SYSTEM AND METHOD FOR INFUSION OF DRUGS ~71:UNIVERSITY OF CAPE TOWN, Lovers Walk, South Africa ~72: COETZEE, Ettienne~ 33:GB ~31:1911611.0 ~32:14/08/2019

2022/02898 ~ Complete ~54:SAMPLE CRUSHING DEVICE FOR PHYSIOLOGICAL RESEARCH ~71:Anhui Medical College, No. 632 Furong Road, Hefei City, Anhui, 230601, People's Republic of China ~72: CHEN, Jin;FANG, Peifei;FANG, Yonghong;JI, Yan;YU, Furong;ZHANG, Min~

2022/02901 ~ Complete ~54:A DENDROBIUM PLANTING USED PINE BARK COLLECTION DEVICE ~71:Lu'an Kekedaer Biotechnology Co., Ltd., 1301, building a, Lu'an science and technology entrepreneurship service center, Lu'an economic and Technological Development Zone, Anhui Province, People's Republic of China ~72: Cheng Rui~

2022/02890 ~ Complete ~54:PORTABLE PROXIMITY DETECTION DEVICE ~71:BATTERY ELECTRIC (PTY) LIMITED, 533 Malcolm Moodie Crescent, Jet Park, Boksburg, South Africa ~72: MARAIS, Marnus~ 33:ZA ~31:2021/01507 ~32:05/03/2021

2022/02917 ~ Complete ~54:ORAL PRODUCT WITH A BASIC AMINE AND AN ION PAIRING AGENT ~71:NICOVENTURES TRADING LIMITED, Globe House, 1 Water Street, United Kingdom ~72: KELLER, Christopher;KEYSER, Brian Michael;MOLDOVEANU, Serban C.;POOLE, Thomas H.~ 33:US ~31:16/568,034 ~32:11/09/2019

2022/02920 ~ Complete ~54:METHOD FOR RAPIDLY PROPAGATING TILLANDSIA BY MEANS OF SEED TISSUE CULTURE ~71:JIANGSU VOCATIONAL COLLEGE OF AGRICULTURE AND FORESTRY, No. 19, Wenchang East Road, Jurong, Zhenjiang, Jiangsu, 212400, People's Republic of China ~72: CHENGLONG

LI;DONG LIANG;HUIMIN LIANG;PENG HAN;WENBO ZHANG;YAN LIU;YANG XIA;YING ZHANG~ 33:CN ~31:201910903598.8 ~32:23/09/2019

2022/02925 ~ Complete ~54:ENVIRONMENT-FRIENDLY FUNCTIONAL MEMBRANE MATERIAL AND PREPARATION METHOD AND APPLICATION THEREOF ~71:SHAOXING CHORAY COMPOSITES CO., LTD., Room 411, Kechuang Building Complex Building, No.586 Xihuan Road, Ke Qiao Economic Development Zone, Keqiao District, Shaoxing, Zhejiang, 312030, People's Republic of China ~72: LI, Fangli;LI, Xianqiang;SUN, Wenqi;ZHANG, Wanhu;ZHANG, Zhaoyang~ 33:CN ~31:202111299878.6 ~32:04/11/2021

2022/02914 ~ Complete ~54:LIGHT GOLD ~71:ETH ZURICH, ETH Transfer Rämistrasse 101, Switzerland ~72: MEZZENGA, Raffaele;VAN 'T HAG, Leonie~ 33:EP ~31:19194693.8 ~32:30/08/2019

2022/02899 ~ Complete ~54:A FIREFIGHTING LIFEBOAT WITH THE PROTECTION FUNCTION ~71:Lu'an Huasheng Zhiheng Industrial Design Co., Ltd, Room b408, Lu'an science and technology entrepreneurship service center, Lu'an economic and Technological Development Zone, Anhui Province, People's Republic of China ~72: Huang Wen De~

2022/02902 ~ Complete ~54:METHOD FOR PREPARING ORGANIC FERTILIZER BY USING ORGANIC WASTE FROM PLANTING AND BREEDING ~71:Shandong Agricultural Technology Extension Center, No.15 Jiefang Road, Lixia District, Jinan City, Shandong Province, People's Republic of China ~72: Dong Yanhong;Fu Xiaoyan;Guo Yuesheng;Liu Cuixian;Liu Yansheng;Ma Ronghui;Wang Guohua;Wang Jian;Yu Lei;Zhang Shanshan~

2022/02904 ~ Complete ~54:AN ASPHALT MORTAR UV AGING SIMULATION METHOD ~71:Changsha University of Science & Technology, No. 960 Wangjiali Road, Tianxin District, Changsha City, Hunan Province, People's Republic of China ~72: Cai Jun;Gong Xiangbing;Li Xi;Liu Wei;Wang Chang;Zhou Hongyu~

2022/02910 ~ Complete ~54:WORKING PLATFORM FOR MACHINING ~71:SHANGHAI MARITIME UNIVERSITY, No. 1550 Haigang Avenue, Pudong New Area, People's Republic of China ~72: WANG, Jingtao;WANG, Kaiyuan;YE, Jingtao;ZANG, Yize;ZANG, Zhaoliang~

2022/02927 ~ Complete ~54:XANTHOPHYLL COMPOSITION COMPRISING LUTEIN AND ZEAXANTHIN WITH ENHANCED BIOAVAILABILITY ~71:OmniActive Health Technologies Limited, T-8B, 5th Floor, Phoenix House, A Wing, Phoenix Mills Compound, 462, Senapati Bapat Marg, Lower Parel, MUMBAI 400013, MAHARASHTRA, INDIA, India ~72: LAL, Jangir Mohan;MORDE, Abhijeet;NALAWADE, Pravin;T. K., Sunil Kumar;THAKARE, Ravindra~ 33:IN ~31:201921041676 ~32:15/10/2019

2022/02903 ~ Complete ~54:NOVEL FRICTION PENDULUM ISOLATION BEARING ~71:Qingdao University of Technology, No. 777 Jialingjiang East Road, Huangdao District, Qingdao City, Shandong Province, 266520, People's Republic of China ~72: DUAN, Zhongzhe;SUI, Jieying~

2022/02907 ~ Complete ~54:AQUACULTURE FEED ~71:Ocean University of China, No. 238, Songling Road, Laoshan District, Qingdao, Shandong, 266100, People's Republic of China;Qingdao Zhongde Jianlian Biotechnology Co., Ltd., Baoshan Town, Huangdao District, Qingdao City, Shandong Province, 266422, People's Republic of China ~72: AI, Qinghui;LI, Qingfei;LIN, Weidong;MAI, Kangsen;WANG, Zhen;XU, Jianwei;XU, Wei;YU, Wei;ZHENG, Xiukun~

2022/02912 ~ Complete ~54:2-AZASPIRO[3.4]OCTANE DERIVATIVES AS M4 AGONISTS ~71:NOVARTIS AG, Lichtstrasse 35, Switzerland ~72: CALHOUN, Amy;CHEN, Xin;GARDINIER, Kevin, Matthew;HALL, Edward, Charles;JENDZA, Keith;LABBE-GIGUERE, Nancy;NEEF, James;PALACIOS, Daniel, Steven;QIAN,

Ming;SHULTZ, Michael David;THOMSON, Christopher G.;WANG, Kate, Yaping;YANG, Fan~ 33:US ~31:62/912,980 ~32:09/10/2019

2022/02919 ~ Complete ~54:P MATRICES FOR EHT ~71:TELEFONAKTIEBOLAGET LM ERICSSON (PUBL), 164 83, Sweden ~72: LOPEZ, Miguel;WILHELMSSON, Leif~

2022/02921 ~ Complete ~54:SYSTEM AND METHOD FOR AUTOMATICALLY DETECTING UNAUTHORIZED ENTRY INTO A POOL ~71:CUTTING EDGE PACKAGING SOLUTIONS, 385 Minoma Lane, Franklin Lakes, New Jersey 07417, United States of America ~72: PAUL VEGLIANTE~ 33:US ~31:16/561,586 ~32:05/09/2019

2022/02923 ~ Complete ~54:SELF CLEANING DEVICE AND METHOD FOR CONTINUOUS FILTRATION OF HIGH VISCOSITY FLUIDS ~71:Gideon PINTO, 8A/14 Irus St., Israel ~72: Gideon PINTO~ 33:US ~31:62/905,469 ~32:25/09/2019

2022/03001 ~ Provisional ~54:VINYL IN THE CITY ~71:Mthokozisi Majola, 1340 Pablo Street, South Africa ~72: Mthokozisi Majola~

2022/02887 ~ Provisional ~54:RECOVERY OF IRON FROM IRON ORE FINES USING HYDROGEN RICH GAS ~71:MANIC TECHNOLOGY HOLDINGS (PTY) LTD, 46 Northview Road, Lanseria, South Africa ~72: BEACHY HEAD, John Peter;BECERRA NOVOA, Jorge Octavio~

2022/02889 ~ Provisional ~54:CONVEYOR SYSTEM ~71:Mike Junior McKerson, 7 Quibeba, Arboretum, South Africa ~72: Mike Junior McKerson~

2022/02915 ~ Complete ~54:DUAL-CHAMBER AEROSOL DISPENSER ~71:RAI STRATEGIC HOLDINGS, INC., 401 North Main Street, United States of America ~72: HEJAZI, Vahid~ 33:US ~31:62/893,339 ~32:29/08/2019

2022/02918 ~ Complete ~54:A COATED STEEL SUBSTRATE ~71:ARCELORMITTAL, 24-26, Boulevard d'Avranches, Luxembourg ~72: Carlota DOMINGUEZ FERNANDEZ;Cristina BLANCO ROLDAN;David NORIEGA PEREZ;Jorge RODRIGUEZ GARCIA;Laura MEGIDO FERNANDEZ;Roberto SUAREZ SANCHEZ;Thi Tan VU~ 33:IB ~31:PCT/IB2019/059255 ~32:29/10/2019

2022/02932 ~ Complete ~54:FXIA INHIBITORS AND PREPARATION METHOD THEREFOR AND PHARMACEUTICAL USE THEREOF ~71:SHENZHEN SALUBRIS PHARMACEUTICALS CO. LTD, 37F, Main Tower, Lvjing Plaza, Che Gong Miao, People's Republic of China ~72: HONG, Zexin;LU, Yinsuo;WU, Jianli;WU, Junjun;XIAO, Ying;XING, Wei~ 33:CN ~31:201910923960.8 ~32:27/09/2019;33:CN ~31:201911318870.2 ~32:19/12/2019;33:CN ~31:202010902000.6 ~32:01/09/2020

2022/02888 ~ Provisional ~54:PAN RELEASE AGENT ~71:LAMBDATECH LTD, Tepelenio Business Center, 1st Floor, 13 Tepeleniou, Cyprus ~72: CHARILAOU, Constantinos~

2022/02892 ~ Complete ~54:METHOD AND APPARATUS FOR GENERATING FROM A COEFFICIENT DOMAIN REPRESENTATION OF HOA SIGNALS A MIXED SPATIAL/COEFFICIENT DOMAIN REPRESENTATION OF SAID HOA SIGNALS ~71:DOLBY INTERNATIONAL AB, Apollo Building, 3E, Herikerbergweg 1-35, NL-1101 , CN Amersterdam Zuidoost, Netherlands ~72: ALEXANDER KRUEGER;SVEN KORDON~ 33:EP ~31:13305986.5 ~32:11/07/2013

2022/02894 ~ Complete ~54:PLANTING METHOD FOR IMPROVING NUTRITIONAL QUALITY OF FORAGE GRASS ~71:Northwest Institute of Plateau Biology The Chinese Academy of Sciences, No. 23, Xinning Road, Chengxi District, Xining City, Qinghai Province, 810008, People's Republic of China ~72: GUO, Yingyi;HAN, Xueping;HU, Linyong;LIU, Hongjin;MA, Li;SAREN, Gaowa;WANG, Xungang;XU, Shixiao;XU, Tianwei;YAO, Leiming;ZHANG, Qian;ZHANG, Xiaoling;ZHAO, Liang;ZHAO, Na;ZHAO, Xinquan;ZHOU, Huakun~

2022/02896 ~ Complete ~54:THREE-DIMENSIONAL POROUS BIODEGRADABLE POLYMER-BASED ARTIFICIAL ESOPHAGEAL STENT AND PREPARATION METHOD THEREOF ~71:Yancheng polytechnic college, No. 285, Jiefang South Road, Yancheng City, Jiangsu, 224000, People's Republic of China ~72: MA, Qian;WANG, Ke;WANG, Shudong~ 33:CN ~31:202111661086.9 ~32:30/12/2021

2022/02900 ~ Complete ~54:MANUFACTURING PROCESS FOR IMPROVING THE VULCANIZATION EFFICIENCY OF SMALL-SIZED RUBBER PRODUCTS ~71:Xuzhou College of Industrial Technology, No.1, Xiangwang Road, Gulou District, Xuzhou City, Jiangsu Province, People's Republic of China ~72: Cong Houluo;Dai Xi;Li Peipei;Liu Feng;Sun Peng;Wang Yanqiu;Wang Zaixue;Wang Zhongguang;Xu Shuangyuan;Xu Yunhui;Yang Liu;Zang Yanan;Zhang Tongyu;Zhang Zhaohong;Zhao Guiying;Zhu Muwei~

2022/02905 ~ Complete ~54:BACILLUS LICHENIFORMIS PREPARATION AND PREPARATION METHOD THEREOF ~71:Agricultural Bio-Resources Research Institute, Fujian Academy of Agricultural Sciences, No.247 WuSi Street, Gulou district, Fuzhou city, Fujian province, People's Republic of China;Agricultural Engineering Technology Institute, Fujian Academy of Agricultural Sciences, No.247 WuSi Street, Gulou district, Fuzhou city, Fujian province, People's Republic of China ~72: Fang Guiyou;Guan Xuefang;Ruan Chuanqing;Xu Qingxian~

2022/02906 ~ Complete ~54:A FEED FORMULA FOR SHEEP ~71:Shi guoqing, wu yi road No.221, Xinjiang academy of agricultural reclamation, Shihezi, Xinjiang, People's Republic of China;Xinjiang Academy of Agricultural Reclamation Sciences, wu yi road No.221, Xinjiang academy of agricultural reclamation, Shihezi, Xinjiang, People's Republic of China ~72: Dai rong;Fu xiangwei;Liu yucheng;Shi guoqing;Wan pengcheng;Yang yang~

2022/02909 ~ Complete ~54:METHOD FOR AN ASPHALT BINDER USING BIOMASS MODIFIED HEAVY COMPONENTS OF COAL TAR ~71:TAIYUAN UNIVERSITY OF TECHNOLOGY, No. 79 Yingze West Street, Taiyuan City, People's Republic of China ~72: CHEN, Tingsheng;DU, Zhenyi;ZHANG, Hanyu~

2022/02924 ~ Complete ~54:OIL-WATER SEPARATION APPARATUS AND OIL-WATER SEPARATION METHOD ~71:HYTECH CARBON COMPOSITES (NANJING) CO.,LTD., Room 274, No.169-5 Fangshui Road, Jiangbei New District, Nanjing, Jiangsu, 210048, People's Republic of China ~72: LI, Fangli;LI, Xianqiang;SUN, Wenqi;ZHANG, Wanhu;ZHANG, Zhaoyang~ 33:CN ~31:202111299263.3 ~32:04/11/2021

2022/02926 ~ Complete ~54:METHOD FOR TESTING COPPER CONTENT OF PLASTIC GRANULES PRODUCED BY DRY-TYPE SCRAP COPPER WIRE GRANULATOR ~71:JIANGSU HENGTONG PRECISION METAL MATERIAL CO.LTD, No.88 Hengtong Avenue, Qidu Town, Wujiang District, Suzhou, Jiangsu, 215200, People's Republic of China ~72: HU, Zhenfei;LI, Wei;LIU, Song;LUO, Jianyu;SHI, Xueqing;SUN, Zhongqi;YU, Fang~ 33:CN ~31:202010631518.0 ~32:03/07/2020

2022/02929 ~ Complete ~54:VEHICLE AND METHOD FOR MONITORING ABNORMALITY IN MOTIVE POWER TRANSMISSION MECHANISM ~71:Honda Motor Co., Ltd., 1-1, Minami-Aoyama 2-chome, Minato-ku, TOKYO 107-8556, JAPAN, Japan ~72: HATTORI, Makoto;NOMURA, Naoki;ONUKI, Hirotaka;SUNAMOTO, Masayuki~ 33:JP ~31:2019-165698 ~32:11/09/2019

. - APPLIED ON 2022-03-11 -

2022/02989 ~ Complete ~54:SYSTEM FOR PREDICTING AUGER FAILURE IN A TIRE INJECTION FILLING MIXING MACHINE ~71:Carlisle Construction Materials, LLC, 1555 Ritner Highway, CARLISLE 17013, PA, USA, United States of America ~72: BISHOP, John;LITTLE, Jeff~ 33:US ~31:62/899,466 ~32:12/09/2019

2022/02975 ~ Complete ~54:EUKARYOTIC SEMI-SYNTHETIC ORGANISMS ~71:THE SCRIPPS RESEARCH INSTITUTE, 10550 North Torrey Pines Road, United States of America ~72: ROMESBERG, Floyd, E.;SHENG, Kai;ZHOU, Anne Xiaozhou~ 33:US ~31:62/908,421 ~32:30/09/2019

2022/02980 ~ Complete ~54:HIGH MODULUS GLASS FIBER COMPOSITION, GLASS FIBER THEREOF, AND COMPOSITE MATERIAL ~71:JUSHI GROUP CO., LTD., Jushi Science & Technology Building, 669 Wenhua Road (South), Tongxiang Economic Development Zone, Tongxiang City, Zhejiang, 314500, People's Republic of China ~72: GUORONG CAO;LIN ZHANG;WENZHONG XING;ZHONGHUA YAO~ 33:CN ~31:202010665076.1 ~32:10/07/2020

2022/03002 ~ Provisional ~54:THE PATENT NAME AND CONCEPT OF THE PROPERTY IS CALLED AMBC WHICH STANDS FOR AFRICAN MUSIC BUSINESS CONFERENCE ~71:Mahlatsi Sethole, 35 Daniel Street, South Africa ~72: Mahlatsi Sethole~

2022/02984 ~ Complete ~54:A PROCESS FOR TREATING ACID MINE DRAINAGE ~71:UNIVERSITY OF SOUTH AFRICA, Preller Street Muckleneuk, Pretoria, South Africa ~72: BHEKIE BRILLIANCE MAMBA;KEBEDE KETEREW KEFENI~

2022/02992 ~ Complete ~54:[1,2,4]TRIAZOLO[1,5-C]QUINAZOLIN-5-AMINES ~71:Bayer Aktiengesellschaft, Kaiser-Wilhelm-Allee 1, LEVERKUSEN 51373, GERMANY, Germany;Bayer Pharma Aktiengesellschaft, Müllerstr. 178, BERLIN 13353, GERMANY, Germany ~72: BÖHME, Stephan;BADER, Benjamin;BAUMANN, Daniel;BOTHE, Ulrich;BUCHMANN, Bernd;GÜNTHER, Judith;GORJÁNÁCZ, Mátyás;GUTCHER, Ilona;HERBERT, Simon Anthony;KOBER, Christina;LEFRANC, Julien;MEIER, Robin Michael;PLATTEN, Michael;RÖSE, Lars;SCHMEES, Norbert;STÖCKIGT, Detlef;ZORN, Ludwig~ 33:EP ~31:19191299.7 ~32:12/08/2019;33:EP ~31:20167707.7 ~32:02/04/2020

2022/02997 ~ Complete ~54:APPLICATION OF ZM5008 IN REGULATING PLANT HEIGHT AND INTERNODE LENGTH IN MAIZE ~71:BIOTECHNOLOGY RESEARCH INSTITUTE , CHINESE ACADEMY OF AGRICULTURAL SCIENCES, No.12 Zhongguancun South Street, People's Republic of China ~72: PU, Li;XU, Fan;YU, Jia~ 33:CN ~31:201910742857.3 ~32:13/08/2019

2022/02935 ~ Provisional ~54:POLYMER BUSH IN A UNIVERSAL JOINT BEARING ~71:Jean Bensch, 58 Plantation Road, South Africa ~72: Jean Bensch~

2022/02939 ~ Complete ~54:COUPLING ~71:ROBIN ELLIOT HOLLIDAY, 22 AITKEN ROAD, South Africa ~72: ROBIN ELLIOT HOLLIDAY~ 33:ZA ~31:2021/01640 ~32:11/03/2021

2022/02943 ~ Complete ~54:VEGETABLE STICKY TRAP FOR THRIPS ~71:National Vegetable Quality Standard Center, 200m south of the intersection, east of the Road Intersection of Wensheng East Street and Mihe West Dam, Shouguang City, Shandong Province, 262700, People's Republic of China;Shandong Colorful Manor Vegetable And Food Co.,Ltd, 8th Floor, Block A, Vegetable Building, No. 9 Haoyuan Road, Luocheng Street, Shouguang City, Shandong Province, 262700, People's Republic of China;Shandong Shouguang Vegetable Industry Group Biological Control Technology Co., Ltd., No. 9 Haoyuan Road, Luocheng Street, Shouguang City, Shandong Province, 262700, People's Republic of China;Weifang University of Science and Technology, No. 1299, Jinguang Street, Shouguang City, Shandong Province, 262700, People's Republic of China ~72: DING, Junyang;DING, Zhuo;GUO, Yanchun;HU, Yongjun;LI, Yingjie;LIN, Guiyu;LV, Jinfu;TIAN, Subo;WEI, Fuhong;XIN, Xiaofei~

2022/02946 ~ Complete ~54:METHOD FOR SCREENING HIGH-FERTILIZER-EFFICIENCY TOMATO ROOTSTOCKS ~71:Shandong Shouguang Vegetable Industry Group Co., Ltd., No. 9 Haoyuan Road, Luocheng

Street, Shouguang City, Shandong Province, 262700, People's Republic of China;Shandong Shouguang Vegetable Seed Industry Group Co., Ltd., North of Weigao Road, Luocheng Sub-district Office, Shouguang City, Shandong Province, 262700, People's Republic of China;Weifang University of Science and Technology, No. 1299, Jinguang Street, Shouguang City, Shandong Province, 262700, People's Republic of China ~72: DING, Junyang;DU, Mingxia;GUO, Yanchun;HU, Yongjun;LI, Yingjie;LIN, Guiyu;TIAN, Subo;WU, Ailian~

2022/02951 ~ Complete ~54:VEGETABLE STICKY TRAP ~71:Shandong Shouguang Vegetable Industry Group Biological Control Technology Co., Ltd., No. 9 Haoyuan Road, Luocheng Street, Shouguang City, Shandong Province, 262700, People's Republic of China;Shandong Shouguang Vegetable Industry Group Co.,Ltd., No. 9 Haoyuan Road, Luocheng Street, Shouguang City, Shandong Province, 262700, People's Republic of China;Shandong Vegetable Engineering Technology Research Center Co., Ltd., (in the courtyard of Shouguang Vegetable Seed Industry Group) West of Beishunhe Road, Shengcheng East Street, Shouguang City, Shandong Province, 262700, People's Republic of China ~72: GUO, Jiajin;HU, Yongjun;LI, Yingjie;LIN, Guiyu;MA, Xiaomei;WANG, Kaiyan;WANG, Lei;XIN, Xiaofei;ZHANG, Chungui~

2022/02974 ~ Complete ~54:LC-MS METHODS FOR ANTIBODY ISOTYPING AND QUANTIFICATION ~71:REGENERON PHARMACEUTICALS, INC., 777 Old Saw Mill River Road, Tarrytown, United States of America ~72: HUANG, Xiaoxiao;LI, Ning;QIU, Haibo;XU, Xiaobin~ 33:US ~31:62/901,037 ~32:16/09/2019;33:US ~31:63/064,868 ~32:12/08/2020

2022/02978 ~ Complete ~54:A PRESS HARDENING METHOD ~71:ARCELORMITTAL, 24-26, Boulevard d'Avranches, Luxembourg ~72: Brahim NABI;Florin DUMINICA;Pascal DRILLET;Raisa GRIGORIEVA;Thierry STUREL~

2022/02983 ~ Complete ~54:COMPOSITIONS AND PARTICLES FOR PAYLOAD DELIVERY ~71:APPLIED MOLECULAR TRANSPORT INC., 450 East Jamie Court, South San Francisco, California, 94080, United States of America ~72: DEREK MACLEAN;KEVIN YIN;KEYI LIU;MICHAEL SEKAR;RANDALL J MRSNY;TAHIR MAHMOOD;THOMAS CARL HUNTER~ 33:US ~31:62/887,933 ~32:16/08/2019;33:US ~31:62/887,963 ~32:16/08/2019;33:US ~31:62/888,133 ~32:16/08/2019;33:US ~31:62/888,144 ~32:16/08/2019;33:US ~31:62/888,237 ~32:16/08/2019;33:US ~31:62/888,238 ~32:16/08/2019;33:US ~31:62/888,282 ~32:16/08/2019;33:US ~31:62/888,400 ~32:16/08/2019;33:US ~31:62/898,709 ~32:11/09/2019;33:US ~31:62/898,729 ~32:11/09/2019;33:US ~31:62/898,899 ~32:11/09/2019;33:US ~31:62/898,934 ~32:11/09/2019;33:US ~31:62/899,064 ~32:11/09/2019;33:US ~31:PCT/US2019/050708 ~32:11/09/2019;33:US ~31:PCT/US2019/060356 ~32:07/11/2019;33:US ~31:62/935,615 ~32:14/11/2019;33:US ~31:62/939,495 ~32:22/11/2019;33:US ~31:62/970,627 ~32:05/02/2020;33:US ~31:62/971,126 ~32:06/02/2020;33:US ~31:62/986,557 ~32:06/03/2020;33:US ~31:62/986,579 ~32:06/03/2020;33:US ~31:63/013,309 ~32:21/04/2020;33:US ~31:63/020,996 ~32:06/05/2020;33:US ~31:63/021,029 ~32:06/05/2020;33:US ~31:63/033,077 ~32:01/06/2020;33:US ~31:63/033,151 ~32:01/06/2020;33:US ~31:63/033,180 ~32:01/06/2020;33:US ~31:63/055,886 ~32:23/07/2020

2022/02940 ~ Complete ~54:RECTIFICATION EQUIPMENT FOR MEDICAL INTERMEDIATES ~71:JIAMUSI UNIVERSITY, NO. 258, XUEFU STREET, XIANGYANG DISTRICT, People's Republic of China ~72: WANG, Yaokun~

2022/02942 ~ Complete ~54:BIOLOGICAL CONTROL METHOD OF SOLANACEOUS VEGETABLE SPIDER MITES ~71:Shandong Shouguang Vegetable Industry Group Biological Control Technology Co., Ltd., No. 9 Haoyuan Road, Luocheng Street, Shouguang City, Shandong Province, 262700, People's Republic of China;Shandong Shouguang Vegetable Industry Group Co.,Ltd., No. 9 Haoyuan Road, Luocheng Street, Shouguang City, Shandong Province, 262700, People's Republic of China;Shandong Vegetable Engineering Technology Research Center Co., Ltd., (in the courtyard of Shouguang Vegetable Seed Industry Group) West of

Beishunhe Road, Shengcheng East Street, Shouguang City, Shandong Province, 262700, People's Republic of China ~72: DING, Junyang;GUO, Jiajin;HU, Yongjun;LIN, Guiyu;LIU, Xinqing;QI, Ye;WANG, Laifang;ZHAO, Xiaoning~

2022/02947 ~ Complete ~54:METHOD FOR CONTINUOUSLY CONTROLLING TOMATO ROOT KNOT NEMATODES BY USING RESISTANT VARIETY ~71:National Vegetable Quality Standard Center, 200m south of the intersection, east of the Road Intersection of Wensheng East Street and Mihe West Dam, Shouguang City, Shandong Province, 262700, People's Republic of China;Shandong Colorful Manor Vegetable And Food Co.,Ltd, 8th Floor, Block A, Vegetable Building, No. 9 Haoyuan Road, Luocheng Street, Shouguang City, Shandong Province, 262700, People's Republic of China;Shandong Shouguang Vegetable Seed Industry Group Co., Ltd., North of Weigao Road, Luocheng Sub-district Office, Shouguang City, Shandong Province, 262700, People's Republic of China ~72: HU, Yingying;HU, Yongjun;LI, Yingjie;TIAN, Subo;XIN, Xiaofei;ZHANG, Chuanwei;ZHANG, Chungui;ZHANG, Ronghuan;ZHAO, Xiaoning~

2022/02949 ~ Complete ~54:ANTI-LOOSENING DEVICE OF STEEL STRUCTURE FASTENING BOLT ~71:CONSON CSSC(Qingdao) Ocean Technology Co., Ltd., Conson Marine Entrepreneurial Base Qingdao Blue Silicon Valley Core Area,Jimo District, Qingdao City, Shandong Province, People's Republic of China;Chongqing Jiaotong University, No 66 Xuefu Road, Nan’an District, Chongqing, People's Republic of China;Chongqing Technology and Business Institute, No. 1, Hualong Avenue, Jiulong Science Park, Jiulongpo District, Chongqing, People's Republic of China;Plan Approval Department, Qingdao Branch China Classification Society, Room 1606 Qingdao International Shipping Center, No.66, Lianyungang Road, Qingdao City, Shandong Province, People's Republic of China;Yantai Shunjie Marine Safety&Technical Advisory Development Company, No.2 Yanfu Road, Zhifu District, Yantai City, Shandong Province, People's Republic of China ~72: CHENG Pingjie;JIANG Shanchao;LI Meidan;LIU Gongwei;SUN Yonggan;WANG Qiao~

2022/02954 ~ Complete ~54:DEVICE FOR IMPROVING GRAIN FEED DIGESTIBILITY IN ALPINE PASTORAL AREA ~71:Northwest Institute of Plateau Biology The Chinese Academy of Sciences, No. 23, Xinning Road, Chengxi District, Xining City, Qinghai Province, 810008, People's Republic of China ~72: GUO, Yingyi;HAN, Xueping;HU, Linyong;LI, Shanlong;SAREN, Gaowa;XU, Shixiao;XU, Tianwei;YAO, Leiming;ZHAO, Liang;ZHAO, Na;ZHAO, Xinquan;ZHOU, Huakun~

2022/02958 ~ Complete ~54:DEVICE AND METHOD FOR DETECT CUTTING QUALITY OF CORD FABRIC ~71:Xuzhou College of Industrial Technology, No.1, Xiangwang Road, Gulou District, Xuzhou City, Jiangsu Province, People's Republic of China ~72: Cong Houluo;Dai Xi;Li Peipei;Liu Feng;Song Shuaishuai;Sun Peng;Wang Yanqiu;Wang Zaixue;Wang Zhongguang;Xu Shuangyuan;Xu Yunhui;Yang Liu;Zang Yanan;Zhang Tongyu;Zhang Zhaohong;Zhao Guiying;Zhu Muwei~

2022/02988 ~ Complete ~54:METHODS FOR INDICATION OF REFERENCE STATION GNSS RTK INTEGER AMBIGUITY LEVEL ~71:TELEFONAKTIEBOLAGET LM ERICSSON (PUBL), 164 83, Sweden ~72: GUNNARSSON, Fredrik;MODARRES RAZAVI, Sara;SHREEVASTAV, Ritesh~ 33:US ~31:62/910,131 ~32:03/10/2019

2022/02936 ~ Provisional ~54:SYSTEM AND PROCESS FOR PREHEATING RAW MATERIAL IN THE PRODUCTION OF FERROCHROME PRODUCTS ~71:SAMANCOR CHROME LIMITED, 1st Floor, Block A, Cullinan Place, Cullinan Close (off Rivonia Road), Morningside, Sandton, 2196, South Africa ~72: BENJAMIN THOMAS DU PLESSIS;DONALD BRUCE GRANT~

2022/02944 ~ Complete ~54:VEGETABLE STICKY TRAP ~71:Shouguang Vegetable Industry Holding Group Co., Ltd, No. 9 Haoyuan Road, Luocheng Street, Shouguang City (22-27th Floor, Block A, Vegetable Building), Shandong Province, 262700, People's Republic of China;Weifang University, No. 5147, Dongfeng East Street,

High-tech Development Zone, Weifang City, Shandong, 261012, People's Republic of China;Weifang University of Science and Technology, No. 1299, Jinguang Street, Shouguang City, Shandong Province, 262700, People's Republic of China ~72: DAI, Huijie;HU, Yongjun;LI, Jintang;LIN, Guiyu;QI, Ye;QIAO, Ning;TIAN, Subo;WU, Ailian;ZHAO, Jing~

2022/02956 ~ Complete ~54:DEVICE FOR MONITORING CARBON FLUX OF ALPINE GRASSLAND ~71:Northwest Institute of Plateau Biology The Chinese Academy of Sciences, No. 23, Xinning Road, Chengxi District, Xining City, Qinghai Province, 810008, People's Republic of China ~72: DENG, Yanfang;GE, Shidong;GUO, Yingyi;HAN, Xueping;HU, Linyong;SAREN, Gaowa;XU, Shixiao;XU, Tianwei;YAO, Leiming;ZHAO, Liang;ZHAO, Na;ZHAO, Xinquan;ZHOU, Huakun~

2022/02960 ~ Complete ~54:PROTECTION DEVICE FOR BIG DATA AND COMPUTER NETWORK SECURITY ~71:Dezhou University, No. 566 university Rd. West, Decheng District, Dezhou City, Shandong Province , 253023, People's Republic of China ~72: GAO, Xiulian;GUO, Changyou;YIN, Xiuling~ 33:CN ~31:202110272411.6 ~32:12/03/2021

2022/02967 ~ Complete ~54:A COLLOIDAL GOLD LABELED CHROMATOGRAPHIC LATERAL FLOW STRIP FOR TESTING THE CONCENTRATION OF LAMOTRIGINE IN PLASMA ~71:ANHUI DEEPBLUE MEDICAL TECHNOLOGY CO., LTD., 4th Floor D-1# Zone, Pearl Industrial Park , 106 Innovation Avenue, High-Tech Development Zone , Hefei, Anhui, 230088, People's Republic of China ~72: Bin WANG;Chao ZHANG;Chuanxiang GUO;Fengling CHEN;Jing XU;Yicheng ZHANG~

2022/02971 ~ Complete ~54:PEANUT PLANTING METHOD ~71:QINGDAO YUNDE BIOLOGICAL RESEARCH CO., LTD, No. 180 Shenzhen Road, Laoshan District, Qingdao City, People's Republic of China;SHANDONG PEANUT RESEARCH INSTITUTE, No. 126 Fushan Road, Licang District, Qingdao, People's Republic of China ~72: CHEN, Mingna;CHEN, Na;CHI, Xiaoyuan;JIANG, Xiao;PAN, Lijuan;SUN, Yuhao;TANG, Hua;WANG, Tong;XU, Jing;YANG, Zhen;YU, Shanlin~

2022/02982 ~ Complete ~54:COMPOSITIONS, FORMULATIONS, AND INTERLEUKIN PRODUCTION AND PURIFICATION ~71:APPLIED MOLECULAR TRANSPORT INC., 1 Tower Place, Suite 850, South San Francisco, California, 94080, United States of America ~72: AMIR PORAT;BITTOO KANWAR;CHARLES OLSON;DEREK MACLEAN;ELIZABETH BHATT;HYOJIN KIM;JAMES ANDREW WHITNEY;JOHN KOLENG;KEVIN YIN;KHUSHDEEP MANGAT;MARVIN GAROVOY;RAJENDRA TANDALE;RANDALL J MRSNY;SALLY POSTLETHWAITE;SEAN DALZIEL;TAHIR MAHMOOD;WEIJUN FENG~ 33:US ~31:62/887,933 ~32:16/08/2019;33:US ~31:62/887,963 ~32:16/08/2019;33:US ~31:62/888,144 ~32:16/08/2019;33:US ~31:62/888,237 ~32:16/08/2019;33:US ~31:62/898,709 ~32:11/09/2019;33:US ~31:62/898,729 ~32:11/09/2019;33:US ~31:62/898,899 ~32:11/09/2019;33:US ~31:62/898,934 ~32:11/09/2019;33:US ~31:PCT/US2019/050708 ~32:11/09/2019;33:US ~31:62/939,495 ~32:22/11/2019;33:US ~31:62/970,627 ~32:05/02/2020;33:US ~31:62/971,126 ~32:06/02/2020;33:US ~31:62/986,557 ~32:06/03/2020;33:US ~31:62/986,579 ~32:06/03/2020;33:US ~31:63/013,309 ~32:21/04/2020;33:US ~31:63/020,996 ~32:06/05/2020;33:US ~31:63/033,077 ~32:01/06/2020;33:US ~31:63/055,886 ~32:23/07/2020

2022/02964 ~ Complete ~54:GROUPED HATCHING INCUBATOR TRAY APPARATUS FOR QUAILS FOR TEST ~71:NANJING INSTITUTE OF ENVIRONMENTAL SCIENCES, MINISTRY OF ECOLOGY AND ENVIRONMENT OF THE PEOPLE'S REPUBLIC OF CHINA, 8 Jiang-wang-miao Street, Nanjing, Jiangsu 210042, People's Republic of China ~72: DIDI SHAN;HONGWEI WANG;JIANHUA LIAO;LILI SHI;WEILI XU;XINLI YAN;YUE YU;YULIANG SHENG;YUXUAN ZHU~ 33:CN ~31:2021115444 24.0 ~32:16/12/2021

2022/02966 ~ Complete ~54:MINIMIZING AGGLOMERATION OF DRUG PARTICLE COATING MATERIAL DURING STORAGE TO STABILIZE DISINTEGRATION TIMES OF PHARMACEUTICAL PRODUCTS ~71:Catalent U.K. Swindon Zydis Limited, 1 George Square, GLASGOW G2 1AL, UNITED KINGDOM, United Kingdom ~72: HOWES, Simon Andrew Martyn;MCLAUGHLIN, Rosaleen;WHEADON, Craig;WHITEHOUSE, Jonathon~ 33:US ~31:62/809,307 ~32:22/02/2019

2022/02970 ~ Complete ~54:A NORMALLY-ON DUAL GATE (DG) ALGAN/GAN HIGH ELECTRON MOBILITY TRANSISTOR DEVICE ~71:KASHYAP, Nitesh, Dr B R Ambedkar National Institute of Technology Jalandhar N.I.T. Post Office, India;RAMAN, Ashish, Dr B R Ambedkar National Institute of Technology Jalandhar N.I.T. Post Office, India;RANJAN, Ravi, Dr B R Ambedkar National Institute of Technology Jalandhar N.I.T. Post Office, India;RAO, Manisha, Dr B R Ambedkar National Institute of Technology Jalandhar N.I.T. Post Office, India;SARIN, Rakesh Kumar, Dr B R Ambedkar National Institute of Technology Jalandhar N.I.T. Post Office, India ~72: KASHYAP, Nitesh;RAMAN, Ashish;RANJAN, Ravi;RAO, Manisha;SARIN, Rakesh Kumar~

2022/02981 ~ Complete ~54:WEAR PART FOR AN ARC TORCH AND PLASMA TORCH, ARC TORCH AND PLASMA TORCH COMPRISING SAME, METHOD FOR PLASMA CUTTING AND METHOD FOR PRODUCING AN ELECTRODE FOR AN ARC TORCH AND PLASMA TORCH ~71:KJELLBERG STIFTUNG, Geschwister-Scholl-Str. 1, 03238, Finsterwalde, Germany ~72: FRANK LAURISCH;KATRIN JEHNERT;RALF-PETER REINKE;VOLKER KRINK~ 33:DE ~31:10 2019 124 521.4 ~32:12/09/2019

2022/02995 ~ Complete ~54:CHIMERIC ANTIGEN RECEPTOR AND IMMUNE EFFECTOR CELL EXPRESSING CHIMERIC ANTIGEN RECEPTOR ~71:BoYuan RunSheng Pharma (Hangzhou) Co., Ltd., 3rd Floor, Building A, Zijin Pioneer Park, No. 859, Shixiang West Road, Sandun Town, Xihu District, HANGZHOU 310012, ZHEJIANG, CHINA (P.R.C.), People's Republic of China ~72: FENG, Xin-Hua;SUN, Chuang;ZHAO, Bin~ 33:CN ~31:201910750137.1 ~32:14/08/2019

2022/02969 ~ Complete ~54:A FORMULATION FOR PREPARATION OF CS-ALG NANOPARTICLES AND A METHOD THEREOF ~71:GUPTA, Ajay, University Institute of Pharmacy, C.S.J.M. University (Formerly Kanpur University), Kanpur, India;KUMAR, Jayendra, IIMT College of Pharmacy, Greater Noida Plot No. 19 & 20, Knowledge Park-III Greater Noida,, India;PRIYANSHA, Department of pharmacy Prasad institute of technology Jaunpur,, India;SINGH, Alok Pratap, SRM Modinagar college of Pharmacy, SRM institute of science and technology, Delhi NCR campus, Delhi- Meerut road Modinagar,, India;SINGH, Manish Kumar, Department of pharmacy Hygiya institute of pharmaceutical education Research Aktu Lucknow,, India;TIWARI, Ruchi, Pranveer Singh Institute of technology (PHARMACY) Kalpi Road, Bhauti Kanpur, India ~72: GUPTA, Ajay;KUMAR, Jayendra;PRIYANSHA;SINGH, Alok Pratap;SINGH, Manish Kumar;TIWARI, Ruchi~

2022/02973 ~ Complete ~54:METHOD FOR DETERMINING A MEASURE CORRELATED TO THE PROBABILITY THAT TWO MUTATED SEQUENCE READS DERIVE FROM THE SAME SEQUENCE COMPRISING MUTATIONS ~71:LONGAS TECHNOLOGIES PTY LTD, Level 3, 56 Pitt Street, Sydney, Australia ~72: DARLING, Aaron Earl~ 33:GB ~31:1914064.9 ~32:30/09/2019

2022/02977 ~ Complete ~54:METAL SHEET TREATMENT METHOD AND METAL SHEET TREATED WITH THIS METHOD ~71:ARCELORMITTAL, 24-26, Boulevard d'Avranches, Luxembourg ~72: Christian ALLELY;Delphine THAÏ;Frida GILBERT;Lydia RACHIELE~ 33:IB ~31:PCT/IB2020/059548 ~32:16/10/2019

2022/02994 ~ Complete ~54:METHODS OF GENERATING AND ISOLATING MIDBRAIN DOPAMINE NEURONS ~71:Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, NEW YORK 10065, NY, USA, United States of America ~72: IRION, Stefan;KIM, Taewan;KOO, So Yeon;STUDER, Lorenz~ 33:US ~31:62/893,674 ~32:29/08/2019

2022/02962 ~ Complete ~54:METHOD FOR IDENTIFYING DROUGHT RESISTANCE AND WATER SAVING OF CROP VARIETIES ~71:Dryland Farming Institute, Hebei Academy of Agricultural and Forestry Science, 1966 Shengli East Road, Hengshui City, Hebei Province, 053000, People's Republic of China ~72: Chen Chaoyang;Li Lei;Liu Binhui;Wang Bianyin;Zhang Wenying~

2022/02985 ~ Complete ~54:AGENT FOR INDUCTION OF SPECIFIC IMMUNITY AGAINST SEVERE ACUTE RESPIRATORY SYNDROME CORONAVIRUS (SARS-COV-2) IN LYOPHILIZED FORM (VERSIONS) ~71:FEDERAL STATE BUDGETARY INSTITUTION "NATIONAL RESEARCH CENTRE FOR EPIDEMIOLOGY AND MICROBIOLOGY NAMED AFTER THE HONORARY ACADEMICIAN N.F. GAMALEYA" OF THE MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION, ul. Gamalei 18, Moscow, 123098, Russian Federation ~72: ALEKSANDR LEONIDOVICH GINTSBURG;ALEKSANDR SERGEEVICH SEMIKHIN;ALINA SERGEEVNA EROXOVA;ALINA SHAHMIROVNA DZHARULLAEVA;AMIR ILDAROVICH TUKHVATULIN;ANDREI GENNADEVICH BOTIKOV;BORIS SAVELIEVICH NARODITSKY;DARIA MIKHAILOVNA GROUSOVA;DENIS YURYEVICH LOGUNOV;DMITRII NIKOLAEVICH SHCHERBININ;DMITRII VIKTOROVICH SHCHEBLIAKOV;ELIZAVETA ALEXANDROVNA TOKARSKAYA;FATIMA MAGOMETOVNA IZHAEVA;ILIAS BULATOVICH ESMAGAMBETOV;INNA VADIMOVNA DOLZHIKOVA;NADEZHDA LEONIDOVNA LUBENETS;NATALIA MIKHAILOVNA TUKHVATULINA;NATALYA ANATOLEVNA NIKITENKO;OLGA POPOVA;OLGA VADIMOVNA ZUBKOVA;SERGEY VLADIMIROVICH BORISEVICH;TATIANA ANDREEVNA OZHAROVSKAIA~ 33:RU ~31:2021103101 ~32:10/02/2021

2022/02993 ~ Complete ~54:USE OF A FUEL OIL WASH TO REMOVE CATALYST FROM A FLUIDIZED-BED PROPANE DEHYDROGENATION REACTOR EFFLUENT ~71:Kellogg Brown & Root LLC, 601 Jefferson Avenue, HOUSTON 77002 , TX, USA, United States of America ~72: CATON, Jeffrey Donald;REYNEKE, Rian;URQUIAGA, Jose Manuel;VU, Truc~ 33:US ~31:16/570,029 ~32:13/09/2019

2022/02996 ~ Complete ~54:INTERLEUKIN-2 MUTEINS FOR THE EXPANSION OF T-REGULATORY CELLS ~71:Amgen Inc., One Amgen Center Drive, THOUSAND OAKS 91320-1799, CA, USA, United States of America ~72: BATES, Darren L.;CATTERALL, Hannah;SOHN, Sue J.;WANG, Zhulun~ 33:US ~31:62/886,283 ~32:13/08/2019

2022/02955 ~ Complete ~54:HORIZONTAL ANGLE MEASURING TOOL IN THE FIELD OF STEEL STRUCTURE ENGINEERING ~71:CONSON CSSC(Qingdao) Ocean Technology Co., Ltd., Conson Marine Entrepreneurial Base Qingdao Blue Silicon Valley Core Area, Jimo District, Qingdao City, Shandong Province, People's Republic of China;Chongqing Jiaotong University, No 66 Xuefu Road, Nan’an District, Chongqing, People's Republic of China;Chongqing Technology and Business Institute, No. 1, Hualong Avenue, Jiulong Science Park, Jiulongpo District, Chongqing, People's Republic of China;Plan Approval Department, Qingdao Branch China Classification Society, Room 1606 Qingdao International Shipping Center, No.66, Lianyungang Road, Qingdao City, Shandong Province, People's Republic of China;Yantai Shunjie Marine Safety&Technical Advisory Development Company, No.2 Yanfu Road, Zhifu District, Yantai City, Shandong Province, People's Republic of China ~72: CHENG Pingjie;JIANG Shanchao;LI Meidan;LIU Gongwei;SUN Yonggan;WANG Qiao~

2022/02968 ~ Complete ~54:SANITISATION AND DATA COLLECTION UNIT ~71:SIHLONGONYANE, Nokuthula Ntombenhle Pretty-girl, 40 Broadway Street, South Africa ~72: SIHLONGONYANE, Nokuthula Ntombenhle Pretty-girl~ 33:ZA ~31:2020/03490 ~32:11/12/2020

2022/02972 ~ Complete ~54:METHOD OF TESTTING INHIBITORY EFFECT OF CARBON DIOXIDE ON SPOILAGE CAUSING ABILITY OF SHEWANELLA PUTREFACIENS ~71:SHANGHAI OCEAN UNIVERSITY, No. 999 Hucheng Ring Rd, Lingang New Town, Pudong New District, People's Republic of China ~72: CHEN, Yueming;LI, Peiyun;WANG, Jinfeng;XIE, Jing~

2022/02976 ~ Complete ~54:METHOD AND DEVICE FOR SYNTHESIS OF DIAMOND AND ALL OTHER ALLOTROPIC FORMS OF CARBON BY LIQUID PHASE SYNTHESIS ~71:DIAROTECH SA, Rue du Rabiseau 19, Belgium ~72: BALTHASART, Etienne;TELLEZ OLIVA, Horacio J.~ 33:BE ~31:BE2019/5605 ~32:11/09/2019

2022/02979 ~ Complete ~54:AUTOMATIC ANALYSIS DEVICE ~71:HITACHI HIGH-TECH CORPORATION, 17-1, Toranomon 1-chome, Minato-ku, Tokyo, 1056409, Japan ~72: MIYUKI SUGINO;YOSHIAKI SAITO~ 33:JP ~31:2019-185620 ~32:09/10/2019

2022/02934 ~ Provisional ~54:EXTRACTS OF SACCHARIDES FROM UVARIA BREVISTIPITATA DE WILD ~71:CREPPAT LABORATORIES PROPRIETARY LIMITED, 80 Frere Road, VINCENT, East London 5247, SOUTH AFRICA, South Africa ~72: BASHENGEZI, Constantin Mihigo Ighanz Kulimushi~

2022/02941 ~ Complete ~54:METHOD FOR EVALUATING UNIFORMITY OF FRUITS OF FRUIT-BEARING VEGETABLES ~71:National Vegetable Quality Standard Center, 200m south of the intersection, east of the Road Intersection of Wensheng East Street and Mihe West Dam, Shouguang City, Shandong Province, 262700, People's Republic of China;Shandong Colorful Manor Vegetable And Food Co.,Ltd, 8th Floor, Block A, Vegetable Building, No. 9 Haoyuan Road, Luocheng Street, Shouguang City, Shandong Province, 262700, People's Republic of China;Weifang University of Science and Technology, No. 1299, Jinguang Street, Shouguang City, Shandong Province, 262700, People's Republic of China ~72: DING, Junyang;HU, Yongjun;LIN, Guiyu;LV, Jinfu;SUN, Ming;TIAN, Subo;WANG, Kunting;WEI, Hong;XIA, Haibo~

2022/02945 ~ Complete ~54:CONSTRUCTION METHOD OF A COMPREHENSIVE PROTECTION SYSTEM FOR URBAN DESERTIFICATION CONTROL IN SAND AREAS ~71:Xinjiang Institute of Ecology and Geography , Chinese Academy of Sciences, No.818, South Beijing Road, Urumqi, Xinjiang Uygur Autonomous Region, People's Republic of China ~72: WANG Yongdong;YOU Yuan;ZHOU Na~

2022/02950 ~ Complete ~54:METHOD FOR CULTIVATING ROOT-KNOT NEMATODE RESISTANT TOMATO SEEDLING ~71:National Vegetable Quality Standard Center, 200m south of the intersection, east of the Road Intersection of Wensheng East Street and Mihe West Dam, Shouguang City, Shandong Province, 262700, People's Republic of China;Shandong Vegetable Engineering Technology Research Center Co., Ltd., (in the courtyard of Shouguang Vegetable Seed Industry Group) West of Beishunhe Road, Shengcheng East Street, Shouguang City, Shandong Province, 262700, People's Republic of China;Weifang University of Science and Technology, No. 1299, Jinguang Street, Shouguang City, Shandong Province, 262700, People's Republic of China ~72: HU, Yongjun;LI, Jintang;LIN, Guiyu;TIAN, Subo;WANG, Guanjie;WANG, Kunting;WANG, Laifang;WANG, Lei~

2022/02952 ~ Complete ~54:A WEARABLE ROBOTIC HAND STAND TO IMPROVE ELDERLY COGNITIVE HEALTH MANAGEMENT ~71:Dr. Ajay Singh Kushwah, Associate Professor and HOD Pharmacology, Amar Shaheed Baba Ajit Singh Jujhar Singh Memorial College of Pharmacy, Bela, Ropar, Punjab, 140111, India;Dr. Rahul Kumar Sharma, Assistant Professor, Amar Shaheed Baba Ajit Singh Jujhar Singh Memorial College of Pharmacy, Bela, Ropar, Punjab, 140111, India;Dr. Ravinder Pal Singh, Professor & Principal , NIMS Institute of Pharmacy, NIMS University, Jaipur, Rajasthan, 303121, India;Dr. Shailej kumar Dalu Bonde, Assistant Professor, Govindrao Nikam College of Pharmacy, Sawarde, Ratnagiri, Maharashtra, 415606, India;Renu Malik, Assistant Professor , Baba Mastnath University, Asthal Bohar, Rohtak, Haryana, 124021, India;Roopal Mittal, Assistant Professor, R.K.S.D. College of Pharmacy, Kaithal , Haryana, 136027, India;Ruchika Garg, Assistant Professor, Department of Pharmacology, Maharaja Agrasen School of Pharmacy, Maharaja Agrasen University, Baddi, Himachal Pradesh , 174103, India ~72: Dr. Ajay Singh Kushwah;Dr. Rahul Kumar Sharma;Dr. Ravinder Pal Singh;Dr. Shailej kumar Dalu Bonde;Renu Malik;Roopal Mittal;Ruchika Garg~

2022/02959 ~ Complete ~54:HUMAN-DERIVED MOLECULARLY MODIFIED MIMIC BT CRY INSECTICIDAL PROTEIN, ENCODING GENE, AND DESIGN METHOD AND APPLICATION THEREOF ~71:Jiangsu Academy of Agricultural Sciences, 50 Zhongling Street, Xuanwu District, Nanjing, Jiangsu, 210000, People's Republic of China ~72: GAO, Meijing;HE, Xin;HU, Xiaodan;LIN, Manman;LIU, Xianjin;LIU, Yuan;LU, Lina;XIE, Yajing;XU, Chongxin;ZHANG, Cunzheng;ZHANG, Xiao;ZHU, Qing~

2022/02963 ~ Complete ~54:LIQUID-LIQUID EXTRACTION UNIT AND MULTISTAGE LIQUID-LIQUID EXTRACTION APPARATUS USING THE SAME ~71:SHIN-ETSU CHEMICAL CO., LTD., 4-1, Marunouchi 1-chome, Japan ~72: SUGAHARA, Hiroto~ 33:JP ~31:2021-049326 ~32:24/03/2021

2022/02965 ~ Complete ~54:A PROCESS FOR PREPARATION OF A UREA DERIVATIVE ~71:Adama Agan Ltd., PO Box 262, Northern Industrial Zone, ASHDOD 7710001, ISRAEL, Israel ~72: COHEN, Carmen;NIEGO, Jack~

2022/02986 ~ Complete ~54:AGENT FOR INDUCTION OF SPECIFIC IMMUNITY AGAINST SEVERE ACUTE RESPIRATORY SYNDROME CORONAVIRUS (SARS-COV-2) IN LIQUID FORM (VERSIONS) ~71:FEDERAL STATE BUDGETARY INSTITUTION "NATIONAL RESEARCH CENTRE FOR EPIDEMIOLOGY AND MICROBIOLOGY NAMED AFTER THE HONORARY ACADEMICIAN N.F. GAMALEYA" OF THE MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION, ul. Gamalei 18, Moscow, 123098, Russian Federation ~72: ALEKSANDR LEONIDOVICH GINTSBURG;ALEKSANDR SERGEEVICH SEMIKHIN;ALINA SERGEEVNA EROXOVA;ALINA SHAHMIROVNA DZHARULLAEVA;AMIR ILDAROVICH TUKHVATULIN;ANDREI GENNADEVICH BOTIKOV;BORIS SAVELIEVICH NARODITSKY;DARIA MIKHAILOVNA GROUSOVA;DENIS YURYEVICH LOGUNOV;DMITRII NIKOLAEVICH SHCHERBININ;DMITRII VIKTOROVICH SHCHEBLIAKOV;ELIZAVETA ALEXANDROVNA TOKARSKAYA;FATIMA MAGOMETOVNA IZHAEVA;ILIAS BULATOVICH ESMAGAMBETOV;INNA VADIMOVNA DOLZHIKOVA;NADEZHDA LEONIDOVNA LUBENETS;NATALIA MIKHAILOVNA TUKHVATULINA;NATALYA ANATOLEVNA NIKITENKO;OLGA POPOVA;OLGA VADIMOVNA ZUBKOVA;SERGEY VLADIMIROVICH BORISEVICH;TATIANA ANDREEVNA OZHAROVSKAIA~ 33:RU ~31:2021103099 ~32:09/02/2021

2022/02990 ~ Complete ~54:AUGER FOR GRINDING POLYURETHANE FOR A TIRE FILLING MACHINE ~71:Carlisle Construction Materials, LLC, 1555 Ritner Highway, CARLISLE 17013, PA, USA, United States of America ~72: BISHOP, John;LITTLE, Jeff~ 33:US ~31:62/899,925 ~32:13/09/2019

2022/02948 ~ Complete ~54:CULTIVATION METHOD FOR CONTROLLING TOMATO YELLOW LEAF CURL VIRUS ~71:Shandong Shouguang Vegetable Industry Group Co.,Ltd., No. 9 Haoyuan Road, Luocheng Street, Shouguang City, Shandong Province, 262700, People's Republic of China;Weifang University, No. 5147, Dongfeng East Street, High-tech Development Zone, Weifang City, Shandong, 261012, People's Republic of China;Weifang University of Science and Technology, No. 1299, Jinguang Street, Shouguang City, Shandong Province, 262700, People's Republic of China ~72: DING, Junyang;DING, Zhuo;GUO, Jiajin;SONG, Guoxiang;TIAN, Subo;WANG, Kaiyan;WEI, Hong;ZHAO, Haiyang;ZHAO, Jing~

2022/02953 ~ Complete ~54:PROTECTIVE DEVICE OF CONNECTOR PIN SOCKET ~71:ShanDong JiaoTong University, No. 5, Jiaoxiao Road, Tianqiao District, Jinan City, Shandong Province, 250023, People's Republic of China ~72: CUI, Wenchao;GU, Haiwen;QIAO, Changjian~ 33:CN ~31:202121405370.5 ~32:21/06/2021

2022/02957 ~ Complete ~54:AUTOMATIC PRESSURIZING DEVICE FOR RUBBER PERMANENT DEFORMATION TEST ~71:Xuzhou College of Industrial Technology, No.1, Xiangwang Road, Gulou District, Xuzhou City, Jiangsu Province, People's Republic of China ~72: Cong Houluo;Dai Xi;Li Peipei;Liu Feng;Sun Peng;Wang Yanqiu;Wang Zaixue;Wang Zhongguang;Xu Shuangyuan;Xu Yunhui;Yang Liu;Zang Yanan;Zhang Tongyu;Zhang Zhaohong;Zhao Guiying;Zhu Muwei~

2022/02961 ~ Complete ~54:ANALYSIS DEVICE FOR NETWORK BIG DATA ~71:Dezhou University, No. 566 university Rd. West, Decheng District, Dezhou City, Shandong Province , 253023, People's Republic of China ~72: GAO, Xiulian;GUO, Changyou;YIN, Xiuling~ 33:CN ~31:202110269659.7 ~32:12/03/2021

2022/02987 ~ Complete ~54:PULSE VALVE ~71:MAC VALVES, INC., 30569 Beck Road, P.O. Box 111, Wixom, Michigan 48393, United States of America ~72: JEFFREY SIMMONDS;KEVIN C WILLIAMS;MATTHEW NEFF;RAY JENKINS~ 33:US ~31:62/902,129 ~32:18/09/2019;33:US ~31:17/021,283 ~32:15/09/2020

2022/02991 ~ Complete ~54:LIPOPHILLICALLY DISPERSED PHENOLIC POLYMER PARTICLES ~71:Nanophase Technologies Corporation, 1319 Marquette Drive, ROMEOVILLE 60446 , IL, USA, United States of America ~72: BOFFA, Christopher C.;CURETON, Kevin;SARKAS, Harry W.~ 33:US ~31:16/570,944 ~32:13/09/2019

. - APPLIED ON 2022-03-14 -

2022/03016 ~ Complete ~54:COLLECTING DEVICE FOR SOIL GREENHOUSE GASES IN ALPINE MEADOW ECOSYSTEM ~71:Northwest Institute of Plateau Biology The Chinese Academy of Sciences, No. 23, Xinning Road, Chengxi District, Xining City, Qinghai Province, 810008, People's Republic of China ~72: DENG, Yanfang;GE, Shidong;GUO, Yingyi;HAN, Xueping;HU, Linyong;SAREN, Gaowa;XU, Shixiao;XU, Tianwei;YAO, Leiming;ZHAO, Liang;ZHAO, Na;ZHAO, Xinquan;ZHOU, Huakun~

2022/03024 ~ Complete ~54:LDPC CODING METHOD AND APPARATUS, AND BASE STATION AND READABLE STORAGE MEDIUM ~71:ZTE CORPORATION, ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, People's Republic of China ~72: CHEN, Yueqiang;ZHANG, Caihong~ 33:CN ~31:201910754120.3 ~32:15/08/2019

2022/03030 ~ Complete ~54:PYRAZOLE COMPOUNDS, FORMULATIONS THEREOF, AND A METHOD FOR USING THE COMPOUNDS AND/OR FORMULATIONS ~71:RIGEL PHARMACEUTICALS, INC., 1180 Veterans Boulevard, South San Francisco, California 94080, United States of America ~72: DAZHONG FAN;IHAB DARWISH;LU CHOU;MATT DUAN;SIMON SHAW;SOMASEKHAR BHAMIDIPATI;VANESSA TAYLOR;YAN CHEN;ZHUSHOU LUO~ 33:US ~31:62/894,547 ~32:30/08/2019

2022/03034 ~ Complete ~54:HIGH-STRENGTH STAINLESS STEEL ROTOR AND PREPARATION METHOD THEREOF ~71:CENTRAL IRON AND STEEL RESEARCH INSTITUTE, 76 Xueyuan South Road, Haidian District, Beijing, 100081, People's Republic of China ~72: LIANG, Jianxiong;LIU, Zhenbao;SUN, Yongqing;WANG, Changjun;WANG, Xiaohui;YANG, Zhiyong~ 33:CN ~31:202010357799.5 ~32:29/04/2020

2022/03036 ~ Complete ~54:A FREIGHT MOBILITY SYSTEM ~71:COGOS TECHNOLOGIES PVT. LTD, #38, 3rd Floor Kalyan Plaza, 33rd Cross, 9th Main, Jayanagar 4th Block, India ~72: KATTA, Rama Mohan;SREERAM, Durga Venkata Prasad~ 33:IN ~31:201941035832 ~32:16/09/2019

2022/03041 ~ Complete ~54:CH1 DOMAIN VARIANTS ENGINEERED FOR PREFERENTIAL LIGHT CHAIN PAIRING AND MULTISPECIFIC ANTIBODIES COMPRISING THE SAME ~71:Adimab, LLC, 7 Lucent Drive, LEBANON 03766, NH, USA, United States of America ~72: HELBLE, Michaela;KRAULAND, Eric;SCHUTZ, Kevin;SIVASUBRAMANIAN, Arvind;WIDBOOM, Paul~ 33:US ~31:62/908,367 ~32:30/09/2019

2022/03043 ~ Complete ~54:DEVICES, SYSTEMS, AND METHODS FOR WIRELESS DATA ACQUISITION DURING DRILLING OPERATIONS ~71:BLY IP INC., 2455 S. 3600 W., United States of America;GLOBAL TECH CORPORATION PTY LTD., Abn 18 087 281 418 Of 1/48 Vinnicombe Drive, Australia ~72: DRENTH, Christopher L.;HILL, Raymond;STEWART, Gordon;WILKINSON, Brett~ 33:US ~31:62/899,555 ~32:12/09/2019

2022/03045 ~ Complete ~54:ELECTRIC-POWERED CUTTING DEVICE FOR PRUNING ~71:ARS CORPORATION, 476-3 Handaiji-Cho, Naka-ku, Sakai City, Japan ~72: NII Hidetatsu~

2022/03047 ~ Provisional ~54:SAFETY MECHANISM (EMERGENCY BRAKE) FOR AUTO LIFT LADDER OR WINCH DRIVEN CHERRY PICKER ~71:PETRUS JOHANNES BREEDT, PLOT 23, DROOGEFONTEIN, ELOFF, South Africa ~72: PETRUS JOHANNES BREEDT ~

2022/03027 ~ Complete ~54:INHIBITORS OF RECEPTOR INTERACTING PROTEIN KINASE I FOR THE TREATMENT OF DISEASE ~71:BOARD OF REGENTS, THE UNIVERSITY OF TEXAS SYSTEM, 210 West 7th Street, United States of America ~72: ALVAREZ, Fernando;CROSS, Jason;HAMILTON, Matthew;LEWIS, Richard;PFAFFINGER, Dana;RAMASWAMY, Suyambu Kesava Vijayan;RAY, William;REYNA, Naphtali~ 33:US ~31:62/907,146 ~32:27/09/2019

2022/03032 ~ Complete ~54:COMPOSITIONS, SYSTEMS, AND METHODS FOR IDENTIFYING A COMPOUND THAT MODULATES ONE OR MORE CHARACTERISTICS ASSOCIATED WITH A RBM20 CONDENSATE AND/OR A RBM20 POLYPEPTIDE ~71:DEWPOINT THERAPEUTICS, INC., 451 D Street, Suite 104, Boston, Massachusetts, 02210, United States of America ~72: ANN D KWONG;AVINASH PATEL;BOŽENA KESIC;BRUCE AARON BEUTEL;JOHN C MANTEIGA;JUWINA WIJAYA;MARK ANDREW MURCKO;PETER JEFFREY DANDLIKER;STEPHEN PAUL HALE~ 33:US ~31:62/902,309 ~32:18/09/2019;33:US ~31:63/074,985 ~32:04/09/2020

2022/03035 ~ Complete ~54:A GRENADE LAUNCHER ~71:NORSMAK MAKINA VE KALIP SAN. TIC. LTD. STI., Ramazanoglu Mah. Zengin Cad. No:4/1 Pendik, Istanbul, Turkey ~72: Senol Ozcan~ 33:TR ~31:2019/22526 ~32:30/12/2019

2022/03037 ~ Complete ~54:TARGETED APPLICATION OF DEEP LEARNING TO AUTOMATED VISUAL INSPECTION EQUIPMENT ~71:Amgen Inc., One Amgen Center Drive, THOUSAND OAKS 91320-1799, CA, USA, United States of America ~72: ALVARADO RENTAS, Roberto C.;CHAVALI, Neelima;FLORES-ACOSTA, Eric R.;PEARSON, Thomas C.;PEREZ, Osvaldo;RODRIGUEZ-TOLEDO, Sandra;SOTO, Manuel A.;TAPIA, Javier O.;TORRES, Brenda A.;TORRES, Jorge Delgado~ 33:US ~31:62/932,413 ~32:07/11/2019;33:US ~31:62/949,667 ~32:18/12/2019

2022/03042 ~ Complete ~54:PIEZOELECTRIC MOTOR ~71:TAURUS TECHNOLOGIES HOLDINGS, INC., 20 Red Haven Drive, Unit 11, Grimsby, Canada ~72: MAGNUSSON, Marta;MAGNUSSON, Stefan~ 33:US ~31:16/941,477 ~32:28/07/2020

2022/03046 ~ Provisional ~54:AUTO LIFT LADDER ~71:PETRUS JOHANNES BREEDT, PLOT 23, DROOGEFONTEIN, ELOFF, South Africa ~72: PETRUS JOHANNES BREEDT ~

2022/03004 ~ Provisional ~54:ROLL-ON APPLICATOR BALL ~71:Mpact Limited, 4th Floor, No. 3 Melrose Boulevard, South Africa ~72: JONES, Graeme Edward Hulme~

2022/03051 ~ Complete ~54:PROCESSING METHOD OF FRESH-EATING CHINESE CHESTNUTS ~71:HEBEI NORMAL UNIVERSITY OF SCIENCE & TECHNOLOGY, NO. 360 WEST SECTION OF HEBEI STREET, HAIGANG DISTRICT, People's Republic of China ~72: ZHAO, Yuhua~

2022/03003 ~ Provisional ~54:SPIRAL BUDDY CLIP ~71:Nico van Wyk, Nico van Wyk, South Africa ~72: Nico van Wyk~

2022/03005 ~ Provisional ~54:RESTRAINT FOR AN ELECTRICAL TRANSFORMER ~71:CMC DESIGN AND MANUFACTURERS (PTY) LTD., 27 Waterval Road, Kliprivier, 1871, South Africa ~72: CRAIG ROBERT MC CHLERY~

2022/03008 ~ Complete ~54:CONSTRUCTION METHOD OF BUILDING COMPLEX MECHANICAL DISMANTLING AND APPLICATION THEREOF ~71:Qingdao Baoli Construction Co., Ltd., No. 1502, 15th Floor, Building 3, No. 666, Jiangshan South Road, Economic and Technological Development Zone, Qingdao City, Shandong Province, People's Republic of China ~72: GUO, Qiuyu;LI, Yongfu;LIU, Chengliang;LIU, Guangyao;LIU, Zuowei;LU, Chen;ShI, Jili;ZHU, Tianle~ 33:CN ~31:202111149723.4 ~32:29/09/2021

2022/03014 ~ Complete ~54:AUXILIARY POWER SUPPLY DEVICE OF INTELLIGENT SENSING SYSTEM IN DIGITAL TWIN ROADHEADER ~71:Anhui University of Science&Technology, No.168 Taifeng Street, Tianjia'an District, Huainan City, Anhui Province, 232000, People's Republic of China;Kaisheng Heavy Industry Co.,Ltd., No.18 Chaoyang East Road, Economic and Technological Development Zone, Huainan City, Anhui Province, 232000, People's Republic of China ~72: Du Fei;Liang Xiuyun;Luo Songsong;Lyu Yinghui;Ma Tianbing;Sun Duohui;Wang Xin;Xu Tongle;Yang Kai;Zhang Zhihao~

2022/03019 ~ Complete ~54:LURE FOR TRAPPING LYONETIA CLERKELLA L.MOTHS AND TRAPPING METHOD ~71:Hangzhou Raw Seed Growing Farm, Xi’ansi Village, Pingyao Town, Yuhang District, Hangzhou City, Zhejiang Province, 311115, People's Republic of China;Pherobio Technology Co., Ltd., No.2 Courtyard, 59A, No 17 Huanke Mid Rd., Tongzhou District, Beijing, 101102, People's Republic of China;Zhejiang A and F University, No. 666 Wusu Street, Lin'an District, Hangzhou City, Zhejiang Province, 311300, People's Republic of China ~72: CHU, Sijie;DENG, Jianyu;FANG, Minghua;LAN, Chenyihang;LI, Yonghu;LIU, Tao;SUN, Yuan;WANG, Lin;WO, Linfeng;ZHOU, Guoxin~

2022/03025 ~ Complete ~54:ESTROGEN-RELATED RECEPTOR ALPHA (ERRA) MODULATORS ~71:LEAD PHARMA HOLDING B.V, Kloosterstraat 9 RK, AB Oss, Netherlands ~72: CALS, Joseph, Maria Gerardus;DERETEY, Eugen;KLOMP, Johannes, Petrus, Gerardus;LEMMERS, Jaap, Gerardus, Henricus;OUBRIE, Arthur~ 33:EP ~31:19204189.5 ~32:18/10/2019

2022/03010 ~ Complete ~54:AUTOMATIC CONTROL SYSTEM FOR INDUSTRIAL WASTEWATER TREATMENT ~71:Hangzhou Normal University Qianjiang College, No.16 Xuelin Road, Qiantang District, of Hangzhou city, Zhejiang Province, People's Republic of China ~72: Jiang Xia;Li Weidong;Liu Qi;Sun Yan;Yang Huayun~

2022/03015 ~ Complete ~54:SIMPLE CALCULATION METHOD OF RAW MATERIAL CONSUMPTION QUOTA IN RUBBER FORMULA ~71:Xuzhou College of Industrial Technology, No.1, Xiangwang Road, Gulou District, Xuzhou City, Jiangsu Province, People's Republic of China ~72: Cong Houluo;Dai Xi;Li Peipei;Liu Feng;Song Shuaishuai;Sun Peng;Wang Yanqiu;Wang Zaixue;Wang Zhongguang;Xu Shuangyuan;Xu Yunhui;Yang Liu;Zang Yanan;Zhang Tongyu;Zhang Zhaohong;Zhao Guiying;Zhu Muwei~

2022/03018 ~ Complete ~54:DUAL-CHANNEL NUCLEIC ACID DETECTION LABORATORY FOR HIGH AND LOW-RISK PATHOGENIC MICROORGANISMS ~71:The First People's Hospital Of Chongqing Liang Jiang New Area, No.199, Renxing Road, Renhe Street, Yubei District, Chongqing, 401121, People's Republic of China ~72: Liyi Hu~ 33:CN ~31:202110915195.2 ~32:10/08/2021

2022/03023 ~ Complete ~54:METHOD AND ELECTRONIC DEVICE FOR HANDLING UNUSUAL EVENT IN CONTENT ~71:Dr. Harivans Pratap SINGH, 200, Shivpuri Sadar Bazaar, Idgah Road, Pratapgarh, India;Dr. Munesh Chandra TRIVEDI, Department of Computer Science Engineering, National Institute of Technology, Agartala, India;Mr. Shriansh Pratap SINGH, 200, Shivpuri Sadar Bazaar, Idgah Road, Pratapgarh, India;Mr. Vedansh TRIVEDI, 1/189, Chiranjeev Vihar, Ghaziabad, India;Ms. Adhya TRIVEDI, 1/189, Chiranjeev Vihar,

Ghaziabad, India;Prof. Shiv Singh SARANGDEVOT, Vice Chancellor, JRN Rajasthan Vidyapeeth Deemed University, Udaipur, India ~72: Dr. Harivans Pratap SINGH;Dr. Munesh Chandra TRIVEDI;Mr. Shriansh Pratap SINGH;Mr. Vedansh TRIVEDI;Ms. Adhya TRIVEDI;Prof. Shiv Singh SARANGDEVOT~ 33:IN ~31:202211009009 ~32:21/02/2022

2022/03040 ~ Complete ~54:A CONTROL SYSTEM AND METHOD OF CONTROLLING TOWED MARINE OBJECT ~71:Karmøy Winch AS, Bygnesveien 30, KOPERVIK 4250, NORWAY, Norway ~72: HYSTAD, Magne~ 33:NO ~31:20191019 ~32:23/08/2019

2022/03044 ~ Complete ~54:ELECTROSURGICAL APPARATUS FOR TREATING BIOLOGICAL TISSUE WITH MICROWAVE ENERGY ~71:CREO MEDICAL LTD, Creo House, Unit 2, Beaufort Park, Beaufort Park Way, United Kingdom ~72: HANCOCK, Christopher Paul~ 33:GB ~31:1913330.5 ~32:16/09/2019

2022/03011 ~ Complete ~54:PREPARATION METHOD AND APPLICATION OF A DUAL ROD-SPHERICAL NANOSTRUCTURE REINFORCED COLD-WATER FISH GELATIN BASED EDIBLE FILM ~71:Qingdao Agricultural University, Chengyang District, Qingdao City, Shandong Province, 266109, People's Republic of China ~72: Chen Chengwang;Chen Ning;Cheng Xiaofang;Jiang Wenli;Kang Mengchen;Li Zhenru;Qu Zhongfeng;Xue Changhui;Yang Shuo;Zhang Shuangling~ 33:CN ~31:202111231040.3 ~32:22/10/2021

2022/03013 ~ Complete ~54:PLATE COATING MODULE AND PLATE COATING DEVICE ~71:Northwest A&F University, No.3 Taicheng Road, Yangling, Xianyang, Shaanxi, 712100, People's Republic of China ~72: Chen Jiarun;Dong Jincheng;Dong Yunfei;Kou Xiaoxi;Ma Yujuan;Qiang Hongli;Wang Donghan;Zhang Furui~

2022/03052 ~ Complete ~54:INTERNAL AMPLIFICATION CONTROL AND DETECTION METHOD OF MULTIPLE PCR OF BACTERIA ~71:HEDONG DISTRICT ANIMAL HUSBANDRY DEVELOPMENT PROMOTION CENTER, GOVERNMENT AFFAIRS BUILDING, NO. 1 LIGONG STREET, HEDONG DISTRICT, LINYI, People's Republic of China;LINYI ANIMAL HUSBANDRY DEVELOPMENT PROMOTION CENTER, NO. 11, BEIJING ROAD, BEICHENG NEW DISTRICT, LINYI, People's Republic of China;MENGYIN COUNTY ANIMAL HUSBANDRY DEVELOPMENT PROMOTION CENTER, NO. 68 MENGTIAN ROAD, MENGYIN COUNTY, LINYI, People's Republic of China;PINGYI COUNTY ANIMAL HUSBANDRY DEVELOPMENT PROMOTION CENTER, 8TH FLOOR, LINSHANG BANK, FENGSHAN ROAD, PINGYI COUNTY, LINYI, People's Republic of China;SHANDONG ANIMAL PRODUCTS QUALITY AND SAFETY CENTER, NO. 4566 TANGYE WEST ROAD, JINAN, People's Republic of China ~72: BO, Yongheng;FENG, Yiqiang;FU, Zhenyuan;GONG, Jingjing;LI, Guihua;LI, Wei;LIU, Qiang;MAO, Lei;NI, Xiao;YANG, Lin;ZHANG, Guiping;ZHAO, Fenghua;ZHAO, Hongyu;ZHAO, Jiyan~

2022/03007 ~ Provisional ~54:THE GENERAL AND SPECIAL CASE OF ORGANIC QUANTUM ELECTRODYNAMIC PHOTODISSOCIATION (OQEPD) AND SUPERCONDUCTING LINEAR OSCILLATING PHOTODISSOCIATION EFFECT (SLOPE) ~71:DEFRIES, Anthony, 2 Northcliff Manor, 12 Waugh Avenue, Northcliff, South Africa ~72: DEFRIES, Anthony~

2022/03009 ~ Complete ~54:METHOD FOR DETERMINING VECTORS OF SUGARCANE WHITE LEAF PHYTOPLASMAS ~71:Biotechnology and Germplasm Resources Institute, Yunnan Academy of Agricultural Sciences., No. 2238, Beijing Road, Kunming, Yunnan Province, 650000, People's Republic of China;Sugarcane Research Institute, Yunnan Academy of Agricultural Sciences, No. 363, Eastern Lingquan Road, Kaiyuan, Yunnan Province, 661600, People's Republic of China ~72: Huang Yingkun;Li Jie;Li Wenfeng;Li Yinhu;Lu Wenjie;Shan Hongli;Wang Xiaoyan;Zhang Rongyue~

2022/03012 ~ Complete ~54:PREDICTION AND FORECAST METHOD FOR KARST GROUND COLLAPSE BASED ON KARST WATER DYNAMICS ~71:Shandong University of Science and Technology, No. 579, Qianwangang Road, Huangdao District, Qingdao City, Shandong Province, 266590, People's Republic of China

~72: CHEN, Qiao;DENG, Qinghai;FENG, Jianguo;GAO, Zongjun;TIAN, Hong;WANG, Min;XIA, Lu;ZHANG, Chunrong~

2022/03022 ~ Complete ~54:PROCESSING METHOD FOR INHIBITING RECRYSTALLIZATION OF ALUMINUM LITHIUM ALLOY ~71:CHONGQING UNIVERSITY OF ARTS AND SCIENCES, Shuangzhu Town, Yongchuan District, People's Republic of China ~72: HUANG, Weijiu;WANG, Xin;YANG, Xusheng;ZHU, Xianghui~

2022/03017 ~ Complete ~54:SIMULATION TRAINING APPARATUS FOR SKATING ~71:Beihua University, No. 3999 Binjiang East Road, Jilin City, Jilin Province , 132013, People's Republic of China ~72: GAN, Xinji;XING, Zhongyuan;ZHOU, Xiaolong~ 33:CN ~31:202110701287.0 ~32:24/06/2021

2022/03020 ~ Complete ~54:CUTTING DUST PRODUCTION EXPERIMENT SYSTEM AND CUTTING DUST PRODUCTION MONITORING METHOD THEREOF ~71:Anhui University of Science and Technology, 168 Taifeng street, Huainan city, People's Republic of China ~72: CHEN, Qinghua;HU, Zuxiang;JIANG, Bingyou;LIN, Hanyi;QIU, Jinwei;SU, Mingqing;TANG, Mingyun;WANG, Xiaohan;YUAN, Liang;ZHENG, Yuannan;ZHOU, Liang~

2022/03031 ~ Complete ~54:METHODS OF IMPROVING SEED SIZE AND QUALITY ~71:INSTITUTE OF GENETICS AND DEVELOPMENTAL BIOLOGY CHINESE ACADEMY OF SCIENCES, No. 1 West Beichen Road, Chaoyang District, Beijing, 100101, People's Republic of China ~72: SHAN JIANG;XIMING JIN;YUNHAI LI~ 33:CN ~31:PCT/CN2019/104566 ~32:05/09/2019

2022/03039 ~ Complete ~54:IONIZABLE LIPIDS AND NANOPARTICLE COMPOSITIONS THEREOF ~71:Generation Bio Co., 301 Binney Street, 4th Floor, CAMBRIDGE 02142, MA, USA, United States of America ~72: CHATTERTON, Jon Edward;FEINSTEIN, Gregory;LEBLANC, Michelle;NOLTING, Birte;STANTON, Matthew G.~ 33:US ~31:62/939,326 ~32:22/11/2019;33:US ~31:63/026,493 ~32:18/05/2020

2022/03117 ~ Provisional ~54:GENERATOR THAT DOES NOT RUN ON BIOFUELS ~71:Mr Pragasan Gopaul, 6 Magson Heights, 30 Kanarie Road, Lenasia South Ext1,, South Africa ~72: Mr Pragasan Gopaul~

2022/03021 ~ Complete ~54:USE OF INVERSIN (INVS) PROTEIN IN PREPARATION OF MEDICAMENT FOR REPAIRING SERTOLI CELL INJURY IN TESTES ~71:The Second Affiliated Hospital and Yuying Children’s Hospital of Wenzhou Medical University, 109 Xueyuan Western Road, Wenzhou City, People's Republic of China ~72: CAO, Shuyan;CHU, Jinjin;GE, Renxhan;LI, Linxi;LI, Xiaoheng;LV, Lixiu;WANG, Yiyan;WU, Ying~ 33:CN ~31:202111484219.X ~32:07/12/2021

2022/03026 ~ Complete ~54:AN X-RAY DIGITAL TOMOSYNTHESIS SYSTEM AND METHOD ~71:ADAPTIX LIMITED, BEGBROKE SCIENCE PARK, CENTRE FOR INNOVATION AND ENTERPRISE (CIE), WOODSTOCK ROAD, BEGBROKE, OXFORDSHIRE OX5 1PF, UNITED KINGDOM, United Kingdom ~72: SCHMIEDEHAUSEN, Kristin;WELLS, Steve~ 33:GB ~31:1913166.3 ~32:12/09/2019

2022/03028 ~ Complete ~54:A PRESS HARDENING METHOD ~71:ARCELORMITTAL, 24-26, Boulevard d'Avranches, Luxembourg ~72: Brahim NABI;Florin DUMINICA;Pascal DRILLET;Raisa GRIGORIEVA;Thierry STUREL~ 33:IB ~31:PCT/IB2019/059286 ~32:30/10/2019

2022/03029 ~ Complete ~54:TAPE DISPENSER ~71:MIJOVY (PTY) LIMITED, 7 Bamboo Street, Primrose, South Africa ~72: MARTHINUS JOHANNES VAN DER VYVER~ 33:ZA ~31:2019/06119 ~32:17/09/2019

2022/03033 ~ Complete ~54:SILOXANE DERIVATIVES OF AMINO ACIDS HAVING SURFACE-ACTIVE PROPERTIES ~71:ADVANSIX RESINS & CHEMICALS LLC, 300 Kimball Drive, Suite 101, Parsippany, New Jersey, 07054, United States of America ~72: ANDREI HONCIUC;EDWARD ASIRVATHAM;VOICHITA MIHALI~ 33:US ~31:62/890,341 ~32:22/08/2019

2022/03038 ~ Complete ~54:STEAM BOILER LIQUID SEPARATOR AND METHOD FOR THE PRODUCTION THEREOF ~71:Westinghouse Electric Germany GmbH, Dudenstr. 6, MANNHEIM 68167, GERMANY, Germany ~72: KROES, Albertus;VANDAMME, François~ 33:DE ~31:10 2019 006 567.0 ~32:17/09/2019

2022/03006 ~ Provisional ~54:PROJECTILE TRAP ~71:LOOCK, Joshua, Brian, 54 GUINEA FOWL STREET, SILVER LAKES GOLF ESTATE, PRETORIA, 0081, SOUTH AFRICA, South Africa;MAGILL, Gary, Lionel, 359 HOLMDENE STREET, FAERIE GLEN, PRETORIA, 0081, South Africa ~72: MAGILL, Gary, Lionel~

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2022/03050 ~ Provisional ~54:MATRON MED PATIENT ADMINISTRATION AND BILLING SOLUTION ~71:Loyiso Sihiya, 15 Barbet Road, Yellowwood Park, South Africa ~72: Loyiso Sihiya~

2022/03059 ~ Complete ~54:METHOD FOR TESTING IRON LOSS OF PERMANENT MAGNET SYNCHRONOUS RELUCTANCE MOTOR ~71:Shenyang University of Technology, No. 111, Shenliao West Road, Economic and Technological Development Zone, Shenyang City, Liaoning Province, 110870, People's Republic of China ~72: CHEN, Jian;HAN, Xueyan;JIA, Jianguo;LI, Honghao;WANG, Jian;WANG, Shiwei~

2022/03063 ~ Complete ~54:APPLICATION OF HARMINE DERIVATIVE IN PREPARATION OF ANTI-HYDATID INSECTICIDES ~71:The First Affiliated Hospital of Xinjiang Medical University, No. 137, Liyushan Road, Urumqi, Xinjiang, 830011, People's Republic of China;Xinjiang Huashidan Pharmaceutical Co., Ltd., No. 169, Henan East Road, Xinshi District, Urumqi, Xinjiang Uygur Autonomous Region, 830000, People's Republic of China ~72: CHEN, Bei;FAN, Wenxi;GAO, Huijing;HUANG, Hui;MA, Liyun;MA, Qin;TENG, Liang;WANG, Jianhua;WEN, Hao;XU, Zhaohui;ZHAO, Jun~ 33:CN ~31:202111664926.7 ~32:31/12/2021

2022/03069 ~ Complete ~54:NITROGEN-DOPED CARBON-COATED MANGANESE SULFIDE COMPOSITE NEGATIVE ELECTRODE MATERIAL, AND PREPARATION METHOD AND APPLICATION THEREOF ~71:Dongguan University of Technology, No. 1 University Road, Songshan Lake Science and Technology Industrial Park, Dongguan City, Guangdong, 523808, People's Republic of China ~72: FU, Wei;LIN, Xiang;MIAO, Rongrong;XIE, Songheng;YANG, Yuhui;ZHU, Zijian~ 33:CN ~31:202111295316.4 ~32:03/11/2021

2022/03074 ~ Complete ~54:RESIDUE PRETREATMENT DEVICE FOR SEWAGE TREATMENT ~71:Liaoning Institute of Science and Technology, No.176, Xiang Huai Road, High & New Technology Industry Development Zone, Benxi city, Liaoning Province, 117004, People's Republic of China ~72: Changwei An;Danfeng Zhang;Jia Liu;Jingyu Li;Jun Zhang;Tong Liu;Xianqi Guan;Yiling Zhao~ 33:CN ~31:202210047489.2 ~32:17/01/2022

2022/03079 ~ Complete ~54:METHOD FOR REDUCING SPEED FLUCTUATION OF LINEAR FEED SYSTEM ~71:ANHUI UNIVERSITY OF SCIENCE AND TECHNOLOGY, NO. 168 TAIFENG STREET, People's Republic of China ~72: CHEN, Rui;PAN, Tong;QIN, Na;WANG, Zhaoguo;ZHANG, Xiwang~ 33:CN ~31:202111079429.0 ~32:15/09/2021

2022/03085 ~ Complete ~54:SYSTEM FOR TESTING THE ASEISMIC CAPACITY OF URBAN UNDERGROUND INTEGRATED PIPE RACK AND TESTING METHOD ~71:Hebei GEO University, No. 136 East Huai'an Road, Yuhua Distirict, Shijiazhuang , Hebei, 050031, People's Republic of China ~72: Jianming Li;Liang Yu;Muci Yue;Siru Zhang;Xiaohong Qu;Xingkuo Wang;Xiuling, Cao;Yunsheng Gao~ 33:CN ~31:202111465955.0 ~32:03/12/2021

2022/03094 ~ Complete ~54:A SYSTEM FOR WHOLE-BODY VIBRATION OF DOZER OPERATORS BASED ON POSTURAL VARIABILITY ~71:ARUNA, Mangalpady, Associate Professor, Department of Mining Engineering, NITK Surathkal, Srinivasnagar Post, Mangalore(D.K), India;KUMAR, Jeripotula Sandeep, Assistant

Professor, Department of Mechanical Engineering, Sree Dattha College of Engineering Sheriguda, Ibrahimpatnam, India ~72: ARUNA, Mangalpady;KUMAR, Jeripotula Sandeep~

2022/03118 ~ Provisional ~54:CRAZY BOX ~71:CRAZY BOND PAY LTD REG NO 2017/489143/07 T/A JOFFE SHEET METAL, 18-25 TH Ave Elsies-River,, South Africa ~72: MERLE PETERS~

2022/03119 ~ Provisional ~54:FREE UNLIMITED VOICE CALL SERVICE ~71:Ramotitswe Monageng, Thabakhubedu, 23 Mabopane,, South Africa ~72: Ramotitswe Monageng~

2022/03101 ~ Complete ~54:FRUIT AND VEGETABLE ENZYME FERMENTATION EQUIPMENT CAPABLE OF MAINTAINING BIOLOGICAL ACTIVITY ~71:SHANXI AGRICULTURAL UNIVERSITY SHANXI FUNCTIONAL FOOD RESEARCH INSTITUTE, East Yard, No.79 Longcheng Street, Taiyuan, Shanxi, 030031, People's Republic of China ~72: DING, Weiying;HAN, Jiming;LI, Qi;MAO, Kai;YANG, Chun;YE, Zheng;ZHANG, Jiangning;ZHANG, Ling~

2022/03105 ~ Complete ~54:SUSTAINED RELEASE FORMULATION CONTAINING ASPALATHUS LINEARIS EXTRACT ~71:CAPE PENINSULA UNIVERSITY OF TECHNOLOGY, Symphony Way (off Modderdam Road) Bellville, Cape Town, 7530, South Africa ~72: JEANINE LUCASTA VON METZINGER;JOHN HENRY NEETHLING;JOSIAS H HAMMAN;MARILIZE LE ROES-HILL~

2022/03109 ~ Complete ~54:REDUCED VOLUME FORMULATIONS INCLUDING AMINO ACID ENTITIES ~71:AXCELLA HEALTH INC., 840 Memorial Drive, 3rd Floor, Cambridge, Massachusetts, 02139, United States of America ~72: BENJAMIN FARINA;DANIEL ROTHENBERG;JASON LEGASSIE;RALPH YAMAMOTO;THOMAS HANLON;WEIJIA NIU~ 33:US ~31:62/913,515 ~32:10/10/2019;33:US ~31:62/913,524 ~32:10/10/2019

2022/03115 ~ Complete ~54:INTERNET-BASED TEACHING RESOURCE SHARING SYSTEM AND METHOD ~71:SHENZHEN QICHENG ZHIYUAN NETWORK TECHNOLOGY CO., LTD., ROOM 606, XINGHE BUILDING, NO. 100, SHANGXING CENTER ROAD, SHANGXING COMMUNITY, XINQIAO STREET, BAO'AN DISTRICT, People's Republic of China ~72: LI, Minbo;LI, Qundi;LI, Wen;LI, Xueyong;ZHOU, Chengtao~ 33:CN ~31:202110893773.7 ~32:05/08/2021

2022/03167 ~ Provisional ~54:CELEBRATE LIFE ~71:Dennis Cassim Mphoreng, 2179 Highveld park, South Africa ~72: Dennis Cassim Mphoreng~

2022/03166 ~ Provisional ~54:PAPERCARD ACTIVATED HANDSOAP DISPENSER ~71:GRUNYUZA MICHAEL, 504 RUSSELLS PLACE, SOPHIE DE BRYN, South Africa ~72: GRUNYUZA MICHAEL ~

2022/03057 ~ Complete ~54:INFLATABLE TIGHTNESS DEVICE FOR REPAIRING BOILER PIPELINE ~71:CONSON CSSC(Qingdao) Ocean Technology Co., Ltd., Conson Marine Entrepreneurial Base Qingdao Blue Silicon Valley Core Area, Jimo District, Qingdao City, Shandong Province, People's Republic of China;Chongqing Jiaotong University, No 66 Xuefu Road, Nan'an District, Chongqing, People's Republic of China;Chongqing Technology and Business Institute, No. 1, Hualong Avenue, Jiulong Science Park, Jiulongpo District, Chongqing, People's Republic of China;Plan Approval Department, Qingdao Branch China Classification Society, Room 1606 Qingdao International Shipping Center, No.66, Lianyungang Road, Qingdao City, Shandong Province, People's Republic of China;Yantai Shunjie Marine Safety&Technical Advisory Development Company, No.2 Yanfu Road, Zhifu District, Yantai City, Shandong Province, People's Republic of China ~72: CHENG Pingjie;DONG Xinqing;LI Meidan;LIU Gongwei;SUN Yonggan;WANG Qiao;YUAN Yuwei~

2022/03065 ~ Complete ~54:SAMPLING OBSERVATION DEVICE FOR ROOT GROWTH OF SMALL SHRUBS ~71:Gansu Agricultural University, No. 1 Yingmen village, Anning District, Lanzhou, Gansu Province, 730070,

People's Republic of China ~72: Lishan Shan;Peifang Chong;Shiping Su;Tingting Xie;Wenxing Li;Yi Li;Yuan Li;Zhengzhong Zhang~

2022/03071 ~ Complete ~54:VARIABLE SPRAYING DEVICE BASED ON UNIVERSAL NETWORK FOR ORCHARD ~71:Northwest A&F University, No. 22, Xinong Road, Yangling District, Xianyang City, Shaanxi Province, 712100, People's Republic of China ~72: Cao Yazhou;Guo Huiping;Wang Changlin;Wang Chensi;Yang Fuzeng;Zhang Jiao;Zhang Wenjie~ 33:CN ~31:202210188091.0 ~32:28/02/2022

2022/03083 ~ Complete ~54:A LARGE HYPERBOLOID HIDDEN FRAME GLASS CURTAIN WALL SYSTEM ~71:THE FIRST CONSTRUCTION ENGINEERING COMPANY LTD. OF CHINA CONSTRUCTION SECOND ENGINEERING BUREAU, Floors 1 to 7, building 1, Yard 9, Kechuang 4th Street, Beijing Economic-Technological Development Area Daxing District, Beijing, People's Republic of China ~72: Bai Binrui;Jin Haiming;Kang Ning;Li Hongquan;Li Weiyong;Liang Ying;Xu Zhongqiang;Zhao Peng~ 33:CN ~31:202122178584.X ~32:19/09/2021

2022/03087 ~ Complete ~54:A LARGE STEEL STRUCTURE EMBEDDED PART ~71:THE FIRST CONSTRUCTION ENGINEERING COMPANY LTD. OF CHINA CONSTRUCTION SECOND ENGINEERING BUREAU, Floors 1 to 7, building 1, Yard 9, Kechuang 4th Street, Beijing Economic-Technological Development Area Daxing District, Beijing, People's Republic of China ~72: Han Mingqiang;Lei Lili;Li Hongquan;Li Weiyong;Xu Zhongqiang~ 33:CN ~31:202210146276.5 ~32:17/02/2022

2022/03092 ~ Complete ~54:A METHOD FOR EVALUATING THE ANTIMALARIAL ACTIVITY OF THE METHANOL EXTRACTS OF COPTIS TEETA ~71:GOGOI, Bhaskarjyoti, The Assam Royal Global University, Betkuchi (Opposite ISBT, Guwahati), Guwahati,, India;GOGOI, Neelutpal, Department of Pharmaceutical Sciences, Dibrugarh University, Dibrugarh, India;GOSWAMI, Ashis Kumar, Department of Pharmaceutical Sciences, Dibrugarh University, Dibrugarh, India;KASHYAP, Ankita, Girijananda Chowdhury Institute of Pharmaceutical Science, Guwahati,, India;SARMA, Himangshu, Department of Pharmaceutical Sciences, Dibrugarh University, Dibrugarh, India;SHARMA, Hemanta Kumar, Department of Pharmaceutical Sciences, Dibrugarh University, Dibrugarh, India;TIWARI, Gaurav, Pranveer Singh Institute of Technology (PHARMACY). Kalpi Road Bhaunti Kanpur, India ~72: GOGOI, Bhaskarjyoti;GOGOI, Neelutpal;GOSWAMI, Ashis Kumar;KASHYAP, Ankita;SARMA, Himangshu;SHARMA, Hemanta Kumar;TIWARI, Gaurav~

2022/03099 ~ Complete ~54:A PRESS HARDENING METHOD ~71:ARCELORMITTAL, 24-26, Boulevard d'Avranches, Luxembourg ~72: Brahim NABI;Florin DUMINICA;Pascal DRILLET;Raisa GRIGORIEVA;Thierry STUREL~ 33:IB ~31:PCT/IB2019/059288 ~32:30/10/2019

2022/03107 ~ Complete ~54:AZAINDOLE CARBOXAMIDE COMPOUNDS FOR THE TREATMENT OF MYCOBACTERIAL INFECTIONS ~71:THE GLOBAL ALLIANCE FOR TB DRUG DEVELOPMENT, INC., 40 Wall Street, New York, New York, 10005, United States of America ~72: NADER FOTOUHI;TAKUSHI KANEKO~ 33:US ~31:62/906,461 ~32:26/09/2019

2022/03113 ~ Complete ~54:WIND WALL ~71:CALLE MADRID, Alfredo Raúl, Av. Bernard Balaguer s/n, Condominio Las Condes, Casa E-6, Ñaña, Lurigancho, Lima 15, Lima - Perú, Peru ~72: CALLE MADRID, Alfredo Raúl~

2022/03273 ~ Provisional ~54:GUILLOTINE WOOD SPLITTER ~71:CHARLES EUGENE O'REILLY, 97 POR1, 2ND AVENUE, FONTAINEBLEAU, GAUTENG, South Africa ~72: CHARLES EUGENE O'REILLY~

2022/03081 ~ Complete ~54:A YIELD SYSTEM ~71:LULL STORM TRADING (PTY) LTD., 168/169 Bosworth Street, ALRODE SOUTH 1451, Gauteng Province, SOUTH AFRICA, South Africa ~72: BOTHMA, Eric;VAN DER WESTHUIZEN, Rudi;WILSON, Langdon Roger~ 33:ZA ~31:2021/04434 ~32:28/06/2021

2022/03095 ~ Complete ~54:METHOD FOR MEASURING LODGING RESISTANCE OF CORN ROOT SYSTEMS UNDER AERIAL ROOT PRUNING CONDITION ~71:INSTITUTE OF TILLAGE AND CULTIVATION, HEILONGJIANG ACADEMY OF AGRICULTURAL SCIENCE, No. 368, Xuefu Road, Nangang District, Harbin City, People's Republic of China ~72: CHEN, Lei;FAN, Weimin;GAO, Li;GONG, Xiaoqiu;GONG, Xiujie;HAN, Yehui;HAO, Yubo;HE, Chang'an;JI, Chunxue;JIANG, Yu;JIANG, Yubo;JIN, Xiaochun;JIN, Zhenguo;LI, Congfeng;LI, Donglin;LI, Guotai;LI, Liang;LIU, Kai;LV, Guoyi;MA, Zijun;MI, Gang;QIAN, Chunrong;QIU, Lei;REN, Yang;SHANG, Jiawei;SHAO, Guangzhong;SHAO, Yong;SHEN, Haijun;SONG, Zhenwei;SUN, Bing;SUN, Dan;SUN, Yinhui;WANG, Jiangxu;WANG, Junhe;WANG, Junqiang;XIA, Tianshu;XIE, Lianjie;XIE, Tingting;XU, Hongyan;XUE, Yongguo;YANG, Xianli;YU, Yang;ZHAO, Yang;ZHENG, Chengyan;ZHOU, Xin~

2022/03102 ~ Complete ~54:EPOXIDE WITH LOW TOTAL CHLORINE CONTENT AND NO HEAVY METAL RESIDUES, AND SYNTHESIS PROCESS THEREFOR ~71:JIANGSU TETRA NEW MATERIAL TECHNOLOGY CO., LTD., 6-2 Zhonggang Road, Taixing Economic Development Zone, Taizhou, Jiangsu, 225400, People's Republic of China ~72: CAO, Xiangming;CHANG, Yangjun;HAN, Jianwei;JIA, Quan~ 33:CN ~31:201910875227.3 ~32:17/09/2019

2022/03076 ~ Complete ~54:METHOD FOR MEASURING ELECTRIC FIELD WITHOUT POLARIZATION POTENTIAL DIFFERENCE ON LAND OR SEA ~71:INSTITUTE OF GEOLOGY AND GEOPHYSICS, CHINESE ACADEMY OF SCIENCES (IGGCAS), No. 19, Beitucheng Western Road, Chaoyang District, Beijing, 100029, People's Republic of China ~72: An Zhiguo;Fu Changmin;Lei Da;Ren Hao;Wang Ruo;Wang Zhongxing;Zhen Qihui~

2022/03089 ~ Complete ~54:DEVICE FOR PLANTING SHRUBS AND GRASS IN HARD SOIL SLOPE ~71:INSTITUTE OF WATER RESOURCES FOR PASTORAL AREA, MWR, NO. 128, UNIVERSITY EAST STREET, SAIHAN DISTRICT, HOHHOT, People's Republic of China ~72: ABIAS;LI, Hongfang;LI, Jinrong;LIU, Hu;MIAO, Henglu;RONG, Hao;WANG, Jian;WANG, Lixia~

2022/03103 ~ Complete ~54:TEMPERATURE SENSITIVE GEL OF CURCUMIN CLATHRATE AND PREPARATION METHOD AND APPLICATION THEREOF ~71:Guangdong Ocean University, No.1, Haida Road, Mazhang District, Zhanjiang, Guangdong Province, People's Republic of China ~72: Chen Jianping;Liang Yuanwei;Liu Ying;Qin Xiaoming;Zhong Saiyi~ 33:CN ~31:202010816639.2 ~32:14/08/2020

2022/03111 ~ Complete ~54:ASSAY METHODS AND KITS FOR DETECTING RARE SEQUENCE VARIANTS ~71:Rutgers, The State University of New Jersey, 83 Somerset Street, NEW BRUNSWICK 08901, NJ, USA, United States of America ~72: KRAMER, Fred Russell;VARGAS-GOLD, Diana~ 33:US ~31:62/909,483 ~32:02/10/2019

2022/03049 ~ Provisional ~54:TREATMENT OF WASTE CATALYST ~71:SIBANYE STILLWATER LIMITED, Constantia Office Park, Bridgeview House, Building 11, Ground Floor, cnr 14th Avenue and Hendrik Potgieter Road, WELTEVREDEN PARK 1709, Johannesburg, Gauteng, SOUTH AFRICA, South Africa ~72: FLYNN, Dayle Robert;PLUMB, Beverly Ann~

2022/03053 ~ Complete ~54:A ROCK ANCHOR ~71:LULL STORM TRADING (PTY) LTD., 168/169 Bosworth Street, ALRODE SOUTH 1451, Gauteng Province, SOUTH AFRICA, South Africa ~72: WILSON, Langdon Roger~ 33:ZA ~31:2021/03163 ~32:11/05/2021

2022/03054 ~ Complete ~54:TOPOLOGY OPTIMIZATION DESIGN METHOD WITH COORDINATION OF RIB LAYOUT AND SUBSTRATE SHAPE ~71:Shandong University, No. 17923, Jingshi Road, Lixia District, Jinan City, Shandong , 250061, People's Republic of China ~72: LI, Quhao;LIU, Shutian;QU, Yongxin;WANG, Jilai;ZHANG, Fengtong~ 33:CN ~31:202110865365.0 ~32:29/07/2021

2022/03056 ~ Complete ~54:NOVEL ELECTRIC VACUUM CLAMP ~71:LIU Jianchang, No.127, 60 South Avenue, Chenying Town, Wanian County, Shangrao, Jiangxi, People's Republic of China ~72: LIU Jianchang~

2022/03061 ~ Complete ~54:DISTRIBUTED THREE-DIMENSIONAL (3D) INDUCED POLARIZATION (IP) DATA ACQUISITION AND PROCESSING DEVICE AND METHOD ~71:Chinese Academy of Geological Sciences, No. 26, Baiwanzhuang Street, Xicheng District, Beijing, 100037, People's Republic of China ~72: MENG, Guixiang;XUE, Ronghui;YAN, Jiayong~ 33:CN ~31:202210054109.8 ~32:18/01/2022

2022/03066 ~ Complete ~54:INTELLIGENT FIRE-FIGHTING TECHNOLOGY OF CONVENTIONAL VILLAGE LAND AND AIR DUAL-PURPOSE UNMANNED AERIAL VEHICLE ~71:Guizhou University, No.2708, Huaxi Avenue, Huaxi District, Guiyang City, Guizhou Province, People's Republic of China ~72: Chen Yuchuan;Luo Hao;Shen Wanfeng;Tian Cong;Tian Jingyu;Wang Sicheng;Wang Xi;Wang Yan;Yang Furong;Yang Yizhou;Yu Taoyuan;Yu Yafang;Zhang Hua;Zhao Yuqi~

2022/03067 ~ Complete ~54:METHOD FOR PREDICTING GROUND VIBRATION DAMAGE BOUNDARY CAUSED BY FRACTURE OF THICK AND HARD CRITICAL LAYER ~71:ANHUI UNIVERSITY OF SCIENCE AND TECHNOLOGY, No. 168 Taifeng Street, Huainan City, Anhui Province, 232001, People's Republic of China ~72: FENG, Bin;HU, Xuelong;TU, Min;ZHANG, Ming~

2022/03072 ~ Complete ~54:ONE-DIMENSIONAL YOLK-SHELL NI@VOID@CO3O4@RGO WAVE ABSORBENT AND PREPARATION METHOD THEREOF ~71:Qingdao University of Technology, No. 777 Jialingjiang East Road, Huangdao District, Qingdao City, Shandong Province, 266520, People's Republic of China ~72: BI, Yuxin;CHEN, Yan;LIU, Yanyan;MA, Mingliang;SU, Xuewei;TONG, Zhouyu;WAN, Fei;XING, Qiyang~

2022/03075 ~ Complete ~54:A METHOD FOR MAKING A SIMILAR SIMULATION TEST SPECIMEN OF GROUTING IN FAULT FRACTURE ZONE ~71:Shandong University of Science and Technology, 579 Qianwangang Road, Huangdao District, Qingdao City, Shandong Province, 266590, People's Republic of China ~72: Chaoqun Ma;Jianli Shao;Song Li;Wenquan Zhang;Xunan Wu;Yu Lei~

2022/03077 ~ Complete ~54:AN ECO-FRIENDLY PUMPING SEWAGE TREATMENT DEVICES WITH DOSING SYSTEM AND IT'S IMPLEMENT METHODS ~71:Liaoning Institute of Science and Technology, No.176, Xiang Huai Road, High & New Technology Industry Development Zone, Benxi city, Liaoning Province, 117004, People's Republic of China ~72: Changwei An;Danfeng Zhang;Jia Liu;Jingyu Li;Jun Zhang;Tong Liu;Xianqi Guan;Yiling Zhao~ 33:CN ~31:202210010813.3 ~32:05/01/2022

2022/03082 ~ Complete ~54:AN IMPLEMENTATION METHOD FOR ELIMINATING SELF-EXCITED VIBRATION OF LINEAR FEED SERVO SYSTEM ~71:ANHUI UNIVERSITY OF SCIENCE AND TECHNOLOGY, NO. 168 TAIFENG STREET, People's Republic of China ~72: CHEN, Rui;QIN, Na;WANG, Zhaoguo;ZHANG, Xiwang;ZHOU, Jie~ 33:CN ~31:202111242976.6 ~32:25/10/2021

2022/03088 ~ Complete ~54:A FABRICATED BUILDING CLADDING PANEL CONSTRUCTION PROTECTION STRUCTURE ~71:THE FIRST CONSTRUCTION ENGINEERING COMPANY LTD. OF CHINA CONSTRUCTION SECOND ENGINEERING BUREAU, Floors 1 to 7, building 1, Yard 9, Kechuang 4th Street, Beijing Economic-Technological Development Area Daxing District, Beijing, People's Republic of China ~72: Du Rui;Han Penghua;Kong Ning;Li Ruiping;Yang Le~ 33:CN ~31:202122760157.2 ~32:11/11/2021

2022/03090 ~ Complete ~54:MULTIFUNCTION-INTEGRATED COAL AND GANGUE SORTING SYSTEM ~71:Anhui University of Science and Technology, 168 Taifeng street, Huainan city, People's Republic of China ~72: CHENG, Gang;GUO, Yongcun;HE, Lei;LIU, Puzhuang;WANG, Shuang;ZHAO, Yanqiu~

2022/03096 ~ Complete ~54:A METHOD FOR IN VIVO MEASUREMENT OF GOOSE FEATHER AND DOWN PRODUCTION ~71:YANGZHOU UNIVERSITY, Yangzhou University, No. 48 Wenhui East Road, Yangzhou City, People's Republic of China ~72: CAO, Zhengfeng;CHEN, Guohong;XU, Qi;ZHANG, Yang;ZHANG, Yu~

2022/03098 ~ Complete ~54:A PRESS HARDENING METHOD ~71:ARCELORMITTAL, 24-26, Boulevard d'Avranches, Luxembourg ~72: Brahim NABI;Florin DUMINICA;Pascal DRILLET;Raisa GRIGORIEVA;Thierry STUREL~ 33:IB ~31:PCT/IB2019/059287 ~32:30/10/2019

2022/03104 ~ Complete ~54:LIGHTWEIGHT SEALING GASKET FOR LOW PRESSURE AND NON-PRESSURE APPLICATIONS ~71:S & B TECHNICAL PRODUCTS, INC., 1300 East Berry Street, TX 76119, United States of America ~72: PACHECO, Rodney;QUESADA, Guido;ROJAS, Bernal;WEIH, Mark, A.~ 33:US ~31:62/899,253 ~32:12/09/2019;33:US ~31:16/997,359 ~32:19/08/2020

2022/03106 ~ Complete ~54:THIAZOLE CARBOXAMIDE COMPOUNDS AND USE THEREOF FOR THE TREATMENT OF MYCOBACTERIAL INFECTIONS ~71:THE GLOBAL ALLIANCE FOR TB DRUG DEVELOPMENT, INC., 40 Wall Street, New York, New York, 10005, United States of America ~72: NADER FOTOUHI;TAKUSHI KANEKO~ 33:US ~31:62/906,452 ~32:26/09/2019

2022/03112 ~ Complete ~54:THROMBOSOMES AS AN ANTIPLATELET AGENT REVERSAL AGENT ~71:Cellphire, Inc., 9430 Key West Avenue, ROCKVILLE 20850, MD, USA, United States of America ~72: DICKERSON, William Matthew;ISHLER, Braden Carl;LEE, Amber Nicole;MOSKOWITZ, Keith Andrew;TANDON, Narendra Nath~ 33:US ~31:62/887,923 ~32:16/08/2019;33:US ~31:63/065,337 ~32:13/08/2020

2022/03116 ~ Complete ~54:SOLAR POWER MONITORING AND OPTIMISATION APPARATUS, SYSTEMS AND METHODS ~71:COMTECH (AUST) PTY LTD, 30-32 Harrier Avenue, Loganholme, Australia ~72: SCHIRMER, Ian~ 33:AU ~31:2019903171 ~32:29/08/2019

2022/03048 ~ Provisional ~54:METHOD TO PRODUCE A BIOLOGICAL CONTROL PRODUCT AND PRODUCT FOR THE CONTROL OF LOCUSTS AND A METHOD FOR THE CONTROL OF LOCUSTS ~71:DESERT LOCUST CONTROL ORGANIZATION FOR EASTERN AFRICA (DLCO-EA), SUB-CITY BOLE, WOREDA 11, HOUSE NO. 1758, DLCO-EA, ADDIS ABABA, ETHIOPIA, Ethiopia ~72: ABDALLA ELFAKI, Osman, Mohammed;MEGENASA, Tessema~

2022/03055 ~ Complete ~54:A TRACTION MECHANISM USED FOR OUTER WALL WASHER ~71:Anhui Lutai Electric Technology Co., Ltd, No12401, Haixinsha Building, Pihe Road, Jin'an District, Lu'an City, Anhui Province, People's Republic of China ~72: Zhang Yanxue~

2022/03058 ~ Complete ~54:AN OUTDOOR ISOLATING SWITCH WITH SWITCHING-OFF STATE PROTECTION FUNCTION ~71:Anhui Lutai Electric Technology Co., Ltd, No12401, Haixinsha Building, Pihe Road, Jin'an District, Lu'an City, Anhui Province, People's Republic of China ~72: Zhang Yanxue~

2022/03064 ~ Complete ~54:MODELING METHOD OF WIND TURBINE AERODYNAMIC CALCULATION MODEL BASED ON CFD TECHNOLOGY ~71:Shenyang University of Technology, No.111, Shenliao West Road, Economic & Technological Development Zone, Shenyang City, Liaoning Province, 110870, People's Republic of China ~72: Chen Lei;Li Yuan;Liu Bowen;Xing Zuoxia;Xu Zengjin;Zheng Wei~

2022/03070 ~ Complete ~54:METHOD FOR COMPENSATING AND PROCESSING MISSING DATA OF ENVIRONMENTAL MONITORING ~71:Central South University of Forestry and Technology, No. 498 Shaoshan South Road, Changsha, Hunan Province, People's Republic of China ~72: Duan Chenbo;Liu Yongmin;Xue Fan;Yan Haoran;Zhang Lingtao~ 33:CN ~31:202210188052.0 ~32:28/02/2022

2022/03080 ~ Complete ~54:CAP FOR A CONTAINER ~71:SACMI COOPERATIVA MECCANICI IMOLA SOCIETÀ COOPERATIVA, Via Selice Provinciale 17/A, 40026, Imola (Bologna), Italy ~72: ZENO ZUFFA~ 33:IT ~31:102021000006557 ~32:18/03/2021

2022/03084 ~ Complete ~54:PREPARATION METHOD OF SILICA AEROGEL MODIFIED STYRENE ACRYLIC HEAT-INSULATING PAINT ~71:Taiyuan University of Technology, No.79 Yingze West Street, Wanbailin District, Taiyuan, Shanxi, 030024, People's Republic of China ~72: Hongwei He;Jiayong Feng;Lan Jia;Xiaofei Han;Yanlong Ma;Zhiyi Zhang~ 33:CN ~31:202111050975.1 ~32:08/09/2021

2022/03086 ~ Complete ~54:METHOD FOR TRACKING AND MEASURING DUST THROUGH TIME DELAY ~71:Anhui University of Science and Technology, 168 Taifeng street, Huainan city, People's Republic of China ~72: CHEN, Qinghua;HU, Zuxiang;JIANG, Bingyou;LIN, Hanyi;QIU, Jinwei;SU, Mingqing;TANG, Mingyun;WANG, Xiaohan;YUAN, Liang;ZHENG, Yuannan;ZHOU, Liang~

2022/03093 ~ Complete ~54:A FORMULATION AND A METHOD FOR DEVELOPMENT AND TRANSDERMAL DELIVERY OF DAPSONE AND AN ANTIBIOTIC ENTRAPPED IN ETHANOLIC LIPOSOMAL GEL ~71:KUMAR, Jayendra, IIMT College of Pharmacy, Greater Noida Plot No. 19 & 20, Knowledge Park-III Greater Noida, India;KUSHWAHA, Ashutosh, Kailash Institute of Pharmacy and Management, GIDA, Gorakhpur, India;MAURYA, Priyanka, Kailash Institute of Pharmacy and Management, GIDA,Gorakhpur-, India;MISHRA, Jai Narayan, Kailash Institute of Pharmacy and Management, GIDA, Gorakhpur, India;SINGH, Abhay Pratap, Kailash Institute of Pharmacy and Management, GIDA, Gorakhpur, India;TIWARI, Ruchi, Pranveer Singh Institute of technology (PHARMACY) Kalpi Road, Bhaunti Kanpur, India;VISHWAKARMA, Dhaneshwar Kumar, Kailash Institute of Pharmacy and Management, GIDA, Gorakhpur, India ~72: KUMAR, Jayendra;KUSHWAHA, Ashutosh;MAURYA, Priyanka;MISHRA, Jai Narayan;SINGH, Abhay Pratap;TIWARI, Ruchi;VISHWAKARMA, Dhaneshwar Kumar~

2022/03100 ~ Complete ~54:DRUGGABLE TARGET TO TREAT RETINAL DEGENERATION ~71:THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES, Office of Technology Transfer, NIH, 6701 Rockledge Drive, Suite 700, MSC 7788, United States of America ~72: BARBOSA SABANERO, Karla, Yadira;BHARTI, Kapil;CHANG, Justin, Ren Yuan;JHA, Balendu Shekhar;SHARMA, Ruchi~ 33:US ~31:62/899,899 ~32:13/09/2019

2022/03108 ~ Complete ~54:INDOLE CARBOXAMIDE COMPOUNDS AND USE THEREOF FOR THE TREATMENT OF MYCOBACTERIAL INFECTIONS ~71:THE GLOBAL ALLIANCE FOR TB DRUG DEVELOPMENT, INC., 40 Wall Street, New York, New York, 10005, United States of America ~72: NADER FOTOUHI;TAKUSHI KANEKO~ 33:US ~31:62/906,424 ~32:26/09/2019

2022/03114 ~ Complete ~54:ASSEMBLY FOR GRANULATING EXTRUDED MATERIAL ~71:EREMA ENGINEERING RECYCLING MASCHINEN UND ANLAGEN GESELLSCHAFT M.B.H., Unterfeldstrasse 3, Austria ~72: Christian WAGNER;Klaus FEICHTINGER;Michael AIGNER;Roland HUBER~ 33:AT ~31:A50870/2019 ~32:11/10/2019

2022/03120 ~ Provisional ~54:FARMERS HEALTH ~71:Loyiso Sihiya, 15 Barbet Road, Yellowwood Park, South Africa ~72: Loyiso Sihiya~

2022/03060 ~ Complete ~54:DEVICE FOR IMPROVING BEARING CAPACITY OF SINGLE OPEN PRESTRESSED HIGH STRENGTH CONCRETE PIPE PILE ~71:CHINA CONSTRUCTION FIFTH ENGINEERING DIVISION CORP., LTD, No. 158, Zhongyi 1st Road, Yuhua District, Changsha City, Hunan Province , 410004, People's Republic of China;CHINA RAILWAY CONSTRUCTION GROUP CO.,LTD., No. 20, Shijingshan Road, Shijingshan District, Beijing , 100043, People's Republic of China;Qingdao Geological Engineering Exploration Institute (Qingdao Geological Exploration and Development Bureau), No. 73, Keyuanweisi Road, Laoshan District, Qingdao City, Shandong Province , 266000, People's Republic of

China;Qingdao University of Technology, No.777, Jialingjiang East Road, Huangdao District, Qingdao City, Shandong , 266520, People's Republic of China;Shandong Nuclear Industry No. 248 Geological Brigade, Building 1, No. 1, Xingguo Road, Licang District, Qingdao City, Shandong Province , 266000, People's Republic of China ~72: BAI, Xiaoyu;FAN, Qinghou;HE, Laisheng;LI, Cuicui;MA, Dongdong;SUN, Jianwen;WANG, Zhongsheng;XU, Shaoshuai;XU, Yongliang;YAN, Jun;YAN, Nan;YU, Longtao;ZHANG, Changtai;ZHANG, Mingyi;ZHANG, Tongbo~ 33:CN ~31:202110326236.4 ~32:26/03/2021

2022/03062 ~ Complete ~54:PHASE CHANGE COOLING SMART PROTECTION HELMET USED IN HIGH-TERRESTRIAL-HEAT MINE ~71:Taiyuan University of Technology, No. 79, West Street Yingze, Wanbailin District, Taiyuan City, Shanxi Province, 030024, People's Republic of China ~72: DENG, Cunbao;WANG, Xuefeng;YANG, Yiqian;ZHANG, Bailin~ 33:CN ~31:202111130661.2 ~32:26/09/2021

2022/03068 ~ Complete ~54:THREE-DIMENSIONAL STRETCHING AND STAMPING FORMING ROBOT FOR FORMING AND MACHINING ALUMINUM ALLOY VEHICLE BODY MEMBER ~71:Anhui University of Science and Technology, No. 168, Taifeng Street, Huainan City, Anhui Province, 232001, People's Republic of China ~72: CHEN, Binyang;LI, Long;SHA, Dan;TIAN, Xing;ZHANG, Ying~

2022/03073 ~ Complete ~54:GRAPHENE-LIKE BIOCHAR LOADED WITH NANO ZERO-VALENT IRON COMPOSITE, PREPARATION METHOD AND APPLICATION THEREOF ~71:Institute of Eco-environmental and Soil Sciences, Guangdong Academy of Sciences, Tianyuan road 808, Tianhe district, Guangzhou, Guangdong province, 510650, People's Republic of China ~72: Fang Liping;Liu Kai;Ma Yibing;Ran Qiwang~

2022/03078 ~ Complete ~54:A SURVEILLANCE SYSTEM FOR TRACKING AND COUNTING PEOPLE AND ENTITIES ~71:Manipal University Jaipur, Manipal University Jaipur, Dehmi Kalan, Off Jaipur-Ajmer Expressway, Jaipur, Rajasthan, 303007, India ~72: Dr. Saurabh Sharma;Ms. Neha Sharma~

2022/03091 ~ Complete ~54:TRANSMISSION IMAGING DETECTION DEVICE AND ITS COMPUTERIZED TOMOGRAPHY SYSTEM ~71:AI SI RUI TECHNOLOGY (XIAMEN) CO., LTD., ONE OF UNIT 708, 7TH FLOOR, CHUANGYE BUILDING, NO. 1302, JIMEI AVENUE, People's Republic of China ~72: FANG, Zheng~

2022/03097 ~ Complete ~54:A RICE/DUCK-GRASS/GOOSE FARMING SYSTEM ~71:YANGZHOU UNIVERSITY, Yangzhou University, No. 48 Wenhui East Road, Yangzhou City, People's Republic of China ~72: CAO, Zhengfeng;CHEN, Guohong;XU, Qi;ZHANG, Yang;ZHANG, Yu~

2022/03110 ~ Complete ~54:ANTI-KLK7 ANTIBODIES, ANTI-KLK5 ANTIBODIES, MULTISPECIFIC ANTI-KLK5/KLK7 ANTIBODIES, AND METHODS OF USE ~71:GENENTECH, INC., 1 DNA Way, South San Francisco, California, 94080, United States of America ~72: CARY DEAN AUSTIN;CECILIA P.C CHIU;JAMES THOMAS KOERBER;JAWAHAR SUDHAMSU;JOSEPH EDWARD CHAVARRIA-SMITH;JUAN ZHANG;TANGSHENG YI;WYNE PUN LEE~ 33:US ~31:62/901,990 ~32:18/09/2019

. - APPLIED ON 2022-03-16 -

2022/03173 ~ Complete ~54:ANTIGENIC RESPIRATORY SYNCYTIAL VIRUS POLYPEPTIDES ~71:SANOFI, 55 Corporate Drive, Mail Code 55A-505A, United States of America ~72: BESEV, Magnus;DHAL, Pradeep;DHARANIPRAGADA, Ram;NABEL, Gary, J.;SWANSON, Kurt;WEI, Chih-Jen~ 33:US ~31:62/652,199 ~32:03/04/2018

2022/03122 ~ Provisional ~54:PRESSURE SPREADING DEVICE FOR A CORNER CONNECTOR ARRANGEMENT FOR A FENESTRATION SYSTEM ~71:KELLER, Izaan Louis, 31 Mount Pleasant, 5th Avenue, Denneoord, George 6529, Western Cape, SOUTH AFRICA, South Africa ~72: FOURIE, Waldo~

2022/03123 ~ Provisional ~54:AFRICAN MARKET - A BUSINESS MODEL THAT USES INTEREST EARNED FROM GROUP SAVINGS AND/OR DIVIDENDS FROM INVESTMENTS, TO INVEST AND/OR PURCHASE SHARES IN BUSINESSES. ~71:Thapelo Chanda, 703 Seremane Street, Montshiwa, 2737,, South Africa ~72: Thapelo Chanda;Thapelo Chanda~ 33:ZA ~31:African Market ~32:15/03/2022

2022/03127 ~ Complete ~54:LIQUID CHLORINE CYLINDER DETECTION DEVICE ~71:Dongying Hebang Chemical Co., Ltd., West of Donggang Road and North of Gangbei 1st Road, Dongying Port Economic Development Zone, Dongying City, Shandong Province, 257237, People's Republic of China ~72: CHEN, Taibin;GUO, Fengshu;LIU, Hongjun;MA, Lijun;MENG, Qinghe;QIU, Suqin;QU, Qinghua~ 33:CN ~31:202110628453.9 ~32:07/06/2021

2022/03133 ~ Complete ~54:A PRODUCTION EQUIPMENT AND VOLCANIC MUD CONCRETE PRODUCTION PROCESS ~71:Linyi University, West side of north section of Gongye Avenue, Lanshan District, Linyi City, Shandong Province, 276000, People's Republic of China;Shandong Sensen Mining New Material Co., Ltd., Dabu Village, Miaoshan Town, Tancheng County, Linyi City, Shandong Province, 276113, People's Republic of China ~72: Liu Keming;Ma Xuewen~

2022/03140 ~ Complete ~54:PHARMACEUTICAL COMPOSITION COMPRISING THROMBOLYTIC PEPTIDE-TETRAHYDROISOQUINOLINE CONJUGATE ~71:LUMOSA THERAPEUTICS CO., LTD, 4F, No. 3-2, Park Street, Taiwan, Province of China ~72: CHOU, David Chih-Kuang~ 33:US ~31:62/905,679 ~32:25/09/2019

2022/03146 ~ Complete ~54:FOOD BOWL KIT ~71:MARS, INCORPORATED, 6885 Elm Street, McLean, Virginia, 22101-3883, United States of America ~72: ALYSIA HUNT;ANNABELLE GOYON;EMILY MARSHALL;LEWIS JONES;MATHIEU MAO;MELANIE TREHIOU;SANDRINE VIALLE;TAMMIE KING~ 33:EP ~31:19206648.8 ~32:31/10/2019;33:EP ~31:20173532.1 ~32:07/05/2020

2022/03130 ~ Complete ~54:PHOTOSENSITIVE NANOLIPOSOME TARGETING TRIPLE-NEGATIVE BREAST CANCER STEM CELLS ~71:Wuxi Maternal and Child Health Hospital, No.48 Huaishu Lane, Wuxi City, Jiangsu Province, 214002, People's Republic of China ~72: Chen Yu;Ding Yinan;Li Su;Lu Mudan;Su Chen;Tang Qiusha;Yang Rui~

2022/03132 ~ Complete ~54:INTELLIGENT DEVICE FOR LITERACY TRAINING OF UNIVERSITY TEACHERS ~71:Shandong Management University, No.3500 Dingxiang Road, Changqing District, Jinan City, Shandong Province, People's Republic of China ~72: Wang Huayun~

2022/03141 ~ Complete ~54:METHOD FOR THE PRODUCTION OF PROTEIN-CONTAINING FOODS ~71:BÜHLER AG, GUPFENSTRASSE 5, 9240 UZWIL, SWITZERLAND, Switzerland ~72: MITRA, Bhaskar;STIRNEMANN, Erich;WEINBERGER, Michael;WINDHAB, Erich~ 33:EP ~31:19192660.9 ~32:20/08/2019;33:EP ~31:19202278.8 ~32:09/10/2019;33:EP ~31:20184014.7 ~32:03/07/2020

2022/03145 ~ Complete ~54:METHODS OF TREATING ANIMAL PROTEINS ~71:MARS, INCORPORATED, 6885 Elm Street, McLean, Virginia, 22101-3883, United States of America ~72: JEAN-MICHEL NEBOUT;LUIS MOLINA~ 33:EP ~31:19306262.7 ~32:02/10/2019

2022/03151 ~ Complete ~54:HEMP POLYMER MATERIALS AND METHODS OF MAKING SAME ~71:THE HEMP PLASTIC COMPANY, 1495 Canyon Boulevard, Boulder, Colorado 80302, United States of America ~72: FRANCINE ETTENSON;GREG DEAN;KEVIN TUBBS;PAUL BENHAIM~ 33:US ~31:62/908,322 ~32:30/09/2019;33:US ~31:62/908,339 ~32:30/09/2019;33:US ~31:62/908,351 ~32:30/09/2019;33:US ~31:62/908,360 ~32:30/09/2019;33:US ~31:62/908,369 ~32:30/09/2019

2022/03162 ~ Complete ~54:METHODS AND COMPOSITIONS FOR THE MODIFICATION AND DELIVERY OF LYMPHOCYTES ~71:Exuma Biotech Corp., 625 N. Flagler Dr., Suite 625, WEST PALM BEACH 33401, FL, USA, United States of America ~72: FROST, Gregory Ian;HAERIZADEH, Farzad;KUNDU, Anirban;ONUFFER, James Joseph;VIGANT, Frederic~ 33:US ~31:62/894,849 ~32:01/09/2019;33:US ~31:62/894,852 ~32:01/09/2019;33:US ~31:62/894,853 ~32:01/09/2019;33:IB ~31:2019/049259 ~32:02/09/2019;33:US ~31:62/894,926 ~32:02/09/2019;33:US ~31:62/943,207 ~32:03/12/2019;33:US ~31:62/985,741 ~32:05/03/2020

2022/03121 ~ Provisional ~54:GREEN MONSTER EMERGENCY RESCUE UNIT ~71:Loyiso Sihiya, 15 Barbet Road, Yellowwood Park, South Africa ~72: Loyiso Sihiya~

2022/03156 ~ Complete ~54:AN ENCODER, A DECODER AND CORRESPONDING METHODS FOR PERFORMING CHROMA DEBLOCKING FOR BLOCKS WHICH USE JOINT CHROMA CODING ~71:Huawei Technologies Co., Ltd., Huawei Administration Building, Bantian, Longgang District, SHENZHEN 518129, GUANGDONG, CHINA (P.R.C.), People's Republic of China ~72: ALSHINA, Elena Alexandrovna;CHERNYAK, Roman Igorevich;ESENLIK, Semih;GAO, Han;KOTRA, Anand Meher;WANG, Biao~ 33:IB ~31:2019/072643 ~32:23/08/2019;33:IB ~31:2019/000639 ~32:16/09/2019;33:IB ~31:2019/077057 ~32:07/10/2019

2022/03164 ~ Complete ~54:NON-ASBESTOS FIBER CEMENT CORRUGATED SHEETS AND MANUFACTURING METHOD THEREOF ~71:HIL LIMITED (FORMERLY HYDERABAD INDUSTRIES LIMITED), SLN Terminus, 7th Floor, Near Botanical Garden, Gachibowli, Hyderabad, 500032, India ~72: SATYANARAYANA, D~ 33:IN ~31:202041024574 ~32:11/06/2020

2022/03125 ~ Complete ~54:MODIFIED GRAPHENE-GRAFTED CONDUCTIVE FIBER, PREPARATION METHOD AND USES THEREOF ~71:Qingdao University, No. 308, Ningxia Road, Shinan District, Qingdao, Shandong, 266071, People's Republic of China ~72: QU, Lijun;ZHAO, Hongtao;ZHOU, Zhenhui;ZHU, Shifeng~

2022/03136 ~ Complete ~54:A SCREENING DEVICE AND VOLCANIC MUD CONCRETE PRODUCTION PROCESS ~71:Linyi University, West side of north section of Gongye Avenue, Lanshan District, Linyi City, Shandong Province, 276000, People's Republic of China;Shandong Sensen Mining New Material Co., Ltd., Dabu Village, Miaoshan Town, Tancheng County, Linyi City, Shandong Province, 276113, People's Republic of China ~72: Liu Keming;Ma Xuewen~

2022/03148 ~ Complete ~54:ANTIMICROBIAL HEMP POLYMER MATERIALS AND METHODS OF MAKING SAME ~71:THE HEMP PLASTIC COMPANY, 1495 Canyon Boulevard, Boulder, Colorado 80302, United States of America ~72: FRANCINE ETTENSON;GREG DEAN;KEVIN TUBBS;PAUL BENHAIM~ 33:US ~31:62/908,322 ~32:30/09/2019;33:US ~31:62/908,339 ~32:30/09/2019;33:US ~31:62/908,351 ~32:30/09/2019;33:US ~31:62/908,360 ~32:30/09/2019;33:US ~31:62/908,369 ~32:30/09/2019

2022/03129 ~ Complete ~54:AGGREGATION-INDUCED EMISSION POLYMER, PREPARATION METHOD AND APPLICATION THEREOF ~71:Qingdao Agricultural University, 700 Changcheng Road, Chengyang District, Qingdao City, Shandong Province, 266109, People's Republic of China;The Hong Kong University of Science and Technology, Clear Water Bay, Hong Kong, Sai Kung District, New Territories, Hong Kong , 999077, People's Republic of China ~72: BIAN, Xuhui;HAN, Lei;LIU, Chenchen;TANG, Benzhong~ 33:CN ~31:202111341713.0 ~32:12/11/2021

2022/03134 ~ Complete ~54:ROUNDNESS MEASURING TOOL FOR BRIDGE STEEL STRUCTURE ~71:CONSON CSSC(Qingdao) Ocean Technology Co., Ltd., Conson Marine Entrepreneurial Base Qingdao Blue Silicon Valley Core Area, Jimo District, Qingdao City, Shandong Province, People's Republic of China;Chongqing Jiaotong University, No 66 Xuefu Road, Nan'an District, Chongqing, People's Republic of China;Chongqing Technology and Business Institute, No. 1, Hualong Avenue, Jiulong Science Park, Jiulongpo District, Chongqing,

People's Republic of China;Plan Approval Department, Qingdao Branch China Classification Society, Room 1606 Qingdao International Shipping Center, No.66, Lianyungang Road, Qingdao City, Shandong Province, People's Republic of China;Yantai Shunjie Marine Safety&Technical Advisory Development Company, No.2 Yanfu Road, Zhifu District, Yantai City, Shandong Province, People's Republic of China ~72: CHENG Pingjie;DONG Xinqing;LI Meidan;LIU Gongwei;SUN Yonggan;WANG Qiao~

2022/03138 ~ Complete ~54:DEVICE FOR RAPID DETECTION OF TRACE METAL ELEMENTS IN PULP ~71:BGRIMM MTC TECHNOLOGY CO., LTD., A708 AND A701, 1 BUILDING NO. 22 BEIXING ROAD DAXING DISTRICT, People's Republic of China ~72: FANG, Shengnan;HAN, Pengcheng;LI, Huachang;SHI, Yehong;YANG, Fei;ZHAO, Zhen~

2022/03142 ~ Complete ~54:RECIRCULATING WATER SYSTEM COMPOSITION ~71:BIO-LAB, INC., 1725 NORTH BROWN ROAD, LAWRENCEVILLE, GEORGIA 30043, USA, United States of America ~72: GAULDING, Jeffrey;SAYRE, Curtis;TRENCK, Brian;YEOMAN, Al~ 33:US ~31:62/890,650 ~32:23/08/2019

2022/03144 ~ Complete ~54:TREATMENT OF CHRONIC GRANULOMATOUS DISEASE ~71:UNIVERSITÄT ZÜRICH, Rämistrasse 71, CH-8006, Zürich, Switzerland ~72: JANINE REICHENBACH;ULRICH WOLFGANG SILER;WALTHER HÄNSELER~ 33:EP ~31:19201180.7 ~32:02/10/2019

2022/03149 ~ Complete ~54:METHODS OF TREATMENT USING A GENETICALLY MODIFIED AUTOLOGOUS T-CELL IMMUNOTHERAPY ~71:PACT PHARMA, INC., 2 Corporate Drive, South San Francisco, California, 94080, United States of America ~72: ALEX FRANZUSOFF;ARATI V RAO;BARBARA SENNINO;BHAMINI PURANDARE;GREGG D FINE;MARK WALTER FROHLICH;STEFANIE MANDL-CASHMAN;TODD STALLINGS-SCHMITT~ 33:US ~31:62/912,545 ~32:08/10/2019

2022/03160 ~ Complete ~54:METHOD AND APPARATUS OF HIGH-LEVEL SIGNALING FOR WEIGHTED PREDICTION ~71:Huawei Technologies Co., Ltd., Huawei Administration Building, Bantian, Longgang District, SHENZHEN 518129, GUANGDONG, CHINA (P.R.C.), People's Republic of China ~72: ALSHINA, Elena Alexandrovna;FILIPPOV, Alexey Konstantinovich;RUFITSKIY, Vasily Alexeevich~ 33:IB ~31:2019/000625 ~32:06/09/2019

2022/03159 ~ Complete ~54:METHODS OF USE FOR KV7 CHANNEL ACTIVATORS ~71:Knopp Biosciences LLC, 2100 Wharton Street, Suite 615, PITTSBURGH 15203, PA, USA, United States of America ~72: BOZIK, Michael E.;DWORETZKY, Steven;HEBRANK, Gregory;PETZINGER, Jr., Thomas;PICCHIONE, Kelly~ 33:US ~31:62/901,621 ~32:17/09/2019;33:US ~31:62/945,300 ~32:09/12/2019

2022/03124 ~ Complete ~54:PESTICIDE CONTAINING THIAMETHOXAM AND CHLOROTHALONIL AND PRODUCTION PROCESS THEREOF ~71:Biotechnology and Germplasm Resources Institute, Yunnan Academy of Agricultural Sciences, No. 2238, Beijing Road, Kunming, Yunnan Province, 650000, People's Republic of China;Sugarcane Research Institute, Yunnan Academy of Agricultural Sciences, No. 363, Eastern Lingquan Road, Kaiyuan, Yunnan Province, 661600, People's Republic of China ~72: Huang Yingkun;Li Jie;Li Wenfeng;Li Yinhu;Lu Wenjie;Shan Hongli;Wang Xiaoyan;Zhang Rongyue~

2022/03126 ~ Complete ~54:METHOD FOR DETERMINING DEGRADATION RATE OF CREATINE PYRUVATE IN RUMEN FLUID OF RUMINANTS ~71:Jiangxi Academy of Agricultural Sciences, No. 602, Nanlian Road, Qingyunpu District, Nanchang City, Jiangxi Province, 330299, People's Republic of China;Jiangxi Agricultural University, No. 1101, Zhimin Street, Economic & Technological Development Zone, Nanchang City, Jiangxi Province, 330045, People's Republic of China ~72: Guwei Lu;Jian Huang;Kang Mao;Mingren Qu;Xianghui Zhao;Yanjiao Li;Yitian Zang~

2022/03131 ~ Complete ~54:INTELLIGENT PUBLICITY EQUIPMENT FOR COLLEGE STUDENTS' ENTREPRENEURSHIP EDUCATION ~71:Shandong Management University, No.3500 Dingxiang Road, Changqing District, Jinan City, Shandong Province, People's Republic of China ~72: Wang Huayun~

2022/03137 ~ Complete ~54:LIBS ONLINE DETECTION METHOD FOR DETERMINING ELEMENTARY CONSTITUENTS OF PRODUCT IN PHOSPHATE FLOTATION PROCESS ~71:BGRIMM MTC TECHNOLOGY CO., LTD., A708 AND A701, 1 BUILDING NO. 22 BEIXING ROAD DAXING DISTRICT, People's Republic of China ~72: FANG, Shengnan;FENG, Xianjin;HAN, Pengcheng;LI, Huachang;SHI, Yehong;YANG, Fei;ZHAO, Zhen~

2022/03143 ~ Complete ~54:ELECTRONIC FINANCIAL TRANSACTION SYSTEM EMPLOYING CRYPTOCURRENCY ANDPAYMENT METHOD USING SAME ~71:PHILLIPS MULTI CO., LTD, (SEOKCHON-DONG, JEU BUILDING) 5F 507, 293, BAEKJEGOBUN-RO, SONGPA-GU, SEOUL 05614, REP OF KOREA, Republic of Korea ~72: CHOI, Gi Jai~ 33:KR ~31:10-2019-0114103 ~32:17/09/2019

2022/03150 ~ Complete ~54:COSMETIC COMPOSITION WITH ENHANCED COLOR STABILITY ~71:UNILEVER GLOBAL IP LIMITED, Port Sunlight, Wirral, Merseyside, CH62 4ZD, United Kingdom ~72: HASIBA BEKTO;LEI HUANG;TEANOOSH MOADDEL~ 33:EP ~31:19205384.1 ~32:25/10/2019

2022/03152 ~ Complete ~54:PHARMACEUTICAL COMPOSITION ~71:RENOWN PHARMA INC., 30 Sunnyside Avenue, Mill Valley, California, 94941, United States of America ~72: ANTHONY CLARKE;JAGDEEP SHUR~ 33:GB ~31:1912686.1 ~32:04/09/2019;33:US ~31:62/895,619 ~32:04/09/2019

2022/03154 ~ Complete ~54:CEFUROXIME AXETIL PHARMACEUTICAL COMPOSITION AND PREPARATION METHOD THEREFOR ~71:SINOPHARM ZHIJUN (SHENZHEN) PHARMACEUTICAL CO., LTD, No. 16 Lanqing 1st Road, Guanlan High-tech Industrial Park, Longhua District, Guangdong, People's Republic of China ~72: CHEN, Zhenyang;HUANG, Yan;LIU, Wanli;NI, Yuxiang;PAN, Weihong;WU, Xi;YE, Jiahong;ZENG, Huanxiang;ZHONG, Jiasheng~ 33:CN ~31:201910882055.2 ~32:18/09/2019

2022/03161 ~ Complete ~54:MEAT ANALOGUE PRODUCT COMPRISING HYDRATED TEXTURED PLANT PROTEIN ~71:Société des Produits Nestlé S.A., Avenue Nestlé 55, VEVEY 1800, SWITZERLAND, Switzerland ~72: GADDIPATI, Sanyasi;RIDDLE, Ryan~ 33:US ~31:62/891,485 ~32:26/08/2019

2022/03163 ~ Complete ~54:THERAPEUTIC METHODS AND USES THEREOF ~71:EUSTRALIS PHARMACEUTICALS LIMITED (TRADING AS PRESSURA NEURO), SUITE 3, LEVEL 2, 470 COLLINS STREET, MELBOURNE, VICTORIA 3000, AUSTRALIA, Australia ~72: PURSEY, Peter;VANKAN, Pierre~ 33:AU ~31:2019903095 ~32:23/08/2019

2022/03155 ~ Complete ~54:A FILTER CARTRIDGE FOR A LIQUID SUCH AS FUEL, THE UPPER END PLATE OF WHICH INCLUDING AN AUTOMATIC DEGASSING VALVE ~71:Volvo Truck Corporation, GÖTEBORG SE-405 08, SWEDEN, Sweden ~72: BOUTIN, Baptiste;COSTE, Hervé~

2022/03165 ~ Complete ~54:COMPOSITIONS AND METHODS FOR TCR REPROGRAMMING USING FUSION PROTEINS ~71:TCR2 THERAPEUTICS INC., 100 Binney Street, Suite 710, United States of America ~72: BAEUERLE, Patrick;DONAGHEY, Julie;GETTS, Daniel;GUTIERREZ, Dario;HOFMEISTER, Robert;KIEFFER-KWON, Philippe~ 33:US ~31:62/899,563 ~32:12/09/2019;33:US ~31:62/971,682 ~32:07/02/2020

2022/03153 ~ Complete ~54:AUTOMATIC WHOLE-PROCESS SOIL TABLETTING DEVICE ~71:ZHEJIANG UNIVERSITY, 866 Yuhangtang Road, Xihu District, Hangzhou, Zhejiang, 310058, People's Republic of China

~72: KONG, Wenwen;LI, Xiaolong;LIU, Fei;LU, Xiangyu;PAN, Tiantian;SHEN, Jiangang;ZHOU, Jun~ 33:CN ~31:202010862936.0 ~32:25/08/2020

2022/03158 ~ Complete ~54:AN ENCODER, A DECODER AND CORRESPONDING METHODS FOR SUBPICTURE SIGNALLING IN SEQUENCE PARAMETER SET ~71:Huawei Technologies Co., Ltd., Huawei Administration Building, Bantian, Longgang District, SHENZHEN 518129, GUANGDONG, CHINA (P.R.C.), People's Republic of China ~72: ALSHINA, Elena Alexandrovna;ESENLIK, Semih;GAO, Han;KOTRA, Anand Meher;WANG, Biao~ 33:IB ~31:2020/053465 ~32:11/02/2020

2022/03157 ~ Complete ~54:DETERMINING CORRECTIONS TO BE APPLIED TO A MULTICHANNEL AUDIO SIGNAL, ASSOCIATED CODING AND DECODING ~71:Orange, 111, quai du Président Roosevelt, ISSY-LES-MOULINEAUX 92130, FRANCE, France ~72: DANIEL, Jerome;MAHE, Pierre Clément;RAGOT, Stéphane~ 33:FR ~31:1910907 ~32:02/10/2019

2022/03193 ~ Complete ~54:CANNABINOID CONCENTRATE AND ISOLATE, METHOD OF OBTAINING THE SAME AND USE THEREOF ~71:HERBOLEA BIOTECH S.P.A, Via Luciano Lama, 9/11, SESTO FIORENTINO, Italy ~72: DECORTI, Deborha;VENTURINI DEL GRECO, Giovanni;VENTURINI DEL GRECO, Lorenzo~

2022/03128 ~ Complete ~54:PREPARATION METHOD OF FEED MYCOTOXIN ADSORBENT ~71:Qingdao Agricultural University, 700 Changcheng Road, Chengyang District, Qingdao, Shandong Province, 266109, People's Republic of China;Shandong Sinder Technology Co., Ltd., No. 195, Shungeng Road, Zhucheng City, Weifang City, Shandong Province, 262200, People's Republic of China ~72: CHEN, Fu;GUO, Yixuan;LIN, Yingting;QIAO, Yanliang;SUN, Xuelian;ZHANG, Beibei;ZHU, Fenghua;ZHU, Lianqin~

2022/03135 ~ Complete ~54:AUXILIARY DEVICE FOR IDEOLOGICAL AND POLITICAL COURSE TEACHING COMMONLY USED IN UNIVERSITIES, PRIMARY AND SECONDARY SCHOOLS ~71:Shandong Management University, No.3500 Dingxiang Road, Changqing District, Jinan City, Shandong Province, People's Republic of China ~72: Wang Huayun~

2022/03139 ~ Complete ~54:BRACKET FOR SOLAR PANELS ~71:NIENHUIS, Jan, Balster, 646 WINDSOR ROAD, GARSFONTEIN EAST, 0060, SOUTH AFRICA, South Africa ~72: NIENHUIS, Jan, Balster~

2022/03147 ~ Complete ~54:HEMP POLYMER MATERIALS WITH AN ADDITIVE AND METHODS OF MAKING SAME ~71:THE HEMP PLASTIC COMPANY, 1495 Canyon Boulevard, Boulder, Colorado 80302, United States of America ~72: FRANCINE ETTENSON;GREG DEAN;KEVIN TUBBS;PAUL BENHAIM~ 33:US ~31:62/908,322 ~32:30/09/2019;33:US ~31:62/908,339 ~32:30/09/2019;33:US ~31:62/908,351 ~32:30/09/2019;33:US ~31:62/908,360 ~32:30/09/2019;33:US ~31:62/908,369 ~32:30/09/2019

. - APPLIED ON 2022-03-17 -

2022/03170 ~ Provisional ~54:TWEN-T-FEST BD ~71:Dennis Cassim Mphoreng, 2176 Watsonia Street Highveld Park, South Africa ~72: Dennis Cassim Mphoreng~

2022/03177 ~ Complete ~54:DISPLAY CABINET THAT IS CONVENIENT TO MOVE ~71:Shandong Yingcai University, No.2 Yingcai Road, High-tech Industrial Development Zone, Jinan City, Shandong Province, People's Republic of China ~72: WANG, Suling~

2022/03179 ~ Complete ~54:A MANUFACTURING METHOD OF EVA FOAMED FILM ~71:Xuzhou College of Industrial Technology, No. 1 Xiangwang South Road, Gulou District, Xuzhou City, Jiangsu Province, People's Republic of China ~72: Liu Feng;Sun Shuo;Xu Dongmei;Xu Peng;Yang Xiaojie;Zeng Changchun;Zhang Jing;Zhang Lin;Zhang Yulai~

2022/03185 ~ Complete ~54:A FULL LINING DEBRIS FLOW DRAINAGE GROOVE AND ITS CONSTRUCTION METHOD BASED ON SIMPLE PILE ENERGY DISSIPATION ~71:Linyi University, Middle Section of Shuangling Road, Lanshan District, Linyi City, Shandong Province, 276000, People's Republic of China ~72: Jia Chuanyang;Li Wei;Sun Xizhen;Wang Hailong;Yu Xianbin~ 33:CN ~31:202111399044.2 ~32:24/11/2021

2022/03186 ~ Complete ~54:A DEMONSTRATION DEVICE OF ROCK FRACTURE EVOLUTION ~71:Linyi University, Middle section of Shuangling Road, Lanshan District, Linyi City, Shandong Province, 276000, People's Republic of China ~72: Sun Xizhen;Zhan Xucai;Zhang Ce~ 33:CN ~31:202110062691.8 ~32:18/01/2021

2022/03190 ~ Complete ~54:ELECTRONIC SMOKING ARTICLE ~71:ALTRIA CLIENT SERVICES LLC, 6601 West Broad Street, Richmond, Virginia, 23230, United States of America ~72: ALI ROSTAMI;BERINA YERKIC-HUSEJNOVIC;CHRIS CARRICK;CHRISTOPHER S TUCKER;DAVID SCHIFF;ERIC HAWES~ 33:US ~31:61/883,023 ~32:26/09/2013

2022/03192 ~ Complete ~54:CHLOROPLAST CELL-CONTAINING COMPOSITE LAYER, MASK AND METHOD FOR PREPARING THE COMPOSITE LAYER ~71:HARBIN INSTITUTE OF TECHNOLOGY, No. 92 Xidazhi Street, Nangang District, Harbin, People's Republic of China ~72: BAO, Tianyi;BAO, Wen;LI, Songjing~

2022/03194 ~ Complete ~54:PARAMETER SENSING FOR A LIQUID APPLICATOR ~71:INTELLIGENT AGRICULTURAL SOLUTIONS LLC, NDSU Research Circle, N Fargo, North Dakota, United States of America ~72: MAURER, Garrett;WOOD, JR., Daniel, R.~ 33:US ~31:62/910,714 ~32:04/10/2019

2022/03214 ~ Complete ~54:METHOD FOR THE DYNAMIC TRAFFIC ROUTING OF EXTERNAL TRANSPORTATION MEANS IN A HIGH-BAY WAREHOUSE ~71:AMOVA GMBH, Wiesenstrasse 30, Germany ~72: Bernd KLEIN;Carsten HEIDE;Patrick BOL;Ronald, Johannes VAN DER MEER;Volker BRÜCK~ 33:DE ~31:10 2019 134 528.6 ~32:16/12/2019

2022/03218 ~ Complete ~54:ABRASIVE FOR JET CUTTING ~71:VULKAN INOX GMBH, Gottwaldstr. 21, Germany ~72: HAHN, André;HIDDE, Marc~ 33:DE ~31:10 2019 133 017.3 ~32:04/12/2019

2022/03211 ~ Complete ~54:IRON GRADIENT IN POLYCRYSTALLINE DIAMOND COMPACTS; BLANKS, CUTTERS AND CUTTING TOOLS INCLUDING SAME; AND METHODS OF MANUFACTURE ~71:Diamond Innovations, Inc., 6325 Huntley Road, WORTHINGTON 43085, OH, USA, United States of America ~72: ADEPALLI, Kiran~ 33:US ~31:62/946,623 ~32:11/12/2019

2022/03178 ~ Complete ~54:A ROADSIDE TRANSVERSE THERMOELECTRIC DEVICE MANUFACTURE METHOD AND ITS APPLICATION ~71:Changsha University of Science and Technology, No 960 Wanjiali Road, Tianxin District, Changsha City, Hunan Province, People's Republic of China ~72: Cai Jun;Gong Xiangbing;Li Xi;Liu Huang;Qian Guoping;Xu Peng;Yu Huanan;Zhou Hongyu~

2022/03182 ~ Complete ~54:TWEEZERS FOR REMOVING BUDS OF CRUCIFEROUS CROPS ~71:Li Peishan, Building 3, No.14 Guangxi Road, Shinan District, Qingdao City, Shandong Province, 266005, People's Republic of China ~72: Li Peishan~

2022/03196 ~ Complete ~54:T CELL PRODUCTION FROM RAG INACTIVATED IPSCS ~71:ADAPTIMMUNE LIMITED, 60 Jubilee Avenue, Milton Park, Abingdon, Oxfordshire, OX14 4RX, United Kingdom ~72: ADAM SIDAWAY;LAURA JANE BARKER;LEE CARPENTER~ 33:GB ~31:1911953.6 ~32:20/08/2019

2022/03202 ~ Complete ~54:MONOCYCLIC AGONISTS OF STIMULATOR OF INTERFERON GENES STING ~71:THE SCRIPPS RESEARCH INSTITUTE, 10550 North Torrey Pines Road, La Jolla, California, 92037, United States of America ~72: ALAN CHU;ANA MARIA GAMO ALBERO;ANIL GUPTA;ARNAB K

CHATTERJEE;CHENGUANG YU;EMILY CHIN;HANK MICHAEL JAMES PETRASSI;JIE WANG;JUNKO TAMIYA;KRISTEN JOHNSON;LUKE L LAIRSON;PETER G SCHULTZ~ 33:US ~31:62/889,669 ~32:21/08/2019

2022/03208 ~ Complete ~54:RECOMBINANTLY ENGINEERED, LIPASE/ESTERASE-DEFICIENT MAMMALIAN CELL LINES ~71:Eli Lilly and Company, Lilly Corporate Center, INDIANAPOLIS 46285, IN, USA, United States of America ~72: FRYE, Christopher Carl;HALL, Troii;HUANG, Lihua;SANDEFUR, Stephanie Lynn~ 33:US ~31:62/915,234 ~32:15/10/2019

2022/03169 ~ Provisional ~54:CELEBRATE LIFE ~71:Dennis Cassim Mphoreng, 2176 Watsonia street, Highveld park, South Africa ~72: Dennis Cassim Mphoreng~

2022/03172 ~ Provisional ~54:FULL ROUND INITIATION POSITIONING DEVICE ~71:Petrus Johannes Jansen Van Rensburg Roux, 44 Cobalt str, Hospitaal park, South Africa ~72: Petrus Johannes Jansen Van Rensburg Roux~

2022/03191 ~ Complete ~54:HIGH-LOW-CHAIN TYPE COARSE CEREAL GRAIN HARVESTING HEADER SUITABLE FOR CRAWLER BELT MACHINE ~71:Liaocheng Houde Electromechanical Co., Ltd, No. 003, Zhenxing Road, Zhengjia Town, Dongchangfu District, Liaocheng, Shandong, 252000, People's Republic of China ~72: Diandong GUO~

2022/03197 ~ Complete ~54:CULTURE MEDIUM FOR HAEMATOPOIETIC INDUCTION ~71:ADAPTIMMUNE LIMITED, 60 Jubilee Avenue, Milton Park, Abingdon, Oxfordshire, OX14 4RX, United Kingdom ~72: CHENG TAO YANG;LEE CARPENTER~ 33:GB ~31:1911955.1 ~32:20/08/2019;33:GB ~31:2012306.3 ~32:07/08/2020

2022/03199 ~ Complete ~54:METHODS OF T CELL PRODUCTION ~71:ADAPTIMMUNE LIMITED, 60 Jubilee Avenue, Milton Park, Abingdon, Oxfordshire, OX14 4RX, United Kingdom ~72: CLAIRE GUEGUEN~ 33:GB ~31:1911958.5 ~32:20/08/2019

2022/03201 ~ Complete ~54:THERAPEUTIC CONJUGATES ~71:TOTUS MEDICINES INC., 700 Main Street, Cambridge, Massachusetts 02139, United States of America ~72: JAMES ABELLERA BLAIR;NEIL SONIN DHAWAN;ROBERT B PERNI~ 33:US ~31:62/902,554 ~32:19/09/2019;33:US ~31:63/078,055 ~32:14/09/2020

2022/03207 ~ Complete ~54:A SENSING DEVICE, SYSTEM AND METHOD FOR A PUMP ~71:Weir Minerals Australia Ltd, 1 Marden Street, ARTARMON 2064, NEW SOUTH WALES, AUSTRALIA, Australia ~72: ARULKUMAR, Jonathan Alvin;DUONG, Chi Huy;GLAVES, Garry Bruce~ 33:AU ~31:2019903474 ~32:18/09/2019

2022/03209 ~ Complete ~54:MULTI-STAIN CLEANING ROBOT AND MOTION PATH CONTROL METHOD BASED ON MULTI-STAIN CLEANING ROBOT ~71:Wuyi University, No. 22 Dongcheng, PENGJIANG JIANGMEN 529000, GUANGDONG, CHINA (P.R.C.), People's Republic of China ~72: DENG, Fuqin;DING, Yi;FENG, Hua;HUANG, Yongshen;LAI, Feiyue;LI, Weike;LONG, Jiale;WANG, Dong;YUE, Hongwei;ZHANG, Jianmin~ 33:CN ~31:202010131975.3 ~32:28/02/2020

2022/03210 ~ Complete ~54:BRANCHED TAIL LIPID COMPOUNDS AND COMPOSITIONS FOR INTRACELLULAR DELIVERY OF THERAPEUTIC AGENTS ~71:ModernaTX, Inc., 200 Technology Square, CAMBRIDGE 02139, MA, USA, United States of America ~72: BENENATO, Kerry E.;CORNEBISE, Mark;HENNESSY, Edward;KUMARASINGHE, Ellalahewage S.~ 33:US ~31:62/902,927 ~32:19/09/2019

2022/03215 ~ Complete ~54:DEVICE FOR STORING STANDARDIZED STORAGE GOODS IN A HIGH-BAY WAREHOUSE ~71:AMOVA GMBH, Wiesenstrasse 30, Germany ~72: Bernd KLEIN;Carsten HEIDE;Patrick BOL;Ronald, Johannes VAN DER MEER;Volker BRÜCK~ 33:DE ~31:10 2019 134 527.8 ~32:16/12/2019

2022/03217 ~ Complete ~54:METHOD FOR TREATING HUMAN OR ANIMAL URINE AND USES OF THE TRANSFORMED URINE OBTAINED IN PARTICULAR AS FERTILISER ~71:TOOPI ORGANICS, Lieu-dit aux Halles, Zone Artisanale, ECOPOLE 33190, LOUPIAC-DE-LA-REOLE, France ~72: HUGUIER, Pierre;ROES, Michaël~ 33:FR ~31:1910186 ~32:16/09/2019

2022/03168 ~ Provisional ~54:PURIFICATION OF MNSO4 SOLUTIONS ~71:INNOVATIVE MANGANESE TECHNOLOGIES SA (PTY) LTD., SOUTH AFRICA, South Africa ~72: PRETORIUS, Gerard~

2022/03175 ~ Complete ~54:PERMEABLE ASPHALT CONCRETE PERMEABILITY TESTING DEVICE AND METHOD ~71:Changsha University of Science and Technology, No.960 Wanjiali south Road, Tianxin District, Changsha City, Hunan Province, People's Republic of China ~72: Cai Jun;Gong Xiangbing;Ma Wei;Zhou Hongyu;Zou Penghui~

2022/03184 ~ Complete ~54:A CYCLIC FABRICATED REBAR DISTRIBUTOR ~71:THE FIRST CONSTRUCTION ENGINEERING COMPANY LTD. OF CHINA CONSTRUCTION SECOND ENGINEERING BUREAU, Floors 1 to 7, building 1, Yard 9, Kechuang 4th Street, Beijing Economic-Technological Development Area Daxing District, Beijing, People's Republic of China ~72: Feng Jin;Liu Yunfeng;Wang Liming;Yang Xuegang~ 33:CN ~31:202110327186.1 ~32:26/03/2021

2022/03187 ~ Complete ~54:FERTILIZING METHOD OF ORGANIC FERTILIZER INSTEAD OF CHEMICAL FERTILIZER FOR GREENHOUSE CUCUMBER ~71:Shandong Agricultural Technology Extension Center, No.15 Jiefang Road, Lixia District, Jinan City, Shandong Province, People's Republic of China ~72: Bo Luji;Liu Yansheng;Ma Ronghui;Wang Rongjiang;Xu Yu;Yang Wujie;Zhang Wenxiao~

2022/03189 ~ Complete ~54:CLOUD COMPUTING-BASED SOCIAL NETWORK SECURITY PRIVACY DATA FUSION METHOD ~71:Shenyang University of Technology, No.111 Shenliao West Road, Shenyang Economic and Technological Development Zone, Shenyang City, Liaoning Province, People's Republic of China ~72: Song Xiaoxu~

2022/03195 ~ Complete ~54:A METHOD OF ASSESSING WOUND HEALING POTENCY OF A MESENCHYMAL STEM POPULATION AND RELATED METHODS OF SELECTING MESENCHYMAL STEM CELLS AND IDENTIFYING TISSUE AS STARTING MATERIAL FOR PRODUCING A MESENCHYMAL STEM CELL POPULATION ~71:CELLRESEARCH CORPORATION PTE. LTD., 7500A Beach Road, #06-302, The Plaza, Singapore ~72: PHAN, Toan Thang~ 33:US ~31:62/912,374 ~32:08/10/2019

2022/03200 ~ Complete ~54:UBE3A FOR THE TREATMENT OF ANGELMAN SYNDROME ~71:THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, 1111 Franklin Street 12th Floor, Oakland, California, 94607-5200, United States of America ~72: JOSEPH ANDERSON~ 33:US ~31:62/890,364 ~32:22/08/2019;33:US ~31:62/945,062 ~32:06/12/2019

2022/03213 ~ Complete ~54:SEMI-AUTOMATIC IMAGE DATA LABELING METHOD, ELECTRONIC APPARATUS, AND STORAGE MEDIUM ~71:Wuyi University, No. 22, Dongcheng, Pengjiang, JIANGMEN 529000, GUANGDONG, CHINA (P.R.C.), People's Republic of China ~72: CHEN, Yingying;DENG, Fuqin;FENG, Hua;HUANG, Yongshen;LI, Weike;PENG, Jianfeng~ 33:CN ~31:201911117335.0 ~32:15/11/2019

2022/03219 ~ Provisional ~54:MY FETTLE CARE ~71:Masweneng Tebogo Seemane, 64 VAN BEEK AVENUE GLENVISTA, South Africa ~72: Masweneng Tebogo Seemane~

2022/03204 ~ Complete ~54:B-LYMPHOCYTE SPECIFIC AMATOXIN ANTIBODY CONJUGATES ~71:HEIDELBERG PHARMA RESEARCH GMBH, Gregor-Mendel-Strasse 22, Germany ~72: Andreas PAHL;Christoph MÜLLER;Michael KULKE;Torsten HECHLER~ 33:EP ~31:19203400.7 ~32:15/10/2019

2022/03206 ~ Complete ~54:HISTORY-BASED MOTION VECTOR PREDICTION ~71:QUALCOMM Incorporated, ATTN: International IP Administration, 5775 Morehouse Drive, SAN DIEGO 92121-1714, CA, USA, United States of America ~72: KARCZEWICZ, Marta;RUSANOVSKYY, Dmytro;ZHANG, Yan~ 33:US ~31:62/905,311 ~32:24/09/2019;33:US ~31:62/905,371 ~32:24/09/2019;33:US ~31:17/028,064 ~32:22/09/2020

2022/03205 ~ Complete ~54:A CONNECTOR ~71:DETNET SOUTH AFRICA (PTY) LTD, AECI Place, The Woodlands, Woodlands Drive, Woodmead, South Africa ~72: BEUKES, Chris Andre;BOTHA, Marius Christo;OLWAGE, Phillip~ 33:ZA ~31:2019/06570 ~32:07/10/2019

2022/03171 ~ Provisional ~54:SWIMMING POOL CLEANER ACCESSORY ~71:SCHEEPERS, Michael Johannes, 1060 Edwards Road, Eldoraigne X1, South Africa ~72: SCHEEPERS, Michael Johannes~

2022/03176 ~ Complete ~54:DETACHABLE LIBRARY BOOK CART ~71:Xuzhou College of Industrial Technology, No.1, Xiangwang Road, Gulou District, Xuzhou City, Jiangsu Province, People's Republic of China ~72: Lei Shuiwang;Ning Junsheng~

2022/03180 ~ Complete ~54:COMBINED TRANSMISSION TYPE ANTI-SKID FRICTION WHEEL ~71:Shandong Huahui automation equipment Co., Ltd, 296 Foguang Road, Tai'an City, Shandong Province, People's Republic of China;Shandong University of science and technology, 579 qianwangang Road, Huangdao District, Qingdao City, Shandong Province, People's Republic of China ~72: Jiang Haiyan;Li Lina;Li Xinglong;Liu Xiaodong;Liu Chengzhi;Liu Xiujie;Xu Ruiyin;Zhao Shenggang;Zhou Miao~

2022/03216 ~ Complete ~54:EYE SAFE DIVERGED BEAM OPTICAL WIRELESS COMMUNICATIONS SYSTEM ~71:8 RIVERS CAPITAL, LLC, 406 Blackwell Street, Durham, United States of America ~72: BROWN, William J.;CLARK, Hannah~ 33:US ~31:62/901,391 ~32:17/09/2019

2022/03174 ~ Complete ~54:CORNER CONNECTOR ARRANGEMENT FOR A FENESTRATION SYSTEM ~71:KELLER, Izaan Louis, 31 Mount Pleasant, 5th Avenue, Denneoord, George 6529, Western Cape, SOUTH AFRICA, South Africa ~72: FOURIE, Waldo~ 33:ZA ~31:2021/01511 ~32:05/03/2021

2022/03181 ~ Complete ~54:MIXED LIQUID MICROBIAL BIOFERTILIZER FOR BUPLEURUM CHINENSIS AND PREPARATION METHOD THEREOF ~71:Shandong University of Traditional Chinese Medicine, No. 4655, Daxue Road, University Science and Technology Park, Changqing District, Jinan, Shandong, 250355, People's Republic of China ~72: BU, Xun;CAO, Hailu;Du, Kan;GAO, Demin;LIU, Li;SUN, Yan;ZHANG, Quanfang~

2022/03183 ~ Complete ~54:FLOOR STRUCTURE COMPOSED OF ASSEMBLY BOXES ~71:China University of Mining and Technology, No. 1, University Road, Xuzhou City, Jiangsu Province, 221116, People's Republic of China ~72: Bu Yixiang;Cao Zheyuan;Chen Zhenxing;Jiang Yaqiang;Miao Liyuan;Ren Zhaoqing;Wang Gongchen;Wang Yong;Zhang Yajun;Zhao Hanghang~

2022/03188 ~ Complete ~54:AN AUTOMATIC ONE-PIECE TEMPORARY PREFABRICATED CONCRETE STRUCTURE SUPPORT STRUCTURE, SYSTEM AND SUPPORTING METHOD ~71:THE FIRST CONSTRUCTION ENGINEERING COMPANY LTD. OF CHINA CONSTRUCTION SECOND ENGINEERING BUREAU, Floors 1 to 7, building 1, Yard 9, Kechuang 4th Street, Beijing Economic-Technological Development Area Daxing District, Beijing, People's Republic of China ~72: Chen Qi;Du Rui;Kong Ning;Li Ruiping;Xiang Hengjun;Zhang Guohui~ 33:CN ~31:202111304227.1 ~32:05/11/2021

2022/03198 ~ Complete ~54:METHODS OF PRODUCING HAEMOGENIC PROGENITOR CELLS FROM PLURIPOTENT STEM CELLS ~71:ADAPTIMMUNE LIMITED, 60 Jubilee Avenue, Milton Park, Abingdon,

Oxfordshire, OX14 4RX, United Kingdom ~72: CHENG TAO YANG;LEE CARPENTER~ 33:GB ~31:1911957.7 ~32:20/08/2019

2022/03203 ~ Complete ~54:BICYCLIC AGONISTS OF STIMULATOR OF INTERFERON GENES STING ~71:THE SCRIPPS RESEARCH INSTITUTE, 10550 North Torrey Pines Road, La Jolla, California, 92037, United States of America ~72: ALAN CHU;ARNAB K CHATTERJEE;CHENGUANG YU;EMILY CHIN;HANK MICHAEL JAMES PETRASSI;JIE WANG;KRISTEN JOHNSON;LUKE L LAIRSON;PETER G SCHULTZ~ 33:US ~31:62/889,679 ~32:21/08/2019

2022/03212 ~ Complete ~54:ANTIGEN RECOGNIZING RECEPTORS TARGETING CD371 AND USES THEREOF ~71:Memorial Hospital for Cancer and Allied Diseases, 1275 York Avenue, NEW YORK 10065, NY, USA, United States of America;Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, NEW YORK 10065, NY, USA, United States of America;Sloan-Kettering Institute for Cancer Research, 1275 York Avenue, NEW YORK 10065, NY, USA, United States of America;Tri-Institutional Therapeutics Discovery Institute, Inc., 413 East 69th Street, Box 300, NEW YORK 10021, NY, USA, United States of America ~72: BRENTJENS, Renier J.;DANIYAN, Anthony;LORENZ, Ivo C.;POHL, Mary Ann~ 33:US ~31:62/900,141 ~32:13/09/2019;33:US ~31:62/936,951 ~32:18/11/2019

. - APPLIED ON 2022-03-18 -

2022/03243 ~ Complete ~54:METHOD FOR DETERMINING PROTEIN CONTENT OF WHOLE POTATO FLOUR NOODLES ~71:Shandong University of Technology, Room 313, Block A, Gaochuang Park, High-tech Development Zone, ZIBO CITY 255086, SHANDONG PROVINCE, CHINA (P.R.C.), People's Republic of China ~72: DU, Juan;GONG, Kuijie;LI, Hongjun;MA, Chengye;REN, Zhishang;WANG, Sihua;YIN, Xiang;ZHANG, Jing~

2022/03245 ~ Complete ~54:A METHOD FOR PRODUCING BLUEBERRY BRANDY BASED ON SECONDARY FERMENTATION OF BLUEBERRY POMACE ~71:GUIZHOU BOTANICAL GARDEN, Luchongguan Road No. 86, Yunyan District, Guiyang City, People's Republic of China ~72: LI, Yongxia;LIU, Guohua;NIE, Fei;WANG, Yao;WEN, Guangqin;ZHANG, Xiaoyong~

2022/03233 ~ Complete ~54:INDOOR THREE-DIMENSIONAL VISUAL TEST DEVICE FOR FREEZING AND THAWING OF SOIL ~71:ANHUI UNIVERSITY OF SCIENCE AND TECHNOLOGY, No. 168, Taifeng Street, Shannan New District, Huainan City, Anhui Province, 232001, People's Republic of China ~72: CAI, Haibing;HONG, Rongbao;HU, Shi;LI, Mengkai;YANG, Zhe~ 33:CN ~31:202210164579.X ~32:23/02/2022

2022/03236 ~ Complete ~54:FORMULA FOR THE TREATMENT OF STOMACH DISEASES ~71:Chen Baoliang, Yangzhuang Village, Qiaji Township, Yucheng County, Shangqiu, Henan, People's Republic of China ~72: Chen Baoliang~

2022/03238 ~ Complete ~54:IMMERSIVE INTERACTIVE TEACHING DEVICE FOR PAD CLASS ~71:ANHUI MEDICAL COLLEGE, No.387 Wuhu Road, Baohe District, Hefei City, Anhui Province, 230061, People's Republic of China ~72: CHEN, Jin;CHENG, Jie;HU, Jifen;HUANG, Biyu;JIANG, Nan;XIANG, Hefeng;XIE, Miaomiao~

2022/03252 ~ Complete ~54:METHOD FOR PRODUCING A CATALYTIC CONVERTER SYSTEM FOR GAS REACTIONS ~71:HERAEUS DEUTSCHLAND GMBH & CO. KG, Heraeusstr. 12-14, Germany ~72: BOLL, Willi;HIRSCHEL, Pascal;HUBERT, Peter;HUMM, Stephan~ 33:EP ~31:19204249.7 ~32:21/10/2019

2022/03254 ~ Complete ~54:IMMUNOCYTOKINE COMPRISING HETERODIMERIC PROTEIN COMPLEX BASED ON IL-15/IL-15RA ~71:Joint Stock Company "Biocad", Liter A, bld. 34, Svyazi Street, Russian Federation ~72: AGEEV, Sergei Andreevich;EVDOKIMOV, Stanislav Rudolfovich;GORDEEV, Aleksandr Andreevich;KONONOV, Aleksey Vladimirovich;MITROSHIN, Ivan Vladimirovich;MOROZOV, Dmitry

Valentinovich;;SHMAKOVA, Aleksandra Pavlovna;ULITIN, Andrei Borisovich;VINOGRADOVA, Elena Vladimirovna~ 33:RU ~31:2019129569 ~32:19/09/2019

2022/03256 ~ Complete ~54:METHOD OF SEPARATING GRAINS OF VALUABLE MINERALS, PRECIOUS METALS, RARE-EARTH METALS, PRECIOUS AND SEMI-PRECIOUS STONES FROM NATURAL ORES IN THE AQUATIC ENVIRONMENT BY MEANS OF THE PHENOMENON OF ADHESION ~71:CIECHULSKI, Andrzej, ul. Senatorska 20/19, 00-950, Poland ~72: CIECHULSKI, Andrzej~ 33:PL ~31:P.430975 ~32:28/08/2019

2022/03259 ~ Complete ~54:UNIFIED ACCESS METHOD APPLYING DIGITAL HUMAN BEING CODECHAIN ~71:XU, Wei, No.8, Lane 118, Yonghe Road, Jingan District, People's Republic of China ~72: XU, Wei~ 33:CN ~31:201910927163.7 ~32:27/09/2019

2022/03262 ~ Complete ~54:LURBINECTEDIN IN THE TREATMENT OF MALIGNANT MESOTHELIOMA ~71:PHARMA MAR, S.A., Polígono Industrial La Mina Avda. de los Reyes, 1 Colmenar Viejo, E-28770, Madrid, Spain ~72: IOANNIS METAXAS;ROGER VON MOOS~ 33:EP ~31:19382749.0 ~32:03/09/2019

2022/03264 ~ Complete ~54:REPELLENT COMPOSITION AND USES ~71:CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, 3 rue Michel-Ange, 75016, Paris, France;INSTITUT NATIONAL DE RECHERCHE POUR L'AGRICULTURE, L'ALIMENTATION ET L'ENVIRONNEMENT, 147 rue de l'Université, 75007, Paris, France;UNIVERSITE DE BOURGOGNE, Esplanade Erasme, 21000, Dijon, France ~72: GÉRARD MANIERE;MARTINE BERTHELOT-GROSJEAN;YAËL GROSJEAN~ 33:EP ~31:19306102.5 ~32:13/09/2019

2022/03268 ~ Complete ~54:METHOD FOR CONDUCTING SOLID STATE NMR ON MACROMOLECULE-CONTAINING SOLID STATE FORMULATIONS ~71:Amgen Inc., One Amgen Center Drive, THOUSAND OAKS 91320-1799, CA, USA, United States of America ~72: CAPORINI, Marc A.;DE MAILLE, Mariana;KELLY, Ron C.~ 33:US ~31:62/909,918 ~32:03/10/2019

2022/03220 ~ Provisional ~54:A PISTON ENGINE ~71:SWAN, Patrick Graves, 16 Bray Road, Kenilworth, Cape Town 7708, SOUTH AFRICA, South Africa;SWAN, Stuart Graves, 16 Bray Road, Kenilworth, Cape Town 7708, SOUTH AFRICA, South Africa ~72: SWAN, Patrick Graves;SWAN, Stuart Graves~

2022/03224 ~ Complete ~54:PREPARATION AND APPLICATION OF FLUORESCENT POLYTANNIC ACID NANO-DOT ~71:Qingdao Agricultural University, No. 700, Changcheng Road, Chengyang District, Qingdao City, Shandong Province, 266109, People's Republic of China ~72: XU, Lubin;ZHAO, Yanfang~

2022/03228 ~ Complete ~54:NOVEL CORROSION INHIBITOR AND BACTERICIDE COMPOSITION AND PREPARATION METHOD THEREOF ~71:Yangtze University, No.1 Nanhuan Road, Jingzhou District, Jingzhou, Hubei, People's Republic of China ~72: Li Kee;Li Kehua;Qiao Mengjiao;Wang Renfang;Yang Bingbing;Zhang Jiaoyu~

2022/03231 ~ Complete ~54:SERVING DEVICE FOR TENNIS TRAINING ~71:Qingdao University of Technology, No. 777 Jialingjiang Road, Huangdao District, Qingdao City, Shandong Province, People's Republic of China ~72: MENG, Ming~

2022/03235 ~ Complete ~54:GREEN ASPARAGUS PRESERVATION METHOD ~71:HEBEI NORMAL UNIVERSITY OF SCIENCE & TECHNOLOGY, NO. 360 WEST SECTION OF HEBEI STREET, HAIGANG DISTRICT, People's Republic of China ~72: CHANG, Xuedong;GUO, Haoning;WU, Jiaxiu;ZHAO, Yuhua~

2022/03239 ~ Complete ~54:FEED ADDITIVE FOR PROMOTING LIVESTOCK GROWTH AS WELL AS PREPARATION METHOD AND APPLICATION THEREOF ~71:SHANDONG NONGWEI BIOLOGICAL TECHNOLOGY CO., LTD., WENNAN TOWN INDUSTRIAL PARK, XINTAI CITY, TAI 'AN, People's Republic of China ~72: FENG, Yanzhong;HE, Lanbao;LIU, Jianhe;WANG, Zhaoshan~

2022/03241 ~ Complete ~54:A TABLE HAVING A HEATING APPLIANCE ~71:The Cashmere Caveman Co, Wild Kitchens Limited, 5 Stratford Place, London W1C 1AX, UNITED KINGDOM, United Kingdom ~72: RITCHIE, Guy Stuart;TRUE, Nigel~ 33:GB ~31:1713935.3 ~32:31/08/2017

2022/03247 ~ Complete ~54:MOBILE TRIPLE-FREQUENCY POLARIMETRIC DOPPLER METETOGICAL RADAR SYSTEM AND DETECTING METHOD ~71:INSTITUTE OF ATMOSPHERIC PHYSICS, CHINESE ACADEMY OF SCIENCES, Building 40, Huayanli, Qijiahuozi, Deshengmenwai, Chaoyang District, People's Republic of China;SUN CREATE ELECTRONICS CO., LTD, High-tech Industrial Development Zone, Hefei, People's Republic of China ~72: BI, Yongheng;BIAN, Zhenwen;CHANG, Yue;CHEN, Hongbin;CHEN, Xiaohui;DUAN, Shu;HUANG, Xingyu;JIANG, Yanyan;LI, Yong;NIU, Zhongwen;TENG, Yupeng;WAN, Xia;XUAN, Yuejian~

2022/03250 ~ Complete ~54:CD3 BINDING ANTIBODIES ~71:TENEOBIO, INC., 7999 Gateway Boulevard Suite 320, Newark, California, 94560, United States of America ~72: DUY PHAM;KATHERINE HARRIS;NATHAN TRINKLEIN;SHELLEY FORCE ALDRED;WIM VAN SCHOOTEN~ 33:US ~31:62/394,360 ~32:14/09/2016;33:US ~31:62/491,908 ~32:28/04/2017

2022/03266 ~ Complete ~54:METHOD FOR PREVENTING OR TREATING CHOLESTEROL-RELATED DISEASES BY USING ANTI-PCSK9 ANTIBODY ~71:Innovent Biologics (Suzhou) Co., Ltd., 168 Dongping Street, Suzhou Industrial Park, SUZHOU 215123, JIANGSU, CHINA (P.R.C.), People's Republic of China ~72: DENG, Huan;QIAN, Lei;ZHENG, Shirui~ 33:CN ~31:201910884902.9 ~32:19/09/2019;33:CN ~31:202010424274.9 ~32:19/05/2020

2022/03271 ~ Complete ~54:A NOVEL COMPLEX FORMED BETWEEN THE FLAVIVIRAL NON-STRUCTURAL NS1 PROTEIN AND PLASMA LIPOPROTEINS ~71:Centre National de la Recherche Scientifique - CNRS -, 3, rue Michel Ange, PARIS 75016, FRANCE, France;Institut Pasteur, 25-28 Rue du Docteur Roux, PARIS CÉDEX 15 75724, FRANCE, France;Institut Pasteur du Cambodge, 5 Boulevard Monivong B.P. 983, PHNOM PENH, CAMBODIA, Cambodia ~72: BENFRID, Souheyla;BONTEMS, François;COULIBALY, Fasséli;DELLAROLE, Mariano;DUONG, Veasna;DUSSART, Philippe;FLAMAND, Marie;GIAI GIANETTO, Quentin;MATONDO, Mariette;PARK, Kyu-Ho Paul;REY, Félix;SAKUNTABHAI, Anavaj;TAMIETTI, Carole;VOSS, James~ 33:EP ~31:19306200.7 ~32:25/09/2019

2022/03255 ~ Complete ~54:RGB NETWORK AND DEVICES ~71:PFETCH, INC., 223 E. Flagler St., Suite 218, United States of America ~72: CVIJANOVIC, Christi~ 33:US ~31:63/101,218 ~32:03/10/2019

2022/03258 ~ Complete ~54:ROCK BOLT ASSEMBLY ~71:RAND YORK CASTINGS (PTY) LIMITED, 4 Lagoon Drive, South Africa ~72: CORBETT, Michael Robert~ 33:ZA ~31:2019/05563 ~32:23/08/2019

2022/03221 ~ Provisional ~54:MODULAR BUILDING SYSTEM, A BUILDING UNIT AND A METHOD OF MANUFACTURING SAME ~71:RYAN, Mark, 21 Pinehurst Road, South Africa ~72: KENEALY, Sean;RYAN, Justin;RYAN, Mark~

2022/03223 ~ Provisional ~54:MATTRESS ARRANGEMENT ~71:RESTONIC (PROPRIETARY) LIMITED, Cnr. Short and Longford Street, Booysens, Gauteng, 2016, South Africa ~72: DALE VIVIAN HARLEY;MICHAEL LESLIE METZ~

2022/03226 ~ Complete ~54:E. COLI PHAGE ZJRP5 AND USE THEREOF, AND BACTERICIDE AND DRUG ~71:Zhejiang Academy of Agricultural Sciences, 198 Shiqiao Road, Hangzhou City, Zhejiang Province, 310021, People's Republic of China ~72: BAO, Guolian;CUI, Xuemei;HUANG, Pan;HUANG, Ye'e;JI, Quan'an;LI, Ke;LIU, Yan;WANG, Zhipeng;WEI, Qiang;XIAO, Chenwen~

2022/03229 ~ Complete ~54:METHOD AND SYSTEM OF CALCULATION OF THE NUMBER OF CHASSIS REPAIR UNITS IN THE QUEUING SYSTEM ~71:Army Academy of Armored forces of PLA, 21 Dujiakan, Fengtai District , Beijing, 100072, People's Republic of China ~72: CHENG, Jie;LI, Junqi;SHAO, Wei;SUN, Wanguo;WU, Xixi;XU, Renjie;ZHAI, Xiaoning;ZHENG, Xianzhu;ZHOU, Zeyun~

2022/03240 ~ Complete ~54:ALPHA-V BETA-6 INTEGRIN LIGANDS AND USES THEREOF ~71:ARROWHEAD PHARMACEUTICALS, INC., 225 South Lake Avenue, Suite 1050, Pasadena, California, 91101, United States of America ~72: AARON ALMEIDA;ANGIESZKA GLEBOCKA;ANTHONY NICHOLAS;ERIK W BUSH;JEFFREY CARLSON;MATTHEW FOWLER-WATTERS;TAO PEI;ZHEN LI~ 33:US ~31:62/415,752 ~32:01/11/2016

2022/03246 ~ Complete ~54:A STRAIN OF BACILLUS THURINGIENSIS THAT CAN RAPIDLY REPAIR ACIDIFIED SOIL ~71:Qingdao Vland Biotech Group Co., Ltd., No.596-1 Industrial Park, Jiushui East Road, Laoshan District, Qingdao City, Shandong Province, 266000, People's Republic of China;Weifang University of Science and Technology, 166 Xueyuan Road, Shouguang County, Weifang City, Shandong Province, 262700, People's Republic of China ~72: Bin Lv;Hongli Ling;Jinfu Lv;Meiqin Li;Weiwei Yuan;Xiumei Ni~ 33:CN ~31:202111532407.5 ~32:15/12/2021

2022/03253 ~ Complete ~54:ELECTROCHEMICAL SENSOR FOR ANALYSIS OF BEVERAGES ~71:UNIVERSAL BIOSENSORS PTY LTD, 1 Corporate Avenue, Australia ~72: Alastair M. HODGES;Luke Robert COSSINS;Peter Michael NEWMAN;Ronald Christopher CHATELIER;Stanley ZHEN-JIN~ 33:US ~31:62/908,561 ~32:30/09/2019

2022/03267 ~ Complete ~54:AFFINE CODING WITH VECTOR CLIPPING ~71:QUALCOMM Incorporated, ATTN: International IP Administration, 5775 Morehouse Drive, SAN DIEGO 92121-1714, CA, USA, United States of America ~72: KARCZEWICZ, Marta;RUSANOVSKYY, Dmytro;ZHANG, Yan~ 33:US ~31:62/907,664 ~32:29/09/2019;33:US ~31:62/910,384 ~32:03/10/2019;33:US ~31:17/033,659 ~32:25/09/2020

2022/03272 ~ Complete ~54:ANTI-STEM CELL FACTOR ANTIBODIES AND METHODS OF USE THEREOF ~71:Opsidio, LLC, P.O. Box 802, BRYN MAWR 19010, PA, USA, United States of America ~72: PHILLIPS, Martin~ 33:US ~31:62/900,927 ~32:16/09/2019

2022/03261 ~ Complete ~54:NUCLEOSIDE PRODRUGS AND USES RELATED THERETO ~71:EMORY UNIVERSITY, Office of Technology Transfer, 1599 Clifton Road NE, 4th Floor, Atlanta, Georgia, 30322, United States of America ~72: DENNIS C LIOTTA;ERIC MILLER;KYLE GIESLER;MADHURI DASARI;MICHAEL D'ERASMO;NICOLE PRIBUT;SABRINA ISKANDAR~ 33:US ~31:62/890,452 ~32:22/08/2019;33:US ~31:62/890,684 ~32:23/08/2019

2022/03263 ~ Complete ~54:SET OF PANELS WITH MECHANICALLY LOCKING EDGES ~71:VÄLINGE INNOVATION AB, Prästavägen 513, SE-263 64, VIKEN, Sweden ~72: ANDERS NILSSON;FREDRIK BOO;KARL QUIST;ROGER YLIKANGAS~ 33:EP ~31:19199250.2 ~32:24/09/2019

2022/03265 ~ Complete ~54:BLOWBACK BLOCKAGE REMOVING APPARATUS FOR DRYING MACHINE DUST SCREEN, DUST-PROOF DEVICE, AND DRYING MACHINE ~71:JINGJIN EQUIPMENT INC., Jinghua Road, Economic Development Zone Dezhou, Shandong, 253034, People's Republic of China ~72: GUOZHI LIU;HONGBING WANG;JIAN LI;XIN WANG~ 33:CN ~31:201921357037.4 ~32:21/08/2019

2022/03269 ~ Complete ~54:ANTI-CD371 ANTIBODIES AND USES THEREOF ~71:Memorial Hospital for Cancer and Allied Diseases, 1275 York Avenue, NEW YORK 10065, NY, USA, United States of America;Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, NEW YORK 10065, NY, USA, United States of America;Sloan-Kettering Institute for Cancer Research, 1275 York Avenue, NEW YORK 10065, NY, USA, United States of America;Tri-Institutional Therapeutics Discovery Institute, Inc., 413 East 69th Street, Box 300, NEW YORK 10021, NY, USA, United States of America ~72: BRENTJENS, Renier J.;DANIYAN, Anthony;LORENZ, Ivo C.;POHL, Mary Ann~ 33:US ~31:62/900,118 ~32:13/09/2019;33:US ~31:62/936,913 ~32:18/11/2019

2022/03249 ~ Complete ~54:AEROSOL-GENERATING DEVICE WITH MEANS FOR DETECTING AT LEAST ONE OF THE INSERTION OR THE EXTRACTION OF AN AEROSOL-GENERATING ARTICLE INTO OR FROM THE DEVICE ~71:PHILIP MORRIS PRODUCTS S.A., Quai Jeanrenaud 3, Switzerland ~72: BUTIN, Yannick;COURBAT, Jerome, Christian;FURSA, Oleg;MIRONOV, Oleg;OLIANA, Valerio;STURA, Enrico~ 33:EP ~31:19193286.2 ~32:23/08/2019

2022/03251 ~ Complete ~54:BENZOXAZINONE COMPOUNDS AS KLK5/7 DUAL INHIBITORS ~71:MOLECULAR SKIN THERAPEUTICS, INC., 421 Kipling Street, Palo Alto, United States of America ~72: BETZ, Andreas;ZAMBONI, Robert~ 33:US ~31:62/909,006 ~32:01/10/2019

2022/03257 ~ Complete ~54:OFFSHORE FLOATING WAVE POWER GENERATION ASSEMBLY ~71:LI, Wenbo, No. 202, Unit 1, Building 5, Xishan 5th Street, Nanding Town, Zhangdian District, Zibo City, Shandong Province, People's Republic of China ~72: LI, Wenbo~

2022/03260 ~ Complete ~54:METHOD FOR TREATING HYDRAULICALLY-FILLED SOFT FOUNDATION ~71:CHINA HARBOUR ENGINEERING COMPANY LTD., No. 9,Chunxiu Road, Dongcheng District, Dongcheng District, Beijing, 100027, People's Republic of China ~72: JIAYAN YANG~ 33:CN ~31:202011230273.7 ~32:06/11/2020

2022/03222 ~ Provisional ~54:SHOE ACCESSORY ~71:BAUCHOP, VINCENT WILLIAM, 37 Furgus road, Valhalla, South Africa ~72: BAUCHOP, VINCENT WILLIAM~

2022/03225 ~ Complete ~54:E. COLI PHAGE WITH BACTERICIDAL EFFECT AND USE THEREOF, AND BACTERICIDE AND DRUG ~71:Zhejiang Academy of Agricultural Sciences, 198 Shiqiao Road, Hangzhou City, Zhejiang Province, 310021, People's Republic of China ~72: BAO, Guolian;CUI, Xuemei;HUANG, Pan;HUANG, Ye'e;JI, Quan'an;LIU, Yan;WANG, Zhipeng;WEI, Qiang;XIAO, Chenwen;ZHAO, Jian~

2022/03230 ~ Complete ~54:RUBBER TIE ~71:Xuzhou College of Industrial Technology, No.1, Xiangwang Road, Gulou District, Xuzhou City, Jiangsu Province, People's Republic of China ~72: CONG, Houluo;SUN, Peng;WANG, Yanqiu;WEI, Bangfeng;XU, Yunhui~

2022/03227 ~ Complete ~54:QUICK BASKETBALL CLEANING DEVICE ~71:Qingdao University of Technology, No. 777 Jialingjiang Road, Huangdao District, Qingdao City, Shandong Province, People's Republic of China ~72: CHEN, Hongxin~

2022/03232 ~ Complete ~54:SUNFLOWER STRAW SAND BARRIER STRIP AND THE SETTING METHOD ~71:Institute Of Water Resources for Pastoral Area,MWR, No. 128, University East Street, Hohhot, Inner Mongolia Autonomous Region, People's Republic of China ~72: Abi Yasi;Bao Lili;Cheng Bo;Cui Wai;Dong Lei;Gao Yong;Ge Nan;Han Zhaoen;Li Hongfang;Li Jinrong;Liu Hu;Luo Xiangying;Miao Henglu;Tian Xiumin;Wang Jian;Wang Ru~

2022/03234 ~ Complete ~54:PERSONNEL BASIC INFORMATION COLLECTION PLATFORM BASED ON BIG DATA ~71:SUZHOU UNIVERSITY, Erpu Village, Zhuxianzhuang Town, Yongqiao District, Suzhou, Anhui, 234099, People's Republic of China ~72: Hao Baoming;Li Biao;Li Hao;Zheng Wei~

2022/03237 ~ Complete ~54:PORTABLE TABLE TENNIS SERVER ~71:Shenyang University of Technology, No.111 Shenliao West Road, Shenyang Economic and Technological Development Zone, Shenyang City, Liaoning Province, People's Republic of China ~72: Wang Hongjun;Yan Chang'an;Yan Rui~

2022/03248 ~ Complete ~54:BICYCLIC COMPOUND AND USE THEREOF ~71:SK BIOPHARMACEUTICALS CO., LTD., 221, Pangyoyeok-ro, Bundang-gu, Republic of Korea ~72: CHOI, Hyun Suk;JUNG, Soo Yeon;KANG, Eun Ji;KIM, Jin Sung;KIM, Se Hyuk;LEE, Ho Yeon;LEE, Ho Youl;LEE, Jun;PARK, Sook Kyung;SHIN, Yong Je~ 33:KR ~31:10-2019-0122177 ~32:02/10/2019

2022/03270 ~ Complete ~54:BLOCKCHAIN DATABASE MANAGEMENT SYSTEM ~71:nChain Holdings Limited, Fitzgerald House, 44 Church Street, ST. JOHN'S, ANTIGUA & BARBUDA, Antigua and Barbuda ~72: DOIRON, Brock Gilles;WRIGHT, Craig Steven~ 33:GB ~31:1912068.2 ~32:22/08/2019

2022/03242 ~ Complete ~54:COSMETIC COMPOSITIONS ~71:Givaudan SA, Chemin de la Parfumerie 5, VERNIER 1214, SWITZERLAND, Switzerland ~72: REYNAUD , Romain;SENNELIER PORTET, Benedicte;TENON, Mathieu~ 33:GB ~31:2103822.9 ~32:19/03/2021

2022/03244 ~ Complete ~54:A TABLE HAVING A HEATING APPLIANCE ~71:The Cashmere Caveman Co, Wild Kitchens Limited, 5 Stratford Place, London W1C 1AX, UNITED KINGDOM, United Kingdom ~72: RITCHIE, Guy Stuart;TRUE, Nigel~ 33:GB ~31:1713935.3 ~32:31/08/2017

. - APPLIED ON 2022-03-22 -

2022/03275 ~ Provisional ~54:SURFACE CONTAINMENT METHOD AND APPARATUS ~71:Mpumatech Stainless (Pty) Ltd., 35 - 43 Noble Road, Ferrobank, South Africa ~72: CLARK Raymond Jurgens~

2022/03277 ~ Provisional ~54:SA WINE VALUE KIT ~71:La RicMal CC, 43 Mara Road, South Africa ~72: Malcolm Green~

2022/03279 ~ Complete ~54:PLANTING METHOD FOR PLANTING GRAIN AND OIL CROPS ON RED SOIL PADDY FIELDS WITH BUMPER HARVEST ~71:Jiangxi Institute Of Red Soil, Jiangxi Red Soil Research Institute, Zhanggong Town, Jinxian County, Nanchang City, Jiangxi Province, People's Republic of China ~72: Chen Ming;Hu Wenting;Huang Tianbao;Li Yazhen;Liu Xiaosan;Wu Yan;Xiao Guobin;Xiao Xiaojun;Ye Chuan;Yu Paolan;Zheng Wei~

2022/03281 ~ Complete ~54:APPLICATION OF CCL28 AND HSV-2 GB AS MOLECULAR ADJUVANTS IN CONSTRUCTING DNA VACCINE ~71:The Fifth People's Hospital of Wuxi, The Fifth People's Hospital of Wuxi, Affiliated Hospital of Jiangnan University, Guangrui Road, Liangxi District, Wuxi, Jiangsu Province, 214000, People's Republic of China ~72: Yan Yan~

2022/03284 ~ Complete ~54:AN INTELLIGENT EARLY WARNING SYSTEM AND EARLY WARNING METHOD FOR COAL AND GAS OUTBURST ~71:Guizhou Panjiang Group Technology Research Institute Co., Ltd., No. 95, Lincheng West Road, Guanshanhu District, Guiyang City, Guizhou Province, 550025, People's Republic of China ~72: Hongfei XIE;Hua CHEN;Juncai CAO;Lin HE~

2022/03359 ~ Complete ~54:ARYL HETEROBICYCLIC COMPOUNDS AS KV1.3 POTASSIUM SHAKER CHANNEL BLOCKERS ~71:D.E. Shaw Research, LLC, 120 W. 45th Street - 39th Floor, NEW YORK 10036, NY,

USA, United States of America ~72: GIORDANETTO, Fabrizio;JENSEN, Morten Østergaard;JOGINI, Vishwanath;SNOW, Roger John~ 33:US ~31:62/911,642 ~32:07/10/2019

2022/03287 ~ Complete ~54:HIGH-QUALITY BEEF OF CASTRATE CATTLE AND PREPARATION METHOD THEREOF ~71:Sichuan Animal Science Academy, 7# niusha Street, Jinjiang District, Chengdu, Sichuan, People's Republic of China ~72: AGuo YueDa;Deng XiaoDong;Fang DongHui;Fu MaoZhong;Gan Jia;He Fang;Shi Yi;Wang Wei;Yi Jun~

2022/03292 ~ Complete ~54:A METHOD FOR SOWING AND RAISING SEEDLINGS OF XANTHOCERAS SORBIFOLIUM BUNGE IN WINTER ~71:Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences, No.818, South Beijing Road, Urumqi, Xinjiang Uygur Autonomous Region, 830011, People's Republic of China ~72: LI Shengyu;LIU Guojun;SONG Chunwu;WANG Yongdong;YOU Yuan~

2022/03300 ~ Complete ~54:A CULTIVATION METHOD OF USAGE AND CONSERVATION TYPE TRIPLE CROPPING FARMING PATTERN FOR RED SOIL RICE FIELDS ~71:Jiangxi Institute Of Red Soil, Jiangxi Red Soil Research Institute, Zhanggong Town, Jinxian County, Nanchang City, Jiangxi Province, People's Republic of China ~72: Chen Guojun;Chen Ming;Hu Wenting;Huang Tianbao;Li Yazhen;Li Zhongping;Liu Xiaosan;Lv Weisheng;Wu Yan;Xiao Fuliang;Xiao Guobin;Xiao Xiaojun;Ye Chuan;Ye Deping;Yu Paolan;Zheng Wei~

2022/03330 ~ Complete ~54:METHOD FOR MARKING AND AUTHENTICATING DIAMONDS AND PRECIOUS STONES ~71:SECURITY MATTERS LTD., Kibbutz Ketura, D.N. Hevel Eilot, 8884000, Israel;SOREQ NUCLEAR RESEARCH CENTER, Nahal Soreq, Yavne, 81800, Israel;YAHLOMA TECHNOLOGIES INC., 25th Floor, 700 West Georgia Street, Vancouver, British Columbia, V7Y 1B3, Canada ~72: HAGGAI ALON;MOR KAPLINSKY;NADAV YORAN;TZEMAH KISLEV;YAIR GROF~ 33:US ~31:62/381,243 ~32:30/08/2016

2022/03334 ~ Complete ~54:INTERMODAL TIPPER TRAILER COVER ~71:Ecofab Covers International Inc., Whitepark House, White Park Road, Barbados ~72: DANIEL, Michael Robert;HOMM, Uwe;LOW, Trevor~ 33:US ~31:63/164,224 ~32:22/03/2021

2022/03341 ~ Complete ~54:NITROSYLRUTHENIUM(II) COMPLEX AS WELL AS METHOD AND APPLICATION THEREOF ~71:SHANXI UNIVERSITY, 92 Wucheng Road, Taiyuan City, People's Republic of China ~72: LIU, Chenyang;WANG, Chenyu;WANG, Hongfei;WANG, Yu;XU, Jianguo~

2022/03342 ~ Complete ~54:POST-HARVEST FRESH-KEEPING PACKAGING PRODUCT AND PACKAGING METHOD FOR KIDNEY BEANS ~71:ZHEJIANG UNIVERSITY, 866 Yuhangtang Road, Xihu District, People's Republic of China ~72: CAO, Jinping;JIANG, Anze;KANG, Chen;SUN, Chongde;WANG, Yue;WU, Jue;ZHANG, He~

2022/03344 ~ Complete ~54:EFFICIENT SDS DEVICE ~71:JIANGSU FENGYE TECHNOLOGY ENVIRONMENTAL PROTECTION GROUP CO., LTD, Building 19, Zone 7, No. 188, South Fourth Ring West Road, Fengtai District, Beijing 100071, People's Republic of China ~72: LI, Shuo;LIU, Ming;QIAN, Yucheng;WANG, Kewen~ 33:CN ~31:202110582994.2 ~32:27/05/2021

2022/03347 ~ Complete ~54:METHOD AND EQUIPMENT FOR THE CONTINUOUS CLEANING OF A MOVING STEEL STRIP ~71:ARCELORMITTAL, 24-26, Boulevard d'Avranches, Luxembourg ~72: Florent SPONEM;Pierre RICHET~

2022/03360 ~ Complete ~54:PEPTIDE AMIDE COMPOSITION AND PREPARATION METHOD THEREFOR ~71:Haisco Pharmaceutical Group Inc., No.17, Sanxiang Avenue, Zedang Town, SHANNAN PREFECTURE 856099, TIBET, CHINA (P.R.C.), People's Republic of China;Liaoning Haisco Pharmaceutical Co., Ltd., Caozhuang Industrial Park, XINGCHENG CITY, HULUDAO 125107, LIAONING PROVINCE, CHINA (P.R.C.),

People's Republic of China;Sichuan Haisco Pharmaceutical Co., Ltd., No.136 Beverley Road, Across the Taiwan Strait Technology, Across the Taiwan Strait Technology, Wenjiang District, CHENGDU 611130, SICHUAN, CHINA (P.R.C.), People's Republic of China ~72: LI, Honghu;MA, Xiangling;MO, Yi;ZHANG , Li;ZHAO, Can~ 33:CN ~31:201910751700.7 ~32:23/08/2019

2022/03365 ~ Complete ~54:METHOD FOR PRODUCING A PRESS-HARDENED SHEET STEEL PART HAVING AN ALUMINIUM-BASED COATING, INITIAL SHEET METAL BLANK, AND A PRESS-HARDENED SHEET STEEL PART MADE THEREFROM ~71:SALZGITTER FLACHSTAHL GMBH, Eisenhüttenstrasse 99, Germany ~72: BEIER, Frank;DEBEAUX, Marc;KÖRNER, Kerstin;LUTHER, Friedrich~ 33:DE ~31:10 2019 126 378.6 ~32:30/09/2019

2022/03367 ~ Complete ~54:TREATMENT OF MENSTRUAL CYCLE-INDUCED SYMPTOMS ~71:PERIOD PILL BV, Nes 116, Netherlands ~72: GOLAN, Ezekiel;JANSSEN, Edgar Stijn Jochem;JANSSEN, Merel~ 33:US ~31:62/891,438 ~32:26/08/2019

2022/03316 ~ Complete ~54:METHOD OF POSITIONING AND CORRECTING NEAR-SEABED VIDEO DATA ~71:First Institute of Oceanography, Ministry of Natural Resources, No. 6, Xianxialing Road, Laoshan District, Qingdao, Shandong, 266061, People's Republic of China;Pilot National Laboratory for Marine Science and Technology (Qingdao), No. 1, Wenhai Road, Aoshanwei Town, Jimo District, Qingdao City, Shandong Province, 266237, People's Republic of China;University of Science and Technology Liaoning, No. 189, Qianshan Middle Road, Anshan City, Liaoning Province, 114051, People's Republic of China ~72: DU, Dewen;LI, Chuanshun;SHI, Xinyu;YAN, Shijuan;YANG, Gang;YANG, Tieli;YE, Jun;ZHANG, Wen;ZHAO, Qiukui;ZHAO, Yue;ZHU, Zhiwei~

2022/03323 ~ Complete ~54:ARTIFICIAL PIGEON MILK FEED AND PREPARATION METHOD OF THE SAME ~71:Nanjing Agricultural University, No. 1, Weigang, Xuanwu District, Nanjing City, Jiangsu Province, 210018, People's Republic of China ~72: LI, Chunmei;LI, Yansen;WANG, Mingli~ 33:CN ~31:202110517238.1 ~32:12/05/2021

2022/03328 ~ Complete ~54:CONSTRUCTION REINFORCING UNIT AND METHOD OF REINFORCING A CONCRETE SLAB ~71:Allen Clive FIFORD, 25 Christina Crescent, Northwold Gardens, Randburg, South Africa ~72: Allen Clive Fiford~ 33:ZA ~31:2021/00830 ~32:08/02/2021

2022/03373 ~ Complete ~54:ROAD VEHICLES ANTI-THEFT SECURITY DEVICE BASED ON AUTOMOTIVE EMBEDDED SYSTEMS SOFTWARE ~71:MIURA, Andre Figueiredo, Rua Robson Vieira Prestia 70, Brazil ~72: MIURA, Andre Figueiredo~

2022/03282 ~ Complete ~54:ECOLOGICAL RESTORATION TECHNOLOGY FOR WASTELAND OF MANGANESE TAILING ~71:Central South University of Forestry and Technology, No.498, South Shaoshan Road, Tianxin District, Changsha, Hunan Province, People's Republic of China ~72: OuYang GuanYi;Wang Jun;Wu Xiaohong;Xia Qi;Yan Wende~

2022/03290 ~ Complete ~54:A TERMINAL ROOF BOARD MOUNTING BRACKET WITH A WATERPROOF STRUCTURE ~71:THE FIRST CONSTRUCTION ENGINEERING COMPANY LTD. OF CHINA CONSTRUCTION SECOND ENGINEERING BUREAU, Floors 1 to 7, building 1, Yard 9, Kechuang 4th Street, Beijing Economic-Technological Development Area, Daxing District, Beijing, People's Republic of China ~72: Bai Bing;Du Xin;Liu Fei;Lv Longlong;Xu Haojun;Yang Yawei;Zhang Xuewei;Zhao Ming;Zhao Xingchen;Zhong Xin~

2022/03297 ~ Complete ~54:APPLICATION OF PECTIN METHYLESTERASE INHIBITOR GENE GHPMEI39 AND ITS ENCODED PROTEIN IN PLANT INFLORESCENCE REGULATION ~71:INSTITUTE OF COTTON RESEARCH OF CAAS, No. 38, Yellow River Avenue, Anyang City, Henan Province, People's Republic of China ~72: Li Fuguang;Li Yonghui;Mao Xiaonan;Wang Zhi;Wei Zhenzhen~

2022/03305 ~ Complete ~54:POLYMER-BASED PIEZOELECTRIC HYDROPHILIC NANOCOMPOSITES ~71:GRAPHIC ERA (DEEMED TO BE UNIVERSITY), 566/6, Bell Road, Clement Town, Dehradun, Uttarakhand, 248002, India ~72: Dr. VARIJ PANWAR;LOKESH SINGH PANWAR~ 33:IN ~31:202111044270 ~32:29/09/2021

2022/03313 ~ Complete ~54:LEVELING SYSTEM SUITABLE FOR SWIVEL BRIDGE SLIDEWAY AND APPLICATION METHOD THEREOF ~71:Shandong Expressway Weiri Highway Co., Ltd., Room 01, Building 3, Information Electronic Parts Assembly Project, No.2600 Zhuangjian Road, Kuiwen District, Weifang City, Shandong Province, People's Republic of China ~72: DU Yang;FAN Junying;LI Shimin;TANG Xianpeng;WANG Fawei;XIAO Gang;XU Gangnian;ZHAO Guinan;ZHOU Longzhong~

2022/03315 ~ Complete ~54:SHELLING ASSEMBLY LINE ~71:Qingdao WoLong Peanut Machinery Co., Ltd, South Side of Qianjiatun Village, Baishahe Sub-district Office, Pingdu City, Qingdao City, Shandong Province , 266000, People's Republic of China ~72: CHEN, Dezhang~ 33:CN ~31:202111028796.8 ~32:02/09/2021

2022/03318 ~ Complete ~54:HORIZONTAL DIRECTIONAL DRILLING TRAJECTORY OPTIMIZATION METHOD BASED ON IMPROVED RADIAL MOVEMENT ALGORITHM ~71:Central South University, No. 22 Shaoshan South Road, Changsha, Hunan , 410075, People's Republic of China ~72: JIN, Liangxing;LUO, Chunwa;WEI, Junjie~ 33:CN ~31:202110395818.8 ~32:13/04/2021

2022/03327 ~ Complete ~54:COAL DETECTION METHOD BASED ON BIG DATA ANALYSIS AND PREDICTION ~71:Jing Tang, 122-2-802 Zhirunshan Residential Area, Economic Development Zone, Dalian, Liaoning Province, 116100, People's Republic of China;Ruixin Ma, 122-2-802 Zhirunshan Residential Area, Economic Development Zone, Dalian, Liaoning Province, 116100, People's Republic of China;Xin Li, 122-2-802 Zhirunshan Residential Area, Economic Development Zone, Dalian, Liaoning Province, 116100, People's Republic of China ~72: Jing Tang;Ruixin Ma;Xin Li~

2022/03332 ~ Complete ~54:A METHOD FOR OPERATING A SPRAY FLUID OPERATION SYSTEM FOR AN AGRICULTURAL SPRAYER, A SPRAY FLUID OPERATION SYSTEM, AN AGRICULTURAL SPRAYER, AND A METHOD FOR OPERATING AN AGRICULTURAL SPRAYER ~71:KVERNELAND GROUP NIEUW-VENNEP B.V., Hoofdweg 1278, 2153 LR, Nieuw-Vennep, Netherlands ~72: JOHAN C BEERS;VINCENT KORSUIZE~ 33:EP ~31:21166680.5 ~32:01/04/2021

2022/03362 ~ Complete ~54:CARBONATE CONTAINING LIPID COMPOUNDS AND COMPOSITIONS FOR INTRACELLULAR DELIVERY OF THERAPEUTIC AGENTS ~71:ModernaTX, Inc., 200 Technology Square, CAMBRIDGE 02139, MA, USA, United States of America ~72: BENENATO, Kerry E.;BISWAS, Souvik;CORNEBISE, Mark;HENNESSY, Edward;KUMARASINGHE, Ellalahewage S.~ 33:US ~31:62/902,929 ~32:19/09/2019

2022/03363 ~ Complete ~54:IMMUNOGENIC COMPOSITIONS ~71:GlaxoSmithKline Biologicals SA, Rue de l'Institut 89, RIXENSART B-1330, BELGIUM, Belgium ~72: DEVOS, Nathalie Isabelle;SIJMONS, Steven Clement~ 33:EP ~31:19200878.7 ~32:01/10/2019

2022/03366 ~ Complete ~54:VIDEO-BASED POINT CLOUD STREAMS ~71:VID SCALE, INC, 200 Bellevue Parkway, United States of America ~72: HAMZA, Ahmed;HE, Yong~ 33:US ~31:62/907,249 ~32:27/09/2019;33:US ~31:62/958,031 ~32:07/01/2020

2022/03368 ~ Complete ~54:IMMUNOGENIC COMPOSITIONS AGAINST ENTERIC DISEASES AND METHODS FOR ITS PREPARATION THEREOF ~71:SERUM INSTITUTE OF INDIA PRIVATE LIMITED, 21 2/2, Off Soli Poonawalla Road, Hadapsar, Pune, India ~72: ANNAMRAJU, Dattatreya Sarma;AVALASKAR, Nikhil Dattatray;CHAVAN, Vishal Bharat;DHERE, Rajeev Mhalasakant;GOEL, Sunil Kumar;HUNDEKARI, Yogesh

Tukaram;KAMAT, Chandrashekhar Dwarkanath;PISAL, Sambhaji Shankar;TAKLIKAR, Anil Pirajirao~ 33:IN ~31:201921035435 ~32:03/09/2019

2022/03280 ~ Complete ~54:NOVEL PHOTOVOLTAIC MATERIAL AND PREPARATION METHOD THEREOF ~71:Huanghuai Universiy, No. 76, Kaiyuan Avenue, Zhumadian City, Henan Province, 463000, People's Republic of China ~72: Hu Jingyu;Li Jiangong;Li Kaihua;Liang Yunting;Liu Wenfu;Luo Xin;Tang Yong;Wang Yinling;Yao Haizi~

2022/03298 ~ Complete ~54:AN EASILY-MOUNTED DISTRIBUTION BOX ~71:Anhui Lutai Electric Technology Co., Ltd, No12401, Haixinsha Building, Pihe Road, Jin'an District, Lu'an City, Anhui Province, People's Republic of China ~72: Zhang Yanxue~

2022/03326 ~ Complete ~54:A WATER STORAGE SYSTEM AND METHOD FOR SPONGE CITY CONSTRUCTION ~71:Linyi University, Middle Section of Shuangling Road, Lanshan District, Linyi City, Shandong Province, 276000, People's Republic of China ~72: Jia Chuanyang;Jiang Jiang;Liu Keming;Song Xiaoyuan;Sun Xizhen;Wang Hailong;Yu Xianbin;Zhang Guibin~ 33:CN ~31:202111018200.6 ~32:01/09/2021

2022/03337 ~ Complete ~54:A SYSTEM FOR POROUS FLOW APPROACH TO MODELLING MIXED TRAFFIC ~71:Balarama Krishna CHUNCHU, REVA University, Rukmini knowledge park, Kattigenahalli, Yelahanka, Bangalore, India;Eswar SALA, SESHADRI RAO GUDLAVALLERU ENGINEERING College, Gudlavalleru, KRISHNA DISTRICT, India;Nithya MUTHUKUMARAN, KAKINADA INSTITUTE OF Technological Sciences, Ramachandrapuram, Kakinada,, India;Prasanna Kumar RAVINUTHALA, GEETHANJALI COLLEGE OF engineering and technology, Department of Civil Engineering, Cheeryala, Keesara, Medchal, India;REVA UNIVERSITY, Rukmini knowledge park, Kattigenahalli, Yelahanka, Bangalore, India;Srikanth SEELAM, REVA University, RUKMINI KNOWLEDGE park, Kattigenahalli, Yelahanka, Bangalore, India;Sudharshan Reddy BEERAM, Malla reddy engineering college (Autonomous), Department of civil engineering, Maisammaguda, Gundlapochampally, Medchal, India;Syed Omar BALLARI, Guru Nanak Institutions TECHNICAL CAMPUS, Department OF CIVIL Engineering, Ibrahimpatnam, Ranga Reddy district, India ~72: Balarama Krishna CHUNCHU;Eswar SALA;Nithya MUTHUKUMARAN;Prasanna Kumar RAVINUTHALA;Srikanth SEELAM;Sudharshan Reddy BEERAM;Syed Omar BALLARI~

2022/03371 ~ Complete ~54:FEED ADDITIVE FOR LOWERING CHOLESTEROL CONTENT IN MEAT AS WELL AS PREPARATION METHOD AND APPLICATION THEREOF ~71:SHANDONG NONGWEI BIOLOGICAL TECHNOLOGY CO., LTD., WENNAN TOWN INDUSTRIAL PARK, XINTAI CITY, TAI 'AN, People's Republic of China ~72: FENG, Yanzhong;HE, Lanbao;LIU, Jianhe;WANG, Zhaoshan~

2022/03372 ~ Complete ~54:FEED ADDITIVE FOR INCREASING LEAN MEAT PERCENTAGE AS WELL AS PREPARATION METHOD AND APPLICATION THEREOF ~71:SHANDONG NONGWEI BIOLOGICAL TECHNOLOGY CO., LTD., WENNAN TOWN INDUSTRIAL PARK, XINTAI CITY, TAI 'AN, People's Republic of China ~72: FENG, Yanzhong;HE, Lanbao;LIU, Jianhe;WANG, Zhaoshan~

2022/03374 ~ Complete ~54:STUDENT ATTENDANCE MANAGEMENT SYSTEM AND METHOD BASED ON BIG DATA ~71:SHENZHEN QICHENG ZHIYUAN NETWORK TECHNOLOGY CO., LTD., ROOM 606, XINGHE BUILDING, NO. 100, SHANGXING CENTER ROAD, SHANGXING COMMUNITY, XINQIAO STREET, BAO'AN DISTRICT, People's Republic of China ~72: LI, Qundi;LI, Wen;LI, Xueyong;ZENG, Hong;ZHOU, Chengtao~ 33:CN ~31:202111035509.6 ~32:06/09/2021

2022/03307 ~ Complete ~54:INTELLIGENT FACTORY AUTOMATIC PACKAGING ROBOT ~71:Lu'an Xiangchuan Technology Co., Ltd, No.80 meters east of Huaibin road and Linfeng Road, Linhuaigang Township, Huoqiu County, Lu'an City, Anhui Province, People's Republic of China ~72: Hu Xiuqin;Shen Jiyun~

2022/03312 ~ Complete ~54:SURFACE PURIFICATION TREATMENT METHOD OF SIC PARTICLES FOR ALUMINUM MATRIX COMPOSITE REINFORCEMENT ~71:North China University of Technology, No. 5 Jinyuanzhuang Road, Shijingshan District, Beijing, People's Republic of China ~72: Cui Yan~

2022/03288 ~ Complete ~54:MAX-PHASE METAL CERAMIC INDIRECT ADDITIVE MANUFACTURING METHOD ~71:Lishui University, No. 1 Xueyuan Road, Lishui City, Zhejiang Province, 323000, People's Republic of China ~72: LIN, Yunfeng;MIAO, Yigao;SU, Yongjun;XU, Peng;YE, Xiaoping;YU, Li;YUAN, Haiyang;ZHANG, Na~

2022/03291 ~ Complete ~54:A DECORATIVE ALUMINUM CEILING STRUCTURE FOR TERMINALS IN LARGE AIRPORTS ~71:THE FIRST CONSTRUCTION ENGINEERING COMPANY LTD. OF CHINA CONSTRUCTION SECOND ENGINEERING BUREAU, Floors 1 to 7, building 1, Yard 9, Kechuang 4th Street, Beijing Economic-Technological Development Area, Daxing District, Beijing, People's Republic of China ~72: An Shuchun;Li Hua;Li Jing;Liu Fei;Liu Shaobin;Liu Xuelei;Yang Yawei;Zhang Chao;Zhang Xuewei;Zhang Yajie~

2022/03294 ~ Complete ~54:METHOD FOR CONSTRUCTING RECOMBINANT VECTOR BASED ON CCL19 AND GB GENES, PRODUCTS AND THEIR APPLICATIONS ~71:The Fifth People's Hospital of Wuxi, The Fifth People's Hospital of Wuxi, Affiliated Hospital of Jiangnan University, No.1215 Guangrui Road, Liangxi District, Wuxi City, Jiangsu Province, 214000, People's Republic of China ~72: Yan Yan~

2022/03296 ~ Complete ~54:FRESH AIR CONTROL METHOD OF AIR CONDITIONER ~71:Qingdao University of Technology, No. 11, Fushun Road, Qingdao City, Shandong Province, 266033, People's Republic of China ~72: SHI, Zhigang~

2022/03302 ~ Complete ~54:ARTIFICIAL INTELLIGENCE-BASED FAULT DIAGNOSIS METHOD FOR INTERNET OF THINGS EQUIPMENT ~71:COMSATS University Islamabad, Department of Computer Science, COMSATS University Islamabad, Abbottabad, 22060, Pakistan;Huanghuai University, Huanghuai University, NO.76, Kaiyuan Street, Yicheng District, Zhumadian, Henan, 463000, People's Republic of China ~72: Babar Nazir;Deng Feiyang;Gao Haining;Imran Ali Khan;Liu Wenfu;Mazhar Ali;Shen Hongdan;Wang Yinling;Wu Zhen;Yu Lei;Zeng Jianhao;Zhang Shuaishuai~ 33:CN ~31:202210097614.0 ~32:27/01/2022

2022/03304 ~ Complete ~54:ECOLOGICAL CULTIVATION METHOD FOR TEA PLANT AND TEA PRODUCTS ~71:Nanjing Agricultural University, No. 1, Weigang, Xiaolingwei Street, Xuanwu District, Nanjing City, Jiangsu Province, 210095, People's Republic of China;Nanjing Yarun Tea Industry Co., Ltd., No. 66, Hongqi Road, Heping Community, Qiqiao Street, Gaochun District, Nanjing City, Jiangsu Province, 211302, People's Republic of China;Yunnan Cuigong Tea Industry Co., Ltd., Cuiping Village Stone Factory Community, Cuihua Town, Daguan County, Zhaotong City, Yunnan Province, 657400, People's Republic of China;Zhashui Peida Ecological Agriculture Co., Ltd., Group 2, Zhongtai Village, Xingping Town, Zhashui County, Shangluo City, Shaanxi Province, 711405, People's Republic of China ~72: CHEN, Dandan;CHEN, Xuan;FAN, Peiyong;HAN, Rui;HU, Shunkai;HUANG, Qiwei;LI, Bingshan;LI, Jianjie;LI, Mou;LI, Xiaoqian;LI, Xinghui;LI, Yuchen;LIU, Xinqiu;LUO, Bin;MEI, Huiling;PANG, Xin;WEI, Aihua;ZHAO, Yuxin;ZHAO, Zhen;ZHU, Jin~

2022/03308 ~ Complete ~54:AUTOMATIC HANDLING ROBOT FOR INTELLIGENT LOGISTICS ~71:Lu'an Xiangchuan Technology Co., Ltd, No.80 meters east of Huaibin road and Linfeng Road, Linhuaigang Township, Huoqiu County, Lu'an City, Anhui Province, People's Republic of China ~72: Hu Xiuqin;Shen Jiyun~

2022/03310 ~ Complete ~54:RICE LONG GRAIN GENE LOG1 AND USE THEREOF ~71:China National Rice Research Institute, No. 359, Tiyuchang Road, Xiacheng District, Hangzhou City, Zhejiang Province, 310006, People's Republic of China ~72: GAO, Zhenyu;GUO, Longbiao;HU, Jiang;QIAN, Qian;REN, Deyong;SHEN, Lan;YU, Haiping;ZENG, Dali;ZHANG, Guangheng;ZHANG, Qiang;ZHU, Li~ 33:CN ~31:202111101492.X ~32:18/09/2021

2022/03274 ~ Provisional ~54:INTELLECTUAL PROPETY ~71:Tsitso Letlatsa Ntsenyeo, 19170 Boitekong Ext. 8, South Africa ~72: Tsitso Letlatsa Ntsenyeo~

2022/03285 ~ Complete ~54:A CANTILEVER ROADHEADER DEVICE AND POSITIONING METHOD ~71:Guizhou Panjiang Group Technology Research Institute Co., Ltd., No. 95, Lincheng West Road, Guanshanhu District, Guiyang City, Guizhou Province, 550025, People's Republic of China ~72: Hongfei XIE;Hua CHEN;Juncai CAO;Lin HE~

2022/03295 ~ Complete ~54:AN ULTRAHIGH BUILDING CONSTRUCTION CONCRETE PUMP PIPE FIXING STRUCTURE ~71:THE FIRST CONSTRUCTION ENGINEERING COMPANY LTD. OF CHINA CONSTRUCTION SECOND ENGINEERING BUREAU, Floors 1 to 7, building 1, Yard 9, Kechuang 4th Street, Beijing Economic-Technological Development Area, Daxing District, Beijing, People's Republic of China ~72: An Shuchun;Bai Chunli;Li Jing;Liu Fei;Liu Shaobin;Sheng Guangxin;Wang Chengan;Yang Yawei;Zhang Xuewei;Zhang Yajie~

2022/03306 ~ Complete ~54:APPLICATION OF RBM20 GENE AS A BIOMARKER FOR DETECTING HYPERTROPHIC CARDIOMYOPATHY ~71:Tongji Hospital of Tongji Medical College, Huazhong University of Science and Technology, No.1095 Jiefang Avenue, Wuhan City , Hubei Province, People's Republic of China ~72: Dai Jiaqi;Wang Daowen;Wang Jing;Wang Yan~

2022/03321 ~ Complete ~54:4,6-BISARYLOXYPYRIMIDINE DERIVATIVE, SYNTHESIS METHOD AND APPLICATION THEREOF ~71:Shandong University, No. 180, Wenhua West Road, Weihai City, Shandong, 264209, People's Republic of China ~72: HUAI, Qiyong;XU, Yan~ 33:CN ~31:202110573387.X ~32:25/05/2021

2022/03324 ~ Complete ~54:OLEANOLIC ACID DERIVATIVE AS WELL AS PREPARATION METHOD AND APPLICATION THEREOF ~71:Shandong University, No. 180, Wenhua West Road, Weihai City, Shandong Province, 264209, People's Republic of China ~72: HUAI, Qiyong;ZENG, Qingqing~ 33:CN ~31:202110644088.0 ~32:09/06/2021

2022/03329 ~ Complete ~54:PEPTIDE COMPOUNDS AND PEPTIDE CONJUGATES FOR THE TREATMENT OF CANCER THROUGH RECEPTOR-MEDIATED CHEMOTHERAPY ~71:TRANSFERT PLUS, S.E.C., 355 RUE PEEL, BUREAU 503, MONTREAL QUÉBEC H3C 2G9, CANADA, Canada ~72: ANNABI, Borhane;BÉLIVEAU, Richard;CHARFI, Cyndia;CURRIE, Jean-Christophe;DEMEULE, Michel;LAROCQUE, Alain~ 33:US ~31:62/259,178 ~32:24/11/2015

2022/03333 ~ Complete ~54:SWITCH ACTUATOR ADAPTER ~71:General Equipment and Manufacturing Company, Inc. d/b/a Topworx, Inc., 3300 Fern Valley Road, LOUISVILLE 40213, KT, USA, United States of America ~72: LAFOUNTAIN, Robert L.;SIMMONS, Michael John~ 33:US ~31:17/210,203 ~32:23/03/2021

2022/03286 ~ Complete ~54:MOVABLE ARTIFICIAL RAINFALL SIMULATION METHOD BASED ON UNMANNED AERIAL VEHICLE PLATFORM ~71:Institute Of Water Resources for Pastoral Area,MWR, No. 128, University East Street, Hohhot, Inner Mongolia Autonomous Region, People's Republic of China ~72: Bao Lili;Cheng Bo;Cui Wai;Ge Nan;Han Yanlong;Han Zhaoen;Li Hongfang;Li Jinrong;Li Yingkun;Luo Xiangying;Miao Henglu;Song Wenjuan;Tian Xiumin;Wang Jian;Wang Ru~

2022/03289 ~ Complete ~54:WEB-SIDE BIM 3D BUILDING MODEL DISPLAY METHOD ~71:North University of China, No. 3 Xueyuan Road, Jiancaoping District, Taiyuan City, Shanxi Province, 030051, People's Republic of China;Shanxi Zhongbei Jianxin Industrial Technology Research Institute Co., Ltd., 16th Floor, Block D, Huayu Baihuagu Office Building, No. 132 Xuefu Street, Xiaodian District, Taiyuan City, Shanxi Province, 030032, People's Republic of China ~72: KOU, Jinde;LI, Xiaoxiao;LIAO, Jinpeng;LIU, Yang;QU, Xiaoxi;WANG, Chengshu;WANG, Mengjie;WU, Fan;XUE, Jianying;ZHANG, Yifei~

2022/03293 ~ Complete ~54:AN EMBEDDED REBAR STRUCTURE OF THE ULTRAHIGH-RISE HORIZONTAL SECONDARY STRUCTURE ~71:THE FIRST CONSTRUCTION ENGINEERING COMPANY LTD. OF CHINA CONSTRUCTION SECOND ENGINEERING BUREAU, Floors 1 to 7, building 1, Yard 9, Kechuang 4th Street, Beijing Economic-Technological Development Area, Daxing District, Beijing, People's Republic of China ~72: Huang Ning;Li Hua;Li Mingyang;Liu Fei;Liu Huashan;Wang Kechao;Yang Yawei;Zhang Xianglong;Zhang Xuewei~

2022/03301 ~ Complete ~54:METHOD FOR DETECTING DRIVING STATE OF MOTOR TRAIN DRIVER BASED ON MACHINE VISION ~71:Zhengzhou Railway Vocational And Technical College, No.56 of Pengcheng Avenue, Zhengdong New District, Zhengzhou, Henan, People's Republic of China ~72: Anashkina Natalia;Galuk Alyona;Gnativ Marina;Huayan XING;Lingjie MENG;Shestopalova Olga;Xiuli YAN;Yuanpu QI;Yuanyuan HOU~ 33:CN ~31:202111328955.6 ~32:10/11/2021

2022/03303 ~ Complete ~54:METHOD FOR RAPIDLY DRAWING FARMLAND ELECTRONIC MAP ~71:Guizhou University, Guizhou University, Huaxi District, Guiyang City, Guizhou Province, 550025, People's Republic of China ~72: FENG, Yuehua;MU, Guiting;XU, Guiling~ 33:CN ~31:202111637617.0 ~32:29/12/2021

2022/03369 ~ Complete ~54:APPARATUS FOR CONTROL OF MORTAR JOINT THICKNESS IN AERATED BLOCK MASONRY ~71:THE SECOND CONSTRUCTION ENGINEERING COMPANY LTD. OF CHINA CONSTRUCTION SECOND ENGINEERING BUREAU, No.0169 Qianhai Road, Nanshan subdistrict, Nanshan District, People's Republic of China ~72: BI, Zhonglei;CUI, Qi;FENG, Lilei;HE, Chaofeng;LI, Yanguang~

2022/03309 ~ Complete ~54:A COMPOSITE MATERIAL FOR GROUND REPAIR AND LOAD-BEARING REINFORCEMENT ENGINEERING, AND ITS PREPARATION METHOD AND APPLICATION ~71:Shan Dong Jiao Tong University, NO 5001 Hai Tang Street, Changqing District, Jinan City, Shandong Province, People's Republic of China;Shandong Shuntu Engineering Testing Co., Ltd, NO 5 Jiao Xiao Road, Tianqiao District, Jinan City, Shandong Province, People's Republic of China ~72: Liu Yong~

2022/03311 ~ Complete ~54:RICE SHORT GRAIN GENE SHG1 AND USE THEREOF ~71:China National Rice Research Institute, No. 359, Tiyuchang Road, Xiacheng District, Hangzhou City, Zhejiang Province, 310006, People's Republic of China ~72: GAO, Zhenyu;GUO, Longbiao;HU, Jiang;QIAN, Qian;REN, Deyong;SHEN, Lan;YU, Haiping;ZENG, Dali;ZHANG, Guangheng;ZHANG, Qiang;ZHU, Li~ 33:CN ~31:202111098911.9 ~32:18/09/2021

2022/03314 ~ Complete ~54:CABLE PORT INSULATION PROTECTION DEVICE ~71:Shandong Li'an Electric Appliance Co.,Ltd., No. 68, Rongchang Road, Wudi County, Binzhou City, Shandong, 251900, People's Republic of China ~72: CHEN, Huili;HE, Zhongde;HU, Xinai;LI, Wenhua;SONG, Tao;WANG, Ningxin;YANG, Xiaolu;YU, Juan;ZHANG, Hongli~ 33:CN ~31:202110312477.3 ~32:24/03/2021

2022/03320 ~ Complete ~54:PITCH-BASED CARBON/MANGANESE DIOXIDE COMPOSITE ELECTRODE MATERIAL AS WELL AS PREPARATION METHOD AND APPLICATION THEREOF ~71:Guilin University of Technology, No. 12, Jiangan Road, Guilin, Guangxi, 541004, People's Republic of China ~72: CHEN, Qilong;QIN, Feng;TANG, Shuangmei;YANG, Chao;YAO, Qingyun;ZANG, Limin;ZHONG, Xiaoqiu~ 33:CN ~31:202210201356.6 ~32:03/03/2022

2022/03331 ~ Complete ~54:INJECTION SPRING FOR AGED PREFILLED SYRINGE AND AUTO INJECTOR ~71:TEVA PHARMACEUTICALS INTERNATIONAL GMBH, Schlüsselstrasse 12, 8645, Jona, Switzerland ~72: EDWARD ANDREW CUMMINGS;PAUL ANDREW CHRISTOPHER GIBSON~ 33:US ~31:62/734,209 ~32:20/09/2018

2022/03351 ~ Complete ~54:DEVICE FOR PROCESSING MATERIAL, IN PARTICULAR PLASTICS MATERIAL ~71:PURELOOP GESMBH, Unterfeldstrasse 3, Austria ~72: Florian GRUBER;Klaus FEICHTINGER;Klaus GRADL-LAMI;Manfred DOBERSBERGER~ 33:AT ~31:A 50893/2019 ~32:16/10/2019

2022/03346 ~ Complete ~54:CELLS WITH SUSTAINED TRANSGENE EXPRESSION ~71:BLUEROCK THERAPEUTICS LP, One Broadway 15th Floor, Cambridge, Massachusetts, United States of America ~72: MCAULIFFE, Conor Brian;SOH, Chew-Li;TOMISHIMA, Mark, James;WILKINSON, Dan Charles, JR.~ 33:US ~31:62/913,062 ~32:09/10/2019

2022/03350 ~ Complete ~54:PROTEIN BASED CANNABIS COMPOSITIONS ~71:IZUN PHARMACEUTICALS CORP., One Rockefeller Plaza, 11th Floor, United States of America ~72: GABAY, Olga;LAHIANI HAFZADI, Adi;LECHT, Shimon;LEVINE, William Z.~ 33:US ~31:62/893,201 ~32:29/08/2019

2022/03353 ~ Complete ~54:TEMPERATURE-SENSITIVE HYDROGEL ADJUVANT FOR VETERINARY VACCINES, PREPARATION METHOD AND USE THEREOF ~71:JIANGSU ACADEMY OF AGRICULTURAL SCIENCES, No. 50, Zhongling Street, Xuanwu District, Nanjing, Jiangsu 210014, People's Republic of China ~72: BIHUA DENG;FANG MA;JINFENG MIAO;JINQIU ZHANG;MINGXU ZHOU;WENZHU YIN;YU LU~ 33:CN ~31:202010855595.4 ~32:21/08/2020

2022/03356 ~ Complete ~54:RIFABUTIN TREATMENT METHODS, USES, AND COMPOSITIONS ~71:Bioversys AG, Hochbergerstrasse 60c, c/o Technologiepark, BASEL CH-4057, SWITZERLAND, Switzerland ~72: DALE, Glenn E.;GITZINGER, Marc;KEMMER, Christian;LOCIURO, Sergio;TREBOSC, Vincent~ 33:US ~31:62/899,257 ~32:12/09/2019;33:US ~31:62/902,019 ~32:18/09/2019;33:US ~31:62/941,160 ~32:27/11/2019;33:US ~31:62/977,659 ~32:17/02/2020

2022/03370 ~ Complete ~54:FEED ADDITIVE FOR IMPROVING CONTENT OF POLYUNSATURATED FATTY ACIDS IN LIVESTOCK MEAT AS WELL AS PREPARATION METHOD AND APPLICATION THEREOF ~71:SHANDONG NONGWEI BIOLOGICAL TECHNOLOGY CO., LTD., WENNAN TOWN INDUSTRIAL PARK, XINTAI CITY, People's Republic of China ~72: FENG, Yanzhong;HE, Lanbao;LIU, Jianhe;WANG, Zhaoshan~

2022/03336 ~ Complete ~54:AN INDEX FOR GRADING EXTRINSIC STAINS IN TEETH ~71:Charu Mohan MARYA, Principal, Prof. & Head, Department of Public Health Dentistry, Sudha Rustagi College Of Dental Sciences & Research Faridabad, India;Pratibha TANEJA, Sr. Lecturer, Department of Public Health Dentistry, Sudha Rustagi College Of Dental Sciences & Research Faridabad, India;Ruchi NAGPAL, Professor, Department of Public Health Dentistry, Sudha Rustagi College of Dental Sciences & Research Faridabad, India;Sakshi KATARIA, Reader, Department of Public Health Dentistry, Sudha Rustagi College of Dental Sciences & Research Faridabad, India;Tanvi Kaur AHUJA, AIIMS Jodhpur, India ~72: Charu Mohan MARYA;Pratibha TANEJA;Ruchi NAGPAL;Sakshi KATARIA;Tanvi Kaur AHUJA~

2022/03340 ~ Complete ~54:FRACTURING OPTIMIZATION SYSTEM OF HIGH GEOSTRESS RESERVOIR ~71:CHINA UNIVERSITY OF PETROLEUM (BEIJING), 18 Fuxue Road, Changping District, People's Republic of China ~72: CHU, Zhenyu;FENG, Zhangyu;HE, Chen;JIANG, Jianfang;JIANG, Jie;LIU, Qiujun;QI, Shengjin;WANG, Xiaolei~

2022/03343 ~ Complete ~54:METHOD FOR SEPARATING XYLOSE AND LIGNIN FROM MIXED SUGAR SOLUTION ~71:HEALTANG BIOTECH CO., LTD., Diaozhen Chemical Industrial Development Zone, Zhangqiu, Jinan City, Shandong , 250204, People's Republic of China ~72: GAO, Shaofeng;JIANG, Chengzhen;SHI, Feng~ 33:CN ~31:201910779821.2 ~32:22/08/2019

2022/03349 ~ Complete ~54:SYNERGISTIC HPPD MIXTURES ~71:ADAMA AUSTRALIA PTY LTD, SUITE 1, LEVEL 4, BUILDING B, 207 PACIFIC HIGHWAY, ST LEONARDS, NEW SOUTH WALES 2065, AUSTRALIA, Australia ~72: ADDISON, Bevan;HORSFIELD, Andrew~ 33:AU ~31:2019903071 ~32:22/08/2019

2022/03358 ~ Complete ~54:ANTIBIOTIC COMBINATION THERAPIES ~71:Bioversys AG, Hochbergerstrasse 60c, c/o Technologiepark, BASEL CH-4057, SWITZERLAND, Switzerland ~72: DALE, Glenn E.;GITZINGER, Marc;KEMMER, Christian;LOCIURO, Sergio;TREBOSC, Vincent~ 33:US ~31:62/899,257 ~32:12/09/2019;33:US ~31:62/902,019 ~32:18/09/2019;33:US ~31:62/941,160 ~32:27/11/2019;33:US ~31:62/977,659 ~32:17/02/2020

2022/03283 ~ Complete ~54:MAGNETIC IMMUNOCHROMATOGRAPHIC TEST STRIP AND METHOD FOR RAPID DETECTION OF HEPATITIS B PRES2 ANTIGEN ~71:Shanghai Ocean University, No.999, Huchenghuan Rd, Nanhui New City, Pudong New District, , Shanghai , 201306, People's Republic of China ~72: CAI, Yangyang;LU, Ying~

2022/03299 ~ Complete ~54:A METHOD FOR PREVENTING AND CONTROLLING A LARGE SCALE OF CAVING COAL DUST AT HEIGHTS ~71:Taiyuan University of Science and Technology, Taiyuan University of science and technology, No. 66, luoliu Road, Wanbailin District, Taiyuan City, Shanxi Province, People's Republic of China ~72: Feng Guoping;Gao Guijun;Hao Yongjiang;Liu Xiurong;Shu Xinqian;Yang Xiaobin;Zhao Zhenbao~

2022/03317 ~ Complete ~54:REFRACTURING PROCESS DESIGN METHOD OF OLD WELL TRANSFORMATION FOR SHALE OIL AND GAS HORIZONTAL WELL ~71:LIU, Zhiliang, 4-2-401, District 7, Shiji Community, Zhenxing Street, Xinglongtai District, Panjin City, Liaoning Province , 124010, People's Republic of China ~72: LIU, Zhiliang;YANG, Jialing;ZHANG, Bin~ 33:CN ~31:202210189273.X ~32:28/02/2022

2022/03319 ~ Complete ~54:FEATURE SELECTION METHOD FOR GENE EXPRESSION QUANTITY ~71:Qingdao Agricultural University, No. 700, Changcheng Road, Chengyang District, Qingdao City, Shandong , 266109, People's Republic of China ~72: GAI, Lingyun;SHI, Hongtao~ 33:CN ~31:202210193416.4 ~32:01/03/2022

2022/03322 ~ Complete ~54:FIXTURE DEVICE AND METHOD FOR APPLYING AND UNLOADING BOLT PRELOAD FOR STEEL MEMBERS ~71:Shandong Expressway Weiri Highway Co., Ltd., Room 01, Building 3, Information Electronic Parts Assembly Project, No.2600 Zhuangjian Road, Kuiwen District, Weifang City, Shandong Province, People's Republic of China ~72: DU Yang;DU Yefeng;LI Shimin;XIAO Gang;XU Gangnian;ZHAO Feng;ZHAO Guinan;ZHOU Longzhong~

2022/03325 ~ Complete ~54:APPLICATION OF SDF4 AS BIOMARKER IN PREDICTING PROGNOSIS OF SEPSIS ~71:Zhejiang University, NO.866 Yuhangtang Road, Xihu District, Hangzhou City, Zhejiang Province, People's Republic of China ~72: Chen Jianghua;Jiang Hong;Zhu Tingting~

2022/03352 ~ Complete ~54:METHOD FOR PREPARING METAL RUBIDIUM NANO SOL ~71:HEBEI RUBIDIUM CESIUM TECHNOLOGY COMPANY LIMITED, Xinglong County Mining Company Limited, Hebei ZhuheCompany Group Mayigou Village, Qingsongling Town, Xinglong County, Chengde, Hebei, 067304, People's Republic of China ~72: BAO, Haoming;CAI, Weiping;FAN, Lianzhu;LI, Wenhong;YANG, Guanghe;ZHANG, Hongwen;ZHANG, Zhiguo;ZHAO, Qian~ 33:CN ~31:202010254350.6 ~32:02/04/2020

2022/03354 ~ Complete ~54:SYSTEMS AND METHODS FOR PROTEIN EXPRESSION ~71:EXCEPGEN INC., 82 Mary Street, San Francisco, California 94103, United States of America ~72: BARBARA MERTINS;THOMAS FOLLIARD~ 33:US ~31:62/901,043 ~32:16/09/2019;33:US ~31:62/970,628 ~32:05/02/2020

2022/03357 ~ Complete ~54:RIFABUTIN TREATMENT METHODS, USES, AND COMPOSITIONS ~71:Bioversys AG, Hochbergerstrasse 60c, c/o Technologiepark, BASEL CH-4057, SWITZERLAND, Switzerland ~72: BIONDI, Stefano;BOUROTTE, Marilyne;DALE, Glenn E.;GITZINGER, Marc;LOCIURO, Sergio~ 33:US ~31:62/899,257 ~32:12/09/2019;33:US ~31:62/902,019 ~32:18/09/2019;33:US ~31:62/941,160 ~32:27/11/2019

2022/03276 ~ Provisional ~54:UNIVERSAL RETROFITTABLE INTELLIGENT POWER SWITCH DEVICE FOR RADIO FREQUENCY TRANSMITTER/RECIEVER ~71:Tyrone Bedessy, 12 Solstice Road, Apt 101, The Zone, South Africa ~72: Tyrone Bedessy~

2022/03278 ~ Provisional ~54:AGRICULTURAL COMPOSITION ~71:ORO AGRI EUROPE S.A., Estrada Municipal 533, Biscaia, Lau, Palmela, Setúbal, 2950-065, Portugal ~72: AYA IBRAHIM;CAROL PULLEN;CHARL GUILLAUME MARAIS;PAULO SERGIO BERG;ROBERT MALEK;SARA ALEXANDRA VALADAS SILVA MONTEIRO~

2022/03335 ~ Complete ~54:ROAD TIPPER TRAILER COVER ~71:Ecofab Covers International Inc., Whitepark House, White Park Road, Barbados ~72: DANIEL, Michael Robert;HOMM, Uwe;LOW, Trevor~ 33:US ~31:63/164,224 ~32:22/03/2021

2022/03339 ~ Complete ~54:A STRAIN OF EDIBLE FUNGI OF LYOPHYLLUM DECASTES ~71:HEXI UNIVERSITY, North Road No. 846, Ganzhou District, Zhangye City, People's Republic of China ~72: WEI, Shenglong;XI, Yali~

2022/03338 ~ Complete ~54:A VENUS FLY TRAP OPTIMIZATION TECHNIQUE ~71:Gowri RAJASEKARAN, Assistant Professor, Department of Computer Applications, Sona College of Arts and Science, Salem-5,, India;Rathipriya RAMALINGAM, Assistant Professor, Department of Computer Science, Periyar University, Periyar Palkalai Nagar, Salem-11,, India ~72: Gowri RAJASEKARAN;Rathipriya RAMALINGAM~

2022/03345 ~ Complete ~54:PRODUCT QUALITY ATTRIBUTE MEASUREMENT ~71:GENZYME CORPORATION, 50 Binney Street, Cambridge, MA, United States of America ~72: BERGER, Victoria;HINCAPIE, Marina~ 33:US ~31:62/904,682 ~32:23/09/2019

2022/03348 ~ Complete ~54:APPLICATION OF TRANSPORT CARRIER GENE WHICH IMPROVES L-TRYPTOPHAN PRODUCTION EFFICIENCY IN ESCHERICHIA COLI ~71:NINGXIA EPPEN BIOTECH CO LTD, Yanghe Industry Park, Yonogning, Yinchuan, People's Republic of China;TIANJIN UNIVERSITY OF SCIENCE & TECHNOLOGY, No. 9, 13th Street, Tianjin Economic Technological Development Area, People's Republic of China ~72: GUO XIAOWEI;MEN JIAXUAN;WEI AIYING;XIE XIXIAN;XIONG BO;ZHAO CHUNGUANG~ 33:CN ~31:201910828913.5 ~32:03/09/2019;33:CN ~31:2019112848W ~32:23/10/2019;33:WO ~31:PCT/CN2019/112848 ~32:11/03/2021

2022/03355 ~ Complete ~54:MODIFIED TFF2 POLYPEPTIDES ~71:TONIX PHARMA LIMITED, No. 56 Fitzwilliam Square North, Dublin 2, D02 X224, Ireland ~72: BRUCE DAUGHERTY;SETH LEDERMAN~ 33:US ~31:62/892,520 ~32:27/08/2019;33:US ~31:62/943,803 ~32:04/12/2019;33:US ~31:63/041,097 ~32:18/06/2020

2022/03361 ~ Complete ~54:ANTIBODY COMPOSITIONS COMPRISING FC MUTATIONS AND SITE-SPECIFIC CONJUGATION PROPERTIES ~71:TAE Life Sciences, 19641 Da Vinci, FOOT HILL RANCH 92610, CA, USA, United States of America ~72: KANG, Sohye;MORRISON, Kendall~ 33:US ~31:62/973,475 ~32:04/10/2019

2022/03364 ~ Complete ~54:PERFUME FORMULATION FOR DELIVERY SYSTEM ~71:Firmenich SA, Corporate Legal & Compliance - IP Group, 7, rue de la Bergère, SATIGNY 1242, SWITZERLAND, Switzerland ~72: FADEL, Addi;OUALI, Lahoussine;STRUILLOU, Arnaud;VAN GRUIJTHUIJSEN, Kitty~ 33:US ~31:62/950,148 ~32:19/12/2019;33:EP ~31:20154990.4 ~32:31/01/2020

. - APPLIED ON 2022-03-23 -

2022/03383 ~ Complete ~54:SELF-UNSEALING ANCHORING DEVICE FOR DOWNHOLE HYDROFORMING PATCHING TOOL ~71:China University of Petroleum (East China), No. 66, West Changjiang Road, Huangdao District, Qingdao, Shandong, 266580, People's Republic of China ~72: LIU, Shufeng;LIU, Yanxin;WANG, Hanxiang;ZHANG, Xin~ 33:CN ~31:202110644800.7 ~32:09/06/2021

2022/03386 ~ Complete ~54:SUBSTRATE FOR PROMOTING THE GROWTH AND DEVELOPMENT OF PEONY ROOTS ~71:Central South Forestry&Technology University, NO.498 Shaoshan Road, Tianxin District, Changsha City, Hunan Province, People's Republic of China;Hunan International Economics University, NO.822 Fenglin Road, Yuelu District, Changsha City, Hunan Province, People's Republic of China;Nanning University, NO.8 Longting Road, Yongning District, Nanning City, Guangxi Province, People's Republic of China ~72: Chen Lujie;Huang Linghui;Huang Yu;Tan Chunwen;Tian Jianing;Ye Ye;Yong Yubing;Zhang Minhuan~

2022/03404 ~ Complete ~54:NUCLEIC ACIDS FOR INHIBITING EXPRESSION OF C3 IN A CELL ~71:SILENCE THERAPEUTICS GMBH, ROBERT-RÖSSLE-STRASSE 10, 13125 BERLIN, GERMANY, Germany ~72: AUMILLER, Verena;BETHGE, Lucas;HAUPTMANN, Judith;WEINGÄRTNER, Adrien;WIKSTRÖM LINDHOLM, Marie~ 33:EP ~31:19193840.6 ~32:27/08/2019;33:EP ~31:19219497.5 ~32:23/12/2019;33:EP ~31:20176947.8 ~32:27/05/2020

2022/03409 ~ Complete ~54:METHOD FOR SEPARATING DISODIUM 5'-INOSINATE ~71:CJ CHEILJEDANG CORPORATION, (Ssangnim-dong) 330, Dongho-ro Jung-gu, Seoul, 04560, Republic of Korea ~72: CHANG YUB OH;HWA YEON LIM;IL CHUL KIM;JAE HUN YU;JUN WOO KIM;JUNG HWA CHOI;MIN JONG KIM;SEOK HYUN KANG;YU SHIN KIM~ 33:KR ~31:10-2019-0129324 ~32:17/10/2019

2022/03377 ~ Complete ~54:INNOVATIVE SOIL WATER-RETAINING AGENT AND PREPARATION METHOD THEREOF ~71:Qingdao Agricultural University, 700 Great Wall Road, Chengyang District, Qingdao, Shandong Province, 266109, People's Republic of China ~72: Baoguo Yang;Chunkai Yu;Hu Tian;Jintao Liu;Shutang Liu;Wenliang Wei;Xiaolu Sun~

2022/03420 ~ Complete ~54:FIREPROOF SOUND-INSULATION SOLID WOOD COMPOSITE DOOR ~71:Jiangshan Haiwei Technology Co., Ltd, Floor 3, Building 24, Huancheng West Road, Jiangshan City, Quzhou City, Zhejiang Province, 324100, People's Republic of China ~72: LIU, Lizhong~

2022/03385 ~ Complete ~54:KNEE JOINT INFRARED PHYSIOTHERAPY APPARATUS ~71:ZHENGZHOU RAILWAY VOCATIONAL AND TECHNICAL COLLEGE, No. 56, Pengcheng Avenue, Zhengdong New District, Zhengzhou City, Henan Province, 451460, People's Republic of China ~72: LI, Junlan;LI, Longteng;LIU, Xianfang;ZHANG, Yu;ZHAO, Xiaoli~

2022/03392 ~ Complete ~54:AN INTEGRATED INTELLIGENT CONSTRUCTION ENGINEERING MANAGEMENT SYSTEM ~71:Zhengzhou University of Aeronautics, No.2, Middle University Road, Erqi District, Zhengzhou City, Henan Province, 450000, People's Republic of China ~72: Du Yanhua~

2022/03395 ~ Complete ~54:CONSTRUCTION METHOD OF FUSION RECOMBINANT CONSTRUCTION BASED ON CCL28 AND GD GENES, PRODUCTS AND THEIR APPLICATIONS ~71:The Fifth People's

Hospital of Wuxi, The Fifth People's Hospital of Wuxi, Affiliated Hospital of Jiangnan University, Guangrui Road, Liangxi District, Wuxi, Jiangsu Province, 214000, People's Republic of China ~72: Yan Yan~

2022/03397 ~ Complete ~54:MODULAR RELEASE DEVICE ~71:Shanghai Ocean University, No.999, Hucheng Ring Road, Pudong New Area, Shanghai City, People's Republic of China ~72: Bao Yejun;He Ruijie;Kang Jianliang;Li Qiming;Zhang Lizhen~

2022/03400 ~ Complete ~54:HYDROPHOBIC INTERACTION CHROMATOGRAPHY-COUPLED NATIVE MASS SPECTROMETRY FOR ANTIBODY ANALYSIS ~71:REGENERON PHARMACEUTICALS, INC., 777 Old Saw Mill River Road, Tarrytown, United States of America ~72: WANG, Shunhai;YAN, Yuetian~ 33:US ~31:62/907,465 ~32:27/09/2019

2022/03402 ~ Complete ~54:HETEROARYL-BIPHENYL AMIDES FOR THE TREATMENT OF PD-L1 DISEASES ~71:CHEMOCENTRYX, INC., 835 Industrial Road, Suite 600, United States of America ~72: FAN, Pingchen;LANGE, Christopher W.;LUI, Rebecca M.;MCMURTRIE, Darren J.;SCAMP, Ryan J.;YANG, Ju;ZENG, Yibin;ZHANG, Penglie~ 33:US ~31:62/915,779 ~32:16/10/2019;33:US ~31:63/042,796 ~32:23/06/2020;33:US ~31:63/057,460 ~32:28/07/2020

2022/03405 ~ Complete ~54:USE OF LUBRICANTS WITH CARBOXYLIC ACID ESTERS IN ELECTRIC VEHICLES ~71:BASF SE, CARL BOSCH STRASSE 38, 67056 LUDWIGSHAFEN AM RHEIN, GERMANY, Germany ~72: SCHERER, Markus;SCHRITTMATTER, Jan;WAGNER, Jochen~ 33:EP ~31:19200459.6 ~32:30/09/2019

2022/03411 ~ Complete ~54:DITERPENOID COMPOUNDS THAT ACT ON PROTEIN KINASE C (PKC) ~71:K-Gen, Inc., 863 Mitten Road, BURLINGAME 94010, CA, USA, United States of America ~72: CHEN, Ruihong;JIANG, Chun~ 33:US ~31:62/905,253 ~32:24/09/2019

2022/03413 ~ Complete ~54:AQUEOUS COATING COMPOSITIONS BASED ON SELF-CROSSLINKING POLYURETHANE DISPERSIONS ~71:Saint-Gobain Weber, 2-4 rue Marco Polo, SUCY-EN- BRIE 94370, FRANCE, France ~72: HESSELBARTH, Frank;RIBEIRO DE SOUSA FERREIRA, Pedro Miguel~ 33:EP ~31:19203908.9 ~32:17/10/2019

2022/03375 ~ Complete ~54:GEOPHYSICAL EXPLORATION METHOD AND GEOPHYSICAL EXPLORATION SYSTEM FOR LITHIUM DEPOSITS IN SALT LAKES ~71:THE THIRD GEOLOGICAL EXPLORATION INSTITUTE OF QINGHAI PROVINCE, 61 Xichuan South Road, Chengxi District, Qinghai Province, People's Republic of China ~72: Fengting Li;Guoqiang Xue;Junhai Meng;Mingfeng Zhong;Xuefeng Ling;Yong Li;Zhonghong Yu~

2022/03380 ~ Complete ~54:THE USE OF CARBON DIOXIDE FERTILIZER FOR FACILITY CULTIVATION ~71:Chunkai Yu, People’s Government of Jiangtong, Laiyang City, Yantai, Shandong, 265200, People's Republic of China ~72: Chunkai Yu;Jinglin Zhang;Jintao Liu;Shutang Liu;Wenliang Wei;Zhiqiang Wang~

2022/03393 ~ Complete ~54:BROADBAND SUPER LOW FREQUENCY ANTENNA ~71:Anhui University, No.3 Feixi Road, Hefei City, Anhui Province, 230039, People's Republic of China ~72: Lulu Meng;Yingsong Li~

2022/03407 ~ Complete ~54:HIGH TOUGHNESS HOT ROLLED AND ANNEALED STEEL SHEET AND METHOD OF MANUFACTURING THE SAME ~71:ARCELORMITTAL, 24-26, Boulevard d'Avranches, Luxembourg ~72: Astrid PERLADE;Coralie JUNG;Frédéric KEGEL;Kangying ZHU~ 33:IB ~31:PCT/IB2019/061092 ~32:19/12/2019

2022/03415 ~ Complete ~54:SPORTS TIMING BASED ON A CAMERA SYSTEM ~71:MyLaps B.V., Zuiderhoutlaan 4, HAARLEM 2012 PJ, THE NETHERLANDS, Netherlands ~72: FONG, Kai Wayne;FUNG, King-Hei;HO, John Zin Hang;HOST, Taylor Dalton;ROSS, Benjamin Stuart;VERWOERD, Adriaan Klaas;WILDE, James Alexander~ 33:EP ~31:19197427.8 ~32:14/09/2019

2022/03376 ~ Complete ~54:MICROBIAL PREPARATION FOR REDUCING CONTENT OF AFLATOXIN IN CORN SILAGE FODDER ~71:ANIMAL HUSBANDRY AND VETERINARY BRANCH, HEILONGJIANG ACADEMY OF AGRICULTURAL SCIENCES, NO. 2, HEYI STREET, LONGSHA DISTRICT, People's Republic of China ~72: BAI, Changsheng;DONG, Yang;GUO, Chunhui;GUO, Wenkai;LI, Li;LI, Xuye;LIU, Zedong;WANG, Jia;WANG, Min;YOU, Haiyang~

2022/03396 ~ Complete ~54:DY3+/TM3+ ION-ACTIVATED LUMINESCENT MATERIAL AND PREPARATION METHOD THEREOF ~71:Guorui Scientific Innovation Rare Earth Functional Materials (Ganzhou) Co., Ltd, No. 6 Huilong Avenue, Ganzhou High-tech Zone, Ganzhou City, Jiangxi Province , 341000, People's Republic of China;Jiangxi Rare Earth Functional Materials Technology Co., Ltd., No. 156, Kejia Avenue, Zhanggong District, Ganzhou City, Jiangxi Province , 341000, People's Republic of China;Jiangxi University of Science and Technology, No.86, Hongqi Avenue, Zhanggong District, Ganzhou City, Jiangxi Province , 341000, People's Republic of China ~72: GONG, Guoliang;HUANG, Jianhui;WANG, Junjie;XIE, Haolin;ZHANG, Rubin;ZHAO, Yucong;ZOU, Zhenggang~

2022/03399 ~ Complete ~54:NUCLEAR FUEL ASSEMBLY WITH A REINFORCEMENT DEVICE ~71:FRAMATOME, 1 place Jean Millier, Tour Areva, France ~72: AKARIOUH, Yassmail;BONNAMOUR, Michel~ 33:FR ~31:1910509 ~32:24/09/2019

2022/03401 ~ Complete ~54:METHODS OF TREATING PEMPHIGUS BY ADMINISTERING (R)-2-[3-[4-AMINO-3-(2-FLUORO-4-PHENOXY-PHENYL)PYRAZOLO[3,4-D]PYRIMIDIN-1-YL]PIPERIDINE-1-CARBONYL]-4-METHYL-4-[4-(OXETAN-3-YL)PIPERAZIN-1-YL]PENT-2-ENENITRILE ~71:PRINCIPIA BIOPHARMA INC., 220 East Grand Avenue, South San Francisco, California, United States of America ~72: NEALE, Ann;THOMAS, Dolca~ 33:US ~31:62/913,029 ~32:09/10/2019;33:US ~31:62/942,877 ~32:03/12/2019

2022/03406 ~ Complete ~54:DIAGNOSIS OF TUBERCULOSIS AND OTHER DISEASES USING EXHALED BREATH ~71:ZETEO TECH, INC., 6935 WARFIELD AVE., SYKESVILLE, MD 21784, USA, United States of America ~72: BRYDEN, Wayne, A;CALL, Charles, J.;CHEN, Dapeng;WOOD, Robin~ 33:US ~31:62/891,954 ~32:26/08/2019;33:US ~31:63/069,120 ~32:23/08/2020

2022/03475 ~ Provisional ~54:QUICK DRY BUDDY ~71:JOHANNES LODEWIKUS COETZEE, 57 Seventh Str, Linden, South Africa ~72: JOHANNES LODEWIKUS COETZEE~

2022/03378 ~ Complete ~54:FERTILIZER FOR SOIL AMELIORATION AND PREPARATION METHOD OF FERTILIZER ~71:Dezhou Academy of Agricultural Sciences, No.926, Dexing Middle Road, Decheng District, Dezhou, Shandong, 253000, People's Republic of China ~72: Hongjie Li;Mengyang Du;Wei Wang;Xiaolin Zhou;Yanfang Dong;Yuxia Wang;Zishuang Li~

2022/03379 ~ Complete ~54:ORGANIC WASTE RAPID FERMENTATION TREATMENT DEVICE ~71:Qingdao Agricultural University, 700 Great Wall Road, Chengyang District, Qingdao, Shandong Province, 266109, People's Republic of China ~72: Baoguo Yang;Hu Tian;Jintao Liu;Longgang Zhao;Shutang Liu;Wenliang Wei;Xiaolu Sun~

2022/03382 ~ Complete ~54:MATERIAL SLOW DESCENT CONVEYING APPARATUS AND MATERIAL CONVEYING METHOD ADOPTING SAME ~71:Qingdao WoLong Peanut Machinery Co., Ltd, South Side of Qianjiatun Village, Baishahe Sub-district Office, Pingdu City, Qingdao City, Shandong Province , 266000, People's Republic of China ~72: CHEN, Dezhang~

2022/03394 ~ Complete ~54:ADVANCE MEDIUM-LENGTH BOREHOLE PRESSURE RELIEVING AND DUST SETTLING INTEGRATED METHOD FOR WORKING FACE OF ROCKBURST-PRONE COAL SEAM ~71:Shandong University of Science and Technology, No. 579, Qianwangang Road, Huangdao District, Qingdao City, Shandong Province, 266590, People's Republic of China ~72: GONG, Lihao;HUANG, Gang;JIANG, Han;YANG, Yongjie~ 33:CN ~31:202110334728.8 ~32:29/03/2021

2022/03398 ~ Complete ~54:A SYSTEM AND METHOD FOR IDENTIFYING ANTI-VIRAL DRUGS FOR COVID-19 DRUG REPURPOSING ~71:Deepthi KARUNAKARAN, “Chaithanya”, Kurikkilad P O, Vadakara, Kozhikode,, India;Jereesh Anjiliveettil SIDHIQUE, Assistant Professor, Dept. of Computer Science, Cochin University of Science and Technology, Kochi, India ~72: Deepthi KARUNAKARAN;Jereesh Anjiliveettil SIDHIQUE~

2022/03403 ~ Complete ~54:METHODS, DEVICES, COMPUTER PROGRAMS AND COMPUTER PROGRAM PRODUCTS FOR INDICATING USE OF MASTER CELL GROUP FAST RECOVERY PROCEDURE ~71:TELEFONAKTIEBOLAGET LM ERICSSON (PUBL), SE-164 83 STOCKHOLM, SWEDEN, Sweden ~72: ORSINO, Antonino;TEYEB, Oumer;WAGER, Stefan~ 33:US ~31:62/893,136 ~32:28/08/2019

2022/03408 ~ Complete ~54:SYSTEMS AND METHODS FOR PREDICTION OF PROTEIN FORMULATION PROPERTIES ~71:AMGEN INC., One Amgen Center Drive, Thousand Oaks, California, 91320-1799, United States of America ~72: BEHNAM PARTOPOUR;CINDY REN;MOHAN B BOGGARA;NITIN RATHORE~ 33:US ~31:62/891,541 ~32:26/08/2019

2022/03417 ~ Complete ~54:MEK INHIBITORS FOR THE TREATMENT OF HANTAVIRUS INFECTIONS ~71:ATRIVA THERAPEUTICS GMBH, Eisenbahnstrasse 1, Germany ~72: PLANZ, Oliver~ 33:LU ~31:101430 ~32:08/10/2019;33:EP ~31:19203601.0 ~32:16/10/2019

2022/03387 ~ Complete ~54:LONG-CHAIN NON-CODING RNA AND ITS APPLICATION IN PREPARING MEDICINE FOR REGULATING TRIGLYCERIDE METABOLISM ~71:Tongji Hospital of Tongji Medical College, Huazhong University of Science and Technology, No.1095 Jiefang Avenue , Wuhan City, Hubei Province, People's Republic of China ~72: Dai Jiaqi;Ding Hu;Wang Daowen;Wang Jing;Wang Yan~

2022/03389 ~ Complete ~54:AGROBACTERIUM TUMEFACIENS F-45 WITH HIGH-YIELD C21 STEROIDAL GLYCOSIDE AND USE THEREOF ~71:Yancheng Teachers University, No. 2, Hope Avenue South Road, Tinghu District, Yancheng City, Jiangsu, 224007, People's Republic of China ~72: HONG, Jian;HUA, Shutian;JIN, Yinuo;LIU, Fangfang;WANG, Huanli;ZHANG, Yanzhou~ 33:CN ~31:202111285787.7 ~32:02/11/2021

2022/03391 ~ Complete ~54:HYBRIDOMA CELL STRAIN AND USE THEREOF ~71:Shanxi Agricultural University, No. 1, Mingxian South Road, Taigu District, Jinzhong City, Shanxi, 030801, People's Republic of China ~72: FAN, Kuohai;HOU, Zhen;LI, Hongquan;SUN, Na;SUN, Panpan;YIN, Wei~ 33:CN ~31:202210059980.7 ~32:19/01/2022

2022/03412 ~ Complete ~54:POLYHETEROCYCLIC MODULATORS OF STING (STIMULATOR OF INTERFERON GENES) ~71:Pfizer Inc., 235 East 42nd Street, NEW YORK 10017, NY, USA, United States of America ~72: FENSOME , Andrew;FISHER, Ethan Lawrence;GAJIWALA, Ketan S.;HUH, Chan Woo;JALAIE, Mehran;MCALPINE, Indrawan James;PATMAN, Ryan;RUI, Eugene Yuanjin;TRAN, Tuan Phong;WYTHES, Martin James;ZHANG, Lei;ZHOU, Dahui~ 33:US ~31:62/905,532 ~32:25/09/2019;33:US ~31:63/021,216 ~32:07/05/2020;33:US ~31:63/069,831 ~32:25/08/2020

2022/03421 ~ Complete ~54:MODIFIER OF FOUR-MEMBERED RING DERIVATIVE, PREPARATION METHOD AND APPLICATION THEREOF ~71:JIANGSU HANSOH PHARMACEUTICAL GROUP CO., LTD., Economic and Technological Development Zone, People's Republic of China;SHANGHAI HANSOH BIOMEDICAL CO., LTD., Building 2, No. 3728 Jinke Road, People's Republic of China ~72: BAO, Rudi;CAI, Jiaqiang;LI, Kailong;MAO,

Xiaofeng;SU, Yidong;WANG, Jun~ 33:CN ~31:201911039123.5 ~32:29/10/2019;33:CN ~31:202010028151.3 ~32:10/01/2020;33:CN ~31:202010725922.4 ~32:24/07/2020

2022/03381 ~ Complete ~54:SHIP SAFETY MANAGEMENT METHOD AND SYSTEM ~71:Hebei Donglai Engineering Service Co., Ltd., D-401 Jinbao Fangyuanhui, Huanghua City, Cangzhou City, 061100, People's Republic of China ~72: Jianxin Bai~

2022/03418 ~ Complete ~54:HIGH- AND LOW-VOLTAGE SWITCH CABINET HAVING MOISTURE-PROOFING AND HEAT-DISSIPATING FUNCTION ~71:Jiangshan Haiwei Technology Co., Ltd, Floor 3, Building 24, Huancheng West Road, Jiangshan City, Quzhou City, Zhejiang Province, 324100, People's Republic of China ~72: JIANG, Huiwu;LIU, Lizhong;ZHENG, Xiaocui~

2022/03419 ~ Complete ~54:INSPECTION APPARATUS FOR PRODUCTION OF HIGH-VOLTAGE VACUUM INTERRUPTER ~71:Jiangshan Haiwei Technology Co., Ltd, Floor 3, Building 24, Huancheng West Road, Jiangshan City, Quzhou City, Zhejiang Province, 324100, People's Republic of China ~72: JIANG, Huiwu;LIU, Lizhong;ZHENG, Xiaocui~

2022/03410 ~ Complete ~54:INTERIOR POSITIONING SYSTEM FOR TRACKING COMMUNICATION DEVICES WITHIN A REMOTE LOCATION, AND METHOD THEREFORE ~71:SOLUTIONS AMBRA INC., 3400 boul. L.-P.-Normand, Trois-Rivières, Québec G9B 0G2, Canada ~72: ALEX LEVEILLEE;ERIC L'HEUREUX~ 33:US ~31:62/895,027 ~32:03/09/2019

2022/03414 ~ Complete ~54:CROSS-SPECIES ANTI-LATENT TGF-BETA 1 ANTIBODIES AND METHODS OF USE ~71:Chugai Seiyaku Kabushiki Kaisha, 5-1, Ukima 5-chome, Kita-ku, TOKYO 1158543, JAPAN, Japan ~72: KANAMORI, Masakazu;KOO, Xing'er Christine;SHIMADA, Hideaki~ 33:JP ~31:2019-155278 ~32:28/08/2019

2022/03416 ~ Complete ~54:NOVEL WETTING COMPOSITION ~71:ADVANCED WETTING TECHNOLOGIES PTY LTD, 44 Long Point Street, Potato Point, Australia ~72: ROBERTS, Raymond~ 33:AU ~31:2019904180 ~32:06/11/2019

2022/03384 ~ Complete ~54:METHOD AND SYSTEM FOR QUALITY TRACING OF WINTER JUJUBE PRODUCTS BASED ON BEIDOU POSITIONING ~71:Shandong Agricultural University, 61 Daizong Street, Tai'an City, Shandong Province, 271018, People's Republic of China ~72: Ding Fangjun;Fan Weiqiang;Li Hui;Liu Chuanlong;Liu Jianzeng;Liu Lining;Liu Pengju;Liu Pingzeng;Ma Ke;Ma Xuewen;Wang Kun;Wang Shen;Wu Xiaotong;Yu Yuting;Zheng Haonan~ 33:CN ~31:2021110416831 ~32:07/09/2021

2022/03388 ~ Complete ~54:INSECTICIDE FOR PREVENTING AND CONTROLLING SEDUM PLUMBIZINCICOLA PESTS AND APPLICATION THEREOF ~71:Institute of Soil Science,Chinese Academy of Sciences, No. 71 Beijing East Road, Nanjing City, Jiangsu , 210018, People's Republic of China;Jiangsu Firefly Environmental Technology Co., Ltd., No. 71 Beijing East Road, Nanjing City, Jiangsu, 210018, People's Republic of China ~72: BI, De;GE, Yanyan;LI, Zhu;WANG, Qingling;WANG, Wenyong;WU, Longhua~

2022/03390 ~ Complete ~54:CLAMPING DEVICE FOR MACHINING ~71:Zhengzhou University of Aeronautics, No. 2, University Middle Road, Erqi District, Zhengzhou, Henan, 450015, People's Republic of China ~72: Axiang ZHOU;Shuai ZHOU;Xiuli WANG;Yonghui WEI~ 33:CN ~31:202111309236.X ~32:06/11/2021

. - APPLIED ON 2022-03-24 -

2022/03462 ~ Complete ~54:PROCESS FOR PRODUCING LIGHT OLEFINS AND LOW-SULFUR FUEL OIL COMPONENTS ~71:CHINA PETROLEUM & CHEMICAL CORPORATION, 22 Chaoyangmen North Street,

Chaoyang District, People's Republic of China;RESEARCH INSTITUTE OF PETROLEUM PROCESSING, SINOPEC, 18 Xueyuan Road Haidian District, People's Republic of China ~72: BAI, Xuhui;CUI, Shouye;WANG, Xin;XIE, Xinyu;XU, Youhao;ZUO, Yanfen~ 33:CN ~31:201911014993.7 ~32:24/10/2019

2022/03467 ~ Complete ~54:UTILIZING A USER'S HEALTH DATA STORED OVER A HEALTH CARE NETWORK FOR DISEASE PREVENTION ~71:Patientory, Inc., 34233 Piedmont Road NE, Suite 373, ATLANTA 30305, GA, USA, United States of America ~72: MCFARLANE, Chrissa Tanelia~ 33:US ~31:16/583,143 ~32:25/09/2019

2022/03474 ~ Complete ~54:BLOCKCHAIN DATA SEARCH METHOD ~71:UNIQUECODE CO., LTD., #202-B334, 2nd Floor, 275, Seocho-daero, Seocho-gu, Seoul, 06596, Republic of Korea ~72: SHIN, Ho Yeol~ 33:KR ~31:10-2019-0123595 ~32:07/10/2019

2022/03439 ~ Complete ~54:A METHOD FOR BUILDING A MODEL OF BOVINE MASTITIS USING LTA ~71:Gansu Agricultural University, No. 1, yingmen village, Anning District, Lanzhou City, Gansu Province, People's Republic of China ~72: Chen Yan;Dong Weitao;Du Xianghong;He Yuxuan;Lu Ting;Zhang Yong;Zhao Xiaoxuan~

2022/03445 ~ Complete ~54:COMPOSITIONS FOR USE IN TREATING HYPOXIA INDUCIBLE FACTOR (HIF)-RELATED CONDITIONS ~71:GRIFOLS WORLDWIDE OPERATIONS LIMITED, Grange Castle Business Park, Grange Castle, Ireland ~72: CRUMRINE, Ralph Christian;ROSS, David A.~ 33:US ~31:62/023446 ~32:11/07/2014

2022/03454 ~ Complete ~54:THERAPEUTIC DENDRIMER ~71:STARPHARMA PTY LTD, 4-6 Southampton Crescent, Australia ~72: OWEN, David James;PATHAK, Rashmi~ 33:AU ~31:2019903628 ~32:26/09/2019;33:AU ~31:2019904094 ~32:30/10/2019

2022/03472 ~ Complete ~54:A SENSING ARRAY, SYSTEM AND METHOD FOR ORE PROCESSING EQUIPMENT ~71:Weir Slurry Group, Inc., 2701 South Stoughton Road, MADISON 53716, WI, USA, United States of America ~72: BOURGEOIS, Ronald Joseph;FRAKE, James Christopher;KOSMICKI, Randy James;MILLINGTON, Roger Bradley~ 33:US ~31:62/927,397 ~32:29/10/2019;33:AU ~31:2020900343 ~32:07/02/2020

2022/03426 ~ Complete ~54:FULLY AUTOMATIC INDUCTION DEFOGGING GOGGLES ~71:Shenyang Pharmaceutical University, No. 26, Huatuo Street, High-tech Industrial Development Zone, Benxi City, Liaoning Province, 117004, People's Republic of China ~72: CUI, Yong;LI, Jingwen;LI, Siyi;MA, Yiming;MAO, Chunling;NING, Xuerao;SUN, Yan;WANG, Ruiting;ZHAO, Longshan;ZHAO, Zhe~

2022/03430 ~ Complete ~54:DEVICE FOR VIBRATION ISOLATION OF BUILDINGS ABOVE SUBWAY SUPERSTRUCTURE ~71:CHINA RAILWAY HUATIE ENGINEERING DESIGN GROUP CO., LTD., CHINA RAILWAY HUATIE BUILDING, NO. 36 NORTH FENGTAI ROAD, FENGTAI DISTRICT, People's Republic of China ~72: HUANG, Jian;LIU, Tianyu;YIN, Shen;ZHANG, Bin~ 33:CN ~31:202220334618.1 ~32:18/02/2022

2022/03447 ~ Complete ~54:COMPOSITIONS AND METHODS FOR IN VIVO SYNTHESIS OF UNNATURAL POLYPEPTIDES ~71:THE SCRIPPS RESEARCH INSTITUTE, 10550 North Torrey Pines Road, United States of America ~72: DIEN, Vivian, T.;FELDMAN, Aaron, W.;FISCHER, Emil, C.;HASHIMOTO, Koji;ROMESBERG, Floyd, E.;ZHANG, Yorke~ 33:US ~31:62/913,664 ~32:10/10/2019;33:US ~31:62/988,882 ~32:12/03/2020

2022/03451 ~ Complete ~54:HIGH TOUGHNESS HOT ROLLED STEEL SHEET AND METHOD OF MANUFACTURING THE SAME ~71:ARCELORMITTAL, 24-26, Boulevard d'Avranches, Luxembourg ~72:

Astrid PERLADE;Coralie JUNG;Frédéric KEGEL;Kangying ZHU~ 33:IB ~31:PCT/IB2019/061095 ~32:19/12/2019

2022/03461 ~ Complete ~54:AUTOMATIC PULP ADDING DEVICE OF COATING MACHINE FOR FLUORINE RELEASE FILM PRODUCTION ~71:KUNSHAN ZLAN ELECTRONIC MATERIALS CO., LTD., Building 1, No.1020, Datong Road , Penglang Town, Kunshan , SuZhou, Jiangsu, 215000, People's Republic of China ~72: SONG, Hailong~

2022/03473 ~ Complete ~54:LABEL FLAGGER ~71:Brady Worldwide, Inc., 2221 West Camden Road, MILWAUKEE 53209, WI, USA, United States of America ~72: GUERRERO, Moises~ 33:US ~31:16/577,825 ~32:20/09/2019

2022/03425 ~ Complete ~54:A HOOP-TYPE DUAL-TRACK DEVICE FOR CURTAIN WALL CONSTRUCTION ~71:THE FIRST CONSTRUCTION ENGINEERING COMPANY LTD. OF CHINA CONSTRUCTION SECOND ENGINEERING BUREAU, Floors 1 to 7, building 1, Yard 9, Kechuang 4th Street, Beijing Economic-Technological Development Area, Daxing District, Beijing, People's Republic of China ~72: He Quan;Li Zelan;Wei Xueqi;Yin Haisong;Zhang Yuanjun;Zhao Qingyu~

2022/03428 ~ Complete ~54:METHOD FOR CALCULATING THE CURVATURE RADIUS OF THE BEST FITTING SPHERE OF FULL - APERTURE QUADRIC SURFACE ~71:Nantong University, No. 9 Seyuan Road, Nantong City, Jiangsu Province, People's Republic of China;Nantong University Xinglin College, No. 1, Nanhai Road, Hi-tech Industrial Development Zone, Qidong City, Jiangsu Province, People's Republic of China ~72: Ge Yichen;Gong Tianlin;Hu Qi;Huang Shiwen;Jiang Shuhao;Pan Baozhu;Tang Jing;Wu Di~

2022/03431 ~ Complete ~54:PRIMER PAIR OF MICROSATELLITE MARKER FOR IDENTIFYING GENETIC SEX OF BRACHYMYSTAX LENOK, AND SEX IDENTIFICATION METHOD ~71:HEILONGJIANG RIVER FISHERIES RESEARCH INSTITUTE, CHINESE ACADEMY OF FISHERY SCIENCES, No. 232, Hesong Street, Daoli District, Harbin City, Heilongjiang Province, 150070, People's Republic of China;INNER MONGOLIA YIN CHAO JI LIAO WATER SUPPLY CO., LTD., Yinde'er Road, Yinde'er Town, Laite Banner, Xing'an League, Inner Mongolia Autonomous Region, 137400, People's Republic of China ~72: HAN, Shicheng;KUANG, Youyi;LIU, Bing;LIU, Fuxiang;MA, Kai;SONG, Jianchen;TONG, Guangxiang~ 33:CN ~31:202210140776.8 ~32:16/02/2022

2022/03434 ~ Complete ~54:SELF-CALIBRATION MEASURING DEVICE AND METHOD FOR THE MOMENT OF INERTIA OF THE WINGED FLYING BODY ~71:Zheng Zhou Research Insttute Of Mechanical Engineering CO., LTO., No. 149, science Avenue, high tech Industrial Development Zone, Zhengzhou, Henan, People's Republic of China ~72: Liu Min;Lu Zhihui;Sun Haozhi;Wu Yiyong;Yang Hongtao~

2022/03437 ~ Complete ~54:TEST DEVICE AND METHOD FOR UNLOADING SHEAR MECHANICAL CHARACTERISTICS AND DEFORMATION MEASUREMENT OF THREE-DIMENSIONAL ROCK MASS FRACTURE NETWORK ~71:China University of Mining and Technology, Nanhu Campus of China University of Mining and Technology, No. 1 University Road, Xuzhou City, Jiangsu Province, 221116, People's Republic of China ~72: Deng Tianci;Jiang Zheng;Jing Hongwen;Liu Richeng;Meng Bo;Wei Liyuan;Wu Jiangyu;Yin Qian;Zhang Qiang~

2022/03444 ~ Complete ~54:UNIFORM DISINFECTANT SPRAYING DEVICE FOR PREVENTION AND CONTROL OF AFRICAN SWINE FEVER ~71:HEMING (SHANGHAI) ENVIRONMENTAL TECHNOLOGY CO., LTD., Room 301-99, 3rd Floor, No. 1220, Tongpu Road, Putuo District, People's Republic of China;ZHENGZHOU RAILWAY VOCATIONAL AND TECHNICAL COLLEGE, No. 56, Pengcheng Avenue, Zhengdong New District, Zhengzhou City, People's Republic of China ~72: MENG, Qingfa;WEN, Ailing;XU, Haiyuan;ZENG, Huanqing;ZHAI, Baiqiang~

2022/03448 ~ Complete ~54:IMPROVED WETTING COMPOSITION ~71:ADVANCED WETTING TECHNOLOGIES PTY LTD, 44 Long Point Street, Potato Point, Australia ~72: ROBERTS, Raymond~ 33:AU ~31:2019904182 ~32:06/11/2019

2022/03452 ~ Complete ~54:COLD ROLLED AND HEAT-TREATED STEEL SHEET AND METHOD OF MANUFACTURING THE SAME ~71:ARCELORMITTAL, 24-26, Boulevard d'Avranches, Luxembourg ~72: Astrid PERLADE;Coralie JUNG;Frédéric KEGEL;Kangying ZHU~ 33:IB ~31:PCT/IB2019/061102 ~32:19/12/2019

2022/03457 ~ Complete ~54:COMPOSITION USED FOR COMBATING METABOLIC DISEASES AND USES OF COMPOSITION ~71:INSTITUTE OF ZOOLOGY, CHINESE ACADEMY OF SCIENCES, No. 5, Beichen West Road No. 1, Chaoyang District, Beijing, 100101, People's Republic of China ~72: SHI LIN MA;SHYH CHANG NG~ 33:CN ~31:PCT/CN2019/103677 ~32:30/08/2019

2022/03469 ~ Complete ~54:SYSTEM AND METHOD FOR MANAGING OFF-LABEL DRUG USE WITHIN A HEALTH CARE NETWORK ~71:Patientory, Inc., 34233 Piedmont Road NE, Suite 373, ATLANTA 30305, GA, USA, United States of America ~72: MCFARLANE, Chrissa Tanelia~ 33:US ~31:16/583,130 ~32:25/09/2019

2022/03476 ~ Provisional ~54:COLLECTION OF STATE RELATED DOCUMENTS FROM STATE DEPARTMENTS DELIVERY ~71:DUMISANI BRIAN MBULI, 98 CATHOLIC HOUSE , KERK STREET,, South Africa ~72: DUMISANI BRIAN MBULI~

2022/03466 ~ Complete ~54:SYSTEM AND METHOD FOR PROVIDING ACCESS OF A USER'S HEALTH INFORMATION TO THIRD PARTIES ~71:Patientory, Inc., 34233 Piedmont Road NE, Suite 373, ATLANTA 30305, GA, USA, United States of America ~72: MCFARLANE, Chrissa Tanelia~ 33:US ~31:16/584,573 ~32:26/09/2019

2022/03471 ~ Complete ~54:SYSTEM AND METHOD OF ENHANCING SECURITY OF DATA IN A HEALTH CARE NETWORK ~71:Patientory, Inc., 34233 Piedmont Road NE, Suite 373, ATLANTA 30305, GA, USA, United States of America ~72: MCFARLANE, Chrissa Tanelia~ 33:US ~31:16/584,605 ~32:26/09/2019

2022/03423 ~ Provisional ~54:METHOD OF DISTRIBUTED SENSOR CABLE INSTALLATION ~71:BLUE DISA INTERNATIONAL LIMITED, Suite 1, Perrieri Office Suites, C2-302, Level 3, Office Block C, La Croisette, Mauritius ~72: SCHMITZ, Herbert~

2022/03424 ~ Complete ~54:A METHOD FOR IN SITU, SIMULTANEOUS COMPOSITE OF HETEROGENEOUS COMPONENTS IN THE PREPARATION OF HIGH VOLUME FRACTION SIC/AL COMPOSITES ~71:North China University of Technology, No. 5 Jinyuanzhuang Road, Shijingshan District, Beijing, People's Republic of China ~72: Cui Yan~

2022/03427 ~ Complete ~54:PREPARATION METHOD OF LIGNIN/REINFORCING AGENT COMPOSITE SPINNING SOLUTION ~71:Jiaxing University, No.899 Guangqiong Road, Jiaxing City, Zhejiang Province, 314001, People's Republic of China ~72: Xie Penghui;Xu Xufan;Yu Qiaozhen;Zhan Zhicheng~

2022/03432 ~ Complete ~54:RHODODENDRON SIMSII PLANCH. LEAF DERIVATIVE CARBON MATERIAL AND PREPARATION METHOD AND APPLICATION THEREOF ~71:Zhejiang University of Technology, No. 18, Chaowang Road, Hangzhou City, Zhejiang, 310014, People's Republic of China ~72: LV, Dong;SHE, Yuanbin;SHEN, Haimin~ 33:CN ~31:202111008700.1 ~32:31/08/2021

2022/03435 ~ Complete ~54:PICTURE UPLOADING METHOD, DEVICE, SERVER AND STORAGE MEDIUM BASED ON BLOCKCHAIN ~71:BEIJING BUILDING RESEARCH INSTITUTE CO.LTD. OF CSCEC, Room 403,

Floor 4, Building 3, Yard 3, Zhonghe Road, Fengtai District, Beijing, 100071, People's Republic of China;BEIJING NO.6 CONSTRUCTION ENGINEERING QUALITY TEST DEPARTMENT CO.,LTD, Room 305, Building 14, No.1 A Xinhua Road, Nanyuan, Fengtai District, Beijing, 100071, People's Republic of China;CHINA CONSTRUCTION FIRST GROUP CORPORATION LIMITED, 52 West Fourth Ring South Rd, Fengtai District, Beijing, 100071, People's Republic of China ~72: Liu Mian;Pang Sen;Sun Xiliang;Wang Changjun;Wang Jian;Wang Xianzhang;Xu Dandan~

2022/03440 ~ Complete ~54:METHOD FOR IMPROVING TRANSPLANTING SURVIVAL RATE OF PURPLE-FLESHED SWEET POTATO VIRUS-FREE SEEDLINGS ~71:Jiangsu Xuhuai Xuzhou Institute of Agricultural Sciences (Jiangsu Xuzhou Sweet Potato Research Center), Xuzhou Institute of Agricultural Sciences, North Section of Kunpeng Road, Economic and Technological Development Zone, Xuzhou City, Jiangsu Province, 221131, People's Republic of China ~72: GAO, Runfei;KOU, Meng;LI, Qiang;LIU, Yaju;TANG, Wei;WANG, Xin;YAN, Hui;ZHANG, Yungang~

2022/03443 ~ Complete ~54:METHOD FOR LONG-DISTANCE TRANSPORTATION AND CIRCULATION OF FRESH AND LIVE STURGEONS ~71:JINGDONG PROFITABLE FISHERY CO., LTD., Chashan Street, Manwan Town, Jingdong County, Pu'er City, People's Republic of China;YUNNAN FISHERIES RESEARCH INSTITUTE, No. 156, Chuanjin Road, Panlong District, Kunming City, People's Republic of China ~72: LIANG, Xiang;ZHANG, Tao~

2022/03453 ~ Complete ~54:THERAPEUTIC DENDRIMER ~71:STARPHARMA PTY LTD, 4-6 Southampton Crescent, Australia ~72: OWEN, David James;PATHAK, Rashmi~ 33:AU ~31:2019903628 ~32:26/09/2019;33:AU ~31:2019904094 ~32:30/10/2019

2022/03456 ~ Complete ~54:ELECTRICAL PLUG CONNECTOR ~71:NEUTRIK AG, Im alten Riet 143, 9494 Schaan, Liechtenstein ~72: OLIVER DOBLER~ 33:AT ~31:A50816/2019 ~32:24/09/2019

2022/03460 ~ Complete ~54:MONOCLONAL ANTIBODY AGAINST CANINE FIBROBLAST ACTIVATION PROTEIN THAT CROSS-REACTS WITH MOUSE AND HUMAN FIBROBLAST ACTIVATION PROTEIN (FAP) ~71:THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA, 3600 Civic Center Boulevard 9th Floor, Philadelphia, Pennsylvania, 19104, United States of America ~72: ELLEN PURÉ;LESLIE TODD~ 33:US ~31:62/904,272 ~32:23/09/2019

2022/03464 ~ Complete ~54:SYSTEM AND METHOD FOR IMPROVING TREATMENT OF A CHRONIC DISEASE OF A PATIENT ~71:Patientory, Inc., 34233 Piedmont Road NE, Suite 373, ATLANTA 30305, GA, USA, United States of America ~72: MCFARLANE, Chrissa Tanelia~ 33:US ~31:16/583,147 ~32:25/09/2019

2022/03422 ~ Provisional ~54:A CAP ~71:CATT, Peter, Winston, 7 NETLEY ROAD, PERRIDGEVALE, PORT ELIZABETH, SOUTH AFRICA, South Africa;FOWLER, Denise, Mary, 7 NETLEY ROAD, PERRIDGEVALE, PORT ELIZABETH, SOUTH AFRICA, South Africa ~72: CATT, Peter, Winston~

2022/03429 ~ Complete ~54:HSV-2 DNA VACCINE CONSTRUCTED BY RECOMBINATION OF PCCL28-IRES-GD BICISTRONIC DNA AND ITS APPLICATION ~71:The Fifth People's Hospital of Wuxi, The Fifth People's Hospital of Wuxi, Affiliated Hospital of Jiangnan University, Guangrui Road, Liangxi District, Wuxi, Jiangsu Province, 214000, People's Republic of China ~72: Yan Yan~

2022/03433 ~ Complete ~54:RARE EARTH EUTECTIC MATERIAL WITH PHASE SEPARATION STRUCTURE AS WELL AS PREPARATION METHOD AND APPLICATION THEREOF ~71:Guorui Scientific Innovation Rare Earth Functional Materials (Ganzhou) Co., Ltd, No. 6 Huilong Avenue, Ganzhou High-tech Zone, Ganzhou City, Jiangxi Province , 341000, People's Republic of China;Jiangxi University of Science and Technology, No.86,

Hongqi Avenue, Zhanggong District , Ganzhou City, Jiangxi Province , 341000, People's Republic of China ~72: GONG, Guoliang;SUN, Yijian;WEN, Herui;ZOU, Zhenggang~

2022/03438 ~ Complete ~54:OUTDOOR DEVICE QUICK CONNECTION MECHANISM ~71:Zhejiang University of Water Resources and Electric Power, No. 508, 2nd Street, Xiasha Higher Education Park, Hangzhou City, Zhejiang Province, 310018, People's Republic of China ~72: JIANG, Youyong;XIANG, Chun~

2022/03442 ~ Complete ~54:OIL-BASED LATENT RESIN AND PREPARATION METHOD AND USE THEREOF ~71:INSTITUTE OF CHEMICAL INDUSTRY OF FOREST PRODUCTS CAF, No.16, Suojin Five Village, Xuanwu Nanjing, Jiangsu, 210042, People's Republic of China ~72: HAIYANG DING;JIANLING XIA;LINA XU;MEI LI;NA YAO;SHOUHAI LI;TIANXIANG DENG;XIAOHUA YANG;YAN ZHANG~ 33:CN ~31:2021106921630 ~32:22/06/2021

2022/03449 ~ Complete ~54:PLASTIC CONTAINER FOR LIQUIDS AND METHOD FOR PRODUCING A PLASTIC CONTAINER ~71:PROTECHNA S.A., Avenue de la Gare 14, Switzerland ~72: BLÖMER, Peter;ERLL, Carsten;ERLL, Thomas;MOSEN, Johannes~ 33:DE ~31:10 2019 129 504.1 ~32:31/10/2019

2022/03459 ~ Complete ~54:ELECTRIC PLUG CONNECTOR ~71:NEUTRIK AG, Im alten Riet 143, 9494 Schaan, Liechtenstein ~72: OLIVER DOBLER~ 33:AT ~31:A50815/2019 ~32:24/09/2019

2022/03465 ~ Complete ~54:SYSTEM AND METHOD FOR DETERMINING BEST PRACTICES FOR THIRD PARTIES ACCESSING A HEALTH CARE NETWORK ~71:Patientory, Inc., 34233 Piedmont Road NE, Suite 373, ATLANTA 30305, GA, USA, United States of America ~72: MCFARLANE, Chrissa Tanelia~ 33:US ~31:16/656,220 ~32:17/10/2019

2022/03470 ~ Complete ~54:DIRECT REDUCTION PROCESS UTILIZING HYDROGEN ~71:Midrex Technologies, Inc., 3735 Glen Lake Drive, Suite 400, CHARLOTTE 28208, NC, USA, United States of America ~72: BASTOW-COX, Keith Marshall;CINTRON, Enrique Jose;HUGHES, Gregory Darel~ 33:US ~31:62/906,954 ~32:27/09/2019;33:US ~31:17/029,778 ~32:23/09/2020

2022/03436 ~ Complete ~54:AN EXERCISE BALANCE TRAINING EQUIPMENT FOR SPORTS MEDICINE ~71:Huzhou University, No.759, East Second Ring Road, Huzhou City, Zhejiang Province, 313000, People's Republic of China ~72: Huang Heping~

2022/03441 ~ Complete ~54:PRETREATING AGENT FOR PREVENTING WASTE LIQUID AT BOTTOM OF COAL-TO-ETHYLENE GLYCOL RECTIFICATION TOWER FROM BEING POLYMERIZED AND CRYSTALLIZED ~71:Henan Academy of Sciences, 58 Hongzhuan Road, ZHENGZHOU CITY 450002, HENAN PROVINCE, CHINA (P.R.C.), People's Republic of China;Henan Chemical Industry Research Institute Co., Ltd., 37 Jianshe East Road, ZHENGZHOU CITY 450052, HENAN PROVINCE, CHINA (P.R.C.), People's Republic of China ~72: CHEN, Ke;CHENG, Lanxing;HAO, Lingyun;HE, Yuanyuan;LI, Yan;LIU, Chen;YANG, Bingqi;YANG, Shucheng;ZHAO, Yili;ZHAO, Zengbing~

2022/03446 ~ Complete ~54:1,2,4-OXADIAZOLE DERIVATIVES AS LIVER X RECEPTOR AGONISTS ~71:NOVARTIS AG, Lichtstrasse 35, Switzerland ~72: BOSS, Kelly, D.;FAN, Yi;FLYER, Alec, Nathanson;HARDY, Declan;HUANG, Zhihong;LINKENS, Kathryn Taylor;LOREN, Jon,Christopher;MA, Fupeng;MOLTENI, Valentina;SHAW, Duncan;SMITH, Jeffrey;SOLOVAY, Catherine, Fooks~ 33:US ~31:62/940,061 ~32:25/11/2019;33:US ~31:63/106,293 ~32:27/10/2020

2022/03450 ~ Complete ~54:INTEGRATED SYSTEMS OF A MODULAR SUPPORT SYSTEM ~71:BISHOP ASCENDANT, INC, 155 Clinton Road #1386,, United States of America ~72: BISHOP, Justin~ 33:US ~31:62/922,731 ~32:26/08/2019;33:US ~31:16/994,424 ~32:14/08/2020

2022/03455 ~ Complete ~54:APPLICATOR FOR APPLYING A SEALING COMPOUND ONTO AN EDGING FOLD ~71:DÜRR SYSTEMS AG, Carl-Benz-Straße 34, 74321 , Bietigheim-Bissingen, Germany ~72: BERND KRAFT;MARTIN HALBGEWACHS~ 33:DE ~31:10 2019 122 918.9 ~32:27/08/2019

2022/03458 ~ Complete ~54:ELECTRIC CONNECTOR ~71:NEUTRIK AG, Im alten Riet 143, 9494 Schaan, Liechtenstein ~72: BERNHARD JUTZ~ 33:AT ~31:A50805/2019 ~32:17/09/2019

2022/03463 ~ Complete ~54:VISUAL INDICATOR FOR CORRECT TORSION OF A ROCK BOLT ~71:Sandvik Mining and Construction Australia Pty Ltd, Level 1, Kings Row Office Park, 50 McDougall Street, MILTON 4064, QUEENSLAND, AUSTRALIA, Australia;Sandvik Mining and Construction Tools AB, SANDVIKEN 81181, SWEDEN, Sweden ~72: RATAJ, Mieczyslaw;VALLATI, Osvaldo;WEAVER, Steven~ 33:EP ~31:19208059.6 ~32:08/11/2019

2022/03468 ~ Complete ~54:STEVIA CULTIVAR '320032' WITH SUPER HIGH REBAUDIOSIDE A CONTENT ~71:PureCircle USA Inc., 5 Westbrook Corporate Center, WESTCHESTER 60154, IL, USA, United States of America ~72: BU, Yucheng;CHEN, Jianning;JING, Runchun;MARKOSYAN, Avetik;ONG, Seong Siang;WANG, Chunhui;WONG, Yeen Yee~ 33:US ~31:62/904,835 ~32:24/09/2019

. - APPLIED ON 2022-03-25 -

2022/03478 ~ Provisional ~54:SIDE SUPPORTED MINING PACK ~71:Timrite (Pty) Ltd, 10 Van der Bijl Street, South Africa ~72: MOGOROSI, Lebogang~

2022/03482 ~ Complete ~54:A KIND OF START-UP METHOD AND APPLICATION OF SHORTCUT DENITRIFICATION SYSTEM ~71:Beijing University of Technology, No.100, Pingleyuan, Chaoyang District, Beijing, People's Republic of China ~72: Dou Quanhao;Hao Shiwei;Lan Shuang;Zhang Li~

2022/03488 ~ Complete ~54:MACADAMIA INTEGRIFOLIA WHITENING EXTRACT AND PREPARATION METHOD THEREOF ~71:SOUTHWEST FORESTRY UNIVERSITY, No. 300, Bailong Temple, Panlong District, Kunming City, Yunnan Province, 650224, People's Republic of China ~72: LI, Siqi;LIU, Can;LU, Na;QIAO, Jinchao;SHI, Rui;TAO, Liang;WANG, Wenlin~ 33:CN ~31:202110593903.5 ~32:28/05/2021

2022/03497 ~ Complete ~54:REINFORCING STRUCTURE OF ENTRANCE AND EXIT HOLES FOR LARGE-DIAMETER PIPE JACKING GROUP IN WATER-RICH SAND LAYER AND CONSTRUCTION METHOD ~71:China Tiesiju Civil Engineering Group Limited, No. 96 Wangjiang East Road, Baohe District, Hefei, Anhui, 230000, People's Republic of China;The Fourth Engineering Co., Ltd. of CTCE Group, No. 106 Zhangwa Road, Yaohai District, Hefei, Anhui, 230000, People's Republic of China ~72: Jie ZHAN;Junfeng YANG;Shixiang YU;Ting ZHANG;Weichao WANG;Wenjie DENG;Yunzhou WO;Zhengpu YUAN;Zubing YANG~

2022/03503 ~ Complete ~54:PROSTAGLANDIN EP4 RECEPTOR ANTAGONIST COMPOUNDS ~71:HEPTARES THERAPEUTICS LIMITED, Granta Park Great Abington, Cambridge Cambridgeshire, United Kingdom ~72: CONGREVE, Miles Stuart;SWAIN, Nigel, Alan;WHITEHURST, Benjamin~ 33:GB ~31:1914585.3 ~32:09/10/2019

2022/03514 ~ Complete ~54:METHOD AND APPARATUS FOR INCREASED SOLAR ENERGY CONVERSION ~71:SUNDENSITY, INC., 0 Medowvale Road, United States of America ~72: SONWALKAR, Nishikant~ 33:US ~31:62/913,315 ~32:10/10/2019;33:US ~31:62/927,228 ~32:29/10/2019

2022/03523 ~ Complete ~54:METHOD FOR TREATING MOOD DISORDERS ~71:Jiangsu Nuo-Beta Pharmaceutical Technology Co., Ltd., No. 888, Zhujiang Road, Rudong County, NANTONG 226400, JIANGSU, CHINA (P.R.C.), People's Republic of China ~72: HUANG, Changde;HUANG, Fude;HUANG, Tide;JIAO,

Changping;WANG, Wen'an~ 33:IB ~31:2019/108548 ~32:27/09/2019;33:CN ~31:202011009274.9 ~32:23/09/2020

2022/03481 ~ Complete ~54:ADDITIVELY MANUFACTURED STRUCTURE AND METHOD OF MANUFACTURING THE SAME ~71:HENSOLDT Sensors GmbH, Willy-Messerschmitt-Straße 3, Germany ~72: BALTES, Rolf;HEHN, Tobias;SALOMON, Andreas;SANDER, Jörg;ZIMMER, Felix~ 33:EP ~31:21166339.8 ~32:31/03/2021

2022/03483 ~ Complete ~54:METHOD FOR ENHANCING WET DESULFURIZATION OF PHOSPHATE ROCK SLURRY ~71:Kunming Econ Technology Co., Ltd, Kunming Econ Technology Co., Ltd, Shangsuan Industrial Park, Jinning City, Kunming, Yunnan, 650600, People's Republic of China;Kunming University of Science and Technology, Kunming University of Science and Technology, Chenggong District, Kunming, Yunnan , 650000, People's Republic of China ~72: LI, Chuang;LI, Pengyi;LI, Yonghui;LIU, Wenzheng;NING, Ping;YU, Yongcai;ZHANG, Dongdong;ZHANG, Huifang~ 33:CN ~31:202111329758.6 ~32:10/11/2021

2022/03486 ~ Complete ~54:WALNUT DRYING APPARATUS ~71:Lincang Comprehensive Inspection Center of Quality and Technical Supervision, No. 280, Nantian Road, Linxiang District, Lincang City, Yunnan, 677000, People's Republic of China ~72: DONG, Bin;LEI, Yunqin;LI, Chengkang;LUO, Zhenyu;SU, Juan;TANG, Zhongfeng;YANG, Jianming;ZHAO, Lixin~ 33:CN ~31:202110634983.4 ~32:01/06/2021

2022/03492 ~ Complete ~54:CHINESE MEDICINAL COMPOSITION FOR TREATING MIGRAINE, NASAL GEL, PREPARATION METHOD AND APPLICATION THEREOF ~71:Jilin University, No. 2699 Qianjin Street, Changchun City, Jilin Province, People's Republic of China ~72: Chen Jiajun;Li Jia;Liu Li~

2022/03496 ~ Complete ~54:A METHOD AND SYSTEM FOR DRUG TRACEABILITY REGULATION BASED ON BLOCKCHAIN TECHNOLOGY ~71:Jiuyuan Baoding Internet of Things Technology Co., LTD, Building 3, East Unit, Building 12, Baoding Zhongguancun Innovation Base, No.369, Huiyang Street, Jingxiu District, Baoding City, Hebei Province, People's Republic of China ~72: Chen Xiaohui;Liu Hongjian;Liu Yaofeng;Pei Jiangke~

2022/03502 ~ Complete ~54:NPY2 RECEPTOR AGONISTS ~71:BOEHRINGER INGELHEIM INTERNATIONAL GMBH, Binger Strasse 173, Germany ~72: BRENNAUER, Albert;HAEBEL, Peter, Wilhelm;MADSEN, Charlotte, Stahl;PEDERSEN, Søren, Ljungberg;;PETERS, Stefan~ 33:EP ~31:19208394.7 ~32:11/11/2019

2022/03516 ~ Complete ~54:ARYLMETHYLENE HETEROCYCLIC COMPOUNDS AS KV1.3 POTASSIUM SHAKER CHANNEL BLOCKERS ~71:D.E. Shaw Research, LLC, 120 W. 45th Street - 39th Floor, NEW YORK 10036, NY, USA, United States of America ~72: GIORDANETTO, Fabrizio;JENSEN, Morten Østergaard;JOGINI, Vishwanath;SNOW, Roger John~ 33:US ~31:62/911,655 ~32:07/10/2019

2022/03524 ~ Complete ~54:COMBINATION THERAPIES ~71:MIRATI THERAPEUTICS, INC., 3545 Cray Court, United States of America ~72: BRIERE, David;CHRISTENSEN, James Gail;OLSON, Pete~ 33:US ~31:62/905,107 ~32:24/09/2019

2022/03554 ~ Complete ~54:REBAMIPIDE FOR USE IN PREVENTION AND/OR TREATMENT OF ARTERIAL STIFFNESS ~71:SQUARE POWER LTD, 2ND FLOOR, 9 CHAPEL PLACE, United Kingdom ~72: -~ 33:EP ~31:19020528.6 ~32:11/09/2019

2022/03490 ~ Complete ~54:ROBOT SYSTEM AND METHOD SUITABLE FOR PIPELINE INNER WALL DEFECT DETECTION ~71:Anqing Normal University, No.1318 Jixian North Road, Yixiu Distrct, Anqing City, Anhui Province, People's Republic of China ~72: Ai Liefu;Chen Chunsheng;Chen Shaochuan;Wang Yibin;Zhang Hao;Zhao Mingkang~

2022/03495 ~ Complete ~54:BIDIRECTIONAL PRESTRESSED PREFABRICATED SLAB-COLUMN STRUCTURE SYSTEM AND CONSTRUCTION METHOD THEREOF ~71:BEIJING BUILDING RESEARCH INSTITUTE CO.LTD. OF CSCEC, Room 403, Floor 4, Building 3, Yard 3, Zhonghe Road, Fengtai District, Beijing, 100071, People's Republic of China;BEIJING NO.6 CONSTRUCTION ENGINEERING QUALITY TEST DEPARTMENT CO.,LTD, Room 305, Building 14, No.1 A Xinhua Road, Nanyuan, Fengtai District, Beijing, 100071, People's Republic of China;CHINA CONSTRUCTION FIRST GROUP CORPORATION LIMITED, 52 West Fourth Ring South Rd, Fengtai District, Beijing, 100071, People's Republic of China ~72: Chen Kang;Liu Mian;Pang Sen;Wang Changjun;Wang Jian;Wang Shaorui;Xu Dandan;Zhang Xuewei;Zhu Hongguang~

2022/03501 ~ Complete ~54:TROLLEY MANAGEMENT SYSTEM AND METHOD ~71:SUPERCART SOUTH AFRICA (PTY) LTD, 32 Prospecton Road, PROSPECTON, Durban 4115, Kwazulu-Natal, SOUTH AFRICA, South Africa ~72: WOLFE, Michael Castledine~ 33:ZA ~31:2021/01514 ~32:05/03/2021

2022/03504 ~ Complete ~54:REBAMIPIDE FOR USE IN PROPHYLAXIS AND TREATMENT OF CANCER ~71:SQUARE POWER LTD, 2ND FLOOR, 9 CHAPEL PLACE, United Kingdom ~72: -~ 33:EP ~31:19020505.4 ~32:03/09/2019

2022/03509 ~ Complete ~54:MOULD FOR THE PRODUCTION OF CLOSURES IN COMPRESSION MOULDING MACHINES ~71:SACMI COOPERATIVA MECCANICI IMOLA SOCIETÀ COOPERATIVA, Via Selice Provinciale 17/A, 40026, Imola (Bologna), Italy ~72: DAVIDE PENAZZI;PIERO MARETTI~ 33:IT ~31:102019000017849 ~32:03/10/2019

2022/03512 ~ Complete ~54:OPTICAL COATING FOR SPECTRAL CONVERSION ~71:SUNDENSITY, INC., 0 Medowvale Road,, United States of America ~72: SONWALKAR, Nishikant~ 33:US ~31:62/913,315 ~32:10/10/2019

2022/03520 ~ Complete ~54:[1,4]OXAZEPINO[2,3-C]QUINOLINONE DERIVATIVES AS BCL6 INHIBITORS ~71:Cancer Research Technology Limited, 2 Redman Place, LONDON E20 1JQ, UNITED KINGDOM, United Kingdom;The Institute of Cancer Research: Royal Cancer Hospital, 123 Old Brompton Road, LONDON SW7 3RP, UNITED KINGDOM, United Kingdom ~72: BELLENIE, Benjamin Richard;BRENNAN, Alfie;CHEUNG, Kwai Ming Jack;DAVIS, Owen Alexander;HARNDEN, Alice Claire;HOELDER, Swen;HUCKVALE, Rosemary~ 33:GB ~31:1914860.0 ~32:14/10/2019

2022/03525 ~ Complete ~54:CUTTER WITH EDGE DURABILITY ~71:SCHLUMBERGER TECHNOLOGY B.V., Parkstraat 83, Netherlands ~72: GAN, Xiaoge;ZHANG, Youhe~ 33:US ~31:62/906,153 ~32:26/09/2019

2022/03498 ~ Complete ~54:METHOD FOR DEEPLY OXIDATIVELY TREATING INDUSTRIAL WASTEWATER BY OZONE ~71:Henan Academy of Sciences, 58 Hongzhuan Road, ZHENGZHOU 450002, HENAN, CHINA (P.R.C.), People's Republic of China;Henan Chemical Industry Research Institute Co., Ltd., 37 Jianshe East Road, ZHENGZHOU 450052, HENAN, CHINA (P.R.C.), People's Republic of China ~72: CHENG, Lanxing;GUAN, Sumei;LIU, Hongru;LUO, Gang;LUO, Zhiyong;YANG, Bingqi;YANG, Mengyu;YANG, Shucheng;ZHAO, Yili;ZHAO, Zengbing;ZHOU, Tao;ZHU, Hanjing~

2022/03507 ~ Complete ~54:TREATMENT OF ALCOHOLIC HEPATITIS ~71:DURECT CORPORATION, 10260 Bubb Road, Cupertino, California, 95014-4166, United States of America ~72: JAMES E BROWN;TERRENCE BLASCHKE;WEIQI LIN~ 33:US ~31:62/908,465 ~32:30/09/2019;33:US ~31:62/933,206 ~32:08/11/2019;33:US ~31:63/060,564 ~32:03/08/2020;33:US ~31:63/081,208 ~32:21/09/2020

2022/03511 ~ Complete ~54:DISRUPTING TUMOR TISSUES BY TARGETING FIBROBLAST ACTIVATION PROTEIN (FAP) ~71:THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA, 3600 Civic Center

Boulevard, 9th Floor, Philadelphia, Pennsylvania, 19104, United States of America ~72: ELLEN PURE;LESLIE TODD;STEVEN A ALBELDA~ 33:US ~31:62/904,340 ~32:23/09/2019

2022/03518 ~ Complete ~54:ARYL HETEROBICYCLIC COMPOUNDS AS KV1.3 POTASSIUM SHAKER CHANNEL BLOCKERS ~71:D.E. Shaw Research, LLC, 120 W. 45th Street - 39th Floor, NEW YORK 10036, NY, USA, United States of America ~72: GIORDANETTO, Fabrizio;JENSEN, Morten Østergaard;JOGINI, Vishwanath;SNOW, Roger John~ 33:US ~31:62/911,648 ~32:07/10/2019

2022/03477 ~ Provisional ~54:UPGRADING AND PURIFICATION OF BIOGAS ~71:Suntheren Pillay, 3 Unicorn Place, The Gardens, South Africa ~72: Suntheren Pillay~

2022/03480 ~ Complete ~54:METHOD AND SYSTEM FOR PREDICTING A DAY-AHEAD WIND POWER OF WIND FARMS ~71:ECONOMIC AND TECHNOLOGICAL RESEARCH INSTITUTE OF STATE GRID LIAONING ELECTRIC POWER CO., LTD, No.183-1, Wencui Road, Shenhe District, Shenyang 110015, Liaoning Province, People's Republic of China;NORTHEAST ELECTRIC POWER UNIVERSITY, No.169, Changchun Road, Chuanying District, Jilin 132012, Jilin Province, People's Republic of China;STATE GRID CORPORATION OF CHINA, No. 86, West Chang'an Street, Xicheng District, Beijing, 100031, People's Republic of China ~72: BO YANG;FANGYUAN YANG;HAIFENG YANG;HUA LI;JING GAO;JINQI LI;KAI LIU;LIN ZHAO;LINKUN MAN;MENGZENG CHENG;MINGLI ZHANG;NA ZHANG;NANTIAN HUANG;SUO YANG;WENYING SHANG;XIAO PAN;XILIN XU;XING JI;XUMING LV;YIXIN HOU;YUTONG LIU;ZHUORAN SONG;ZONGYUAN WANG~ 33:CN ~31:202111270931.X ~32:29/10/2021

2022/03484 ~ Complete ~54:UNDISTURBED SOIL COLLECTING APPARATUS CAPABLE OF KEEPING SOIL AND PLANT ROOT SYSTEM INTEGRITY ~71:Institute Of Water Resources for Pastoral Area, MWR, No. 128, University East Road, Saihan District, Hohhot, Inner Mongolia Autonomous Region , 010000, People's Republic of China ~72: GUO, Jianying;LIU, Jing;LIU, Yanping;TANG, Guodong;XING, Ende;XU, Bing;YANG, Zhenqi;ZHANG, Tiegang;ZHANG, Xin;ZHENG, Ying~ 33:CN ~31:202111014570.2 ~32:31/08/2021

2022/03487 ~ Complete ~54:TRADITIONAL CHINESE MEDICINE COMPOSITION FOR IMPROVING MALE SEXUAL FUNCTION BY STIMULATING HUMAN POTENTIAL AS WELL AS PREPARATION METHOD AND APPLICATION THEREOF ~71:Qingdao Baishishankang Traditional Chinese Medicine Technology Co., Ltd., No. 7, Shangliyuan Village, Dongge Sub-district Office, Pingdu City, Qingdao City, Shandong Province, 266799, People's Republic of China ~72: LIN, Ping;LIN, Zixuan~ 33:CN ~31:202210034650.2 ~32:13/01/2022

2022/03491 ~ Complete ~54:A NUTRIENT SOLUTION FOR IMPROVING THE SURVIVAL RATE OF FOREST TREES FOR GREENING IN COASTAL CITIES AND ITS PREPARATION METHOD ~71:Binzhou University, No. 391, Huanghe 5th Road, Bincheng District, Binzhou City, Shandong Province, People's Republic of China ~72: Chengrong Bai;Jiangbao Xia;Jidun Fang;Jun Zhang;Saiyaremu Halifu;Wanli Zhao;Ximei Zhao;Yinping Chen;Yuanjun Chen~

2022/03517 ~ Complete ~54:ARYL HETEROCYCLIC COMPOUNDS AS KV1.3 POTASSIUM SHAKER CHANNEL BLOCKERS ~71:D.E. Shaw Research, LLC, 120 W. 45th Street - 39th Floor, NEW YORK 10036, NY, USA, United States of America ~72: GIORDANETTO, Fabrizio;JENSEN, Morten Østergaard;JOGINI, Vishwanath;SNOW, Roger John~ 33:US ~31:62/911,670 ~32:07/10/2019

2022/03522 ~ Complete ~54:ARYLMETHYLENE HETEROCYCLIC COMPOUNDS AS KV1.3 POTASSIUM SHAKER CHANNEL BLOCKERS ~71:D.E. Shaw Research, LLC, 120 W. 45th Street - 39th Floor, NEW YORK 10036, NY, USA, United States of America ~72: GIORDANETTO, Fabrizio;JENSEN, Morten Ostergaard;JOGINI, Vishwanath;SNOW, Roger John~ 33:US ~31:62/911,652 ~32:07/10/2019

2022/03493 ~ Complete ~54:AN AIR HEATER OF LOW TOTAL TEMPERATURE WITH A RECTIFIER GRILLE ~71:Central South University, No.932 South Lushan Road, Changsha, Hunan, 410083, People's Republic of China ~72: LIU JIAN;XI WEN XIONG~ 33:CN ~31:202110372115.3 ~32:07/04/2021

2022/03500 ~ Complete ~54:ENCODER, DECODER, ENCODING METHOD, AND DECODING METHOD ~71:Panasonic Intellectual Property Corporation of America, 20000 Mariner Avenue, Suite 200, TORRANCE 90503, CA, USA, United States of America ~72: ABE, Kiyofumi;LI, Jing Ya;LIAO, Ru Ling;LIM, Chong Soon;NISHI, Takahiro;SHASHIDHAR, Sughosh Pavan;SUN, Hai Wei;TEO, Han Boon;TOMA, Tadamasa~ 33:US ~31:62/699,930 ~32:18/07/2018

2022/03505 ~ Complete ~54:GLASS CONTAINER WITH RING PULL CAP RIM ~71:OWENS-BROCKWAY GLASS CONTAINER INC., One Michael Owens Way, Perrysburg, Ohio, 43551, United States of America ~72: DONALD P DELAGRANGE;RAUL M PAREDES~ 33:US ~31:16/569,082 ~32:12/09/2019

2022/03515 ~ Complete ~54:SUBSTITUTED PYRIDOPYRIMIDINONYL COMPOUNDS USEFUL AS T CELL ACTIVATORS ~71:Bristol-Myers Squibb Company, Route 206 and Province line Road, PRINCETON 08543, NJ, USA, United States of America ~72: DARNE, Chetan Padmakar;DASGUPTA, Bireshwar;GRUNENFELDER, Denise C.;JALAGAM, Prasada Rao;OLSON, Richard E.;RAHAMAN, Hasibur;ROY, Saumya;VELAPARTHI, Upender;WARRIER, Jayakumar Sankara~ 33:US ~31:62/892,799 ~32:28/08/2019

2022/03494 ~ Complete ~54:CONSTRUCTION METHOD OF ARTIFICIAL VEGETATION OF CAMEL THORN IN OASIS PERIPHERY ~71:Xinjiang Institute of Ecology and Geography , Chinese Academy of Sciences, No.818, South Beijing Road, Urumqi, Xinjiang Uygur Autonomous Region, People's Republic of China ~72: Gui Dongwei;Lei Jiaqiang;Liu Bo;Luo Weicheng;Mu Guijin;Zeng Fanjiang~

2022/03499 ~ Complete ~54:SOLID ACID CATALYST AND PREPARATION METHOD THEREOF ~71:Institute of Applied Chemistry, Jiangxi Academy of Sciences, No. 7777, Changdong Avenue, High-tech Zone, NANCHANG CITY 330000, JIANGXI PROVINCE, CHINA (P.R.C.), People's Republic of China ~72: FU, Jianping;HAN, Xiaodan;HU, Juwu;WANG, Huibin;WU, Lei;XIONG, Wei~

2022/03506 ~ Complete ~54:CDK INHIBITORS AND THEIR USE AS PHARMACEUTICALS ~71:PRELUDE THERAPEUTICS, INCORPORATED, 200 Powder Mill Rd., Wilmington, Delaware, 19803, United States of America ~72: ANDREW PAUL COMBS;CHAOFENG DAI;KLARE LAZOR BERSCH;LIANG LU;RAUL ANDREW LEAL;RUPA SHETTY~ 33:US ~31:62/898,839 ~32:11/09/2019;33:US ~31:63/005,577 ~32:06/04/2020

2022/03510 ~ Complete ~54:BINDING MODULES COMPRISING MODIFIED EHD2 DOMAINS ~71:UNIVERSITÄT STUTTGART, Keplerstrasse 7, 70174, Stuttgart, Germany ~72: OLIVER SEIFERT;ROLAND KONTERMANN~ 33:EP ~31:19199639.6 ~32:25/09/2019

2022/03519 ~ Complete ~54:ARYLMETHYLENE AROMATIC COMPOUNDS AS KV1.3 POTASSIUM SHAKER CHANNEL BLOCKERS ~71:D.E. Shaw Research, LLC, 120 W. 45th Street - 39th Floor, NEW YORK 10036, NY, USA, United States of America ~72: GIORDANETTO, Fabrizio;JENSEN, Morten Østergaard;JOGINI, Vishwanath;SNOW, Roger John~ 33:US ~31:62/911,653 ~32:07/10/2019

2022/03479 ~ Complete ~54:A METHOD FOR ANALYZING CHEMICAL PROFILING, FREE RADICAL SCAVENGING AND ANTI-ACETYLCHOLINESTERASE ACTIVITIES OF ESSENTIAL OIL DERIVED FROM CURCUMACAESIA ~71:Hemanta Kumar SHARMA, Department of Pharmaceutical Sciences, Faculty of Science and Engineering, Dibrugarh University, Dibrugarh,, India;Pallab KALITA, School of Pharmaceutical Sciences, University of Science and Technology Meghalaya, Techno-City, 9th Mile, Baridua,, India;Priyanka SARKAR, Wellcome trust- DBT (India Alliance) Lab, Asian Healthcare Foundation, Asian Institute of Gastroenterology, India;Sudarshana BORAH, School of Pharmaceutical Sciences, University of Science and Technology

Meghalaya, Techno-City, 9th Mile, Baridua,, India;Sujata PAUL, Department of Pharmaceutical Sciences, Faculty of Science and Engineering, Dibrugarh University, Dibrugarh, India ~72: Hemanta Kumar SHARMA;Priyanka SARKAR;Sudarshana BORAH~

2022/03485 ~ Complete ~54:TRADITIONAL CHINESE MEDICINE COMPOSITION AND PRODUCT FOR IMPROVING SLEEP BY BALANCING YIN AND YANG, METHOD FOR MAKING THE SAME AND USE THEREOF ~71:Qingdao Baishishankang Traditional Chinese Medicine Technology Co., Ltd., No. 7, Shangliyuan Village, Dongge Sub-district Office, Pingdu City, Qingdao City, Shandong Province, 266799, People's Republic of China ~72: LIN, Ping;LIN, Zixuan~ 33:CN ~31:202210029358.1 ~32:13/01/2022

2022/03489 ~ Complete ~54:A LONG-DISTANCE EARLY WARNING ALARM SYSTEM FOR METAL PIPELINE LEAKAGE MONITORING ~71:Jiuyuan Baoding Internet of Things Technology Co., LTD, Building 3, East Unit, Building 12, Baoding Zhongguancun Innovation Base, No.369, Huiyang Street, Jingxiu District, Baoding City, Hebei Province, People's Republic of China ~72: Chen Xiaohui;Liu Hongjian;Liu Yaofeng~

2022/03508 ~ Complete ~54:AN ANTIPERSPIRANT COMPOSITION ~71:UNILEVER GLOBAL IP LIMITED, Port Sunlight, Wirral, Merseyside, CH62 4ZD, United Kingdom ~72: HUAJIN JIN;XIAOKE LI~ 33:CN ~31:PCT/CN2019/111461 ~32:16/10/2019;33:EP ~31:19209017.3 ~32:14/11/2019

2022/03513 ~ Complete ~54:PREPARATION METHOD OF CARBON NANOTUBE/POLYACRYLIC ACID HYDROGEL, PRODUCT AND APPLICATION THEREOF ~71:Guangdong Ocean University, No. 1, Haida Road, Mazhang District, Zhanjiang City, Guangdong Province, 524088, People's Republic of China ~72: Hu Zhang;Lai Xuehui;Li Chengpeng;Li Chengyong;Li Lefan;Li Sidong;Wang Di;Wang Wenhua;Wu Zhanxia~ 33:CN ~31:202111514809.2 ~32:13/12/2021

2022/03521 ~ Complete ~54:USE OF FGFR INHIBITORS IN FGFR-GENETICALLY ALTERED CANCERS TO ENHANCE PATIENT RESPONSE TO IMMUNE CHECKPOINT INHIBITORS IN SEQUENTIAL TREATMENT SETTINGS ~71:Janssen Pharmaceutica NV, Turnhoutseweg 30, BEERSE 2340, BELGIUM, Belgium ~72: SANTIAGO-WALKER, Ademi Elena;SHALABY, Waleed S.;VERONA, Raluca;ZUDAIRE, Enrique~ 33:US ~31:62/906,517 ~32:26/09/2019

ASSIGNMENTS IN TERMS OF SECTION 60-REGULATIONS 58-60 AND 64 (1)

Application Number	Assignor	Assignee
2016/06922	ANTHROGENESIS LLC	CELULARITY INC.
2019/08459	QILU UNIVERSITY OF TECHNOLOGY	SHANDONG SCICOM JIAOJUE BIOLOGICAL PRODUCT CO., LTD
2008/04594	UCB PHARMA, S.A.	R-PHARM INTERNATIONAL, LLC
2019/03573	DEFENSIN THERAPEUTICS APS	NOVOZYMES A/S
2018/06870	DEFENSIN THERAPEUTICS APS	NOVOZYMES A/S
2018/04515	DEFENSIN THERAPEUTICS APS	NOVOZYMES A/S
2019/08229	QUINLAN, STEPHEN JOHN	GLOVE IP (PTY)
2019/01014	QUINLAN, STEPHEN JOHN	GLOVE IP (PTY)
2018/05299	MAY, MICHAEL	DVA HOLDINGS CORPORATION
2018/05299	DVA MAYDAY CORPORATION	DVA HOLDINGS LLC
2020/02992	DEFENSIN THERAPEUTICS APS	NOVOZYMES A/S
2019/01397	JUNGKIL NAM	SK TELECOM CO., LTD. and INNOSKY
2017/00343	HUAWEI TECHNOLOGIES CO., LTD.	HUAWEI CLOUD COMPUTING TECHNOLOGIES CO., LTD.
2019/02204	HUAWEI TECHNOLOGIES CO.,	HUAWEI CLOUD COMPUTING

Application Number	Assignor	Assignee
	LTD.	TECHNOLOGIES CO., LTD.
2016/06558	ARCHITECTURE DU BOIS	BURGER ET CIE
2015/07626	ETHICON, INC.	MENTOR WORLDWIDE LLC
2021/02713	MIDORI USA, INC.	DSM IP ASSETS B.V.
2009/06249	SOUTH CHINA UNIVERSITY OF TECHNOLOGY	SIICO TECHNOLOGY CO., LTD.
2020/07649	KENTUCKY BIOPROCESSING, INC.	KBIO HOLDINGS LIMITED
2021/05730	PIERRE BIGNON and ANTON BOUWER	ARMAND WAN HOI
2020/02762	AMGEN INC.	TEIJIN PHARMA LIMITED
2015/04098	HEWITT AND ASSOCIATES (PROPRIETARY) LIMITED	H and A CREATIONS (PTY) LTD
2019/01491	HEWITT AND ASSOCIATES (PROPRIETARY) LIMITED	H and A CREATIONS (PTY) LTD
2019/08137	HEWITT AND ASSOCIATES (PROPRIETARY) LIMITED	CHESTERWOOD PROPERTY (PTY) LTD
2021/09005	FONDAZIONE ISTITUTO NAZIONALE DI GENETICA MOLECOLARE – INGM, OSPEDALE SAN RAFFAELE S.R.L., IRBM S.P.A. and PROMIDIS S.R.L.	ANTIOS THERAPEUTICS, INC.
2016/01252	HUAWEI TECHNOLOGIES CO., LTD.	XFUSION DIGITAL TECHNOLOGIES CO., LTD.
2012/05437	MEDICIS PHARMACEUTICAL CORPORATION	PALAU PHARMA, S.L.
2017/02790	HUAWEI TECHNOLOGIES CO., LTD.	XFUSION DIGITAL TECHNOLOGIES CO., LTD.
2007/02215	EAT JUST, INC.	GOOD MEAT, INC.
2021/04432	NERRA LIMITED	BRUCE JAMES THOMSON
2012/07590	PIERRE FABRE DERMO-COSMETIQUE	GALENIC COSMETICS LABORATORY
2021/03448	AMIR FARSCHI	OVO INCUBATORS (PTY) LTD
2021/08424	MILLER, TIMOTHY J	ABEONA THERAPEUTICS, INC.
2012/00360	STRYKER EUROPEAN HOLDINGS I, LLC	STRYKER EUROPEAN HOLDINGS III, LLC
2008/07889	STRYKER EUROPEAN HOLDINGS I, LLC	STRYKER EUROPEAN HOLDINGS III, LLC
2011/06545	VEXIM	STRYKER EUROPEAN OPERATIONS LIMITED
2005/05597	TENOVA SOUTH AFRICA (PTY) LTD	TAKRAF SOUTH AFRICA (PTY) LTD
2009/09122	TENOVA SOUTH AFRICA (PTY) LTD	TAKRAF SOUTH AFRICA (PTY) LTD
2017/01203	TENOVA SOUTH AFRICA (PTY) LTD	TAKRAF SOUTH AFRICA (PTY) LTD
2020/06190	BIOHAVEN PHARMACEUTICAL HOLDING COMPANY LTD	BIOHAVEN PHARMACEUTICAL IRELAND DAC
2018/02822	NANJING CHUANGHUA SAFETY TECHNOLOGY CO., LTD	JIN, YONGHUI
2006/01258	MARIA ALBERTINA BOSMAN	CLINT QUALITY FENCING MP (PTY) LTD

Application Number	Assignor	Assignee
2017/08495	WERKMAN, BEREND JAN	LEVELOK ENGINEERING (PTY) LTD
2017/08494	WERKMAN, BEREND JAN	LEVELOK ENGINEERING (PTY) LTD
2017/06588	WERKMAN, BEREND JAN	LEVELOK ENGINEERING (PTY) LTD
2014/07687	GLOBAL TECHNOLOGIES LIMITED	perPETual TECHNOLOGIES GMBH
2013/07326	SAMSUNG ELECTRONICS CO., LTD.	INTERNATIONAL SEMICONDUCTOR GROUP
2021/04121	GERARD PRETORIUS FAMILIE TRUST	INNOVATIVE MANGANESE TECHNOLOGIES SA (PTY) LTD
2019/04704	SUN PHARMA GLOBAL FZE	SUN PHARMACEUTICAL INDUSTRIES LIMITED
2015/04209	NCM INNOVATIONS (PTY) LTD	EPIROC HOLDINGS SOUTH AFRICA (PTY) LTD
2015/01611	NCM INNOVATIONS (PTY) LTD	EPIROC HOLDINGS SOUTH AFRICA (PTY) LTD
2014/05751	NCM INNOVATIONS (PTY) LTD	EPIROC HOLDINGS SOUTH AFRICA (PTY) LTD
2007/04345	METSO OUTOTEC OYJ	REEL GMBH
2014/06260	NCM INNOVATIONS (PTY) LTD	EPIROC HOLDINGS SOUTH AFRICA (PTY) LTD
2017/02556	NCM INNOVATIONS (PTY) LTD	EPIROC HOLDINGS SOUTH AFRICA (PTY) LTD
2014/09101	NCM INNOVATIONS (PTY) LTD	EPIROC HOLDINGS SOUTH AFRICA (PTY) LTD
2016/05235	NCM INNOVATIONS (PTY) LTD	EPIROC HOLDINGS SOUTH AFRICA (PTY) LTD
2017/03428	NCM INNOVATIONS (PTY) LTD	EPIROC HOLDINGS SOUTH AFRICA (PTY) LTD
2017/04584	NCM INNOVATIONS (PTY) LTD	EPIROC HOLDINGS SOUTH AFRICA (PTY) LTD
2017/05524	NCM INNOVATIONS (PTY) LTD	EPIROC HOLDINGS SOUTH AFRICA (PTY) LTD
2017/04097	NCM INNOVATIONS (PTY) LTD	EPIROC HOLDINGS SOUTH AFRICA (PTY) LTD
2016/03203	NCM INNOVATIONS (PTY) LTD	EPIROC HOLDINGS SOUTH AFRICA (PTY) LTD
2017/04686	NCM INNOVATIONS (PTY) LTD	EPIROC HOLDINGS SOUTH AFRICA (PTY) LTD
2021/04432	NERRA LIMITED	BRUCE JAMES THOMPSON
2021/08159	MEIJI SEIKA PHARMA CO., LTD.	MMAG CO., LTD.
2018/01906	NCM INNOVATIONS (PTY) LTD	EPIROC HOLDINGS SOUTH AFRICA (PTY) LTD
2017/00549	NCM INNOVATIONS (PTY) LTD	EPIROC HOLDINGS SOUTH AFRICA (PTY) LTD
2010/06139	NEW ENERGY POWER COMPANY	NOVTIUM (BEIJING) SMART ENERGY TECHNOLOGY CO., LTD
2012/09740	NEW ENERGY POWER COMPANY	NOVTIUM (BEIJING) SMART ENERGY TECHNOLOGY CO., LTD
2006/09482	UYS PIETER	STRUTFAST PROPRIETARY LIMITED (IN LIQUIDATION)
2006/09482	STRUTFAST PROPRIETARY LIMITED (IN LIQUIDATION)	ARB GLOBAL PROPRIETARY LIMITED

Application Number	Assignor	Assignee
2021/06335	SHANDONG AGRICULTURAL UNIVERSITY	SHANDONG AGRICULTURAL UNIVERSITY, JEJU NATIONAL UNIVERSITY, SOUTH KOREA
2020/02705	DU PLESSIS, ALWYN, HEUNIS, FRANCOIS PETRUS, RAUTENBACH, RUSSEL JAMES	RUSSEL 10984 (PTY) LTD
2014/09057	NCM INNOVATIONS (PTY) LTD	EPIROC HOLDINGS SOUTH AFRICA (PTY) LTD
2015/07077	NCM INNOVATIONS (PTY) LTD	EPIROC HOLDINGS SOUTH AFRICA (PTY) LTD
2002/09433	SABRE GLBL	FLIGHT OPERATIONS HOLDINGS LLC
2008/01809	CREABILIS THERAPEUTICS S.P.A	JEFFREY L. BURTCH, AS CHAPTER 7 TRUSTEE OF THE BANKRUPT ESTATE OF, AND SUCCESSOR IN INTEREST TO, SIENNA BIOPHARMACEUTICALS, INC.
2008/01809	JEFFREY L. BURTCH, AS CHAPTER 7 TRUSTEE OF THE BANKRUPT ESTATE OF, AND SUCCESSOR IN INTEREST TO, SIENNA BIOPHARMACEUTICALS, INC.	AVRO LIFE SCIENCES, INC.
2005/00644	BEREND JAN WERKMAN	WJ CONVEYANCES (PTY) LTD
2008/07700	BEREND JAN WERKMAN	WJ CONVEYANCES (PTY) LTD
2006/10209	BEREND JAN WERKMAN	WJ CONVEYANCES (PTY) LTD
2005/10208	BEREND JAN WERKMAN	WJ CONVEYANCES (PTY) LTD
2019/08591	BAYER AKTIENGESELLSCHAFT	BAYER HEALTHCARE LLC

CHANGE OF NAME IN TERMS OF REGULATION 39

Application Number	Old Name	New Name
2022/00701	SHANLONG ANTAI ENVIRONMENTAL PROTECTION CO., LTD.	SHANDONG LONGANTAI ENVIRONMENTAL PROTECTION SCI-TECH CO., LTD.
2022/00706	SHANLONG ANTAI ENVIRONMENTAL PROTECTION CO., LTD.	SHANDONG LONGANTAI ENVIRONMENTAL PROTECTION SCI-TECH CO., LTD.
2022/00643	SHANLONG ANTAI ENVIRONMENTAL PROTECTION CO., LTD.	SHANDONG LONGANTAI ENVIRONMENTAL PROTECTION SCI-TECH CO., LTD.
2016/08740	DOW AGROSCIENCES LLC	CORTEVA AGROSCIENCE LLC
2020/07742	THE CLIMATE CORPORATION	CLIMATE LLC
2022/00560	SHANLONG ANTAI ENVIRONMENTAL PROTECTION CO., LTD.	SHANDONG LONGANTAI ENVIRONMENTAL PROTECTION SCI-TECH CO., LTD.
2022/00636	SHANLONG ANTAI ENVIRONMENTAL PROTECTION CO., LTD.	SHANDONG LONGANTAI ENVIRONMENTAL PROTECTION SCI-TECH CO., LTD.
2010/08840	VIVUS, INC.	VIVUS LLC

Application Number	Old Name	New Name
2021/04543	THE CLIMATE CORPORATION	CLIMATE LLC
2021/01531	THE CLIMATE CORPORATION	CLIMATE LLC
2021/00592	THE CLIMATE CORPORATION	CLIMATE LLC
2021/00561	THE CLIMATE CORPORATION	CLIMATE LLC
2021/00449	THE CLIMATE CORPORATION	CLIMATE LLC
2020/07133	THE CLIMATE CORPORATION	CLIMATE LLC
2020/03588	THE CLIMATE CORPORATION	CLIMATE LLC
2020/03589	THE CLIMATE CORPORATION	CLIMATE LLC
2020/03425	THE CLIMATE CORPORATION	CLIMATE LLC
2020/02963	THE CLIMATE CORPORATION	CLIMATE LLC
2020/02225	THE CLIMATE CORPORATION	CLIMATE LLC
2021/03472	THE CLIMATE CORPORATION	CLIMATE LLC
2018/05388	THE CLIMATE CORPORATION	CLIMATE LLC
2018/05014	THE CLIMATE CORPORATION	CLIMATE LLC
2018/04297	THE CLIMATE CORPORATION	CLIMATE LLC
2018/04298	THE CLIMATE CORPORATION	CLIMATE LLC
2018/04750	THE CLIMATE CORPORATION	CLIMATE LLC
2018/00755	THE CLIMATE CORPORATION	CLIMATE LLC
2018/02208	THE CLIMATE CORPORATION	CLIMATE LLC
2018/03006	THE CLIMATE CORPORATION	CLIMATE LLC
2018/02389	THE CLIMATE CORPORATION	CLIMATE LLC
2018/03756	THE CLIMATE CORPORATION	CLIMATE LLC
2020/01608	THE CLIMATE CORPORATION	CLIMATE LLC
2017/08432	THE CLIMATE CORPORATION	CLIMATE LLC
2020/00477	THE CLIMATE CORPORATION	CLIMATE LLC
2019/01406	THE CLIMATE CORPORATION	CLIMATE LLC
2019/03636	THE CLIMATE CORPORATION	CLIMATE LLC
2019/01404	THE CLIMATE CORPORATION	CLIMATE LLC
2019/01403	THE CLIMATE CORPORATION	CLIMATE LLC
2017/01586	THE CLIMATE CORPORATION	CLIMATE LLC
2017/07293	THE CLIMATE CORPORATION	CLIMATE LLC
2017/07447	THE CLIMATE CORPORATION	CLIMATE LLC
2017/08019	THE CLIMATE CORPORATION	CLIMATE LLC
2018/00753	THE CLIMATE CORPORATION	CLIMATE LLC
2015/00753	THE CLIMATE CORPORATION	CLIMATE LLC
2007/02215	HAMPTON CREEK, INC.	JUST, INC.
2007/02215	JUST, INC.	EAT JUST, INC.
2012/00360	STRYKER EUROPEAN HOLDINGS III, LLC	STRYKER EUROPEAN OPERATIONS HOLDINGS LLC
2008/07889	STRYKER EUROPEAN HOLDINGS III, LLC	STRYKER EUROPEAN OPERATIONS HOLDINGS LLC
2014/02596	JINGJIN ENVIRONMENTAL PROTECTION INC.	JINGJIN EQUIPMENT INC.
2021/02881	ESKER THERAPEUTICS, INC.	ALUMIS INC.
2019/04084	ITM ISOTOPEN TECHNOLOGIEN MUNCHEN AG	ITM ISOTOPE TECHNOLOGIES MUNICH SE
2012/03027	ITM ISOTOPEN TECHNOLOGIEN	ITM ISOTOPE TECHNOLOGIES MUNICH SE

Application Number	Old Name	New Name
	MUNCHEN AG	
2019/08056	ITM ISOTOPEN TECHNOLOGIEN MUNCHEN AG	ITM ISOTOPE TECHNOLOGIES MUNICH SE
2021/05953	THE CLIMATE CORPORATION	VLIMATE LLC
2010/08956	ANGLO OPERATIONS LIMITED	ANGLO OPERATIONS (PTY) LTD
2010/08956	ANGLO OPERATIONS (PTY) LTD	THUNGELA OPERATIONS (PTY) LTD
2017/07232	ANGLO OPERATIONS (PTY) LTD	THUNGELA OPERATIONS (PTY) LTD
2010/02354	ANGLO OPERATIONS (PTY) LTD	THUNGELA OPERATIONS (PTY) LTD
2017/07229	ANGLO OPERATIONS (PTY) LTD	THUNGELA OPERATIONS (PTY) LTD
2020/06133	DOW AGROSCIENCES LLC	CORTEVA AGRISCIENCE LLC
2009/00415	ALCOA WARRICK LLC	KAISER ALUMINUM WARRICK, LLC
2008/10096	ALCOA WARRICK LLC	KAISER ALUMINUM WARRICK, LLC
2016/05490	DEZIMA PHARMA B.V.	NEWAMSTERDAM PHARMA B.V.
2006/08117	DEZIMA PHARMA B.V.	NEWAMSTERDAM PHARMA B.V.
2010/04518	RETAIL MOBILE CREDIT SPECIALIST (PROPRIETARY) LIMITED	BLUE LABEL CONNECT (PTY) LTD
2013/02848	CSR ZHUZHOU ELECTRIC LOCOMOTIVE CO., LTD	CRRC ZHUZHOU LOCOMOTIVE CO., LTD.
2017/05332	REHAU AG + CO	REHAU AUTOMOTIVE SE & CO. KG
2016/07988	REHAU AG + CO	REHAU AUTOMOTIVE SE & CO. KG
2014/03507	PURPLEGLAZE 3 (PTY) LTD T/A E-CAT	PURPLEGLAZE 3 (PTY) LTD
2009/08733	REHAU AG + CO	REHAU AUTOMOTIVE SE & CO. KG
2014/06043	REHAU AG + CO	REHAU AUTOMOTIVE SE & CO. KG
2010/00289	REHAU AG + CO	REHAU AUTOMOTIVE SE & CO. KG
2015/04268	REHAU AG + CO	REHAU AUTOMOTIVE SE & CO. KG
2015/06004	REHAU AG + CO	REHAU AUTOMOTIVE SE & CO. KG
2017/03012	REHAU AG + CO	REHAU AUTOMOTIVE SE & CO. KG
2021/06929	ABB POWER GRIDS SWITZERLAND AG	ABB POWER GRIDS SWITZERLAND SA
2021/06929	ABB POWER GRIDS SWITZERLAND AG	HITACHI ENERGY SWITZERLAND SA
2016/08249	SOMERSET COAL INTERNATIONAL	SOMERSET INTERNATIONAL, INC.

PATENT LICENSES IN TERMS OF SECTION 53 (7)-REGULATIONS 62 AND 63

Application Number	Licensor	Licensee
2007/01750	AUSTRALIAN MUD COMPANY LTD	SAMCHEM DRILLING FLUIDS & CHEMICALS (PTY) LTD

PATENT APPLICATIONS ABANDONED OR WITHDRAWN

Application Number	Not Open	Date
2021/06490	WITHDRAWN	12/10/2021
2021/06670	WITHDRAWN	17/02/2022
2021/02166	WITHDRAWN	08/02/2022
2021/01765	WITHDRAWN	23/02/2022
2020/08001	WITHDRAWN	10/12/2021
2021/02178	WITHDRAWN	08/02/2022
2021/02177	WITHDRAWN	08/02/2022
2020/07629	WITHDRAWN	09/11/2021
2020/04472	WITHDRAWN	14/07/2021

APPLICATION FOR RESTORATION OF A LAPSED PATENT

THE PATENTS ACT, No. 57 OF 1978

APPLICATION FOR THE RESTORATION OF A LAPSED PATENT UNDER SECTION 47 OF THE ACT

Notice is hereby given **EVONIK OPERATIONS GMBH OF DENNEMEYER & ASSOCIATES SUITE 415 HYDE PARK CORNER OFFICES CORNER OF WILLIAM NICOL AND JAN SMUTS AVENUE 2196, JOHANNESBURG.** that made application for the restoration of the patent granted to said **EVONIK OPERATIONS GMBH** an invention **PRODUCTION OF FINE-PORED PMMA FOAMS USING NUCLEATING AGENTS** numbered **2017/07210** dated **2017/10/24** which became void **24/03/2021** owing to the non-payment of the prescribed renewal fee.

Any person may give notice on Patent Form No. 19 of opposition to the restoration of the patent within two months of the advertisement hereof.

Registrar of Patents

Notice is hereby given **UNIVERSITEIT GENT OF DENNEMEYER & ASSOCIATES SUITE 415 HYDE PARK CORNER OFFICES CORNER OF WILLIAM NICOL AND JAN SMUTS AVENUE 2196, JOHANNESBURG.** that made application for the restoration of the patent granted to said **UNIVERSITEIT GENT** an invention **RADIOTHERAPY COUCH AND COUCH** numbered **2016/06349** dated **2016/09/14** which became void **24/03/2021** owing to the non-payment of the prescribed renewal fee.

Any person may give notice on Patent Form No. 19 of opposition to the restoration of the patent within two months of the advertisement hereof.

Registrar of Patents

Notice is hereby given **AGRO-KANESHO CO, LTD OF DENNEMEYER & ASSOCIATES, SUITE 415, HYDE PARK, CORNER OFFICES, CORNER OF WILLIAM NICOL AND JAN SMUTS AVENUE. 2196. JOHANNESBURG.** that made application for the restoration of the patent granted to said **AGRO-KANESHO CO.**

LTD an invention **2-AMINONICOTINIC ACID ESTER DERIVATIVE AND BACTERICIDE CONTAINING THE SAME AS ACTIVE INGREDIENT** numbered **2015/00742 dated 02/02/2015** which became void on **02/04/2021** owing to the non-payment of the prescribed renewal fee.

Any person may give notice on Patent Form No. 19 of opposition to the restoration of the patent within two months of the advertisement hereof.

Registrar of Patents

Notice is hereby given **EVIIVO LIMITED OF ADAMS & ADAMS, 4 DAVENTRY ROAD, LYNNWOOD MANOR. PRETORIA.** that made application for the restoration of the patent granted to said **EVIVO LIMITED** an invention **PRODUCT INVENTORY MANAGEMENT SYSTEM** numbered **2004/07825** dated **28/09/2004** whi**ch** became void **28/03/2021** owing to the non-payment of the prescribed renewal fee.

Any person may give notice on Patent Form No. 19 of opposition to the restoration of the patent within two months of the advertisement hereof.

Registrar of Patents

Notice is hereby given **GEOX S.P.A OF HAHN AND HAHN, 222 RICHARD STREET, HATFIELD. PRETORIA. 0001.** that made application for the restoration of the patent granted to said **GEOX S.P.A.** an invention **SHOE WITH BREATHABLE AND WATERPROOF SOLE AND UPPER** numbered **2006/05664** dated **10/07/2006** which became void **20/01/2021 o**wing to the non-payment of the prescribed renewal fee.

Any person may give notice on Patent of Opposition to the restoration of the patent within two months of the advertisement thereof

Registrar of Patents

Notice is hereby given **WELLDRINKS LTD OF DE BEER ATTORNEYS INC., 178 CAMPGROUND RD, NEWLANDS. CAPE TOWN. 7700.** that made application for the restoration of the patent granted to said **WELLDRINKS LTD** an invention **BEVERAGE WITH COLLAGEN AND ADDITIONAL ADDITIVES** numbered **2017/05462** dated **11/08/2017** which became void **11/12/2019 o**wing to the non-payment of the prescribed renewal fee.

Any person may give notice on Patent Form No. 19 of opposition to the restoration of the patent within two months of the advertisement hereof.

Registrar of Patents

Notice is hereby given **HAFEZ, MAMOUD ALM EL DIN OF DE BEER ATTORNEYS INC., 178 CAMPGROUND RD, NEWLANDS. CAPE TOWN. 7700.** that made application for the restoration of the patent granted to said **HAFEZ, MAMOUD** an invention **DEVICE AND METHOD FOR FITTING AN ARTIFICIAL KNEE JOINT USING UNIVERSAL ELECTRONIC TEMPLATES WHICH CAN BE ADAPTED TO ALL ARTIFICIAL JOINTS** numbered **2015/09102** dated **14/12/2015** which became void **11/06/2019** owing to the non-payment of the prescribed renewal fee.

Any person may give notice on Patent Form No. 19 of opposition to the restoration of the patent within two months of the advertisement hereof.

Registrar of Patents

Notice is hereby given **GUODIAN UNITED POWER TECHNOLOGY COMPANY LIMITED OF DE BEER ATTORNEYS INC., 178 CAMPGROUND RD, NEWLANDS. CAPE TOWN. 7700**. that made application for the restoration of the patent granted to said **GUODIAN UNITED POWER TECHNOLOGY COMPPANY LIMITED** an invention **A WIND TURBINE YAW CONTROL METHOD AND** numbered **2015/1882** dated **19/03/2015** which became void **19/03/2018 o**wing to the non-payment of the prescribed renewal fee.

Any person may give notice on Patent Form No. 19 of opposition to the restoration of the patent within two months of the advertisement hereof.

Registrar of Patents

Notice is hereby given **FIBRIA CELULOSE S/A OF ADAMS AND ADAMS, 4 DAVENTRY ROAD, LYNNWOOD MANOR. PRETORIA. 0001.** that made application for the restoration of the patent granted to said **FIBRIA CELULOSE S/A** an invention **INCREASING CELL WALL DEPOSITION AND BIOMASS IN PLANTS** numbered **2011/01374** dated **21/02/2011** which became void **21/08/2020** owing to the non-payment of the prescribed renewal fee.

Any person may give notice on Patent Form No. 19 of opposition to the restoration of the patent within two months of the advertisement hereof.

Registrar of Patents

Notice is hereby given **INFOBRIDGE PTE, LIMITED OF ADAMS AND ADAMS, 4 DAVENTRY ROAD, LYNNWOOD MANOR. PRETORIA. 0001.** that made application for the restoration of the patent granted to said **INFOBRIDGE, PTE LIMITED** an invention **IMAGE DECODING METHOD** dated **2016/00847** dated **08/02/2016** which became void **08/02/2020** owing to the non-payment of the prescribed renewal fee.

Any person may give notice on Patent Form No. 19 of opposition to the restoration of the patent within two months of the advertisement hereof.

Registrar of Patents

Notice is hereby given **INFOBRIDGE PTE, LIMITED OF ADAMS AND ADAMS, 4 DAVENTRY ROAD, LYNNWOOD MANOR. PRETORIA. 0001.** that made application for the restoration of the patent granted to said **INFOBRIDGE, PTE LIMITED** an invention **METHOD OF GENERATING RECONSTRUCTED BLOCK** dated **2016/00849** dated **08/02/2016** which became void **08/02/2020** owing to the non-payment of the prescribed renewal fee.

Any person may give notice on Patent Form No. 19 of opposition to the restoration of the patent within two months of the advertisement hereof.

Registrar of Patents

Notice is hereby given **INFOBRIDGE PTE, LIMITED OF ADAMS AND ADAMS, 4 DAVENTRY ROAD, LYNNWOOD MANOR. PRETORIA. 0001.** that made application for the restoration of the patent granted to said **INFOBRIDGE, PTE LIMITED** an invention **IMAGE DECODING METHOD** dated **2016/00848** dated **08/02/2016** which became void **08/02/2020** owing to the non-payment of the prescribed renewal fee.

Any person may give notice on Patent Form No. 19 of opposition to the restoration of the patent within two months of the advertisement hereof.

Registrar of Patents

Notice is hereby given **AIR REVOLUTION TECHNOLOGIES PTY) LTD OF BOWERS INC. PRETORIA. 0001** that made application for the restoration of the patent granted to said **AIR REVOLUTION TECHNOLOGIES PTY LTD** an invention **AIR PURIFING DEVICES** dated **2008/07086** dated **18/08/2008** which became void **18/08/2017 o**wing to the non-payment of the prescribed renewal fee.

Any person may give notice on Patent Form No. 19 of opposition to the restoration of the patent within two months of the advertisement hereof.

Registrar of Patents

Notice is hereby given **WB INNOVATIONS LIMITED OF DR GERNRHOLTZ P.O.BOX 8, CAPE TOWN. 8000.** that made application for the restoration of the patent granted to said **WB INNOVATIONS LIMITED** an invention **DRINK CAN CLOSURE ELEMENT** dated **2012/06559** dated **31/08/2012** whi**ch** became void **03/03/2015 o**wing to the non-payment of the prescribed renewal fee.

Any person may give notice on Patent Form No. 19 of opposition to the restoration of the patent within two months of the advertisement hereof.

Registrar of Patents

Notice is hereby given **EKA SOFTTOUCH CORP OF MCCALLUM RADEMEYER AND FREIMOND, DOCEX 3, RANDBURG.2125. 8000.** that made application for the restoration of the patent granted to said **EKA SOFTTOUCH CORP** an invention **ARTICLE OF FURNITURE** dated **2012/06559** dated **14/08/2008** which became void **14/08/211** owing to the non-payment of the prescribed renewal fee.

Any person may give notice on Patent Form No. 19 of opposition to the restoration of the patent within two months of the advertisement hereof.

Registrar of Patents

THE PATENTS ACT, No. 57 OF 1978

APPLICATION FOR VOLUNTARY SURRENDER OF PATENTS UNDER SECTION 64 (1), REGULATION 67 OF THE ACT

No records available

APPLICATIONS TO AMEND SPECIFICATION

Applicant: Ideal Engineering CC of **27A Hippo Road Springfield, Johannesburg, Gauteng, South Africa** request permission to amend the specification of letters patent no: **2018/06985** of **19/10/2018** for **SECURING DEVICE AND METHOD FOR SECURING A HANDHELD/PORTABLE PHOTOTHERAPY APPARATUS**

A copy of the original specification on which the proposed amendment is indicated inred, is now available for public inspection at the Patent Office.

Any notice of opposition (on patent Form 19) must be closed at the Patent Office within 2 months from the date hereof.

Registrar of Patents

Applicant: NOKIA TECHNOLOGIES OY KARAPORTTI 3, 02610 ESPOO Finland request permission to amend the specification of letters: **28/8/2008** patent application no: **2010/02158** for **SYSTEM AND METHOD FOR PROVIDING AMR-WB DTX SYNCHRONIZATION**.

A copy of the original specification on which the proposed amendment is indicated inred, is now available for public inspection at the Patent Office .

Any notice of opposition (on patent Form 19) must be closed at the Patent Office within 2 months from the date hereof.

Registrar of Patents

Applicant: DSI UNDERGROUND AUSTRALIA PTY LIMITED 25 Pacific Highway, BENNETT'S GREEN 2290, NSW, AUSTRALIA Australia request permission to amend the specification of letters: **04/5/2020** patent application no: **2020/02285** for **ENCAPSULATION SYSTEM AND METHOD OF INSTALLING A ROCK BOLT**.

A copy of the original specification on which the proposed amendment is indicated inred, is now available for public inspection at the Patent Office .

Any notice of opposition (on patent Form 19) must be closed at the Patent Office within 2 months from the date hereof.

Registrar of Patents

Applicant: TECHNICAL SYSTEMS (PTY) LTD Ampere Street, Stikland, Bellville Cape Town, 7530 South Africa request permission to amend the specification of letters: **09/3/2016** patent application no: **2016/01623** for **CORELESS AUGER MANUFACTURE.**

A copy of the original specification on which the proposed amendment is indicated inred, is now available for public inspection at the Patent Office .

Any notice of opposition (on patent Form 19) must be closed at the Patent Office within 2 months from the date hereof.

Registrar of Patents

Applicant: SYNGENTA PARTICIPATION AG Schwarzwaldallee 215, Basel CH-4058 Switzerland., SYNGENTA LIMITED European Regional Centre, Priestlet Road, Surrey Research Park, Guilford Surrey GU2 7YH United Kingdom request permission to amend the specification of letters: **22/8/2014** patent application no: **2014/06203** for **ADJUVANT COMPOSITIONS**.

A copy of the original specification on which the proposed amendment is indicated inred, is now available for public inspection at the Patent Office .

Any notice of opposition (on patent Form 19) must be closed at the Patent Office within 2 months from the date hereof.

Registrar of Patents

Applicant: HANMI PHARM. CO., LTD. 214, MUHA-RO, PALTAN-MYEON, HWASEONG-SI, GYEONGGI-DO 18536, REPUBLIC OF KOREA request permission to amend the specification of letters: **25/7/2018** patent application no: **2018/04997** for **TRIPLE GLUCAGON/GLP-1/GIP RECEPTOR AGONIST.**

A copy of the original specification on which the proposed amendment is indicated inred, is now available for public inspection at the Patent Office .

Any notice of opposition (on patent Form 19) must be closed at the Patent Office within 2 months from the date hereof.

Registrar of Patents

Applicant: BEARD, Gavin James 10 Silk Oak Drive, Irene Farm Villages, IRENE 0133, SOUTH AFRICA South Africa., FORSYTH, Mark 46 Sparrow Street, Clearwater Estates, Atlas Road, PARKHAVEN 1459, SOUTH AFRICA South Africa request permission to amend the specification of letters: **23/09/2020** patent application no: **2020/05894** for **A PICK SLEEVE.**

A copy of the original specification on which the proposed amendment is indicated inred, is now available for public inspection at the Patent Office .

Any notice of opposition (on patent Form 19) must be closed at the Patent Office within 2 months from the date hereof.

Registrar of Patents

Applicant: NOVARTIS AG Lichtstrasse 35, CH-4056 Basel Switzerland request permission to amend the specification of letters: **16/12/2009** patent application no: **2011/03709** for **HEMIFUMARATE SALT OF 1-[4-[1- (4-CYCLOHEXYL-3 -TRIFLUOROMETHYL-BENZYLOXYIMINO) -ETHYL]-2-ETHYL-BENZYL]-A ZETIDINE-3-CARBOXYLIC ACID.**

A copy of the original specification on which the proposed amendment is indicated inred, is now available for public inspection at the Patent Office .

Any notice of opposition (on patent Form 19) must be closed at the Patent Office within 2 months from the date hereof.

Registrar of Patents

Applicant: NOKIA TECHNOLOGIES OY KARAPORTTI 3 ~02610 ESPOO Finland request permission to amend the specification of letters: **07/1/2009** patent application no: **2010/06258** for **METHOD AND APPARATUS FOR CONVEYING ANTENNA CONFIGURATION INFORMATION VIA MASKING.**

A copy of the original specification on which the proposed amendment is indicated inred, is now available for public inspection at the Patent Office .

Any notice of opposition (on patent Form 19) must be closed at the Patent Office within 2 months from the date hereof.

Registrar of Patents

Applicant: BAYER PHARMA AKTIENGESELLSCHAFT Müllerstr. 178, 13353, Berlin Germany. request permission to amend the specification of letters: **25/5/2016** patent application no: **2016/03585** or **ANTIBODY DRUG CONJUGATES (ADCS) WITH KINESIN SPINDEL PROTEIN (KSP).**

A copy of the original specification on which the proposed amendment is indicated inred, is now available for public inspection at the Patent Office .

Any notice of opposition (on patent Form 19) must be closed at the Patent Office within 2 months from the date hereof.

Registrar of Patents

Applicant: Merck Sharp AND Dohme Corp. 126 East Lincoln Avenue, RAHWAY 07065-0907, NJ, USA United States of America request permission to amend the specification of letters: **19/02/2018** patent application no: **2018/01120** for **OXAZOLIDINONE COMPOUNDS AND METHODS OF USE THEREOF AS ANTIBACTERIAL AGENTS.**

A copy of the original specification on which the proposed amendment is indicated inred, is now available for public inspection at the Patent Office .

Any notice of opposition (on patent Form 19) must be closed at the Patent Office within 2 months from the date hereof.

Registrar of Patents

INSPECTION OF SPECIFICATIONS

A complete specification may, after acceptance is advertised, be inspected during office hours at the Patent Office, Pretoria, at a charge of **R4, 00.** Please note, that in terms of section 43 (3) if the acceptance of an application which claims priority in terms of section 31 (1) (c) is not published in terms of section 42 within 18 months from the earliest priority claimed from the relevant application in a convention country, it shall be opened to public inspection after the expiration of 18 months from the earliest priority so claimed.

COPIES OF DOCUMENTS

The Patent Office, Private Bag X400, Pretoria, supplies copies of all patent and trade mark documents at the following rate:

Photocopies: **R1, 00 per page**

(Payment to be affected by means of revenue stamps only.)

COMPLETE SPECIFICATIONS ACCEPTED AND ABRIDGEMENTS OR ABSTRACTS THEREOF

Complete specifications in respect of the under mentioned applications for letters Patent have been accepted by the Registrar of Patents.

THE PATENTS ACT, 1978 (ACT NO. 57 OF 1978)

In terms of section 42 (b) of the Patents Act, 1978, a patent shall be deemed to have been sealed and granted as from the date of publication of the acceptance.

The numerical references denote the following: **(21)** Number of application. **(22)** Date of application. **(DA)** Date of acceptance. **(51)** Class. **(71)** Name of applicant(s). **(72)** Name of all inventors. **(33)** Country. **(31)** Number and **(32)** Date of convention application. **(54)** Title of invention. **(00)** Number of sheets.

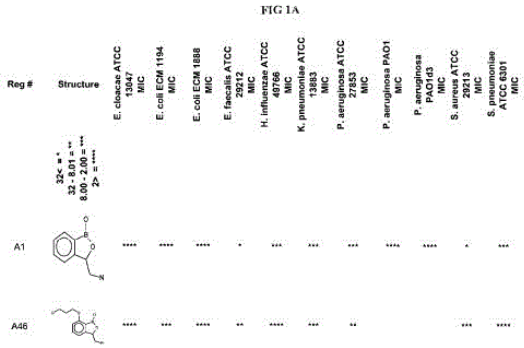
Registrar of Patents

21: 2008/04213. 22: 2008-05-15. 43: 2022-01-07
51: C12P
71: CP Kelco U.S., Inc.
72: PATEL, Yamini, N, COLEMAN, Russell, MATZKE, Steven, HARDING, Nancy, E
33: US 31: 11/264,279 32: 2005-11-01
33: US 31: 11/264,268 32: 2005-11-01
54: High viscosity diutan gums and methods of producing
00: -

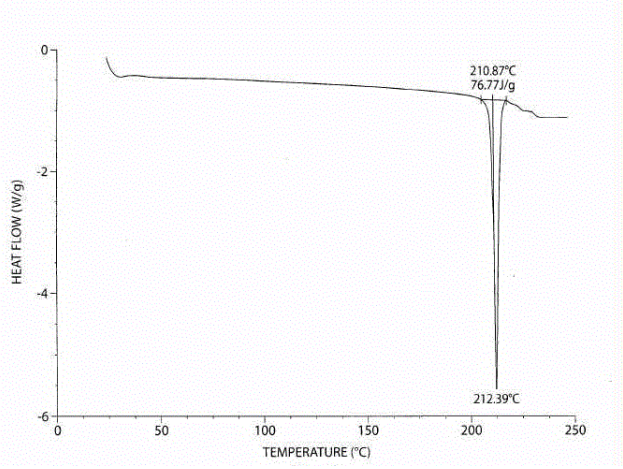
The present invention describes the production of a diutan polysaccharide exhibiting increased viscosity properties as compared with previously produced polysaccharide of the same type of repeating units. Such an improved diutan polysaccharide is produced through the generation of a derivative of *Sphingomonas sp.* ATCC 53159 that harbors a multicopy broad-host-range plasmid into which genes for biosynthesis of diutan polysaccharide have been cloned. The plasmid provides the capability within the host Sphingomonas strain to produce multiple copies of genes for such polysaccharide synthesis. In such a manner, a method of not just increased production of the target diutan polysaccharide, but also production of a diutan polysaccharide of improved physical properties (of the aforementioned higher viscosity) thereof is provided. Such a diutan polysaccharide has proven particularly useful as a possible viscosifier in oilfield applications and within cement materials. The inventive methods of production of such an improved diutan polysaccharide, as well as the novel cloned genes required to produce the improved diutan within such a method, are also encompassed within this invention. Additionally, the novel engineered *Sphingomonas* strain including the needed DNA sequence is encompassed within this invention.

21: 2009/04492. 22: 2009-06-26. 43: 2022-01-07
51: A61K; C07K
71: Emory University, Dana-Farber Cancer Institute, President and Fellows of Harvard College
72: AHMED, Rafi, AMARA, Rama, FREEMAN, Gordon, SHARPE, Arlene
33: US 31: 60/877,518 32: 2006-12-27
54: COMPOSITIONS AND METHODS FOR THE TREATMENT OF INFECTIONS AND TUMORS
00: -
PD-1 antagonists are disclosed that can be used to reduce the expression or activity of PD-1 in a subject. An immune response specific to an infectious agent or to tumor cells can be enhanced using these PD- 1 antagonists in conjunction with an antigen from the infectious agent or tumor. Thus, subjects with infections, such as persistent infections can be treated using PD-1 antagonists. In addition, subjects with tumors can be treated using the PD-1 antagonists. In several examples, subjects can be treated by transplanting a therapeutically effective amount of activated T cells that recognize an antigen of interest and by administering a therapeutically effective amount of a PD-1 antagonist.

21: 2009/09003. 22: 2009-12-17. 43: 2022-01-07
51: A01N; A61K
71: Anacor Pharmaceuticals, Inc.
72: BAKER, Stephen J., HERNANDEZ, Vincent S., SHARMA, Rashmi, NIEMAN, James A., AKAMA, Tsutoma, ZHANG, Yong-Kang, PLATTNER, Jacob J., ALLEY, Michael Richard Kevin, SINGH, Rajeshwar, XIA, Yi, ZHOU, Huchen, MOHAMMAD, Rahim, KERAMANE, El Mehdi, LU, Xiaosong, HA, Minh, PHILLIPS, James G.
33: US 31: 60/945,294 32: 2007-06-20
54: BORON-CONTAINING SMALL MOLECULES
00: -
This invention provides, among other things, novel compounds useful for treating bacterial infections, pharmaceutical compositions containing such compounds, as well as combinations of these compounds with at least one additional therapeutically effective agent.



21: 2010/02770. 22: 2010-04-20. 43: 2022-01-07
51: A61P; C07D; C07K
71: Onyx Therapeutics, Inc.
72: PHIASIVONGSA, Pasit, SEHL, Louis C., FULLER, William Dean, LAIDIG, Guy J.
33: US 31: 60/997,613 32: 2007-10-04
54: CRYSTALLINE PEPTIDE EPOXY KETONE PROTEASE INHIBITORS AND THE SYNTHESIS OF AMINO ACID KETO-EPOXIDES
00: -
The invention relates to crystalline peptide keto epoxide compounds, methods of their preparation, and related pharmaceutical compositions. This invention also relates to methods for the preparation of amino acid keto-epoxides. Specifically, allylic ketones are stereoselectively converted to the desired keto epoxides.



21: 2010/03331. 22: 2010-05-11. 43: 2022-01-07
51: C22C
71: ATI Properties LLC
72: BERGSTROM, David S., RAKOWSKI, James M., STINNER, Charles P., DUNN, John J., GRUBB, John F.
33: US 31: 60/991,016 32: 2007-11-29
54: LEAN AUSTENITIC STAINLESS STEEL
00: -
An austenitic stainless steel having low nickel and molybdenum and exhibiting comparable corrosion resistance and formability properties to higher nickel and molybdenum alloys comprises, in weight %, up to 0.20 C, 2.0-9.0 Mn, up to 2.0 Si, 16.0-23.0 Cr, 1.0-5.0 Ni, up to 3.0 Mo, up to 3.0 Cu, 0.1-0.35 N, up to 4.0 W, up to 0.01 B, up to 1.0 Co, iron and impurities, the steel having a ferrite number of less than 10 and a MD30 value of less than 20° C.

21: 2010/04196. 22: 2010-06-11. 43: 2022-01-07
51: C22C
71: ATI Properties LLC
72: BERGSTROM, David S., RAKOWSKI, James M., STINNER, Charles P., DUNN, John J., GRUBB, John F.
33: US 31: 61/015,338 32: 2007-12-20
54: CORROSION RESISTANT LEAN AUSTENITIC STAINLESS STEEL
00: -
An austenitic stainless steel composition having low nickel and molybdenum and exhibiting high corrosion resistance and good formability. The austenitic stainless steel includes, in weight %, up to 0.20 C, 2.0-6.0 Mn, up to 2.0 Si, 16.0-23.0 Cr, 5.0-7.0 Ni, up to 3.0 Mo, up to 3.0 Cu, 0.1-0.35 N, up to 4.0 W, up to 0.01 B, up to 1.0 Co, iron and impurities. The austenitic stainless steel has a ferrite number less than 11 and an MD30 value less than -10°C.

21: 2010/08559. 22: 2010-11-29. 43: 2022-01-07
51: F04D
71: Weir Minerals Australia Ltd
72: BURGESS, Kevin Edward, LIU, Wen-Jie, LAVAGNA, Luis Moscoso, GLAVES, Garry Bruce
33: AU 31: 2008902886 32: 2008-06-06
54: PUMP CASING
00: -
A pump casing for a centrifugal pump, which comprises an inlet opening, a discharge outlet, and a transition surface extending between an inner peripheral surface of the main pumping chamber and an inner peripheral surface of the discharge outlet, the transition surface arranged for separating an in use exit flow of material in the discharge outlet from an in use recirculation flow of material in the main pumping chamber. The transition surface has a cutwater having a profiled section which comprises a protrusion which extends irregularly from an otherwise generally rounded arched or U-shaped transition surface and is configured such that, in use, the velocity and/or turbulence resulting from the in use flow of the material being pumped in the main pumping chamber is reduced.

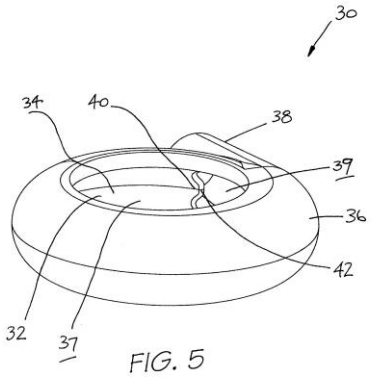
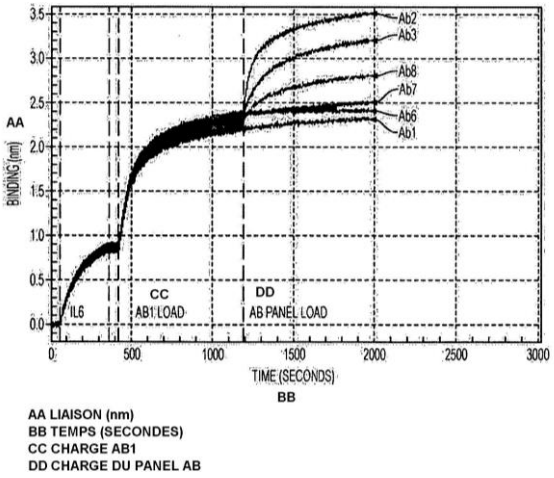


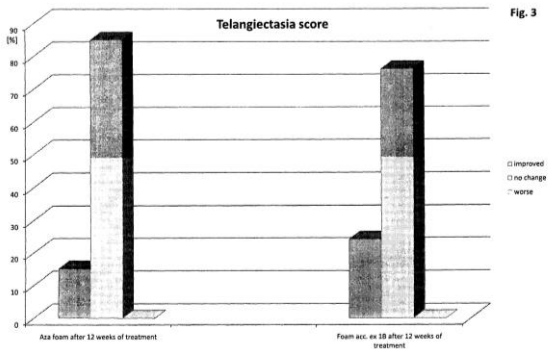
FIG. 5

21: 2011/03803. 22: 2011-05-24. 43: 2022-01-07
51: A61K; C07H; C07K
71: H. Lundbeck A/S.
72: GARCIA-MARTINEZ, Leon, JENSEN, Anne Elisabeth Carvalho, OLSON, Katie, DUTZAR, Ben, LATHAM, John, KOVACEVICH, Brian, SMITH, Jeffrey T.L., LITTON, Mark, SCHATZMAN, Randall
33: US 31: 61/117,811 32: 2008-11-25
33: US 31: 61/117,861 32: 2008-11-25
33: US 31: 61/117,839 32: 2008-11-25
54: ANTIBODIES TO IL-6 AND USE THEREOF
00: -
Disclosed are therapeutic methods using IL-6 antagonists such as an Ab 1 antibody or antibody fragment having binding specificity for IL-6 to prevent or treat disease or to improve survivability or quality of life of a patient in need thereof Patients will preferably comprise those exhibiting (or at psk of developing) an elevated serum C-reactive protein level, reduced serum albumin level, elevated D-dimer or other coagulation cascade related protein(s), cachexia, fever, weakness and/or fatigue prior to treatment The subject therapies also may include the administration of other actives such as

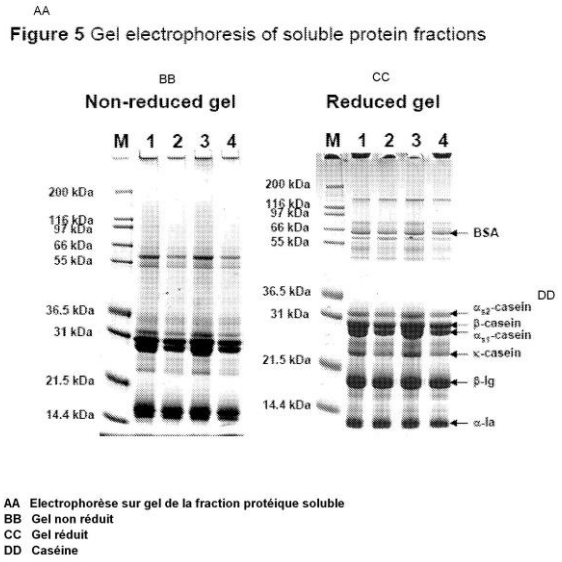
chemotherapeutics, anti-coagulants, statins, and others



21: 2011/04600. 22: 2011-06-22. 43: 2022-01-07
51: A61K; A61P
71: Foamix Pharmaceuticals Ltd.
72: GRAUPE, Klaus, STÄDTLER, Gerald
33: US 31: 61/140,152 32: 2008-12-23
33: EP 31: 08022333.2 32: 2008-12-23
54: USE OF A FOAMABLE COMPOSITION ESSENTIALLY FREE OF PHARMACEUTICALLY ACTIVE INGREDIENTS FOR THE TREATMENT OF HUMAN SKIN
00: -
The present invention related to the use of a pharmaceutical composition which is esentially free of pharmaceutically active ingredients for the treatment of human skin, especially in the treatment of rosacea, acne, atopic dermatitis, contact dermatitis, perioral dermatitis, psoriasis or neurodermitis.



21: 2011/06664. 22: 2011-09-12. 43: 2022-01-07
51: A23C; A23G; A23J; A23L
71: Société des Produits Nestlé S.A.
72: UMMADI, Madhavi, VAGHELA, Madansinh, BUTTERWORTH, Aaron Beth, PANDYA, Nirav Chandrakant, McCUNE, Bridgett Lynn, SCHMITT, Christophe Joseph Etienne
33: US 31: 61/152,629 32: 2009-02-13
54: FROZEN AERATED PRODUCTS
00: -
The present invention relates to frozen aerated products including products manufactured by low-temperature extrusion with superior creaminess. In particular, the invention is concerned with a partially coagulated protein system induced by controlled coagulation of milk protein which imparts outstanding sensory attributes on frozen confectionery including low-temperature extruded frozen products, in particular when containing low fat. A method of producing such frozen aerated confectionery product and the products obtainable from the method are also part of the present invention.



21: 2011/09328. 22: 2011-12-19. 43: 2022-01-07
51: A61D; A61M
71: Simcro Limited
72: EBBETT, Todd Donald, WALKER, Rodney Gordon
33: NZ 31: 577279 32: 2009-05-28
54: SKIN GRIPPING MEANS, INJECTOR INCLUDING THE SKIN GRIPPING MEANS AND

METHOD OF PERFORMING A SUBCUTANEOUS INJECTION

00: -

A skin gripping means for use with an injector (200) is disclosed. In one embodiment the skin gripping means is a needle guard (100). An exterior surface (7) of the skin gripping means (100) is provided with a plurality of fingers (6) adapted to engage a subject's skin (9) when in use. A method of performing a subcutaneous injection is also disclosed with includes the steps of bringing a skin gripping means (100) of an injector (200) into contact with the skin (9) of a subject, moving the skin gripping means (100) substantially parallel to the skin (9) to thereby form a fold (10) in the skin, moving a needle (11) of the injector (200) into the fold (10) to a suitable position for a subcutaneous injection and injecting a substance through the needle (11).

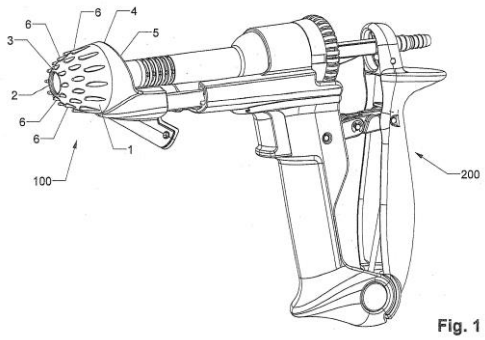


Fig. 1

21: 2011/09340. 22: 2011-12-19. 43: 2022-01-07
51: A61K; A61P; C07D
71: Incyte Holdings Corporation
72: LI, Yun-Long, METCALF, Brian W., COMBS, Andrew P.
33: US 31: 61/221,160 32: 2009-06-29

54: PYRIMIDINONES AS PI3K INHIBITORS

00: -

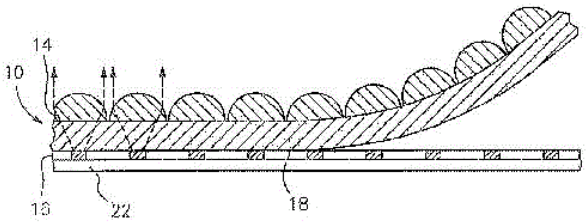
The present invention provides pyrimidinones that modulate the activity of phosphoinositide 3-kinases (PI3Ks) and are useful in the treatment of diseases related to the activity of PI3Ks including, for example, inflammatory disorders, immune-based disorders, cancer, and other diseases.

21: 2012/00509. 22: 2012-01-20. 43: 2022-01-07
51: B42D; G07D
71: Visual Physics, LLC
72: STEENBLIK, Richard A., HURT, Mark J., JORDAN, Gregory R., CAPE, Samuel M.
33: US 31: 61/233,264 32: 2009-08-12

54: A TAMPER INDICATING OPTICAL SECURITY DEVICE

00: -

A tamper indicating optical security device that operates to produce one or more synthetic images is provided. Any attempt to detach (e.g., forcibly remove) this device from an underlying base material will cause one or more layers of the security device to separate or delaminate, rending the device partially or totally inoperable. The inventive device is contemplated for use with, among other things, currency or banknotes, secure documents such as bonds, checks, travelers checks, identification cards, lottery tickets, passports, postage stamps, and stock certificates, as well as non-secure documents such as stationery items and labels. The inventive device is also contemplated for use with consumer goods as well as bags or packaging used with consumer goods.



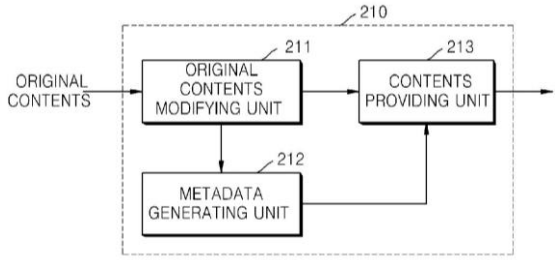
21: 2012/01164. 22: 2012-02-16. 43: 2022-01-07
51: G06F; G06Q
71: Samsung Electronics Co., Ltd.
72: LEE, Keum-Koo, SUNG, Ju-Yun, KIM, Sun-Ae, CHOO, Hee-Jeong, KWAHK, Ji-Young
33: KR 31: 10-2009-0077875 32: 2009-08-21

54: METHOD AND APPARATUS FOR PROVIDING CONTENTS VIA NETWORK, METHOD AND APPARATUS FOR RECEIVING CONTENTS VIA NETWORK, AND METHOD AND APPARATUS FOR BACKING UP DATA VIA NETWORK, BACKUP DATA PROVIDING DEVICE, AND BACKUP SYSTEM

00: -

Provided are methods and apparatuses for providing contents via a network, in which original data of contents provided via a network can be traced, and contents that are modified according to performance of a contents receiving device is provided. Location information of original contents is added to metadata

of contents provided via the network to thereby increase convenience of access to the original contents and modify attributes of contents that are provided, to be suitable for the performance of the contents receiving device.



21: 2012/01738. 22: 2012-03-09. 43: 2022-01-07
51: H04L; H04W
71: QUALCOMM Incorporated
72: GRIOT, Miguel, SONG, Osok
33: US 31: 61/232,733 32: 2009-08-10
54: DOMAIN SELECTION FOR MOBILE-ORIGINATED MESSAGE SERVICE
00: -
An indication is used to control how message service information is routed over different domains. For example, an access terminal may be configured with an indication that indicates that a message service is preferred to be invoked over an IP domain or that the message service is not be invoked over the IP domain. The access terminal then delivers message service information based on the value of the indication. In some cases, a network entity generates the indication and sends the indication to the access terminal. In some cases, a domain for delivery of message service information is selected based on a domain that was selected for particular type of traffic.

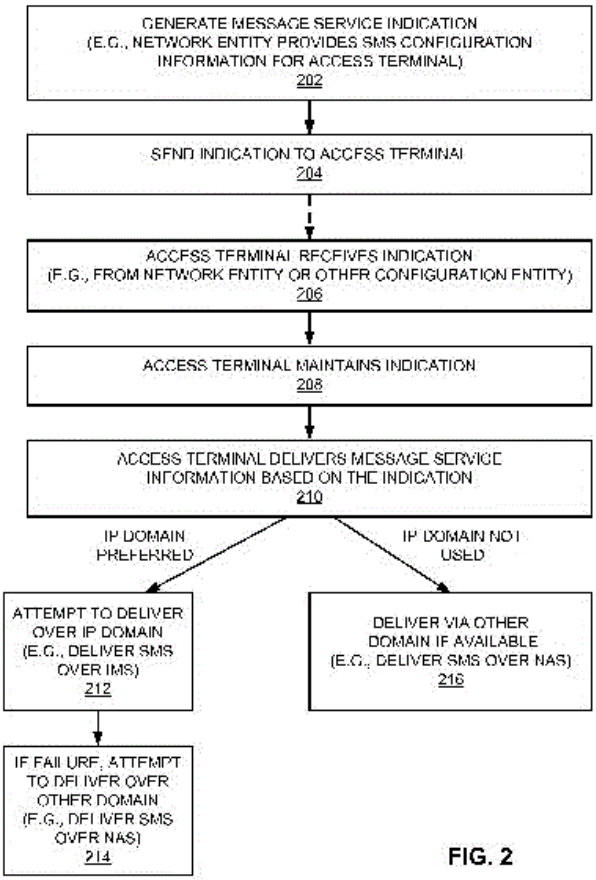


FIG. 2

21: 2012/02025. 22: 2012-03-19. 43: 2022-01-07
51: A61K; A61P; C07C; C07D
71: Plexxikon, Inc.
72: ARTIS, Dean R., BREMER, Ryan, MAMO, Shumeye, NESPI, Marika, ZHANG, Chao, ZHANG, Jiazhong, ZHU, Yong-Liang, TSAI, James, HIRTH, Klaus-Peter, BOLLAG, Gideon, SPEVAK, Wayne, CHO, Hanna, GILLETTE, Samuel J., WU, Guoxian, ZHU, Hongyao, SHI, Shenghua, IBRAHIM, Prabha N.
33: US 31: 60/692,960 32: 2005-06-22
54: INTERMEDIATES USEFUL IN THE PREPARATION OF PYRROLO[2,3-b] PYRIDINE DERIVATIVES
00: -
The invention provides the compounds having the structure of Formula VIIa, as well as processes for preparing the compounds.

21: 2012/03538. 22: 2012-05-15. 43: 2022-01-07
51: A61M
71: Janssen Biotech, Inc.

72: OLSON, Lorin P., KRULEVITCH, Peter, GLENCROSS, James, WANG, Jingli, FOLEY, Nicholas, ZHAO, Mingqi
33: US 31: 61/252,378 32: 2009-10-16
54: PALM ACTIVATED DRUG DELIVERY DEVICE
00: -
Disclosed is a device for the parenteral delivery of a medication, such as a drug. The device includes upper and lower housings in which the upper housing is configured to move relative to the lower housing as a result of application of an external force to permit the user of the device to control the rate at which the drug is administered.

21: 2012/03955. 22: 2012-05-30. 43: 2022-01-07
51: C07K; C12R; G01N
71: Oregon Health & Science University, The United States Government as represented by the Department of Veterans Affairs
72: LEWINSOHN, David M., LEWINSOHN, Deborah A.
33: US 31: 61/263,206 32: 2009-11-20
54: METHODS FOR DETECTING A MYCOBACTERIUM TUBERCULOSIS INFECTION
00: -
Methods for detecting an infection with Mtb in a subject are disclosed. The methods include detecting the presence of CD8+ T cells that specifically recognize an Mtb polypeptide. The methods include in vitro assays for detecting the presence of CD8+ T cells in a biological sample, and in vivo assays that detect a delayed type hypersensitivity reaction. The methods also include detecting Mtb polypeptides and polynucleotides.

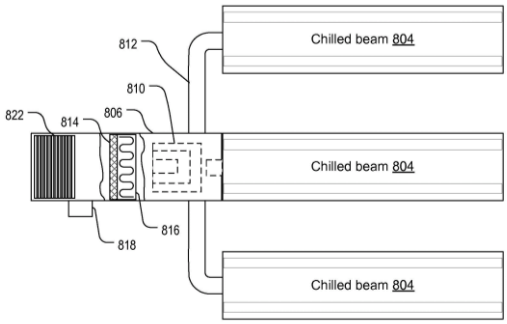
21: 2012/04583. 22: 2012-06-20. 43: 2022-01-17
51: A61K
71: Janssen Sciences Ireland UC
72: SCHACHTER, Deborah M., BAERT, Lieven Elvire Colette, KRAUS, Guenter, ZHANG, Qiang, CHUN, Iksoo
33: US 31: 61/288,373 32: 2009-12-21
54: DEGRADABLE REMOVABLE IMPLANT FOR THE SUSTAINED RELEASE OF AN ACTIVE COMPOUND
00: -
A degradable, removable, pharmaceutical implant for the sustained release of one or more drugs in a subject, wherein the pharmaceutical implant is composed of a tube comprising an outer wall made of a degradable polymer completely surrounding a cavity, wherein the outer wall has a plurality of openings and wherein the cavity contains one or more sets of micro-particles, which micro-particles contain an active agent or a combination of two or more active agents, and wherein the size of the microparticles is selected such that the majority of the microparticles cannot pass through the openings.

21: 2012/05335. 22: 2012-07-17. 43: 2022-01-07
51: C22C; C22F
71: ATI Properties LLC
72: BRYAN, David J.
33: US 31: 12/691,952 32: 2010-01-22
54: PRODUCTION OF HIGH STRENGTH TITANIUM ALLOYS
00: -
Certain embodiments of a method for increasing the strength and toughness of a titanium alloy include plastically deforming a titanium alloy at a temperature in an alpha-beta phase field of the titanium alloy to an equivalent plastic deformation of at least a 25% reduction in area. After plastically deforming the titanium alloy in the alpha-beta phase field, the titanium alloy is not heated to or above the beta transus temperature of the titanium alloy. After plastic deformation, the titanium alloy is heat treated at a heat treatment temperature less than or equal to the beta transus temperature minus 20F (11.1°C).

21: 2012/06026. 22: 2012-08-10. 43: 2022-01-07
51: B01J; C07C
71: Technip E&C Limited
72: PARTINGTON, Stephen Roy
33: EP(GB) 31: 10250327.3 32: 2010-02-24
54: PROCESS FOR PREPARING AN ALKENE
00: -
A process for the preparation of an alkene from an oxygenate comprising contacting a reactant feedstream comprising at least one oxygenate reactant and water with a supported heteropolyacid catalyst at a temperature of at least 170 °C, wherein the process is initiated using a start-up procedure comprising the following steps: (i) heating the supported heteropolyacid catalyst to a temperature of at least 220 °C; (ii) maintaining the heat-treated supported heteropolyacid catalyst of step (i) at a temperature of at least 220 °C for a time sufficient to remove bound water from the heteropolyacid

component of the supported heteropolyacid catalyst; and (iii) whilst maintaining the supported heteropolyacid catalyst of step (ii) at a temperature of at least 220 °C, contacting the supported heteropolyacid catalyst with the reactant feedstream having a temperature of at least 220 °C.

21: 2012/06069. 22: 2012-08-13. 43: 2022-01-07
51: F28D
71: Oy Halton Group Ltd.
72: BAGWELL, Rick A., SUMMANEN, Janne, LIVCHAK, Andrey V.
33: US 31: 61/297,800 32: 2010-01-24
54: CHILLED BEAM DEVICES, SYSTEMS, AND METHODS
00: -
A chilled beam system may incorporate a terminal unit to provide additional heating and cooling capacity including latent cooling. In a system, terminal units may be distributed and connected to cooperate with a primary air stream from a central air handling unit. The chilled beam and/or terminal units may employ features for enhancing heating mode operation. Control embodiments take advantage of the additional capabilities described.



21: 2012/06546. 22: 2012-08-31. 43: 2022-01-07
51: A23L; A61K
71: Société des Produits Nestlé S.A.
72: BERGONZELLI DEGONDA, Gabriela, BUREAU-FRANZ, Isabelle, GARCIA-RODENAS, Clara Lucia
33: EP 31: 08168161.1 32: 2008-11-03
54: A NUTRITIONAL COMPOSITION COMPRISING PROBIOTICS AND IMPROVING SLEEP PATTERNS
00: -
This invention relates to the use of a probiotic bacterial strain in the manufacture of a medicament or therapeutic nutritional composition for improving the maturation of sleep patterns in infants, young children or young animals and/or for reducing sleep disturbances and/or improving sleep patterns in humans or animals at any age.

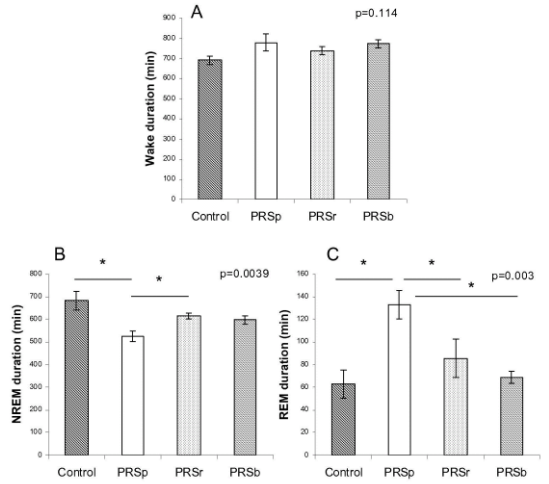


Figure 1. Total duration (minutes) of wake (A), NREM (B) and REM (C) states during the 24 hour polygraphic recording period in control or prenatal stress (PRS) animals. Animals received a daily gavage of either placebo (Control and PRSp), *L. reuteri* DSM 17938 (PRSr) of *B. longum* ATCC BAA-999 (PRSb) during the 14 days preceding polygraphic recordings. Average ± SEM data, as well as the p value for the global group effect (one-way ANOVA test) are shown. The symbol * between two bars indicates a significant difference ($p<0.05$) between the two groups (Tukey-Kramer Multiple-Comparison Test)

21: 2012/06550. 22: 2012-08-31. 43: 2022-01-07
51: F04D; F15D
71: Weir Minerals Australia Ltd
72: WALKER, Craig
33: AU 31: 2010900943 32: 2010-03-05
54: PUMP INTAKE DEVICE
00: -
A pump intake device comprising a main body which includes a side wall section having an inner side and an outer side, an intake section extending from the outer side of the side wall section and an intake passage extending through the intake section, the intake passage having an inner surface and an entry end and an exit end with a central axis extending between the entry and exit ends, a first portion of the inner surface having one or more first guides thereon for directing fluid passing through the intake passage so that in use said fluid leaves the exit end at the first portion with an exit angle which is inclined relative to the central axis.

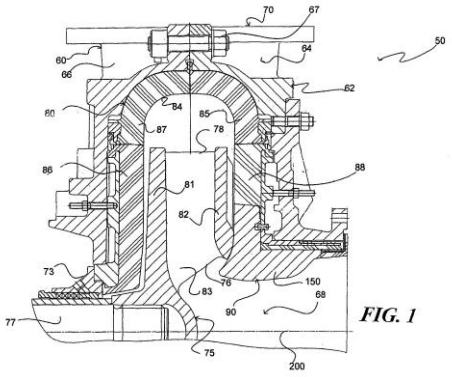
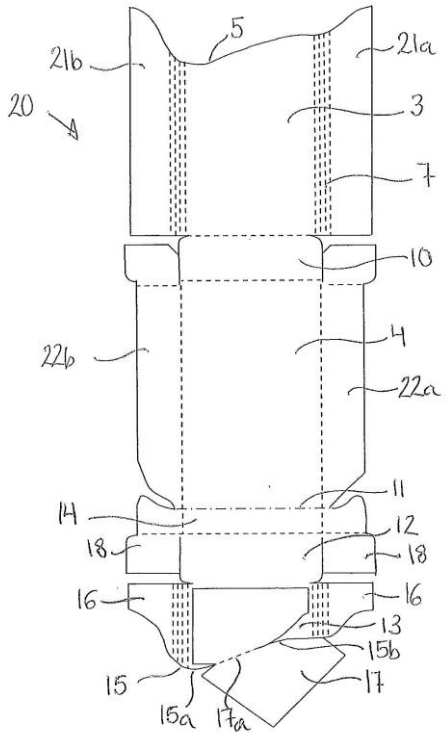


FIG. 1

21: 2012/08459. 22: 2012-11-09. 43: 2022-01-07
51: H04N
71: Samsung Electronics Co., Ltd.
72: MIN, Jung-Hye, HAN, Woo-Jin
33: US 31: 61/323,449 32: 2010-04-13
54: VIDEO-ENCODING METHOD AND VIDEO-ENCODING APPARATUS BASED ON ENCODING UNITS DETERMINED IN ACCORDANCE WITH A TREE STRUCTURE, AND VIDEO-DECODING METHOD AND VIDEO-DECODING APPARATUS BASED ON ENCODING UNITS DETERMINED IN ACCORDANCE WITH A TREE STRUCTURE
00: -
Disclosed is a video-encoding method based on encoding units determined in accordance with a tree structure, wherein the video-encoding method involves: dividing an image of a video into one or more maximum encoding units; encoding, for each maximum encoding unit, the image on the basis of encoding units for each coded depth, which are divided hierarchically on the basis of coded depth, to determine encoding units of coded depths individually for each encoding unit for each coded depth; determining encoding units in accordance with a tree structure; and outputting data encoded on the basis of the encoding units determined in accordance with a tree structure, information on coded depths and encoding modes, and information on an encoding unit structure, which indicates encoding unit sizes and variable coded depths.

110 ... Unit for dividing an image into maximum encoding units
120 ... Encoding unit determining unit
130 ... Output unit

21: 2012/08728. 22: 2012-11-20. 43: 2022-01-07
51: B65D
71: Nicoventures Trading Limited
72: HOLFORD, Steven
33: GB 31: 1009321.9 32: 2010-06-03
54: A PACK FOR SMOKING ARTICLES
00: -
A pack for smoking articles comprising a lid (9) and a body (2) formed from a material having a thickness is disclosed. The lid has a front wall (13) with a lower front wall edge and a flap (17) attached to a portion of said lower front wall edge by a fold- line (17a) formed by partially cutting through the thickness of the material so that, when the flap is folded about said fold- line so as to lie against an inner surface of the lid front wall, said portion of the lower front wall edge to which the flap is attached is aligned with the remainder of the lower front wall edge.



21: 2012/09101. 22: 2012-11-30. 43: 2022-01-07
51: D21C
71: Bahia Specialty Cellulose SA
72: LEITE, Marcelo Moreira
33: RU 31: 2010118498 32: 2010-05-04

54: METHOD AND SYSTEM FOR PULP PROCESSING USING COLD CAUSTIC EXTRACTION WITH ALKALINE FILTRATE REUSE

00: -

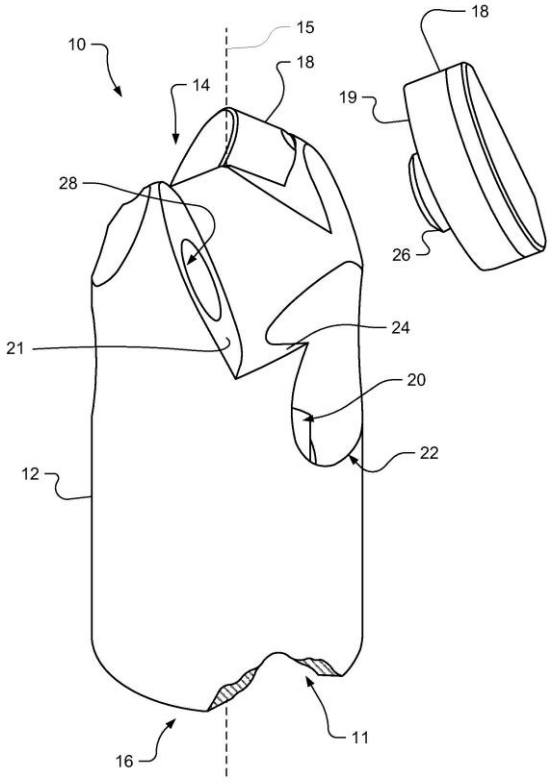
A method for pulp processing includes a cold caustic extraction stage in which the spent cold caustic solution and the spent liquid used to wash the extracted pulp are concentrated by an evaporation system. The concentrated liquid can be used as part of the neutralization and cooking liquor in the pulp process, leading to increased efficiency without significant reduction in pulp quality. Highly concentrated filtrate from the cold caustic extraction stage may help reduce hemicellulose deposition on wood fiber during the cooking step.

21: 2013/01988. 22: 2013-03-15. 43: 2022-01-07
51: E21B; E21D
71: Dover BMCS Acquisition Corporation
72: MYERS, Russell Roy, COX, E. Sean
33: US 31: 12/857,825 32: 2010-08-17

54: ROTATIONAL DRILL BITS AND DRILLING APPARATUSES INCLUDING THE SAME

00: -

A roof-bolt drill bit may include a bit body that is rotatable about a central axis and at least one cutting element mounted to the bit body. The at least one cutting element may include a cutting face, a cutting edge adjacent the cutting face, a back surface opposite the cutting face, and at least one coupling feature positioned adjacent the at least one cutting element. The at least one cutting element may be secured to the bit body by the at least one coupling feature.



21: 2013/04481. 22: 2013-06-18. 43: 2022-01-07
51: A61K; A61P
71: Gilead Sciences, Inc., Janssen Sciences Ireland UC
72: OLIYAI, Reza, WISER, Lauren, MENNING, Mark
33: US 31: 61/415,600 32: 2010-11-19

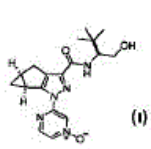
54: THERAPEUTIC COMPOSITIONS COMPRISING RILPIVIRINE HCL AND TENOFOVIR DISOPROXIL FUMARATE

00: -

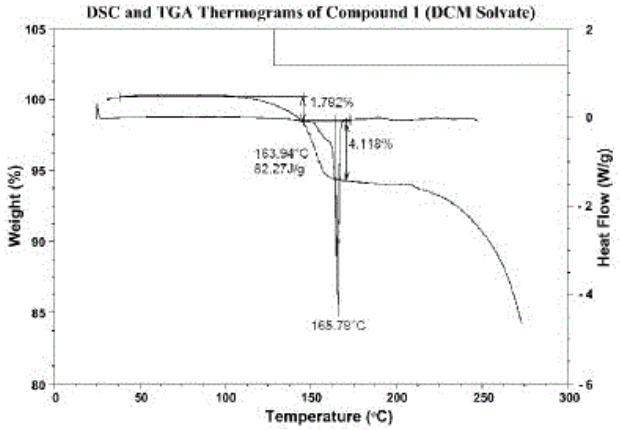
The invention provides multilayer tablets that contain rilpivirine hydrochloride, emtricitabine, and tenofivir

disoproxil fumarate. The tablets are useful for the treatment of HIV.

21: 2013/06402. 22: 2013-08-23. 43: 2022-01-10
51: A61K; A61P; C07D
71: Arena Pharmaceuticals, Inc.
72: BLACKBURN, Anthony C., HAN, Sangdon, JONES, Robert M., MONTALBAN, Antonio Garrido, PAL, Biman B., RUETER, Jaimie Karyn
33: US 31: 61/446,732 32: 2011-02-25
54: CRYSTALLINE FORMS AND PROCESSES FOR THE PREPARATION OF CONDENSED AZACYCLES (CANNABINOID RECEPTOR MODULATORS)
00: -
The present invention relates to crystalline forms of (1aS,5aS)-2-(4-oxy-pyrazin-2-yl)- 1a,2,5.5a-tetrahydro- 1 H-2,3-diaza-cyclopropa[a]pentalene-4-carboxylic acid ((S)- 1 - hydroxymcthyl-2.2-dimcthyl-propyl)-amidc (Compound 1) and pharmaceutical compositions thereof that modulate the activity of the cannabinoid CB2 receptor and are therefore useful in t treatment of CB2 receptor-mediated disorders, for example, osteoarthritis; pain; hyperalgesia; allodynia; inflammatory hyperalgesia; neuropathic hyperalgesia; acute nociception; osteoporosis; multiple sclerosis-associated spasticity; autoimmune disorders; allergic reactions CNS inflammation for example; atherosclerosis; undesired immune cell activity, and inflammation associated with a disorder selected from: osteoarthritis, anaphylaxis, Behcet's disease, graft rejection, vasculitis, gout, spondylitis, viral disease, bacterial disease, lupus, inflammatory bowel disease, autoimmune hepatitis, and type 1 diabetes mellitus; age-related macular degeneration; cough; leukemia; lymphoma; CNS rumors; prostate cancer; Alzheimer's disease; stroke-induced damage; dementia; amyotrophic lateral sclerosis; and Parkinson's disease.



(I)

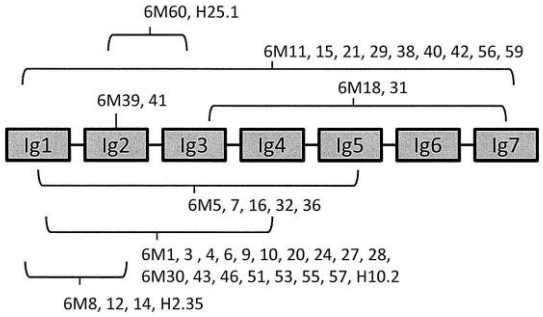


21: 2013/06455. 22: 2013-08-27. 43: 2022-01-07
51: G08B, G05B, G07C, G07B
71: Accenture Global Services Limited
72: BATALLER, Cyrille, PARTINGTON, Alastair, ÅSTRÖM, Anders, CAVALLINI, Alessio, IRISH, David Mark
33: EP 31: 12290281.0 32: 2012-08-27
54: VIRTUAL ACCESS CONTROL
00: -
Virtual access control may include detecting entry of a person into a virtual controlled zone, and counting and/or identifying people including the person entering into the virtual controlled zone. Virtual access control may further include determining an authorization of the person to continue through the virtual controlled zone based on a facial identification of the person, and alerting the person to stop, exit from, or continue through the virtual controlled zone based on the determined authorization. An alarm may be generated if the person violates directions provided by the alert.

21: 2013/06958. 22: 2013-09-16. 43: 2022-01-07
51: C07K
71: AbbVie Stemcentrx LLC
72: FOORD, Orit, DYLLA, Scott J., STULL, Robert A., BANKOVICH, Alex, LAZETIC, Alexandra Leida Liana, BERNSTEIN, Jeffrey
33: US 31: 61/444,614 32: 2011-02-18
54: NOVEL MODULATORS AND METHODS OF USE
00: -

Novel modulators, including antibodies and derivatives thereof, and methods of using such modulators to treat hyperproliferative disorders are provided.

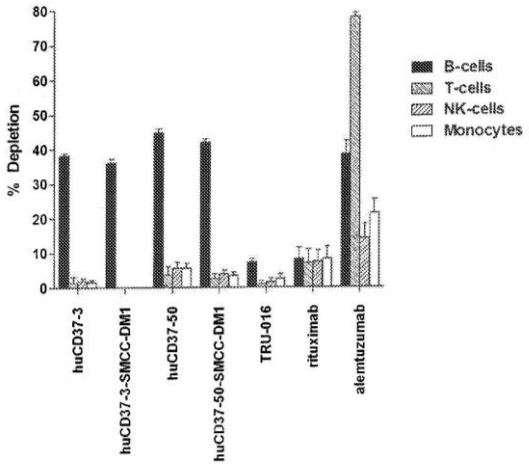
Schematic Depiction of PTK7 Protein Illustrating Modulator Binning



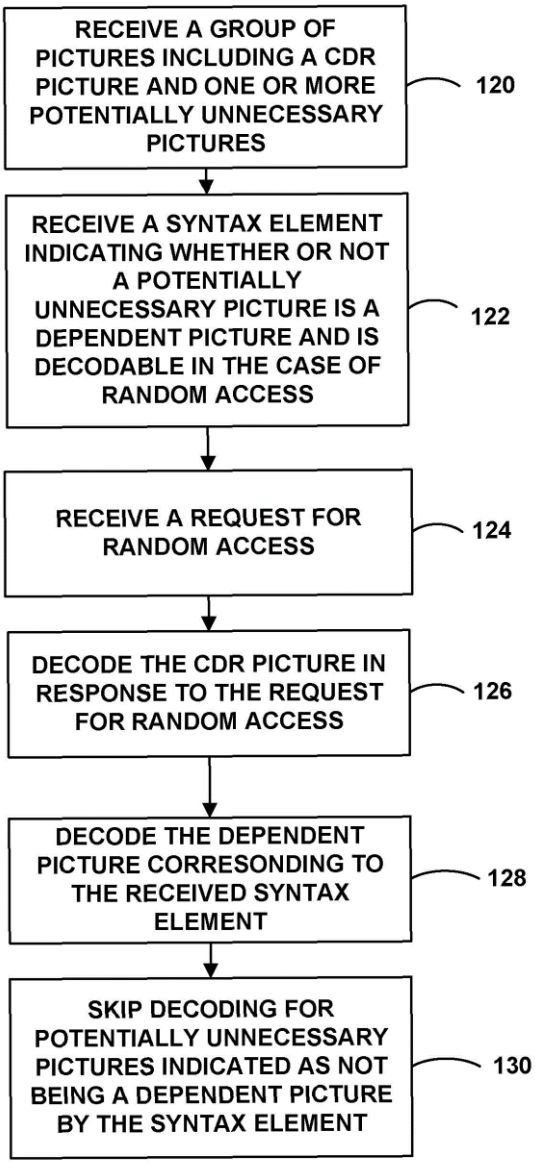
21: 2013/07118. 22: 2013-09-20. 43: 2022-01-07
51: A61K; A61P; C07K; C12N; C12P
71: GlaxoSmithKline Biologicals SA
72: BLAIS, Normand, LABBE, Steve, POOLMAN, Jan
33: US 31: 61/474,779 32: 2011-04-13
54: FUSION PROTEINS AND COMBINATION VACCINES COMPRISING HAEMOPHILUS INFLUENZAE PROTEIN E AND PILIN A
00: -

The present invention relates to compositions comprising *Haemophilus influenzae* Protein E and Pilin A. More particularly, the present application relates to fusion proteins and immunogenic compositions comprising Protein E and PilA, vaccines comprising such immunogenic compositions and therapeutic uses of the same.

21: 2013/07302. 22: 2013-09-30. 43: 2022-01-07
51: A61K; A61P; C07K; C12N
71: Debiopharm International, S.A.
72: DECKERT, Jutta, SETIADY, Julianto, PARK, Peter U.
33: US 31: 61/470,863 32: 2011-04-01
54: CD37-BINDING MOLECULES AND IMMUNOCONJUGATES THEREOF
00: -
Methods of using CD37 agents, including, but not limited to, antibodies and immunoconjugates, that bind to CD37 to deplete B-cells (e.g., non-cancerous B-cells) and methods of treating autoimmune and inflammatory diseases are further provided.

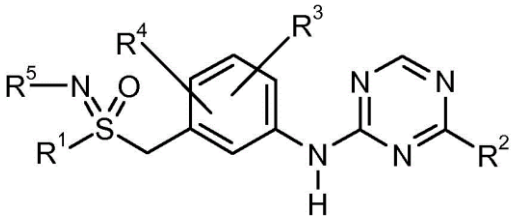


21: 2013/07540. 22: 2013-10-09. 43: 2022-01-07
51: H04N
71: QUALCOMM Incorporated
72: CHEN, Ying, COBAN, Muhammed Zeyd, CHEN, Peisong, KARCZEWICZ, Marta
33: US 31: 61/451,453 32: 2011-03-10
54: VIDEO CODING TECHNIQUES FOR CODING DEPENDENT PICTURES AFTER RANDOM ACCESS
00: -
In general, this disclosure describes techniques for coding video data for random access. In particular, this disclosure proposes to code a syntax element that indicates if a dependent picture may be successfully decoded in the event of a random access request to a clean decoding refresh (CDR) picture and may be required for decoding the pictures following the clean decoding refresh (CDR) picture in display order.



21: 2013/07609. 22: 2013-10-11. 43: 2022-01-07
51: C04B; C08F
71: CHRYSO
72: CHOUGRANI, Kamel, LEISING, Frédéric
33: FR 31: 11 53312 32: 2011-04-15
54: COPOLYMERS HAVING GEM-BISPHOSPHONATE GROUPINGS
00: -
The invention relates to a copolymer including a main hydrocarbon chain and side groups comprising carboxyl groups and polyoxyalkyl groups, characterized in that the copolymer further comprises gem-bisphosphonate groups. The invention also relates to an additive for suspensions of inorganic particles including said copolymer and to a method for preparing said copolymer. The invention finally relates to the use of said copolymer for fluidifying and maintaining the fluidity of suspensions of inorganic particles and for reducing the sensitivity of hydraulic compositions to clays and alkaline sulfates, as well as to a composition of inorganic particles including said copolymer.

21: 2013/09672. 22: 2013-12-20. 43: 2022-01-07
51: A61K; A61P; C07C; C07D
71: Bayer Intellectual Property GmbH
72: LÜCKING, Ulrich, BOHLMANN, Rolf, SCHOLZ, Arne, SIEMEISTER, Gerhard, GNOTH, Mark Jean, BÖMER, Ulf, KOSEMUND, Dirk, LIENAU, Philip, RÜHTER, Gerd, SCHULTZ-FADEMRECHT, Carsten
33: EP(DE) 31: 11167317.4 32: 2011-05-24
54: 4-ARYL-N-PHENYL-1,3,5-TRIAZIN-2-AMINES CONTAINING A SULFOXIMINE GROUP
00: -
The present invention relates to 4-aryl-N-phenyl-1,3,5-triazin-2-amines containing a sulfoximine group of general formula (I) or (Ia) as described and defined herein, and methods for their preparation, their use for the treatment and/or prophylaxis of disorders, in particular of hyper-proliferative disorders and/or virally induced infectious diseases and/or of cardiovascular diseases. The invention further relates to intermediate compounds useful in the preparation of said compounds of general formula (I) or (Ia).


(I)

21: 2014/00089. 22: 2014-01-06. 43: 2022-01-07
51: C12Q
71: Epigenomics, AG
72: LEWIN, Joern, KRISPIN, Manuel
33: US 31: 61/505,919 32: 2011-07-08
54: METHODS AND NUCLEIC ACIDS FOR DETERMINING THE PROGNOSIS OF A CANCER SUBJECT
00: -
The invention provides methods, nucleic acids and kits for determining the prognosis of a subject having cancer. The invention discloses genomic sequences

the methylation patterns of which have utility for the improved detection of said disorder, thereby enabling the improved diagnosis and treatment of patients.

21: 2014/00114. 22: 2014-01-07. 43: 2022-01-07
51: B21D
71: Crown Packaging Technology, Inc.
72: PRESSET, Alain, VINCENT, Keith Alan, MONRO, Stuart Alexander
33: EP 31: 11176206.8 32: 2011-08-01
54: CAN MANUFACTURE
00: -
A method for manufacture of a metal can body is described in which two or more stretching operations are used so as to reduce the thickness of the central part of a cup base, prior to drawing the cup sidewall and forming a can body. By using two or more stretching operations, it has been found possible to control the thickness of the base without significantly reducing pressure performance of the finished can. Alternative embodiments of apparatus comprising tooling for carrying out this method are also described.

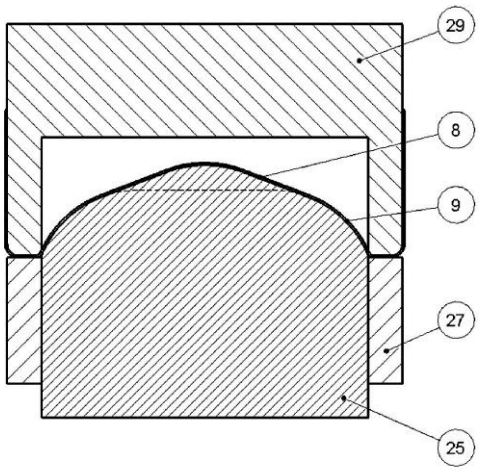
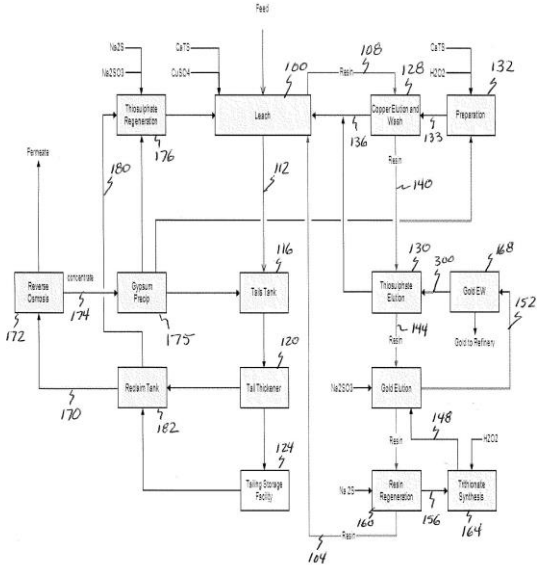


Fig. 2c

21: 2014/00294. 22: 2014-01-14. 43: 2022-01-07
51: C22B
71: Barrick Gold Corporation
72: CHOI, Yeonuk, WANG, Qiankun, LANGHANS, John William
33: US 31: 61/497,415 32: 2011-06-15
54: METHOD FOR RECOVERING PRECIOUS METALS AND COPPER FROM LEACH SOLUTIONS
00: -
The present disclosure is directed to a process for recovering a precious metal from a pregnant leach solution using a resin extractant. The precious metal is eluted from the loaded resin using an eluant comprising trithionate. The barren resin is contacted with a sulfide, bisulfide, and/or polysulfide to convert sorbed trithionate to thiosulfate. The desorbed thiosulfate is contacted with an oxidant and converted to trithionate for eluant recycle.

Figure 1



21: 2014/00330. 22: 2014-01-15. 43: 2022-01-07
51: A61Q
71: GlaxoSmithKline Consumer Healthcare (UK) IP Limited
72: HODGKINSON, John
33: GB 31: 1113754.4 32: 2011-08-09
54: NOVEL COMPOSITION
00: -
The invention relates to non-aqueous dentrfrice compositions comprising a surfactant system. The surfactant system consists of a combination of surfactants i.e. a betaine and a taurate surfactant; or a betaine and an alkyl sulphate surfactant; or a betaine, a taurate and an alkyl sulphate surfactant.

21: 2014/00952. 22: 2014-02-07. 43: 2022-01-07
51: A61K; A61P

71: Ferring B.V.
72: ARCE, Joan-Carles
33: EP(NL) 31: 11176803.2 32: 2011-08-08
54: COMPOSITION FOR CONTROLLED OVARIAN STIMULATION
00: -
Preparations including FSH, for example recombinant FSH, for use in the treatment of infertility.

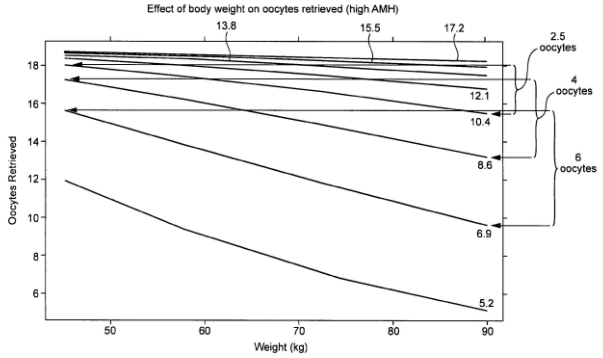
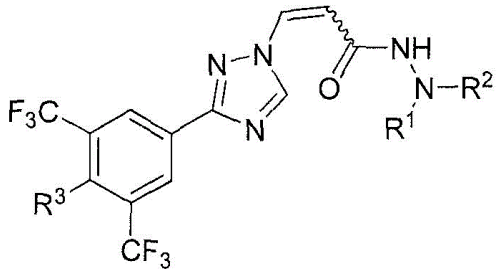


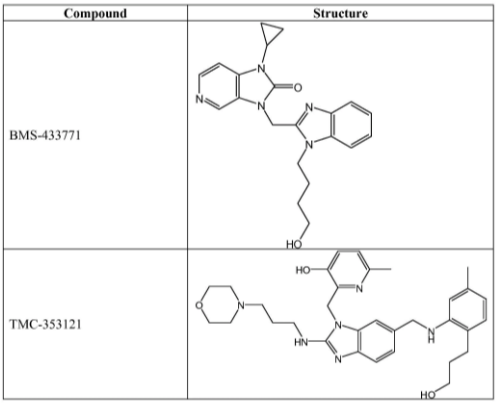
FIG. 8

21: 2014/01223. 22: 2014-02-18. 43: 2022-01-07
51: A61K; A61P; C07D
71: Karyopharm Therapeutics, Inc.
72: SANDANAYAKA, Vincent P., SHACHAM, Sharon, MCCAULEY, Dilara, SHECHTER, Sharon
33: US 31: 61/513,428 32: 2011-07-29
33: US 31: 61/513,432 32: 2011-07-29
54: HYDRAZIDE CONTAINING NUCLEAR TRANSPORT MODULATORS AND USES THEREOF
00: -
The invention generally relates to nuclear transport modulators, e.g., CRM1 inhibitors, and more particularly to a compound represented by structural formula (I): or a pharmaceutically acceptable salt thereof, wherein the values and alternative values for the variables are as defined and described herein. The invention also includes the synthesis and use of a compound of structural formula I, or a pharmaceutically acceptable salt or composition thereof, e.g., in the treatment, modulation and/or prevention of physiological conditions associated with CRM1 activity.

(I)



21: 2014/04486. 22: 2014-06-18. 43: 2022-01-07
51: A61K; A61P; C07D; C07H; C12N
71: Janssen BioPharma, Inc.
72: BEIGELMAN, Leonid, WANG, Guangyi, SMITH, David Bernard, DEVAL, Jerome, PRHAVC, Marija
33: US 31: 61/579,560 32: 2011-12-22
54: SUBSTITUTED NUCLEOSIDES, NUCLEOTIDES AND ANALOGS THEREOF
00: -
Disclosed herein are nucleosides, nucleotides and analogs thereof, pharmaceutical compositions that include one or more of nucleosides, nucleotides and analogs thereof, and methods of synthesizing the same. Also disclosed herein are methods of ameliorating and/or treating a disease and/or a condition, including an infection from a paramyxovirus and/or an orthomyxovirus, with a nucleoside, a nucleotide and an analog thereof.

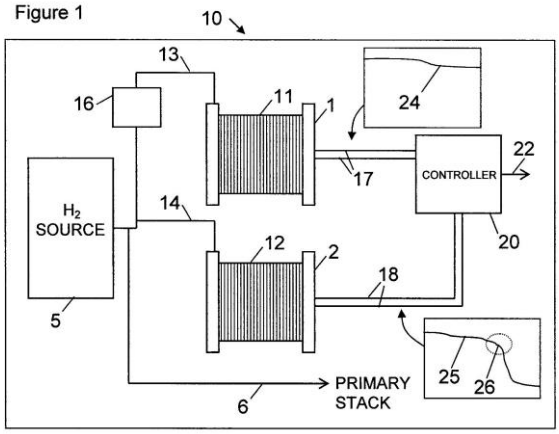


21: 2014/04797. 22: 2014-06-27. 43: 2022-01-07
51: A61K; C07K
71: Janssen Vaccines & Prevention B.V.
72: MEIJBERG, Jan Willem, IMPAGLIAZZO, Antonietta, VOGELS, Ronald, FRIESEN, Robert Heinz Edward, ALARD, Philippe, LOVERIX, Stefan, RADOŠEVIC, Katarina

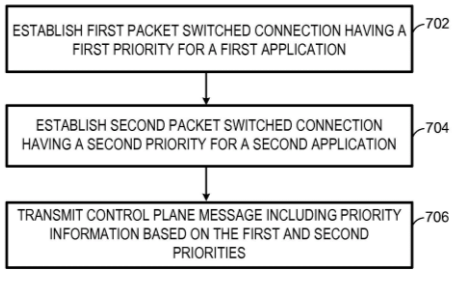
33: EP 31: 11191009.7 32: 2011-11-28
33: EP 31: 11191003.0 32: 2011-11-28
33: US 31: 61/564,086 32: 2011-11-28
33: US 31: 61/564,198 32: 2011-11-28
54: INFLUENZA VIRUS VACCINES AND USES THEREOF
00: -
The present invention provides influenza hemagglutinin stem domain polypeptides comprising (a) an influenza hemagglutinin HA1 domain that comprises an HA1 N-terminal stem segment, covalently linked by a linking sequence of 0-50 amino acid residues to an HA1 C-terminal stem segment, and (b) an influenza hemagglutinin HA2 domain, wherein on or more amino acids in the HA2 domain have been mutated. Also provided are nucleic acids encoding the polypeptides, compositions comprising the polypeptides and/or nucleic acid molecules, as well as methods of their use, in particular in the detection, prevention and/or treatment of influenza.

21: 2014/04979. 22: 2014-07-07. 43: 2022-01-07
51: H01M
71: Intelligent Energy Limited
72: KIRK, Christopher James, FOSTER, Simon Edward
33: GB 31: 1122035.7 32: 2011-12-21
54: HYDROGEN QUALITY MONITOR
00: -
A pair of fuel cells are configured as a hydrogen purity monitor. A first cell, acting as a reference cell, is configured to generate electrical current from the electrochemical reaction of hydrogen and oxidant and has a first fuel inlet configured to receive hydrogen from a first hydrogen source. A second fuel cell, acting as a test cell, is configured to generate electrical current from the electrochemical reaction of hydrogen and oxidant and has a second fuel inlet configured to receive hydrogen from a second hydrogen source. A control system is configured to apply an electrical load to each fuel cell and determine an electrical output of each fuel cell. The control system has a comparator for comparing the electrical outputs of the first and second fuel cells and a purity monitor output configured to give an indication of hydrogen purity based on an output of the comparator.

Figure 1

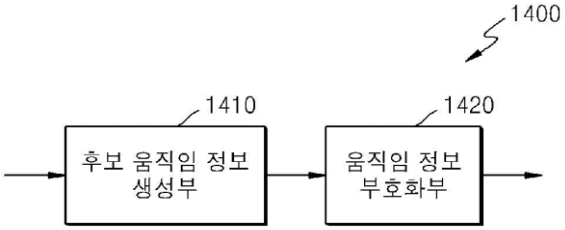


21: 2014/05410. 22: 2014-07-22. 43: 2022-01-07
51: H04W
71: QUALCOMM Incorporated
72: STUPAR, Patrick, GRIOT, Miguel, SUBRAMANIAN, Ramachandran
33: US 31: 61/591,752 32: 2012-01-27
54: SYSTEMS AND METHODS FOR PRIORITY BASED SESSION AND MOBILITY MANAGEMENT DUAL- PRIORITY MTC DEVICES
00: -
Systems, methods, and devices for priority based management of the connections between a device (MTC, M2M) and a network are described herein. In some aspects, a device may include multiple applications with different access priorities, e.g. low priority or normal priority. As a result of a mobility event, such as change in location or resuming operation after an idle period, the device may be configured to transmit a signal indicating its status, e.g. TAU, RAU. The signal may include an access priority value. Various methods and systems for determining an access priority value for devices configured to support one or more access priorities are described.



21: 2015/02768. 22: 2015-04-23. 43: 2022-01-07
51: H04N

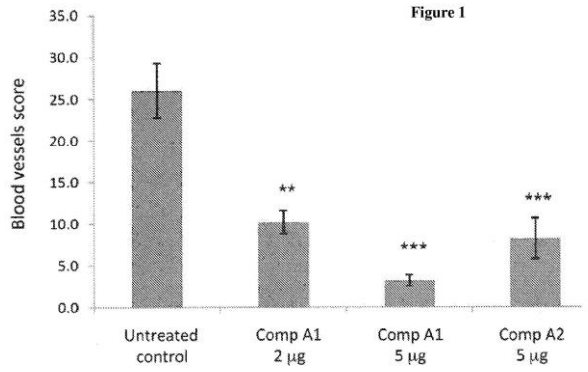
71: Samsung Electronics Co., Ltd.
72: LEE, Tammy
33: US 31: 61/501,300 32: 2011-06-27
54: METHOD OF DECODING AN IMAGE
00: -
Disclosed are methods and apparatuses for encoding and decoding motion information. The method for encoding motion information, according to the present invention, comprises: determining the usability of motion information of spatial prediction units related spatially to a current prediction unit, and of temporal prediction units related temporally thereto; in the case in which the usable spatial prediction units and temporal prediction units are less in number than the previously defined predetermined number, generating additional candidate motion information so that the overall number of candidate motion information units reaches the predetermined number, by using the motion information of the usable spatial prediction units and temporal prediction units; and encoding the motion information of the current prediction unit using the predetermined number of candidate motion information units.



1410 ... Candidate motion information generation unit
1420 ... Motion information encoding unit

21: 2015/04132. 22: 2015-06-08. 43: 2022-02-04
51: C12N
71: THE BOARD INSTITUTE INC., MASSACHUSETTS INSTITUTE OF TECHNOLOGY, PRESIDENT AND FELLOWS OF HAVARD COLLEGE
72: ZHANG, FENG, HEIDENREICH, MATTHIAS, RAN, FEI, SWIECH, LUKASZ
33: US 31: 61/736,527 32: 2012-12-12
33: US 31: 61/748,427 32: 2013-01-02
33: US 31: 61/758,468 32: 2013-01-30
33: US 31: 61/769,046 32: 2013-02-25
33: US 31: 61/791,409 32: 2013-03-15
33: US 31: 61/802,174 32: 2013-03-15
33: US 31: 61/806,375 32: 2013-03-28
33: US 31: 61/814,263 32: 2013-04-20
33: US 31: 61/819,803 32: 2013-05-06
33: US 31: 61/828,130 32: 2013-05-28
33: US 31: 61/847,537 32: 2013-06-17
33: US 31: 61/836,123 32: 2013-06-17
33: US 31: 61/835,931 32: 2013-06-17
54: DELIVERY, ENGINEERING AND OPTIMIZATION OF SYSTEMS, METHODS AND COMPOSITIONS FOR SEQUENCE MANIPULATION AND THERAPEUTIC APPLICATIONS
00: -
The invention provides for delivery, engineering and optimization of systems, methods, and compositions for manipulation of sequences and/or activities of target sequences. Provided are deliver systems and tissues or organ which are targeted as sites for delivery. Also provided are vectors and vector systems some of which encode one or more components of a CRISPR complex, as well as methods for the design and use of such vectors. Also provided are methods of directing CRISPR complex formation in eukaryotic ceils to ensure enhanced specificity for target recognition and avoidance of toxicity and to edit or modify a target site in a genomic locus of interest to alter or improve the status of a disease or a condition.

21: 2015/05575. 22: 2015-08-03. 43: 2022-01-07
51: A61K; A61P; C07D
71: SciFluor Life Sciences, Inc.
72: ASKEW, Ben C., HEIDEBRECHT, Richard W., FURUYA, Takeru, DUGGAN, Mark E., EDWARDS, D. Scott
33: US 31: 61/762,087 32: 2013-02-07
54: FLUORINATED INTEGRIN ANTAGONISTS
00: -
The present invention relates to fluorinated compounds of formula I and methods of synthesizing these compounds. The present invention also relates to pharmaceutical compositions containing the fluorinated compounds of the invention, and methods of treating macular degeneration, diabetic retinopathy (DR), macular edema, diabetic macular edema (DME), and macular edema following retinal vein occlusion (RVO), by administering these compounds and pharmaceutical compositions to subjects in need thereof.

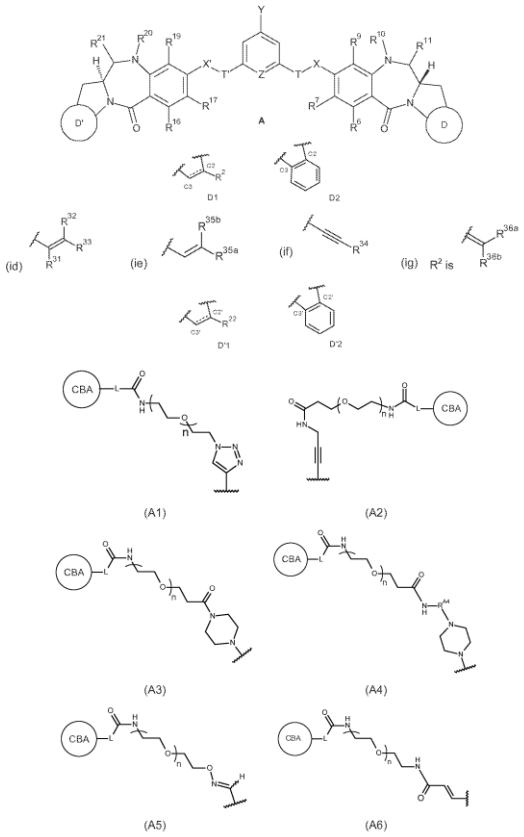


21: 2015/05753. 22: 2015-08-11. 43: 2022-02-11
51: A61K; C07D; A61P
71: MEDIMMUNE LIMITED
72: HOWARD, Philip, Wilson, FLYGARE, John, A., PILLOW, Thomas, WEI, Binqing
33: US 31: 61/778,777 32: 2013-03-13
33: US 31: 61/856,351 32: 2013-07-19

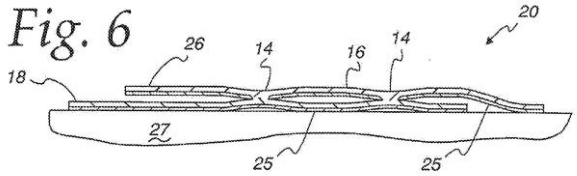
54: PYRROLOBENZODIAZEPINES AND CONJUGATES THEREOF

00: -

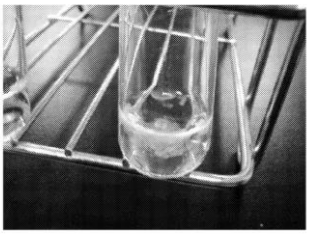
A conjugate of formula A wherein: D represents either group D1 or D2 the dotted line indicates the optional presence of a double bond between C2 and C3; when there is a double bond present between C2 and C3, R2 is selected from the group consisting of: (ia) C5-10 aryl group, optionally substituted by one or more substituents selected from the group comprising: halo, nitro, cyano, ether, carboxy, ester, C1-7 alkyl, C3-7 heterocyclyl and bis-oxy-C1-3 alkylene; (ib) C1-5 saturated aliphatic alkyl; (ic) C3-6 saturated cycloalkyl; (id) wherein each of R31, R32 and R33 a, re independently selected from H, C1-3 saturated alkyl, C2-3 alkenyl, C2-3 alkynyl and cyclopropyl, where the total number of carbon atoms in the R2 group is no more than 5; (ie) wherein one of R35a and R35b is H and the other is selected from: phenyl, which phenyl is optionally substituted by a group selected from halo, methyl, methoxy; pyridyl; and thiophenyl; and (if) where R34 is selected from: H; C1-3 saturated alkyl; C2-3 alkenyl; C2-3 alkynyl; cyclopropyl; phenyl, which phenyl is optionally substituted by a group selected from halo, methyl, methoxy; pyridyl; and thiophenyl; (ig) halo; when there is a single bond present between C2 and C3, where R36a and R36b are independently selected from H, F, C1-4 saturated alkyl, C2-3 alkenyl, which alkyl and alkenyl groups are optionally substituted by a group selected from C1-4 alkyl amido and C1-4 alkyl ester; or, when one of R16a and R16b is H, the other is selected from nitrile and a C1-4 alkyl ester; D' represents either group D'1 or D2: wherein the dotted line indicates the optional presence of a double bond between C2' and C3'; R6 and R9 are independently selected from H, R, OH, OR, SH, SR, NH2, NHR, NRR', NO2, Me3Sn and halo; R7 is independently selected from H, R, OH, OR, SH, SR, NH2, NHR, NRR', NO2, Me3Sn and halo; Y is selected from formulae A1, A2, A3, A4, A5 and A6. L is a linker connected to a cell binding agent; CBA is the cell binding agent; n is an integer selected in the range of 0 to 48; RA4 is a C1-6 alkylene group; either (a) R10 is H, and R11 is OH, ORA, where RA is C1-4 alkyl; or (b) R10 and R11 form a nitrogen-carbon double bond between the nitrogen and carbon atoms to which they are bound; or (c) R10 is H and R11 is OSOzM, where z is 2 or 3 and M is a monovalent pharmaceutically acceptable cation; R and R' are each independently selected from optionally substituted C1-12 alkyl, C3-20 heterocyclyl and C5-20 aryl groups, and optionally in relation to the group NRR', R and R' together with the nitrogen atom to which they are attached form an optionally substituted 4-, 5-, 6- or 7-membered heterocyclic ring; wherein R16, R17, R19, R20, R21 and R22 are as defined for R6, R7, R9, R10, R11 and R2 respectively; wherein Z is CH or N; wherein T and T' are independently selected from a single bond or a C1-9 alkylene, which chain may be interrupted by one or more heteroatoms e.g. O, S, N(H), NMe, provided that the number of atoms in the shortest chain of atoms between X and X' is 3 to 12 atoms; and X and X' are independently selected from O, S and N(H); except that there cannot be double bonds between both C2 and C3 and C2' and C3'.



21: 2015/05785. 22: 2015-08-12. 43: 2022-01-07
51: B65D
71: GSE Environmental, LLC
72: YOUNGBLOOD, Jimmie Gordon, GALLAGHER, David James, ZIMMEL, Edward Joseph
33: US 31: 13/764,305 32: 2013-02-11
54: LEAK DETECTABLE GEOMEMBRANE LINERS AND METHOD AND APPARATUS FOR FORMING
00: -
A geomembrane liner for a containment system including liner panels and connected by a seam at overlapped edges, with the top panel having a conductive lower surface which is non-conductive across the seam. Heat welding of the seams is accomplished by a welder having a heating unit with a projection which interrupts the conductive lower surface of the top panel before forming the seam. Such seams may be used separately or selectively with a lined containment system having a plurality of liner panels covering at least a portion of the containment system bottom. The liner panels have a conductive lower surface and overlap with adjacent panels, and conductive members underlie adjacent panels and contact the conductive Sower surface of both adjacent panels to provide an electrical connection between the conductive lower surfaces of the adjacent panels.



21: 2015/06214. 22: 2015-08-26. 43: 2022-01-07
51: A61K
71: Taiwan Liposome Company, Ltd., TLC Biopharmaceuticals, Inc.
72: KAN, Pei, TSENG, Yun-Long, OU, Han Chun
33: US 31: 61/792,850 32: 2013-03-15
54: ENGINEERING A CONTROL DRUG RELEASE PROFILE VIA LIPOSOME COMPOSITIONS IN BOTH AQUEOUS AND NON-AQUEOUS COMPARTMENTS
00: -
The present invention relates to a pharmaceutical composition comprising at least one liposome, at least one polyvalent counterion donor or a pharmaceutically acceptable salt thereof, at least one monovalent counterion donor or a pharmaceutically acceptable salt thereof, and an amphipathic therapeutic agent. The present invention also relates to methods of inhibiting cancer cell growth, comprising administering the pharmaceutical composition described herein.



21: 2015/06222. 22: 2015-08-26. 43: 2022-01-07
51: C08F; C08G; C09D
71: Akzo Nobel Coatings International B.V.
72: LI, Cathy, MEMMER, Timothy I., SCAVUZZO, Derek, BODE, Daniel
33: US 31: 61/781,565 32: 2013-03-14

54: HYBRID LATEX EMULSIONS AND COATING COMPOSITIONS FORMED FROM HYBRID LATEX EMULSIONS

00: -

Hybrid latex emulsions are disclosed which can be used in the formation of coating compositions having good blush resistance, abrasion resistance, blister resistance, hardness and scratch resistance. In some embodiments, the coating compositions are used to coat substrates such as cans and packaging materials for the storage of food and beverages. Hybrid latex emulsions of the invention may be prepared by mixing an ethylenically unsaturated monomer component and a stabilizer in a carrier to form a monomer emulsion, and reacting the monomer emulsion with an initiator to form the hybrid latex emulsion. The ethylenically unsaturated monomer component may include an organosilane compound, which may include a reactive organic group and a hydrolysable inorganic alkoxysilane.

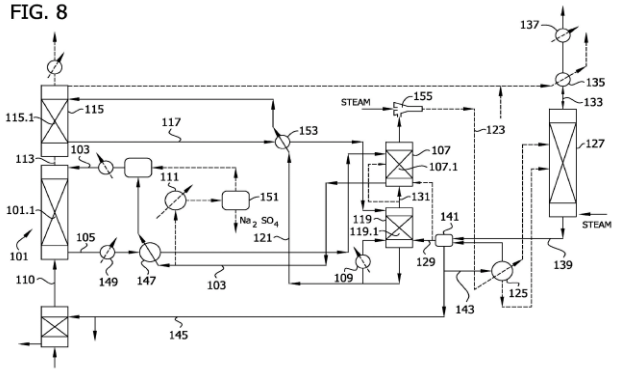
21: 2015/06906. 22: 2015-09-17. 43: 2022-01-07
51: B01D
71: MECS, Inc.
72: VERA-CASTAÑEDA, Ernesto
33: US 31: 61/793,571 32: 2013-03-15

54: REGENERATIVE RECOVERY OF CONTAMINANTS FROM EFFLUENT GASES

00: -

A contaminant gas is removed from a feed gas in two absorption and stripping circuits operated in tandem. The gas is first passed through a rich gas absorber producing a rich absorption liquor from which contaminant gas is stripped in a rich liquor stripper. A lean gas exiting the rich gas absorber is passed through a lean gas absorber, producing a lean absorption liquor from which contaminant gas is stripper in a lean liquor stripper. Regenerated absorption media exiting the respective strippers are recirculated to the respective absorbers.

FIG. 8



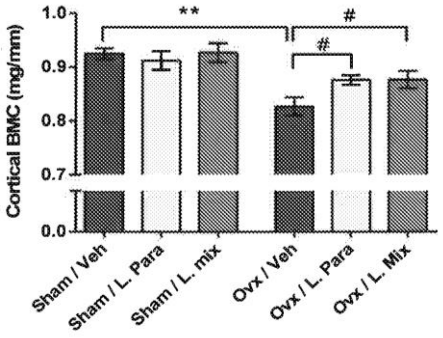
21: 2015/07275. 22: 2015-10-01. 43: 2022-01-10
51: A61K; C12N; C12R; A61P
71: PROBI AB
72: BERGGREN, Anna, LARSSON, Niklas, ÖNNING, GUNILLA, LAZOU AHRÈN, IRINI, SJÖGREN, KLARA, OHLSSON, Claes
33: SE 31: 1350414-7 32: 2013-04-03
33: SE 31: 1351571-3 32: 2013-12-20

54: PROBIOTIC STRAINS FOR USE IN TREATMENT OR PREVENTION OF OSTEOPOROSIS

00: -

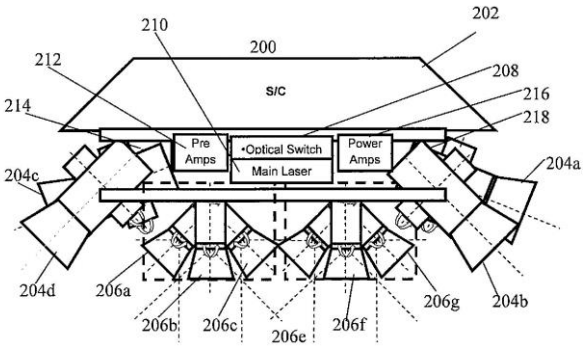
The present invention relates to at least one probiotic strain chosen from Lactobacillus paracasei, or at least one probiotic strain chosen from Lactobacillus paracaseiin combination with at least one probiotic strain chosen from Lactobacillus plantarum, for use in the treatment or prevention of osteoporosis or for use in increasing the absorption of at Ca2+ ions, in a mammal, preferably in a human.

Fig. 4 B

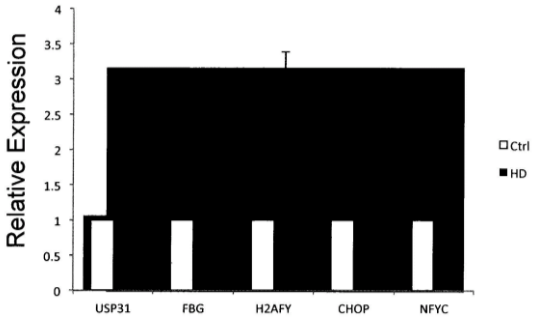


21: 2015/07292. 22: 2015-10-01. 43: 2022-01-07
51: H04B
71: Raytheon Company
72: MAKOWSKI, Maciej D., COLEMAN, Gary D., MINISCALCO, William J., NORDEL, Stephen D.

33: US 31: 13/855,602 32: 2013-04-02
54: LASER RELAY FOR FREE SPACE OPTICAL COMMUNICATIONS
00: -
A laser relay module for free space optical communications including an optical telescope for receiving and transmitting optical beams; an optical diplexer for separating transmitting and received optical beams; an optical amplifier; a modulated beacon laser for line of sight control of a plurality of communicating remote network nodes; a beacon beam detector for detecting an incoming beacon optical beam for line of sight control of the optical telescope and receiving data from other network nodes; and means for inserting an output of the modulated beacon laser into the optical telescope for transmission to another network node, and for transporting the incoming beacon optical beam to the beacon detector.



21: 2015/07439. 22: 2015-10-07. 43: 2022-01-07
51: C12N
71: University of Iowa Research Foundation
72: DAVIDSON, Beverly L., RODRIGUEZ, Edgardo, MAS MONTEYS, Alejandro
33: US 31: 61/794,818 32: 2013-03-15
54: PROMOTER COMPOSITIONS
00: -
An isolated promoter sequence comprising a nucleic acid of between 600 and 1700 nucleotides in length having at least 90% identity to SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, or SEQ ID NO:7.



21: 2015/07519. 22: 2015-10-09. 43: 2022-01-07
51: H01M; H02J; H04M
71: Huawei Device Co., Ltd.
72: SONG, Gang
33: CN 31: 201310018595.9 32: 2013-01-18
54: CHARGING METHOD, MOBILE DEVICE, CHARGING DEVICE AND CHARGING SYSTEM
00: -
A charging method, mobile device and charging device, the mobile device comprising: a battery (110) and a connector (120); the connector (120) comprises a charging pin (V1) and a ground pin (G1); when the charging pin (V1) establishes a connection with the output pin of a charging device via a charging cable or a desktop charger, the charging pin (V1) receives a first current signal transmitted by the output pin of the charging device, and transmits the first current signal to the anode pin (Vbat) of the battery (110) to charge the battery (110). The method reduces the heat loss of a mobile device.

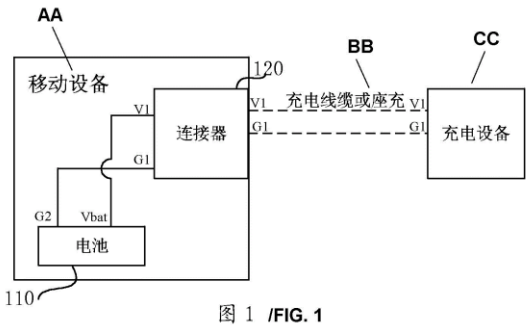
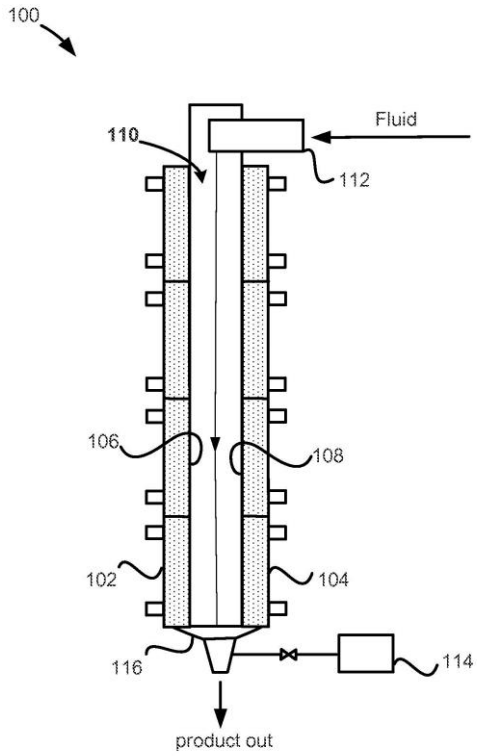


图 1 /FIG. 1

110 Battery
120 Connector
AA Mobile device
BB Charging cable or desktop charger
CC Charging device

21: 2015/07523. 22: 2015-10-09. 43: 2022-01-07

51: A23C; A23L; A61L
71: Millisecond Technologies Corp.
72: AROFIKIN, Nikolay V.
33: US 31: 13/800,100 32: 2013-03-13
54: STERILIZATION REACTOR AND METHOD
00: -
A method and device to treat liquid to reduce the amount of microorganisms in the liquid to a preselected level and/or to mitigate the growth of microorganisms are disclosed. Utilizing the method or device, liquid product is sprayed into a cavity of a reactor using a nozzle that produces a flat spray to provide means for efficient heating and treatment of the liquid.



21: 2015/07645. 22: 2015-10-14. 43: 2022-01-07
51: G06F; G06Q
71: Gelliner Limited
72: MOSHAL, Martin Paul
33: GB 31: 1119375.2 32: 2011-11-10
54: ONLINE PURCHASE PROCESSING SYSTEM AND METHOD
00: -
A system and method to use quick response (QR) codes encoded with merchant website t identification codes and session GUID to register a user or code scanner with a merchant server, login the user or code scanner with the merchant server, and complete a purchase of an item or service within a virtual shopping cart of the merchant server. A code scanner can scan a QR code displayed on a device connected to the internet. An application server can receive an identification code from the code scanner and then transmit data indicating form fields to be filled in on a merchant webpage. A user profile can include data regarding the user and a payment instrument. The user profile data can prepopulate the form fields and the form field data can be transmitted to the merchant server to use for logging in the user and completing the purchase.

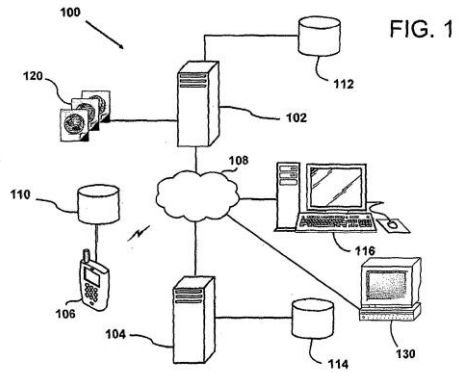
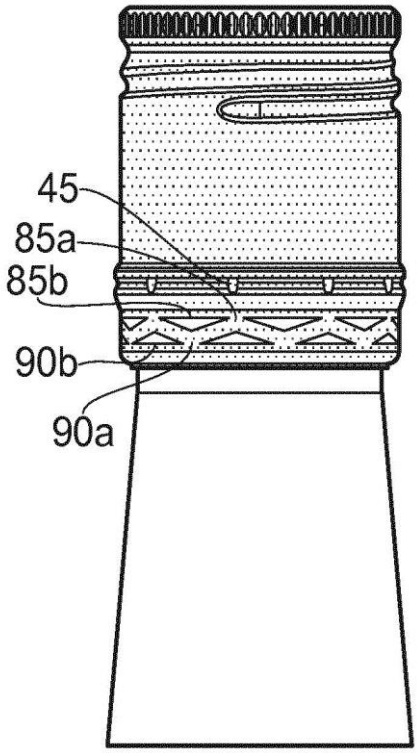
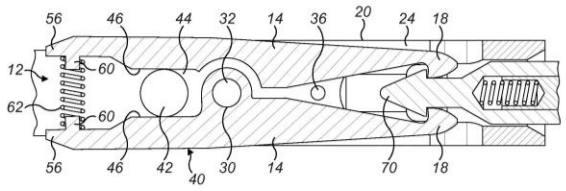


FIG. 1

21: 2015/07722. 22: 2015-10-15. 43: 2022-01-07
51: B65D
71: GCL International S.A.R.L.
72: McPHERSON, Alexander Donald Meiklem
33: GB 31: 1307027.1 32: 2013-04-18
54: TAMPER EVIDENT CLOSURE
00: -
A tamper-evident closure (10, 110) for a container, the closure (10, 110) comprising a shell having a break line (40, 140) along which it is separable, in which the shell further comprises a distortable portion (70, 170), which is distorted upon first opening, the distortable portion (70, 170) being spaced from and separate to the break line (40, 140).

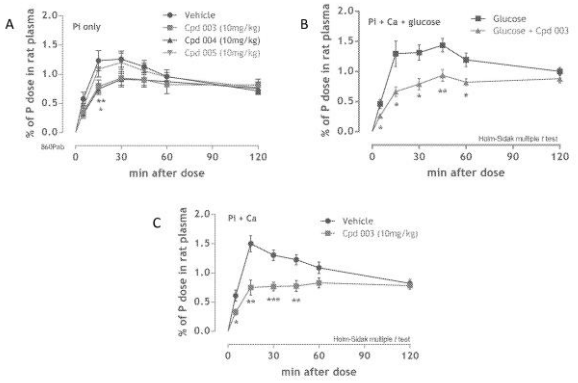


21: 2015/07879. 22: 2015-10-22. 43: 2022-01-07
51: E21B
71: Sandvik Intellectual Property AB
72: BÄCK, Göran, REID, Kenneth
33: AU 31: 2013901497 32: 2013-04-30
54: SAFETY LATCH FOR A DOWNHOLE TOOL
00: -
A lockable overshot assembly for use in a wireline spearhead system for lowering and retrieving inner tube assemblies and other tools and equipment from a downhole location includes a pair of lifting dogs pivotally mounted to an overshot head on the lockable overshot assembly and configured for latching a spearhead. A locking arrangement mounted into the elongated body and engagable within the lifting dogs such that in a locked state the lifting dogs are in latched position and, in an unlocked state, allows said lifting dogs to move to the release position. The locking arrangement is a pin which can be moved laterally to be between the latching dogs to prevent them moving to the release position.

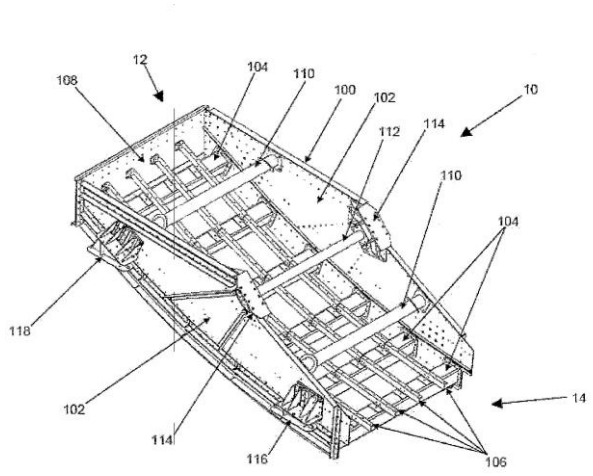


21: 2015/07912. 22: 2015-10-23. 43: 2022-01-07
51: A61K; C07K
71: Janssen Vaccines & Prevention B.V.
72: LANGEDIJK, Johannes Petrus Maria, KRARUP, Anders
33: EP(NL) 31: 13165402.2 32: 2013-04-25
54: STABILIZED SOLUBLE PREFUSION RSV F POLYPEPTIDES
00: -
The present invention provides stable pre-fusion respiratory syncitial virus (RSV) F polypeptides, immunogenic compositions comprising said polypeptides and uses thereof for the prevention and/or treatment of RSV infection.

21: 2015/08006. 22: 2015-10-28. 43: 2022-01-07
51: A61K
71: Ardelyx, Inc.
72: CARRERAS, Christopher, CHARMOT, Dominique, JACOBS, Jeffrey W., LABONTE, Eric, LEWIS, Jason G.
33: US 31: 61/811,613 32: 2013-04-12
54: NHE3-BINDING COMPOUNDS AND METHODS FOR INHIBITING PHOSPHATE TRANSPORT
00: -
Provided are NHE3-binding and/or NHE3-modulating agents having activity as phosphate transport inhibitors, including inhibitors of phosphate transport in the gastrointestinal tract and the kidneys, and methods for their use as therapeutic or prophylactic agent.. Embodiments of the present invention include methods for inhibiting phosphate uptake in the gastrointestinal tract or kidneys of a patient in need of phosphate lowering, comprising administering to the patient a compound that binds to NHE3 and is substantially active in the gastrointestinal tract or kidneys to inhibit transport of phosphate ions (Pi) therein upon administration to the patient in need thereof.



21: 2015/08045. 22: 2015-10-29. 43: 2022-01-07
51: B07B
71: FLSmidth A/S
72: ONG, Gordon, GORDON, Christopher
54: VIBRATING SCREEN
00: -
Disclosed herein are embodiments of a vibrating screen (10) for separation of materials such as ores in mining, quarrying, and mineral processing. The vibrating screen (10) herein disclosed may include a chassis (100) with two side walls (102) with a plurality of support members (104) therebetween and a screen mounting system that receives screen panels (120). At least one of the side walls (102) may have a recess (132) that receives a protrusion (160) of a mounting plate (114) of a vibrator (126).

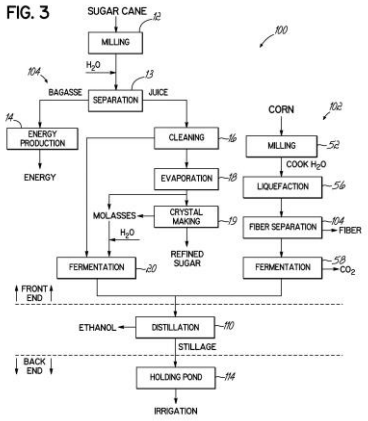


21: 2015/08156. 22: 2015-11-04. 43: 2022-01-07
51: A23L; A61P
71: United Pharmaceuticals
72: MARGOSSIAN, Jonathan Albert, PRADEAU, Nicolas
33: FR 31: 1354200 32: 2013-05-07
54: ANTI-REGURGITATION COMPOSITION MAINTAINING GUT MOTILITY
00: -
The present invention concerns nutritional compositions intended to prevent or treat regurgitation in infants and young children without altering, or indeed while improving, their gut motility and/or to prevent and/or treat intestinal disorders in infants or children. The invention also concerns the method for producing this composition.

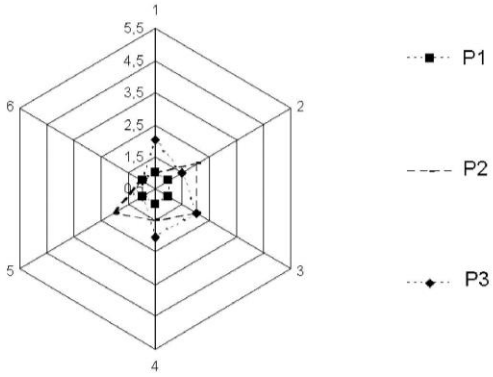
21: 2015/08212. 22: 2015-11-06. 43: 2022-01-07
51: A61K; A61P
71: Ferring B.V., Institut Pasteur
72: DANGLAS, Pascal, DEBARBIEUX, Laurent
33: EP(NL) 31: 13305568.1 32: 2013-04-30
54: BACTERIOPHAGE THERAPY
00: -
The subject invention provides a pharmaceutical composition comprising: (i) at least one bacteriophage strain(s) capable of producing a lytic infection in an adherent- invasive Escherichia coli strain; and (ii) a pharmaceutically acceptable carrier; for the treatment of inflammatory bowel disease. The subject invention further provides a method of treating inflammatory bowel disease comprising administering to a subject in need thereof at least one bacteriophage strain capable of producing a lytic infection in an adherent-invasive Escherichia coli strain thereby treating the subject. The subject invention also provides new bacteriophage strains.

21: 2015/08218. 22: 2015-11-06. 43: 2022-01-07
51: C12M; C12P
71: Fluid Quip Technologies, LLC
72: KWIK, John
33: US 31: 61/820,537 32: 2013-05-07
54: COMBINATION CORN AND SUGAR CANE PROCESSING PLANT AND SYSTEMS AND PROCESSES FOR PRODUCING ALCOHOL THEREAT
00: -
A combination corn and sugar cane processing plant and systems and processes for producing alcohol thereat is disclosed. An existing sugar cane processing plant, which can produce sugar and/or alcohol from sugar cane, may be retrofitted, so as to allow for simultaneous processing of other feedstocks, such as corn, for alcohol production, without significant changes to the existing sugar

cane process equipment and line or significant capital investment. Alternatively, the combination corn and sugar cane processing plants may be constructed from the ground up, if so desired. Such processing plants can separately but simultaneously process front end sugar cane and corn streams, which converge to share the same fermentation and/or distillation and back end equipment for alcohol and other optional byproduct production. In one example, corn fiber can be removed prior to fermentation so as to allow sugar cane and additional raw materials containing insolubles to be co-currently processed.



21: 2015/08411. 22: 2015-11-13. 43: 2022-01-07
51: A61K
71: Zambon S.p.A.
72: DE LAZZARI, Alessandra, MORETTO, Alberto
33: IT 31: MI2013A 000874 32: 2013-05-29
54: SWALLOWABLE N-ACETYLCYSTEINE TABLETS
00: -
This invention relates to swallowable tablets containing at least 80% by weight of N-acetylcysteine (NAC) and at least one pharmaceutically acceptable excipient, in particular tablets in which the sulfurous odor is absent, characterized in that the said tablets are assembled using a granulate prepared by means of a process of dry granulating the active ingredient alone, with which the excipients are mixed before compression.



21: 2015/08520. 22: 2015-11-18. 43: 2022-01-28
51: G10K
71: CERBERUS BLACK LIMITED
72: KINSELLA, EDWARD & MATTHEW, HENRY
33: GB 31: 1309746.4 32: 2013-05-31
54: ACOUSTIC APPARATUS AND OPERATION
00: -
In overview a design for a portable acoustic device is presented that projects a specific acoustic waveform towards a target creating a narrow beam of sound that is highly selective, minimizing exposure to users and bystanders, whilst enabling a controlled dosage of sound to be applied to the target. The design of the device is tailored to this waveform thus achieving a very high degree of directivity. It is not intended for communicating verbal messages. This waveform achieves maximum intensity at the target whilst using a relatively low sound pressure level; meaning that the exposure levels can be controlled to ensure that they are within existing health and safety legislation. A laser range finder limits the sound level at the target to a pre-determined level. An integrated camera is used to aid aiming. Video footage is recorded with use; along with the sound level at the target, exposure duration, time, date and GPS coordinates.

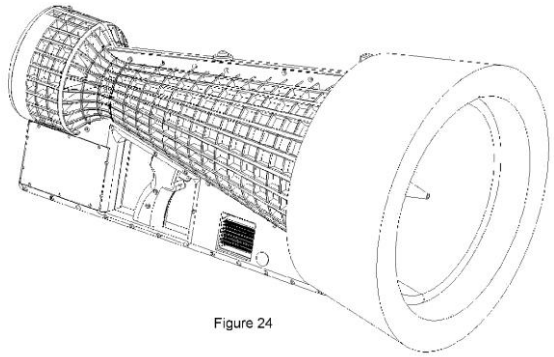


Figure 24

21: 2015/08552. 22: 2015-11-19. 43: 2022-01-07
51: B23K
71: CRC-Evans Pipeline International, Inc.
72: RAJAGOPALAN, Shankar, MALLICK, Siddharth, BOUCHE, Jose C.
33: US 31: 61/826,628 32: 2013-05-23
54: LASER CONTROLLED INTERNAL WELDING MACHINE FOR PIPELINES
00: -
The present invention is directed to a system for welding together segments of a pipeline. The system includes an external alignment mechanism for externally supporting and manipulating the orientation of pipe segments in order to align relative segments. The system also includes an internal welding mechanism for applying a weld to an interior face joint of the two abutted pipe segments. The internal welding mechanism including a torch for applying a weld, a laser for tracking the weld profile and guiding an articulating head of the torch, and a camera for visually inspecting the weld after the weld is applied.

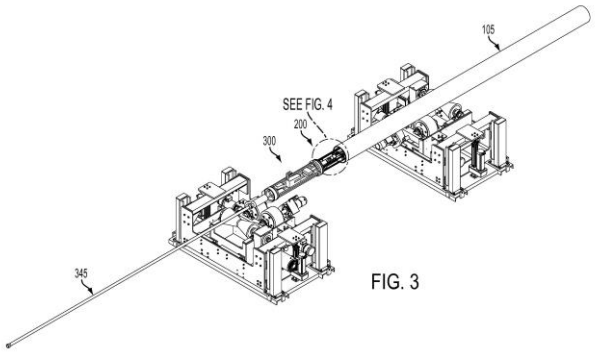


FIG. 3

21: 2015/08585. 22: 2015-11-20. 43: 2022-01-07
51: A61K
71: GlaxoSmithKline Biologicals SA
72: BIEMANS, Ralph Leon, BOUTRIAU, Dominique, DENOEL, Philippe, DUVIVIER, Pierre, GORAJ, Carine
33: GB 31: 1310008.6 32: 2013-06-05
54: IMMUNOGENIC COMPOSITION FOR USE IN THERAPY
00: -
The application discloses a method of immunising against Staphylococcus aureus infection comprising a step of administering to a human patient a single dose of an immunogenic composition comprising a Staphylococcus aureus Type 5 capsular saccharide conjugated to a carrier protein to form a S. aureus Type 5 capsular saccharide conjugate, wherein the S. aureus Type 5 capsular saccharide conjugate is administered at a saccharide dose of 3- 50µg.

21: 2015/08592. 22: 2015-11-20. 43: 2022-01-07
51: B02C
71: FLSmidth A/S
72: HEINRICHS, Robert Evan
33: US 31: 61/825,795 32: 2013-05-21
54: METHODS AND APPARATUS FOR THE CONTINUOUS MONITORING OF WEAR IN GRINDING CIRCUITS
00: -
A system for the continuous monitoring of wear is disclosed. The system comprises a grinding mill (100) having at least one grinding disc (106). At least one detector (141) is provided to the at least one grinding disc (106), and at least one sensor (120) is provided to the grinding mill (100) which is configured to communicate with the at least one detector (141) during operation of the grinding mill (100). In use, the at least one grinding disc (106) wears away and ultimately affects a function of the least one detector (141). The at least one sensor (120) is configured to monitor said function of the least one detector (141). When the at least one sensor (120) detects a change in the signal of the at least one detector (141), an operator is notified that maintenance or grinding disc replacement may be necessary.

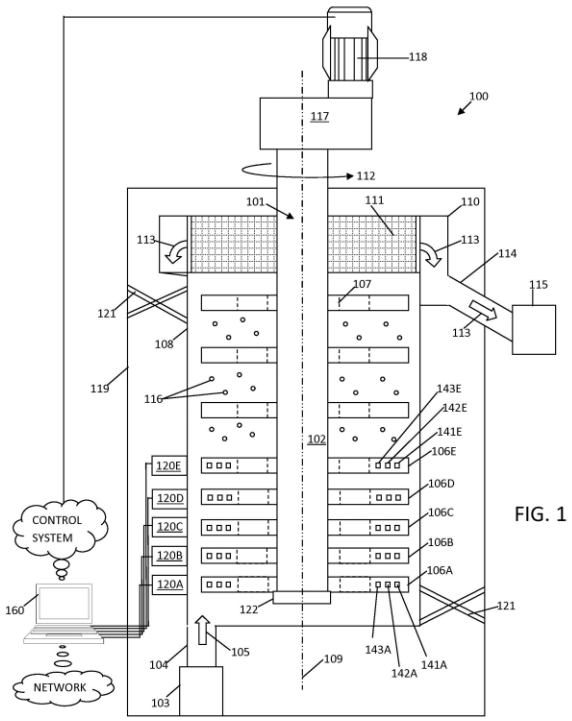
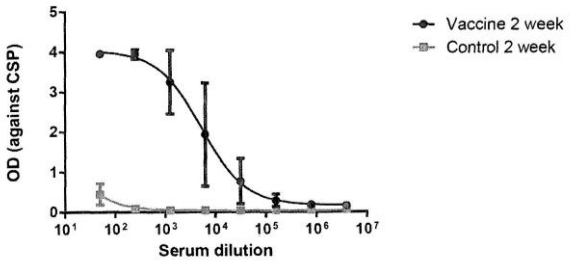


FIG. 1

21: 2015/08642. 22: 2015-11-24. 43: 2022-01-07
51: A61K; C07K; C12N
71: VLP Therapeutics, LLC
72: UENO, Ryuji, AKAHATA, Wataru
33: US 31: 61/830,436 32: 2013-06-03
54: MALARIA VACCINE
00: -
The present invention provides a particle comprising a polypeptide and at least one malaria antigen, and a composition or vaccine comprising thereof, its use in medicine, particularly in the prevention or treatment of malaria infections.



21: 2015/08697. 22: 2015-11-26. 43: 2022-01-07
51: C22B
71: Barrick Gold Corporation
72: CHOI, Yeonuk, GHARELAR, Ahmad Ghahremaninezhad
33: US 31: 61/828,558 32: 2013-05-29
54: METHOD FOR PRE-TREATMENT OF GOLD-BEARING OXIDE ORES
00: -
The disclosure relates to pre-treatment of precious metal-bearing oxide ores, prior to precious metal leaching by thiosulfate. The process comprises mixing oxide ore in oxygenated water in the presence of a carbon-based material (e.g., activated carbon or other type of carbon). The carbon-based material can be separated from the ore slurry, and, the gold is thereafter leached by a thiosulfate lixiviant.

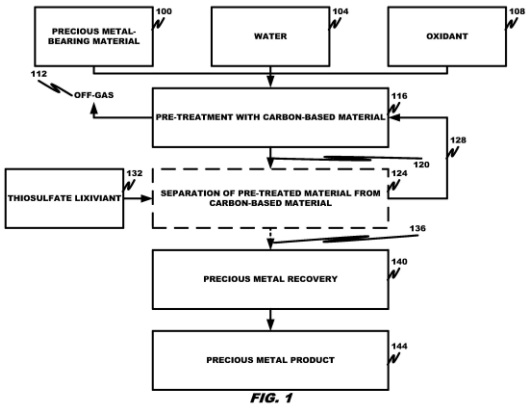


FIG. 1

21: 2015/08777. 22: 2015-12-01. 43: 2022-01-07
51: C12N
71: Stichting Wageningen Research
72: KORTEKAAS, Jeroen Alexander, WICHGERS SCHREUR, Paulus-Jozef, ORESHKOVA, Nadia Dimitrova, MOORMANN, Robertus Jacobus Maria
33: EP(NL) 31: 13168608.1 32: 2013-05-21
54: BUNYAVIRUSES WITH SEGMENTED GLYCOPROTEIN PRECURSOR GENES AND METHODS FOR GENERATING THESE VIRUSES
00: -
Title: Bunyaviruses with segmented glycoprotein precursor genes and methods for generating these viruses Abstract: The invention relates to a bunyavirus, in which separated (NSm)Gn and Gc coding regions are functionally present on two different genome segments, preferably a bunyavirus that comprises a total of at least 4 genome segments. The invention further relates to methods for producing said bunyavirus, and to a composition comprising said bunyavirus and a suitable excipient.

21: 2015/08857. 22: 2015-12-03. 43: 2022-01-07
51: H04W
71: QUALCOMM Incorporated

72: BHUSHAN, Naga,, MALLADI, Durga Prasad, WEI, Yongbin, GAAL, Peter,, LUO, Tao, JI, Tingfang,, HORN, Gavin Bernard, CHEN, Wanshi, DAMNJANOVIC, Aleksandar
33: US 31: 61/825,459 32: 2013-05-20
54: LISTEN-BEFORE-TALK RESERVATION SCHEME FOR WIRELESS COMMUNICATIONS OVER UNLICENSED SPECTRUM
00: -
Methods and apparatuses are described in which an unlicensed spectrum is used for Long Term Evolution (LTE) communications. A first method includes synchronizing clear channel assessment (CCA) slots across a plurality of base stations to determine availability of an unlicensed spectrum for transmissions in a next transmission interval. A second method includes performing a CCA during one of a plurality of CCA slots synchronized across a plurality of evolved Node Bs (eNBs) to determine availability of unlicensed spectrum for transmissions in a next transmission interval.

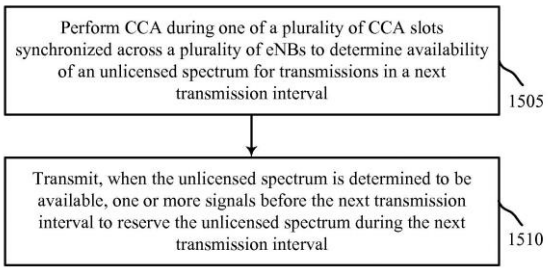
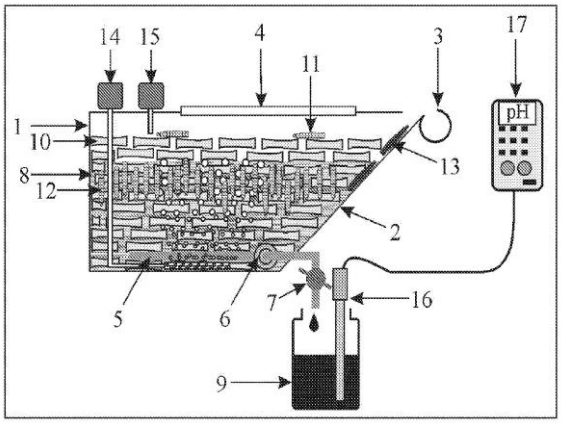


FIG. 15

21: 2015/08895. 22: 2015-12-04. 43: 2022-01-07
51: C12P
71: River Road Research, Inc.
72: POPA, Radu, NEALSON, Kenneth H.
33: US 31: 13/911,927 32: 2013-06-06
54: METHODS FOR PRODUCING MELANIN AND INORGANIC FERTILIZER FROM FERMENTATION LEACHATES
00: -
Melanin or inorganic fertilizers are produced from fermentation leachates or from low-cost nutrient-rich solutions. The method for producing the melanin or inorganic fertilizer comprises repetitive trophic cycling in the controlled conditions of primary and secondary bioreactors. Nutrients are cycled between microorganisms such as bacteria, yeast and fungi and black soldier fly larvae, *Hermetia illucens*. Polysaccharides are partly converted into natural melanins or inorganic fertilizer, which are difficult to biodegrade and hence accumulate in the bioreactors. The method can employ, as a source of nutrients, leachates produced from food waste or from sugar-rich liquid waste of the food industry. These leachates can be used raw or can be augmented with low-cost sugar-rich solutions such as molasses, hydrolyzed cellulose or starch. The method is inexpensive and does not require the use of expensive chemically-defined culture media.

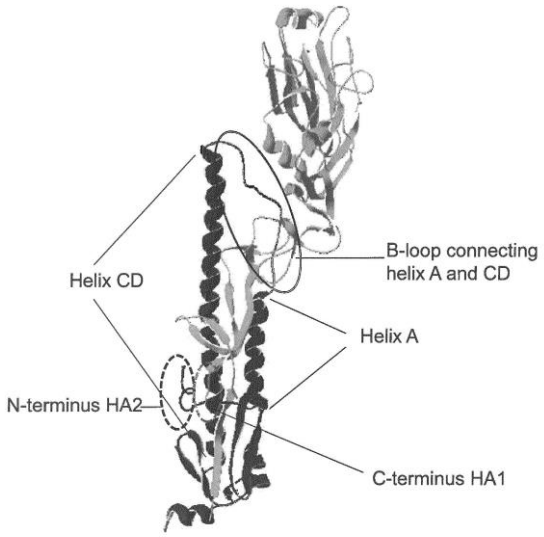


21: 2015/08953. 22: 2015-12-08. 43: 2022-01-07
51: C10L
71: BP Oil International Limited
72: ALLAN, Robert Edward, DEWHURST, Ross Alexander, GRUNDY, Michael John, WILLIAMSON, David Michael
33: EP(GB) 31: 13181875.9 32: 2013-08-27
54: METHODS AND USES FOR CONTROLLING DEPOSITS ON VALVES IN DIRECT-INJECTION SPARK-IGNITION ENGINES
00: -
The use as a valve deposit controlling additive in a fuel composition for a direct injection spark-ignition internal combustion engine of a combination of: a) at least one hydrocarbyl-substituted aromatic compound; and b) at least one polyalkylene amine.

21: 2015/09140. 22: 2015-12-15. 43: 2022-01-07
51: C07K
71: Janssen Vaccines & Prevention B.V.
72: LANGEDIJK, Johannes Petrus Maria, KRARUP, Anders
33: EP(NL) 31: 13172256.3 32: 2013-06-17
54: STABILIZED SOLUBLE PRE-FUSION RSV F POLYPEPTIDES
00: -
The present invention provides stable pre-fusion respiratory syncitial virus (RSV) F polypeptides, immunogenic compositions comprising said

polypeptides and uses thereof for the prevention and/or treatment of RSV infection.

21: 2015/09229. 22: 2015-12-18. 43: 2022-01-07
51: A61K; C07K; C12N
71: Janssen Vaccines & Prevention B.V.
72: MEIJBERG, Jan Wilem, IMPAGLIAZZO, Antonietta, RADOŠEVIĆ, Katarina, WADIA, Jehangir, WILLIAMSON, Robert Anthony, WAGNER, Michelle, DING, Zhaoqing
33: EP(NL) 31: 13169830.0 32: 2013-05-30
54: INFLUENZA VIRUS VACCINES AND USES THEREOF
00: -
The present invention provides influenza hemagglutinin stem domain polypeptides comprising (a) an influenza hemagglutinin HA1 domain that comprises an HAl N-terminal stem segment, comprising the amino acids from position 1 to position x, preferably from position p to position x, of the HA1 domain, covalently linked by a linking sequence of 0-50 amino acid residues to an HA1 C-terminal stem segment, comprising the amino acids from position y to and including the C-terminal amino acid of the HA1 domain and (b) an influenza hemagglutinin HA2 domain, wherein the hemagglutinin stem domain polypeptide is resistant to protease cleavage at the junction between HA1 and HA2, and wherein one or more amino of the amino acids at positions 337, 340, 352, 353, 402, 406, 409, 413 and/or 416 have been mutated as compared to the corresponding positions in wild-type influenza HA.

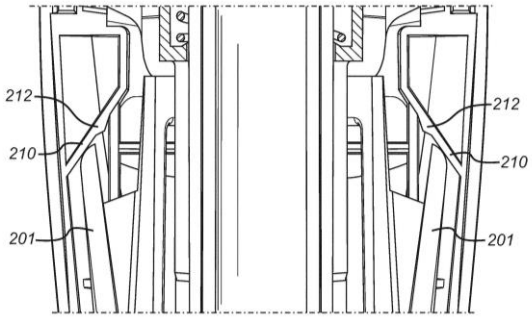


21: 2015/09239. 22: 2015-12-18. 43: 2022-01-07
51: A61K; A61P; C07D
71: AiCuris Anti-infective Cures GmbH
72: SCHWAB, Wilfried, JUNG, Dirk, SCHICKANEDER, Christian, MÄRTENS, Welljanne, LIMMERT, Michael, BOTHE, Clemens, BERWE, Mathias, RINDERMANN, Nicole
33: EP(DE) 31: 13003120.6 32: 2013-06-19
54: AMORPHOUS LETERMOVIR AND SOLID PHARMACEUTICAL FORMULATIONS THEREOF FOR ORAL ADMINISTRATION
00: -
The present invention provides for amorphous Letermovir and orally administrable solid pharmaceutical formulations thereof (immediate release formulation). Said amorphous Letermovir is suitable for immediate release formulations when isolated out of an organic solution by *either* roller-drying said organic solution in a volatile organic solvent, in particular acetone, at a temperature of 30°C to 60°C, and subsequently drying the amorphous Letermovir obtained, or isolating said amorphous Letermovir by precipitation from water miscible solvents selected from acetone or acetonitrile into excess water as anti-solvent, and subsequently filtrating or centrifuging the amorphous Letermovir obtained. The immediate release formulations of amorphous Letermovir are intended for use in methods of prophylaxis or methods of treatment of diseases associated with the group of *Herpesviridae*, preferably associated with cytomegalovirus (CMV), even more preferably associated with human cytomegalovirus (HCMV).

21: 2016/00044. 22: 2016-01-04. 43: 2022-02-04
51: E04G
71: POLYTECH GMBH
72: HOLLMANN, Kai
33: DE 31: 10 2013 107 303.4 32: 2013-07-10
54: FORMWORK PANEL FOR CONCRETING FORMWORKS
00: -
A formwork panel for concreting formworks which has a support structure and a separate formwork lining connected to the support structure, characterized in that the support structure consists

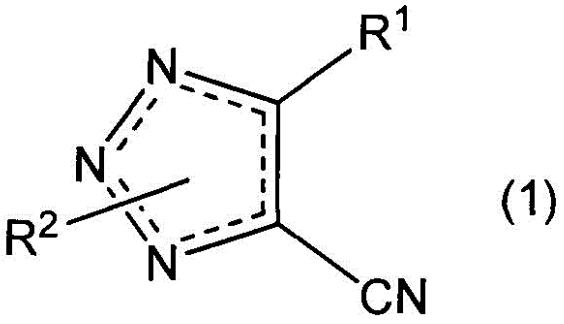
essentially of plastics; and in that the formwork lining, which is formed by a single formwork lining element made essentially of plastics or by a plurality of formwork lining elements which are each made essentially of plastics, is detachably connected to the support structure.

21: 2016/00155. 22: 2016-01-08. 43: 2022-01-07
51: A61M
71: Cilag GmbH International
72: BITAR, Ahmad, JENNINGS, Douglas Ivan
33: GB 31: 1310389.0 32: 2013-06-11
54: INJECTION DEVICE
00: -
An injection device for delivering an injection comprises a housing having a longitudinal axis, a proximal end and a distal end, the housing being arranged such that the injection is delivered from its distal end; and a release mechanism comprising an impediment, the release mechanism being moveable between a first position, in which the impediment is in an impeding position so as to impede the delivery of the injection, and a second position, in which the impediment is in a non-impeding position so as to not impede the delivery of the injection, wherein the force required to move the release mechanism from the first position to the second position varies with the distance moved by the release mechanism, the variation in the force required with distance being represented by a force profile, which is non-linear.



21: 2016/00170. 22: 2016-01-08. 43: 2022-02-04
51: A61K; C12N
71: REGENERON PHARMACEUTICALS, INC, PRESIDENT AND FELLOWS OF HARVARD COLLEGE
72: LAI KA-MAN VENUS, GONG GUOCHUN, RINN JOHN, FRENDEWEY DAVID, VALENZUELA DAVID M
33: US 31: 61/863 147 32: 2013-08-07
54: LINCRNA-DEFICIEN NON-HUMAN ANIMALS
00: -
Genetically modified non-human animals are provided that exhibit a functional lack of one or more lncRNAs. Methods and compositions for disrupting, deleting, and/or replacing lncRNA-encoding sequences are provided. Genetically modified mice that age prematurely are provided. Also provided are cells, tissues and embryos that are genetically modified to comprise a loss-of-function of one or more lncRNAs.

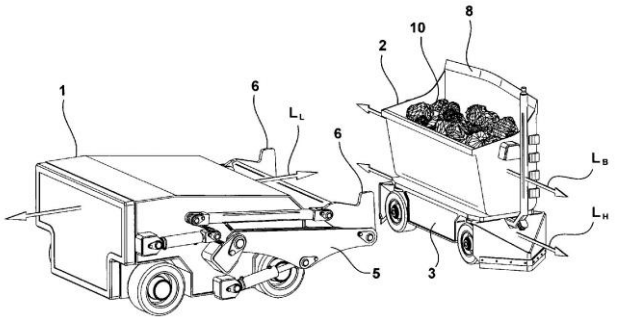
21: 2016/00353. 22: 2016-01-15. 43: 2022-01-07
51: A61K; C07D
71: Otsuka Pharmaceutical Co., Ltd.
72: SATO, Seiji, MATSUDA, Satoshi, MATSUMURA, Chiharu, ITOTANI, Motohiro, SHINOHARA, Toshio, FUJITA, Shigekazu, SAKURAI, Yohji, TAI, Kuninori, FUKUSHIMA, Tae, KANEMOTO, Naohide, OKAMOTO, Takashi
33: US 31: 61/847,268 32: 2013-07-17
54: CYANOTRIAZOLE COMPOUNDS
00: -
This invention relates to a cyanotriazole compound represented by the formula (1):, wherein each symbols are defined in the specification, or a salt thereof. The compound or a salt thereof stimulates the citric acid cycle activity and/or improves hyperglycemia with less side effects, and excellent safety, and therefore, it is useful for treating and/or preventing diseases or disorders on which citric acid cycle activation and/or improvement of hyperglycemia has a prophylactic and/or therapeutic effect, for example, diabetes, impaired glucose tolerance, insulin resistance, diabetic complications, obesity, dyslipidemia, hepatic steatosis, atherosclerosis and/or cardiovascular disease, as well as diseases or disorders that would benefit from stimulating energy expenditure.



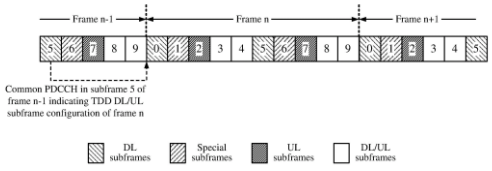
(1)

21: 2016/00655. 22: 2016-01-29. 43: 2022-01-07
51: A61K; A61P; C07D
71: Janssen Sciences Ireland UC
72: MC GOWAN, David Craig, RABOISSON, Pierre Jean-Marie Bernard
33: EP(IE) 31: 13178534.7 32: 2013-07-30
54: THIENO[3,2-d]PYRIMIDINES DERIVATIVES FOR THE TREATMENT OF VIRAL INFECTIONS
00: -
This invention relates to thieno[3,2-d]pyrimidinesderivatives, processes for their preparation, pharmaceutical compositions, and their use in treating viral infections.

21: 2016/00857. 22: 2016-02-08. 43: 2022-01-07
51: B60P; E21C; E21F
71: Russell Mineral Equipment Pty Ltd
72: RUBIE, Peter John
33: AU 31: 2013901182 32: 2013-04-08
54: APPARATUS FOR EXTRACTING ORE FROM BLOCK CAVES AND METHOD AND SYSTEM THEREFOR
00: -
In combination a loader unit and haul unit for use in a block caving mining operation. Each of the loader unit and the haul unit comprise a removable bucket, which can be used for loading ore. In use the bucket carrying a load of ore can be transferred from the loader unit to the haul unit so that the haul unit can transport the ore from a loading site to a crusher. The loader unit and haul unit have a respective longitudinal axis extending from the fore end to the aft thereof, and the bucket is elongate with a longitudinal axis. In use when the bucket is mounted to the loader unit the longitudinal axis of the bucket is disposed orthogonally to the longitudinal axis of the loader unit. When the bucket is transferred to the haul unit, the bucket is placed upright on the haul unit with the longitudinal axis of the bucket parallel to the longitudinal axis of the haul unit.

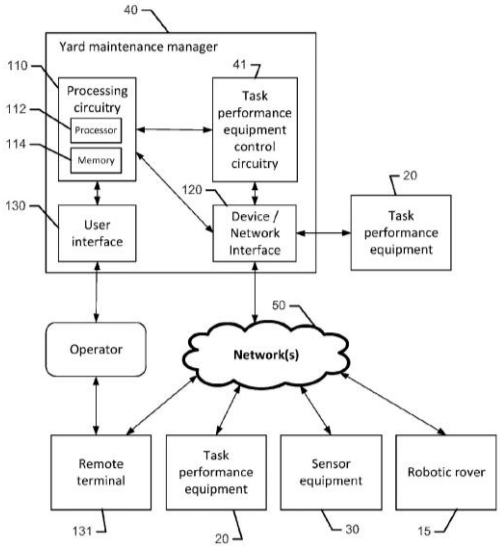


21: 2016/00950. 22: 2016-02-11. 43: 2022-01-07
51: H04W
71: QUALCOMM Incorporated
72: CHEN, Wanshi, XU, Hao, GAAL, Peter, WANG, Neng, WEI, Chao, FENG, Minghai
33: PCT(CN) 31: 2013/080330 32: 2013-07-29
54: DYNAMIC INDICATION OF TIME DIVISION DUPLEX (TDD) UPLINK/DOWNLINK SUBFRAME CONFIGURATIONS
00: -
Aspects of the present disclosure relate to techniques for dynamic indication of Time Division Duplex (TDD) Uplink (UL)/Downlink (DL) subframe configuration to User Equipments. A base station may identify one or more anchor subframes and one or more non-anchor subframes in a frame. The base station may dynamically change a UL/DL configuration of the frame used for communicating with a plurality of User Equipments (UEs) and signal the changed configuration using a common downlink control channel capable of being interpreted by the plurality of UEs in at least one of the one or more anchor subframes of the frame.



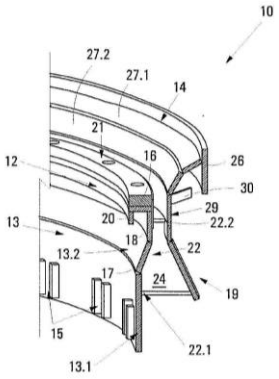
21: 2016/01793. 22: 2016-03-15. 43: 2022-01-07
51: A01D; A01G; G05D
71: Husqvarna AB
72: MATTSSON, Anders, WILLGERT, Mikael, LARSÉN, Martin
33: US 31: 61/866,829 32: 2013-08-16

54: INTELLIGENT GROUNDS MANAGEMENT SYSTEM INTEGRATING ROBOTIC ROVER
00: -
A system may include sensor equipment, task performance equipment, a yard maintenance manager and a robot. The sensor equipment may include one or more sensors disposed on a parcel of land. The task performance equipment may be configured to perform a task on the parcel. The task may be associated with generating a result that is enabled to be monitored via the sensor equipment. The yard maintenance manager may be configured to interface with the sensor equipment and the task performance equipment to compare measured conditions with desirable conditions to direct operation of the task performance equipment. The robot may be configured to work the parcel and perform at least one of acting as one of the one or more sensors, acting as a device of the task performance equipment, or interacting with the sensor equipment or the task performance equipment.



21: 2016/03083. 22: 2016-05-09. 43: 2022-02-11
51: A61K; C07D; A61P
71: SABRE THERAPEUTICS LLC
72: HUTCHINSON, John, Howard, LONERGAN, David
33: US 31: 61/907,965 32: 2013-11-22
33: US 31: 62/038,121 32: 2014-08-15
54: AUTOTAXIN INHIBITOR COMPOUNDS
00: -
Described herein are compounds that are autotaxin inhibitors, methods of making such compounds, pharmaceutical compositions and medicaments comprising such compounds, and methods of using such compounds in the treatment of conditions, diseases, or disorders associated with autotaxin activity.

21: 2016/03621. 22: 2016-05-27. 43: 2022-01-14
51: B02C
71: EnFlotech (Pty) Ltd
72: GOOSEN, Pierre
33: ZA 31: 2013/09420 32: 2013-12-12
54: A PULVERISER MILL
00: -
The invention relates to a pulveriser mill which includes a rotary grinding member and a port ring (10) which is arranged around a periphery of the rotary grinding member for rotation with the rotary grinding member about an axis. The port ring (10) includes a plurality of vanes (22) which are angularly spaced about the axis in a configuration which allows air to flow from below the port ring (10) to above the port ring (10). The vanes (22) are inclined with respect to the vertical and have an operatively upstream end and a downstream end and a non-planar, arcuately curved leading surface (24) which extends between the upstream end and the downstream end. The vanes (22) furthermore have a non-uniform radial width in the axial direction.



21: 2016/05644. 22: 2016-08-15. 43: 2022-02-10
51: A61C
71: TEPE MUNHYGIENPRODUKTER AB
72: WALLSTRÖM, Paul, LARSSON, Jan-Inge, DINGIZIAN, Alexander
33: EP 31: 14158195.9 32: 2014-03-06

54: INTERDENTAL CLEANER
00: -
An interdental cleaner has a gripping portion (3) and a cleaning portion (4) formed by an elongate body made from a thermoplastic material. The cleaning portion (4) has a coating made of a self-adhesive, heat-vulcanized rubber material forming peripheral, flexible brush members (6).

21: 2016/05822. 22: 2016-08-22. 43: 2022-02-11
51: A61C
71: MIS IMPLANTS TECHNOLOGIES LTD.
72: JACOBY, Yuval, BICHACHO, Nitzan, SARIG, Dror
33: US 31: 61/942,197 32: 2014-02-20
54: DENTAL IMPLANT
00: -
Dental implant embodiments comprising one or more non-annular cutaways from a portion of the crown are described. In some embodiments, cutaways, which are implantable beneath the bone line, are orientable during implantation by reference to a dental implant positioning tool to which the dental implant is mated in a known orientation. Mating, in some embodiments, is secured by a detent system which reversibly interlocks the positioning tool and the implant. In some embodiments, a surface of a cutaway is provided with protrusions which stimulate bone regrowth into the volume which the remainder of the cutaway provides.

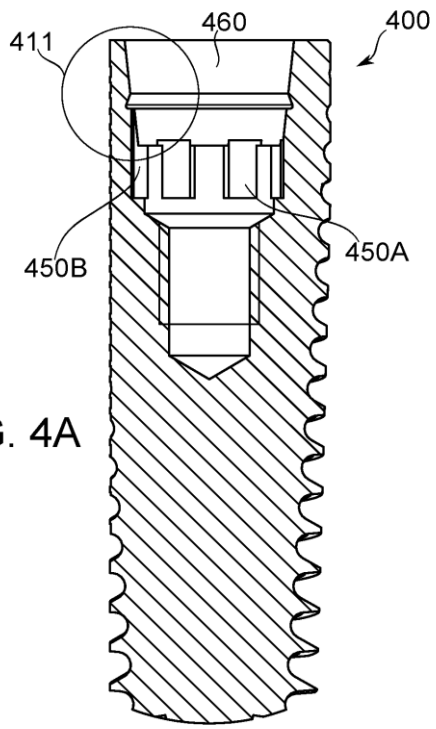


FIG. 4A

21: 2017/02394. 22: 2017-04-05. 43: 2022-01-19
51: B01D; C02F; C08J
71: Tshwane University of Technology, CSIR
72: MOLELEKWA, Gomotsegang Fred, MUKHOLA, Murembiwa Stanley, LUIS, Patricia, RAY, Suprakas Sinha, SADIKU, Emmanuel Rotimi, REDDY, Abbavaram Babul, VAN DER BRUGGEN, Bart
33: ZA 31: 2016/02237 32: 2016-04-05
54: SYNTHETIC POROUS POLYMER MATERIALS
00: -
The invention provides a method of making a synthetic porous polymer composite. The method includes a step of heating a mixture of a first solid polymer material having a first melting point, in particulate form, and a second solid polymer material having a second melting point, also in particulate form, wherein the first melting point is higher than the second melting point. The mixture is heated to a predetermined processing temperature, and is maintained at the predetermined processing temperature for a predetermined processing time. The processing temperature is higher than the second melting point and lower than the first melting point.

21: 2017/03271. 22: 2017-05-11. 43: 2022-01-07
51: B02C

71: Sandvik Intellectual Property AB
72: NICHOLSON, Phil, WHEATLEY, Martin
54: MULTI-DRIVE CRUSHER
00: -
A crusher unit comprising a mainframe that supports a crusher suitable for crushing bulk material. The unit comprises a primary motor carried by the frame to drive a crusher via a first drive belt extending around a first drive pulley and a first flywheel mounted at the crusher. The unit further comprises a secondary motor carried by the frame to provide a secondary drive to the crusher via a second drive belt extending around a first or a second flywheel mounted at the crusher and a second drive pulley.

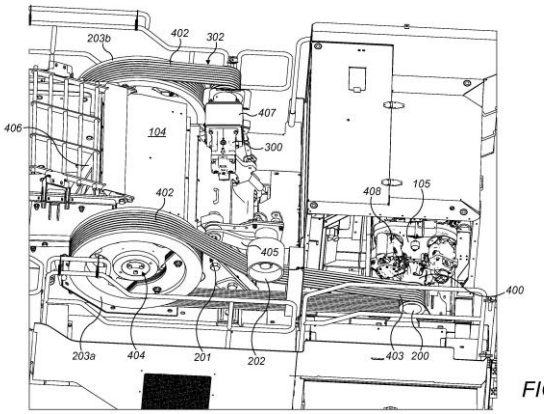


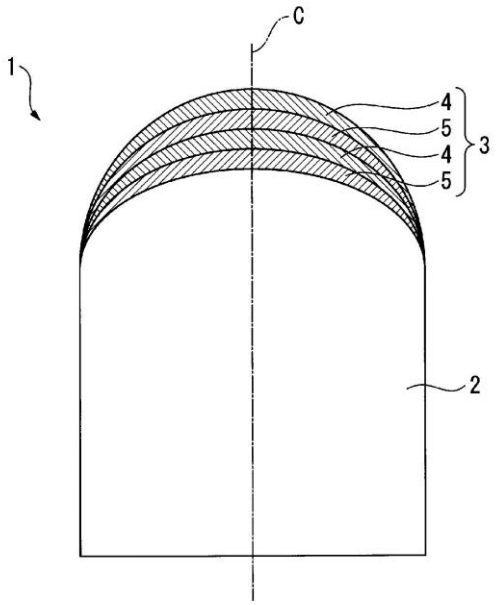
FIG. 4

21: 2017/03443. 22: 2017-05-18. 43: 2022-01-07
51: A23L
71: Kalmarna Limited
72: ROSENBERG, Alon, MILSTEIN, Abraham, MACKLE, Anthony, FIRTH, Ava Marie, SCHWARTZ, Michele Monique, VAN DALSEM, Simon, HALPERN, Arie
33: US 31: 62/081,588 32: 2014-11-19
54: ORAL REHYDRATION COMPOSITION AND METHODS THEREOF
00: -
An oral rehydration composition comprising the following: 1-glutamic acid in a range of about 0.01% to about 0.40% w/w and monosodium glutamate in a range of about 0.05% to about 0.80% w/w; about 1.50% w/w glucose monohydrate; about 0.20% w/w sodium chloride; about 0.15% w/w potassium chloride; about 0.35% w/w glycine; about 0.30% w/w trisodiumcitrate; about 0.15% w/w sodium dihydrogen phosphate; about 0.10% w/w xanthan gum; 85% Steviol Glycoside extract in a range of about 0.01% to about 0.03% w/w; about 0.20% w/w citric acid monohydrate; hydrolyzed whey in a range of about 0.15% to about 1.00% w/w; about 1.00% w/w hydrolyzed wheat; comprises cereals as a protein source; comprises enzyme co- factors; comprises a monosaccharide. The oral rehydration composition can be used on humans or animals that suffer from diarrhea.

21: 2017/03605. 22: 2017-05-25. 43: 2022-01-07
51: C22C
71: Baoshan Iron & Steel Co., Ltd.
72: YUAN, Xiangqian, LI, Hongbin, JIAO, Sihai, YAO, Liandeng
33: CN 31: 201410707715.0 32: 2014-11-28
54: Low-alloy high-strength high-toughness steel plate and method for manufacturing same
00: -
A low-alloy high-strength high-tenacity steel panel and a method for manufacturing the same. Components of the low-alloy high-strength high-tenacity steel panel by mass percentage are: C 0.08% to 0.25%; Si 0.10% to 1.00%; Mn 0.50% to 2.00%; P<0.020%; S<0.010%; Cr 0.10% to 2.00%; Mo 0% to 1.00%; Ni 0% to 2.00%; Nb 0.010% to 0.080%; V≤0.10%; Ti≤0.060%; B 0.0005% to 0.0040%; Al 0.010% to 0.080%; Ca 0.010% to 0.080%; N≤0.0080%; O≤0.0080%; H≤0.0004%, and the rest are Fe and inevitable impurities; and the foregoing elements need to meet: 0.20%≤(Cr/5+Mn/6+50B)≤0.55%, 0.02%≤(Mo/3+Ni/5+2Nb)≤0.45%, and 0.01%≤(Al+Ti)≤0.13%. For the steel panel, the Brinell hardness is 390 HB to 460 HB, the yield strength is 900 MPa to 1100 MPa, the tensile strength is 1100 MPa to 1400MPa, the rate of elongation is 11% to 15%, the Charpy V-notch longitudinal impact energy at -40°C≥40J, the plate thickness may exceed 100 mm, and desirable mechanical processing performance is provided.

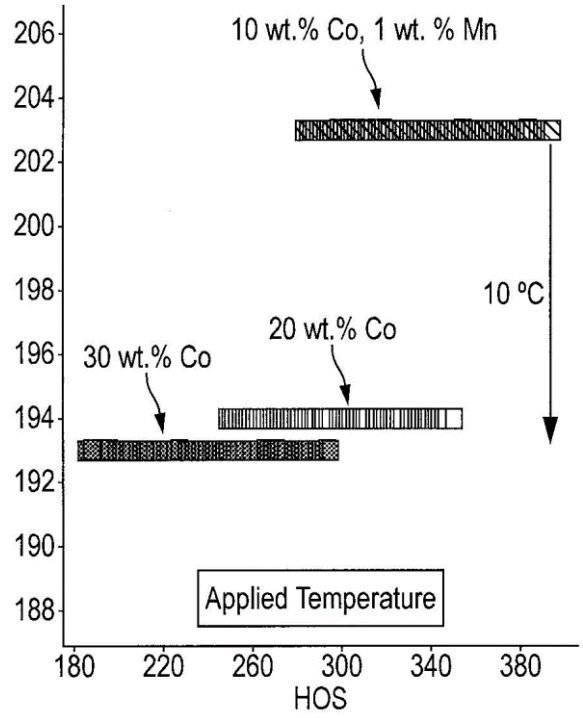
21: 2017/03728. 22: 2017-05-31. 43: 2022-01-07

51: A61K; A61Q
71: Colgate-Palmolive Company
72: NAWROCKI, Shiri, DUBOVOY, Viktor, PAN, Long, QIAO, Baohua, SZEWCZYK, Gregory, SUBRAMANYAM, Ravi
54: ZINC PHOSPHATE COMPLEX
00: -
An oral care composition having a soluble zinc polyphosphate complex made by combining ingredients including a zinc salt, a plurality of long chain polyphosphates having 6 or more phosphate polymer units, and a solvent, the relative amount of organic zinc salt and long chain polyphosphates provides a phosphorus to zinc mole ratio of at least 6:1. Further provided is a method of treating a subject suffering from dentinal sensitivity applying the oral care composition to the teeth and gums of the subject.



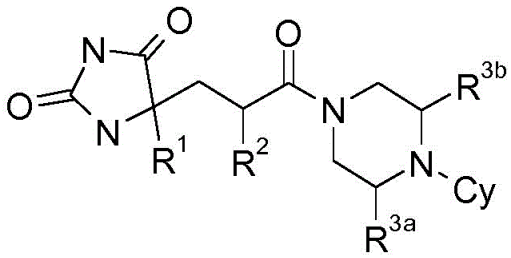
21: 2017/03837. 22: 2017-06-05. 43: 2022-01-07
51: E21B
71: Mitsubishi Materials Corporation
72: AKHMADI EKO, Wardoyo, MATSUO, Toshihiko, SAKURAZAWA, Chihiro
33: JP 31: 2014-240087 32: 2014-11-27
54: DRILL BIT BUTTON INSERT AND DRILL BIT
00: -
This drill tip performs drilling when attached to the leading end of a drill bit, and comprises a tip main body and a hard layer which is coated on at least the leading end of the tip main body and is formed from a hard diamond sintered body harder than the tip main body, wherein, from the surface side to the tip main body side of the hard layer, the hard layer comprises at least two high-hardness layers and, arranged between said high-hardness layers, a low-hardness layer which has a hardness lower than that of the high-hardness layers.

21: 2017/03873. 22: 2017-06-06. 43: 2022-01-07
51: B01J; C07C; C10G
71: BP p.l.c.
72: FERGUSON, Ewen, PATERSON, Alexander
33: EP(GB) 31: 14199348.5 32: 2014-12-19
54: PROCESS FOR PREPARATION OF A SUPPORTED COBALT-CONTAINING FISCHER-TROPSCH SYNTHESIS CATALYST
00: -
The present invention relates to a process for preparing a cobalt-containing Fischer- Tropsch synthesis catalyst with good physical properties and high cobalt loading. In one aspect, the present invention provides a process for preparing a supported cobalt- containing Fischer-Tropsch synthesis catalyst, said process comprising the following steps of: (a) impregnating a support powder or granulate with a cobalt-containing compound; (b) calcining the impregnated support powder or granulate and extruding to form an extrudate; or extruding the impregnated support powder or granulate to form an extrudate and calcining the extrudate; and (c) impregnating the calcined product with a cobalt-containing compound; or forming a powder or granulate of the calcined product, impregnating with a cobalt-containing compound and extruding to form an extrudate.



21: 2017/03874. 22: 2017-06-06. 43: 2022-01-07
51: B01J; C10G
71: BP p.l.c.
72: FERGUSON, Ewen, KRAWIEC, Piotr, OJEDA PINEDA, Manuel, PATERSON, Alexander, WELLS, Matthew James
33: EP(GB) 31: 14197770.2 32: 2014-12-12
54: FISCHER-TROPSCH PROCESS USING REDUCED COBALT CATALYST
00: -
A process for the conversion of a feed comprising a mixture of hydrogen and carbon monoxide to hydrocarbons, the hydrogen and carbon monoxide in the feed being present in a ratio of from 1 :9 to 9:1 by volume, the process comprising the step of contacting the feed at elevated temperature and atmospheric or elevated pressure with a catalyst comprising titanium dioxide and cobalt wherein the catalyst initially comprises from 30% to 95% metallic cobalt by weight of cobalt.

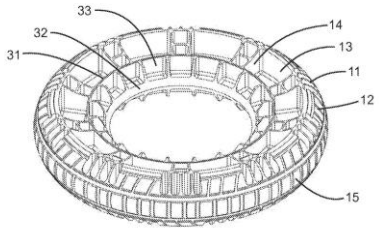
21: 2017/03905. 22: 2017-06-07. 43: 2022-01-07
51: A61K; A61P; C07D
71: Galapagos NV, Les Laboratoires Servier
72: BREBION, Franck Laurent, ALVEY, Luke Jonathan, AMANTINI, David, DEPREZ, Pierre Marc Marie Joseph, GOSMINI, Romain Luc Marie, JARY, Helène Marie, PEIXOTO, Christophe, VARIN, Marie Laurence Claire, DE CEUNINCK, Frédéric André, POP-BOTEZ, Iuliana Ecaterina
33: EP(FR) 31: 14307129.8 32: 2014-12-22
54: 5-[(PIPERAZIN-1-YL)-3-OXO-PROPYL]-IMIDAZOLIDINE-2,4-DIONE DERIVATIVES AS ADAMTS INHIBITORS FOR THE TREATMENT OF OSTEOARTHRITIS
00: -
The present invention discloses compounds according to Formula (I), wherein R, R^2, R^{3a}, R^{3b}, and Cy are as defined herein. The present invention discloses compounds inhibiting ADAMTS, methods for their production, pharmaceutical compositions comprising the same and methods for the prophylaxis and/or treatment of inflammatory conditions and/or diseases involving degradation of cartilage and/or disruption of cartilage homeostasis.



I

21: 2017/04058. 22: 2017-06-13. 43: 2022-01-07
51: B60B
71: TUROZI, Alexandre Santos
72: OXLEY, Alexandro, TUROZI, Alexandre Santos
33: BR 31: 2020140321298 32: 2014-12-19
54: STRUCTURAL ARRANGEMENT FOR A FLEXIBLE WHEEL OF A WHEELBARROW AND HAND-PROPELLED INDUSTRIAL CARTS
00: -
A structural arrangement for a flexible wheel of a wheelbarrow and hand-propellled industrial carts consists of a single block in three parts: the outer ring (1), the central core (2) and the inner ring (3), the outer ring (1) having at its periphery the tread (15) and on each tangential side a lateral tread (12), each lateral tread (12) having a plurality of radial cavities (11) spaced around the wheel, the radial cavities (11) of a lateral tread (12) being offset in relation to the radial cavities (11a) of the opposite lateral tread (12a), and the central core (2) is a flat, massive annular wall contained in a central plane that contains the body of the wheel, a plurality of flexible structures (14) on each side of the flat wall being radially aligned with the radial cavities (11) in

the outer ring (1), and the inner ring (3) consists of a circular wall (31), a reinforcing rim (32) and mass reducers (33), the mass reducers (33) being niches with radial walls.

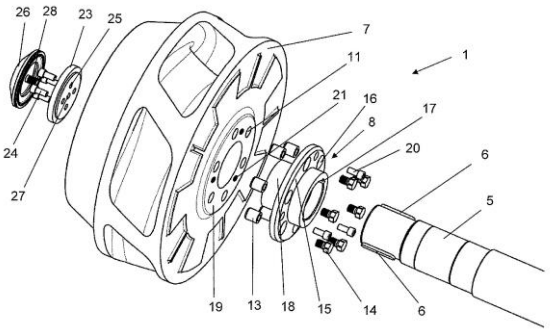


21: 2017/04112. 22: 2017-06-15. 43: 2022-01-07
51: F04D
71: KSB SE & Co. KGaA
72: KRAMME, Ralf, SCHMIDT, Christian
33: DE 31: 102014226525.8 32: 2014-12-19

54: CENTRIFUGAL PUMP IMPELLER

00: -

The invention relates to a centrifugal pump impeller (1) having a non-metallic running wheel part (7) and a metallic hub part (8) connected to the running wheel part (7), said hub part being arranged on a shaft (5). According to the invention, a releasable connection is established between the running wheel part of (7) and the hub part (8).

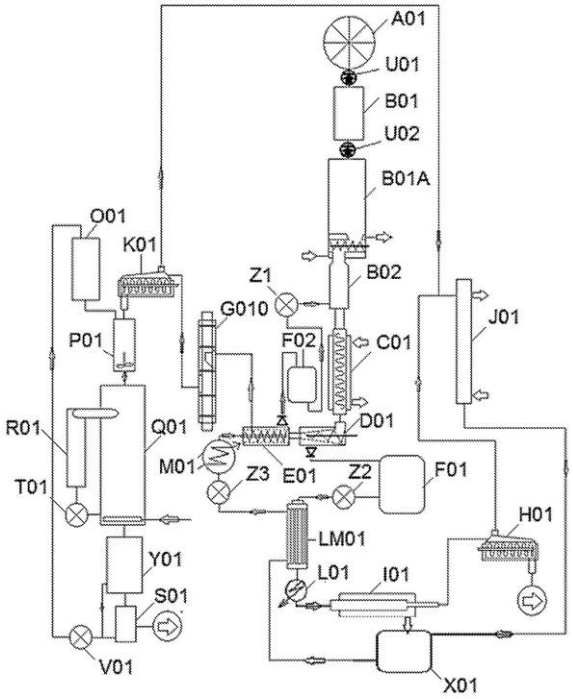


21: 2017/04168. 22: 2017-06-19. 43: 2022-01-07
51: C08J
71: OLIVEIRA, Juarez Souza De
72: OLIVEIRA, Juarez Souza De
33: BR 31: 1020140289895 32: 2014-11-20

54: PROCESS FOR RECYCLING BY SEPARATING THE CONSTITUENTS OF ALUMINIZED AND PLASTICIZED, OPTIONALLY CARTON, CONTAINERS, AND RESPECTIVE EQUIPMENT

00: -

The patent relates to a process and equipment for recycling and reusing wastes, particularly that of plasticized, aluminized and optionally carton containers, using a method for extracting and separating the main components thereof for recycling wastes avoiding environmental pollution, recycling the waste constituents; and recovering said constituents; plastic, aluminium and paper in their original form, with the advantages of producing a polymer of reuse quality, of producing isolated aluminium, of using an easily purchased low-cost solvent, of consuming little electricity, of producing cellulose pulp that can be used for producing cardboard for manufacturing boxes, incorporated as part of a mechanical pulp filler or even continuing on to a clarification process, of having lower manufacturing and investment costs and of having a smaller cost/benefit ratio.

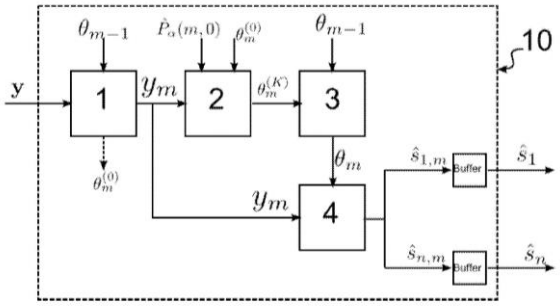


21: 2017/04170. 22: 2017-06-19. 43: 2022-01-07
51: H04L
71: AVANTIX
72: COURTAT, Thomas, CIBLAT, Philippe, BIANCHI, Pascal, FERNANDEZ - BIANCO, Miguel
33: FR 31: 1402936 32: 2014-12-19

54: JOINT IDENTIFICATION OF MERGE SIGNALS IN NON-COOPERATIVE DIGITAL TELECOMMUNICATIONS

00: -

A real-time method for the separation and blind demodulation of digital telecommunication signals, referred to as channels, from the observation, by means of a single sensor, of a composite signal comprising said signals, the parameters of these channels including the modulation type, amplification, phase shift, delay time at the sensor, frequency and modulation speed thereof, said parameters for the different channels being capable of being different or substantially or perfectly equal, said method comprising the following steps: preprocessing of the sum signal; estimation of the parameters of the channels in terms of the Maximum Likelihood via a suitable EM algorithm, in which the calculation of the conditional expectation of the log-likelihood is carried out recursively by a specific filter-smoothing method; joint demodulation of the channels according to a stochastic Viterbi algorithm; monitoring of the temporal progression of the parameters of each channel.

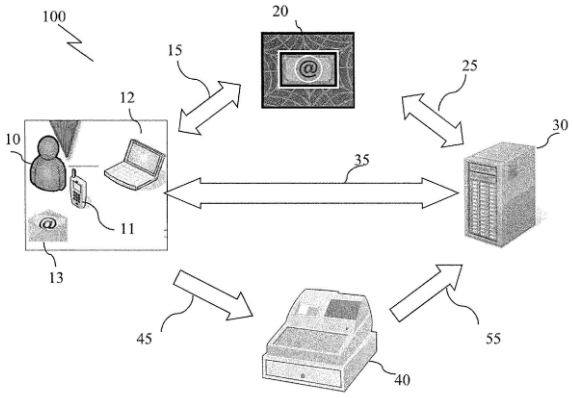


21: 2017/04198. 22: 2017-06-20. 43: 2022-01-07
51: G06Q
71: Einnovations Holdings Pte. Ltd.
72: LAZARO, Mario Miranda, INZA-CRUZ, Edward Joseph Pineda, UBALDE, Oliver Laurito
33: SG 31: 10201407807U 32: 2014-11-25

54: TRANSACTION SYSTEM AND METHOD

00: -

An over-the-counter (OTC) transaction system comprising a computing device operable to send a transaction request to initiate a transaction; and a server operable to receive an OTC electronic transaction request from a computing device and thereafter generate a unique identifier based on the transaction request received from the computing device as part of the transaction; the server further operable to verify the transaction based on the generated unique identifier; and upon verification, process and inform the computing device a status of the transaction; wherein the verification includes comparing a portion of the unique identifier with the entries in a whitelist maintained by the server; and wherein the unique identifier is temporary and is configured to expire after a predetermined criteria is met.



21: 2017/04254. 22: 2017-06-22. 43: 2022-01-07
51: H04S
71: DEGRAYE, Timothy, HUGUET, Liliane
72: DEGRAYE, Timothy, HUGUET, Liliane
33: US 31: 62/096,209 32: 2014-12-23

54: METHOD AND SYSTEM FOR AUDIO SHARING

00: -

The present invention provide a method and system of audio sharing aimed to revolutionize the way people listen and share music and to give multiple uses to a wireless headphone referred to as HEDphone. A communication protocol referred to as HEDtech protocol is used in a HED system to allow users to share music amongst a plurality of HEDphones while using a single audio source. A wireless connection is established between the HEDphone and a mobile device including an audio source while simultaneously having the capability of allowing other HEDphone users to join wirelessly and listen to the same audio source. A feature of Super Human Hearing (SHH) goes beyond conventional ANR (ambient noise reduction) with additional features that allow the user to control their

aural environment by being able to directionally increase or decrease selective frequencies.

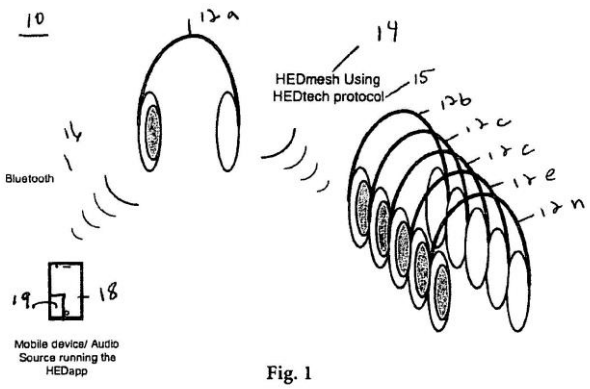
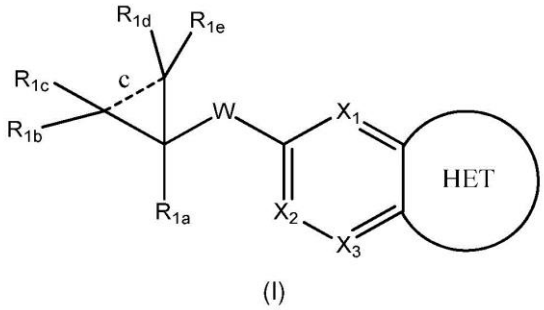


Fig. 1

21: 2017/04383. 22: 2017-06-28. 43: 2022-01-07
51: C07D
71: Cancer Research Technology Limited
72: MCGONAGLE, Alison E., JORDAN, Allan M., WASZKOWYCZ, Bohdan, HUTTON, Colin P., WADDELL, Ian D., HITCHIN, James R., SMITH, Kate M., HAMILTON, Niall M.
33: GB 31: 1422771.4 32: 2014-12-19
54: PARG INHIBITORY COMPOUNDS
00: -

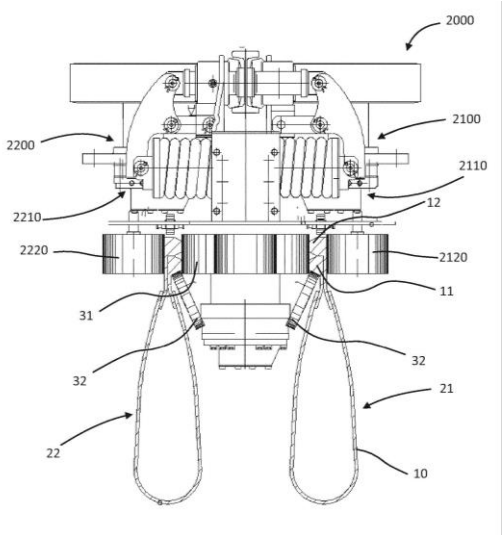
The present invention relates to compounds of formula I that function as inhibitors of PARG (Poly ADP-ribose glycohydrolase) enzyme activity: wherein R_{1a}, R_{1b}, R_{1c}, R_{1d}, R_{1e}, W, X_1, X_2, X_3, X_4, X_5, X_6, X_7, c are each as defined herein. The present invention also relates to processes for the preparation of these compounds, to pharmaceutical compositions comprising them, and to their use in the treatment of proliferative disorders, such as cancer, as well as other diseases or conditions in which PARG activity is implicated.



(I)

21: 2017/04385. 22: 2017-06-28. 43: 2022-01-07
51: B65G; E21F
71: Sandvik Intellectual Property AB
72: RIEGER, Hubert, DAMPFHOFER, Stefan
54: DRIVE ARRANGEMENT FOR BELT, MOBILE HAULAGE ARRANGEMENT, AND METHOD
00: -

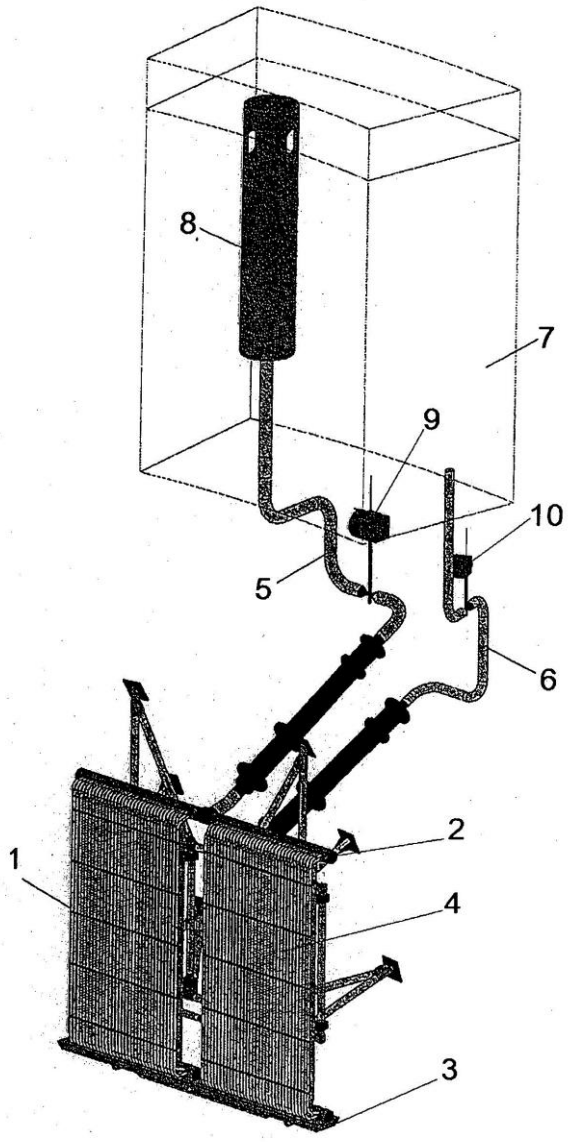
The invention relates to a drive arrangement for driving a belt of an enclosed belt conveyor. The invention further relates to a mobile haulage arrangement for continuously conveying fragmented material in a conveying direction and to a method for driving a mobile haulage arrangement. The drive arrangement (2000) for driving a belt (10) of an enclosed belt conveyor comprises a conveyor drive assembly (2100) arranged to drive the belt (10) of the conveyor run (21) in the conveying direction, and a return drive assembly (2200) arranged to drive the belt (10) of the return run (22) in an opposite direction.



21: 2017/04490. 22: 2017-07-03. 43: 2022-01-07
51: G21C

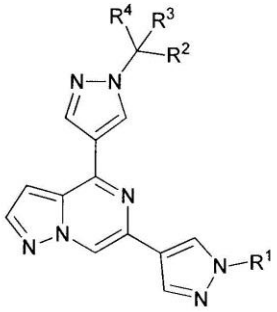
71: Joint-Stock Company Scientific Research and Design Institute for Energy Technologies Atomproekt
72: BEZLEPKIN, Vladimir Victorovich, SEMASHKO, Sergey Evgen'evich, IVKOV, Igor Mihaylovich, ALEKSEEV, Sergey Borisovich, VARDANIDZE, Teymuraz Georgievich, PETROV, Yuriy Yurievich, SOLODOVNIKOV, Aleksander Sergeevich, KRYLOV, Yuriy Vladimirovich
33: RU 31: 2014148910 32: 2014-12-04
54: SYSTEM FOR PASSIVELY REMOVING HEAT FROM INSIDE A CONTAINMENT SHELL
00: -

The invention relates to the field of nuclear engineering, and more particularly to systems for passively removing heat from inside the containment shells of water-cooled, water-moderated reactors, and is intended for cooling the containment shell of a reactor by the natural circulation of a coolant (water) in a loop within the system. The technical result is the improved efficiency of a heat sink, the improved stability of the flow of coolant in the loop and, as a result, the improved operating reliability of the system. The present system comprises at least one loop for circulating cooling water, containing: a heat exchanger, disposed inside a containment shell and comprising an upper collector and a lower collector, which are connected by heat exchange tubes; an upflow pipe and a downflow pipe, which are connected to the heat exchanger; a cooling water reserve tank, which is disposed outside the containment shell, higher than the heat exchanger, and is connected to the downflow pipe; and a steam relief device, which is connected to the upflow pipe and is disposed inside the water reserve tank, to which it is hydraulically connected. Furthermore, the upper and lower collectors of the heat exchanger are divided into sections of heat exchange tubes according to the following condition: L/D ≤ 20, where L is the length of a section of the collector, and D is the inside diameter of the collector.



21: 2017/04494. 22: 2017-07-03. 43: 2022-01-07
51: A61K; A61P; C07D
71: Array BioPharma Inc., Celgene Corporation
72: ALLEN, Shelley, BOYS, Mark Laurence, CHICARELLI, Mark J., FELL, Jay Bradford, FISCHER, John P., GAUDINO, John, HICKEN, Erik James, HINKLIN, Ronald Jay, KRASER, Christopher F., LAIRD, Ellen, ROBINSON, John E., TANG, Tony P., BURGESS, Laurence E., RIEGER, Robert Andrew, PHENEGER, Jed, SATOH, Yoshitaka, LEFTHERIS, Katerina, RAHEJA, Raj K., BENNETT, Brydon L.
33: US 31: 62/088,068 32: 2014-12-05
54: 4,6-SUBSTITUTED-PYRAZOLO[1,5-a]PYRAZINES AS JANUS KINASE INHIBITORS
00: -

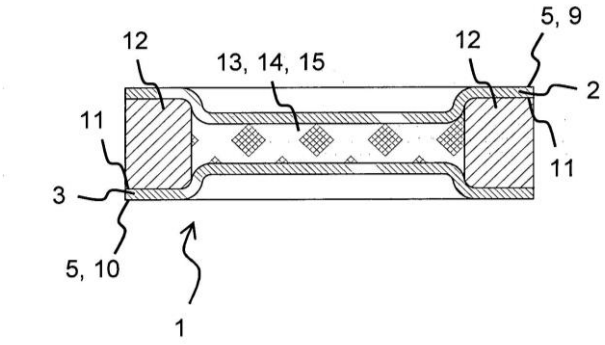
Compounds of Formula I: and stereoisomers and pharmaceutically acceptable salts and solvates thereof in which R^1, R^2, R^3 and R^4 have the meanings given in the specification, are inhibitors of one or more JAK kinases and are useful in the treatment of JAK kinase-associated diseases and disorders, such as autoimmune diseases, inflammatory diseases, rejection of transplanted organs, tissues and cells, as well as hematologic disorders and malignancies and their co-morbidities.



(I)

21: 2017/04553. 22: 2017-07-05. 43: 2022-01-10
51: B01D
71: Outotec (Finland) Oy
72: BÖHNKE, Bernd
54: RECESS PLATE AND METHOD FOR MANUFACTURING THE SAME
00: -

The invention suggests a recess plate (1) designed for use in a filter device for filtering a suspension, the filter device having a stationary head piece and a movable end piece, and a pack including copies of the recess plate (1), having a filter chamber inside the pack, adjoining the recess plate (1), having a first pipe for filling the suspension into the filter chamber, having a filter cloth for collecting a solid content out of the suspension, and having a second pipe for discharging a liquid fraction of the suspension out of the filter chamber as a filtrate, wherein the filter device may be closed before filtering by forcing the end piece in direction of the head piece, and opened after filtering by releasing the end piece, and moving the end piece away from the head piece for removing the filter cake from the filter cloth, and wherein the recess plate (1) has a first surface (9) at the filter chamber and a second surface (10) vis-a-vis the first surface (9), the first surface (9) and the second surface (10) are formed by sheets (2, 3), and the recess plate (1) has a rigid body (15) between the sheets (2, 3). The invention further suggests a method for manufacturing the recess plate (1).



21: 2017/04584. 22: 2017-07-07. 43: 2022-02-03
51: E21D
71: NCM INNOVATIONS (PTY) LTD
72: CROMPTON, Brendan Robert; VISSER, Henri
33: ZA 31: 2016/05232 32: 2016-07-28
33: ZA 31: 2016/07945 32: 2016-11-17
33: ZA 31: 2016/08468 32: 2016-12-08
54: PRELOAD DEVICE WITH INDICATOR DYE
00: -

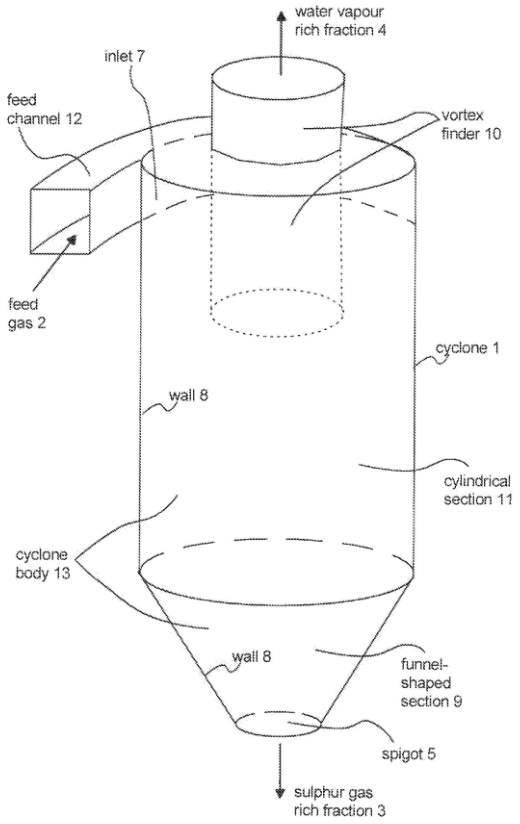
A device for detecting when closure between the rock walls has reached a predetermined closure limit which device includes a pressure vessel which is interposed between a mine support prop and a rock wall and which is expansible by a liquid input in to the vessel, an aperture through a wall of the vessel, a pressure release valve which includes a valve housing, a passage through the housing which leads to or through the aperture, a valve member in the passage, movable between a close position in which the member is sealingly engaged with a valve seat in the passage, and an open position in which the member is disengaged from the seat, a biasing means in the housing which is adapted to bias the valve member into the closed position when the liquid pressure within the vessel is below a predetermined limit but which yields to allow the member to move to the open position when the liquid pressure exceeds a pressure limit proportional to the predetermined closure limit to allow the liquid to flow through the passage and exit the vessel and an indicator dye within the vessel which colours the liquid as a visual indication, when the liquid exits the vessel, of the closure reaching the predetermined closure limit.

21: 2017/04590. 22: 2017-07-07. 43: 2022-01-10
51: A61K
71: Empros Pharma AB

72: ALDERBORN, Göran, FORSLUND, Anders, HOLMBÄCK, Ulf, LENNERNÄS, Hans, GRUDÉN, Jan Stefan Persson
33: EP(SE) 31: 14198468.2 32: 2014-12-17
54: A MODIFIED RELEASE COMPOSITION OF ORLISTAT AND ACARBOSE FOR THE TREATMENT OF OBESITY AND RELATED METABOLIC DISORDERS
00: -
The present invention relates to a modified-release composition comprising orlistat and acarbose, comprising individually distinct parts with different release patterns: a) a first part, G1, comprising from about 5 to about 70% w/w of the total dose of acarbose, b) a second part, G2A, comprising from about 30 to about 95% w/w of the total dose of acarbose, c) a third part, G2B, comprising from about 10 to about 90% w/w of the total dose of orlistat, and d) a fourth part, G3, comprising from about 10 to about 80% w/w of the total dose of orlistat, and the total concentration of acarbose and orlistat, respectively, in the composition is 100% w/w.

21: 2017/04624. 22: 2017-07-10. 43: 2022-01-10
51: A61K; A61P
71: Actelion Pharmaceuticals Ltd
72: DINGEMANSE, Jasper, HOCH, Matthias, KRAUSE, Andreas
33: PCT/EP(CH) 31: 2014/077469 32: 2014-12-11
54: DOSING REGIMEN FOR A SELECTIVE S1P1 RECEPTOR AGONIST
00: -
The present invention relates to a dosing regimen for (R)-5-[3-chloro-4-(2,3-dihydroxy-propoxy)-benz[Z]ylidene]-2-([Z]-propylimino)-3-o-tolyl-thiazolidin-4-one.

21: 2017/04625. 22: 2017-07-10. 43: 2022-01-07
51: B01D; C01B
71: Outotec (Finland) Oy
72: VANHATALO, Aki
33: FI 31: 20146167 32: 2014-12-30
54: DEWATERING OF SULPHUR
00: -
A process is provided for dewatering of sulphur. The process comprises feeding a gaseous mixture (2) at an elevated temperature into a cyclone (1), the gaseous mixture (2) containing sulphur gas and water vapour. A cyclonic separation of the sulphur gas and water vapour contained in the gaseous mixture (2) is performed such that a sulphur gas rich fraction (3) is obtained via a spigot opening (5) of the cyclone (1), and a water vapour rich fraction (4) is obtained via a vortex finder (10) of the cyclone (1).



21: 2017/04662. 22: 2017-07-11. 43: 2022-01-10
51: C01B; C04B; C09K
71: Diamond Innovations, Inc.
72: EASLEY, Thomas, ZHANG, Kai
33: US 31: 62/108,628 32: 2015-01-28
54: FRIABLE CERAMIC-BONDED DIAMOND COMPOSITE PARTICLES AND METHODS TO PRODUCE SAME
00: -
Ceramic-bonded diamond composite particle includes a plurality of diamond grains and silicon carbide reaction bonded to the diamond grains having a composition of 60-90 wt.% diamond, 10-40 wt.% silicon carbide, =2 wt.% silicon. Particles are formed by processes that forms granules in a pre-consolidation process, forms a densified compact including ceramic-bonded diamond composite material in a consolidation process or forms ceramic-bonded diamond composite material directly, and a post-consolidation process in which the densified

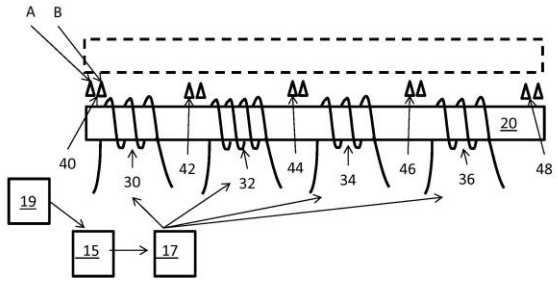
compact or ceramic-bonded diamond composite material is mechanically broken to form a plurality of the particles. Inert or active material can be incorporated into the densified compact or coated on granules to reduce the number and extent of diamond to silicon carbide bonding occurring in the consolidation process and make the ceramic-bonded diamond composite material more friable and easily breakable into composite particles.

21: 2017/04664. 22: 2017-07-11. 43: 2022-01-10
51: A01N; C07K; C12N
71: Valent BioSciences LLC
72: DEVISETTY, Bala N., DAHOD, Samun, MARMOR, Frederick
33: US 31: 62/104,157 32: 2015-01-16
54: BACILLUS THURINGIENSIS SUBSP. KURSTAKI AND BACILLUS THURINGIENSIS SUBSP. AIZAWAI COMBINATION FORMULATIONS
00: -

The present invention generally relates an agricultural formulation comprising a high potency *Bacillus thuringiensis subsp. kurstaki* strain and a *Bacillus thuringiensis subsp. aizawai* strain, wherein the weight ratio of *Bacillus thuringiensis subsp. kurstaki* to *Bacillus thuringiensis subsp. aizawai* is from about 20:80 to 80:20. The present invention is also directed to methods of manufacturing the formulation of the present invention and using the same to effectively control crop pests.

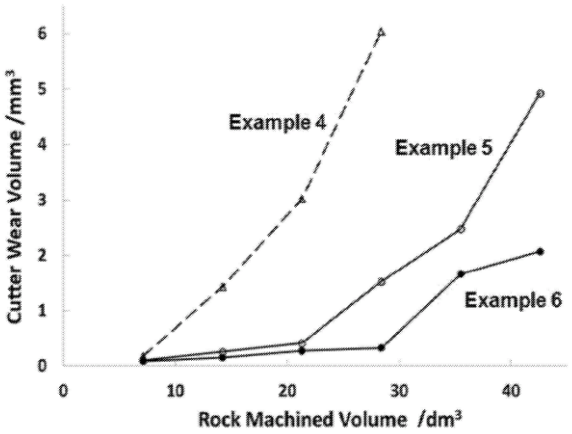
21: 2017/04694. 22: 2017-07-12. 43: 2022-02-18
51: G06K
71: Cardlab ApS
72: NIELSEN, Finn
33: EP(DK) 31: 14199442.6 32: 2014-12-19
54: A METHOD AND AN ASSEMBLY FOR GENERATING A MAGNETIC FIELD AND A METHOD OF MANUFACTURING AN ASSEMBLY
00: -

A credit card shaped element with a dynamic stripe which may be activated or deactivated, where the stripe is formed by a plurality of coils provided along the curve thereof, where the plurality of coils are activated in a sequential manner, where a plurality of proximity sensing coils are provided in series along the curve thereof, where the plurality of coils are formed by one coil contacted at multiple positions along its length by contact pads and where the signals fed to the coils cause an output of a reader coil to output a signals with a minimum slope or where one signal fed to one track has no peaks when the other signal is close to zero.



21: 2017/04736. 22: 2017-07-13. 43: 2022-01-07
51: B22F; C22C
71: Diamond Innovations, Inc.
72: KONOVALOV, Valeriy, SURYAVANSHI, Abhijit
33: US 31: 62/107,121 32: 2015-01-23
54: POLYCRYSTALLINE DIAMOND CUTTERS HAVING NON-CATALYTIC MATERIAL ADDITION AND METHODS OF MAKING THE SAME
00: -

Polycrystalline diamond cutters for rotary drill bits and methods of making the same are disclosed. Polycrystalline diamond cutters include a support substrate and a polycrystalline diamond body coupled to the support substrate. The polycrystalline diamond body includes a plurality of diamond grains exhibiting inter-diamond bonding therebetween and defining a plurality of interstitial regions, a non-catalytic material distributed throughout the polycrystalline diamond body in a detectable amount, and a catalytic material distributed throughout the polycrystalline diamond body in a detectable amount.



21: 2017/04737. 22: 2017-07-13. 43: 2022-01-07
51: A01N
71: Arysta Lifescience Benelux Sprl
72: RAMAEKERS, Lara
33: BE 31: 201505036 32: 2015-01-23
54: FUNGICIDAL COMPOSITION EFFECTIVE AGAINST ALTERNARIA ON CITRUS
00: -

The current invention concerns a composition comprising an effective amount of a dodecylguanidine or salt thereof, preferably dodine, for use in the treatment of *Alternaria* on citrus. The invention also concerns a method of treating *Alternaria* on citrus by applying a composition comprising a dodecylguanidine or salt thereof, preferably dodine, in an effective dose and the use of a composition comprising an effective amount of a dodecylguanidine or salt thereof, preferably dodine, for the treatment of *Alternaria* on citrus.

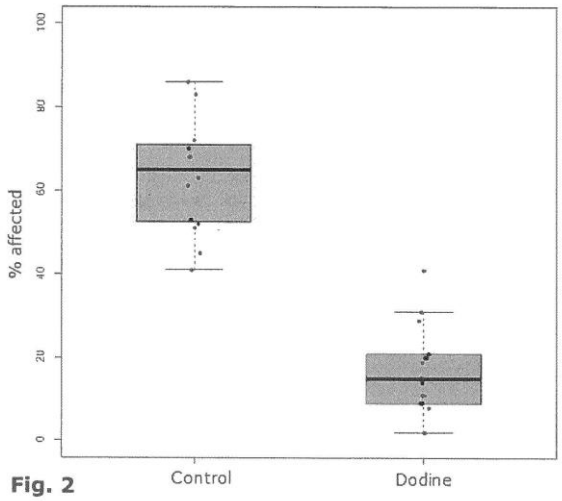
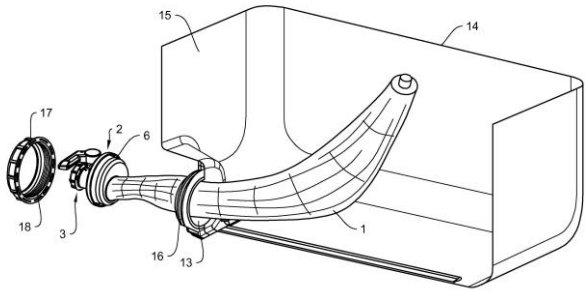


Fig. 2

21: 2017/04909. 22: 2017-07-19. 43: 2022-01-07
51: B65D
71: Protechna S.A.
72: BLÖMER, Peter, BÜSCH, Carsten, WIESNER, Heiko, ENDERS, Veit
33: DE 31: 10 2015 202 133.5 32: 2015-02-06
54: PALLET CONTAINER HAVING AN INNER LINER
00: -

An inliner for receiving in particular fluid transported goods, to be arranged inside an inner container of a pallet container, wherein the inliner comprises a thin-walled, flexible film (1) for receiving the transported goods, an adapter (2) for attaching the film (1) to an opening (13) in the container wall of the inner container (14) of the pallet container, and a fitting (3) for removing the transported goods, wherein the film (1), the adapter (2) and the fitting (3) form a prefabricated composite, and wherein the area enclosed by the film (1), the adapter (2) and the fitting (3) is hermetically sealed against the environment.



21: 2017/04942. 22: 2017-07-20. 43: 2022-01-07

51: A01N; C05G
71: Zelam Limited
72: MOLLOY, Christopher
33: NZ 31: 705626 32: 2015-03-03
54: COMPOSITIONS FOR IMPROVING BUDBREAK AND FLOWERING
00: -

The invention relates to a composition formulated to produce improved budbreak, flowering and disease resistance in perennial fruit crops and/or ornamental trees, comprising: (a) one or more compounds represented by the structure: in which R' is OH or $OCOCH_3$, and R" is H, a monovalent cation, any C1-C10 alkyl group (saturated, unsaturated, linear or branched), any C7-C10 alkaryl group, or a phenyl group; and (b) an alkoxylated amine represented by the structure: in which A is selected from N, N^1R_1, or N→O, and wherein R_1 is H, methyl or benzyl, R_2 is any C8-C22 alkyl group (saturated, unsaturated, linear or branched), R_3 is any C2-C4 alkyl group (linear or branched), x is in the range of 0 to 4 and y+z is in the range of 2 to 50. A method of use is also included, as is a method for preparing the composition.

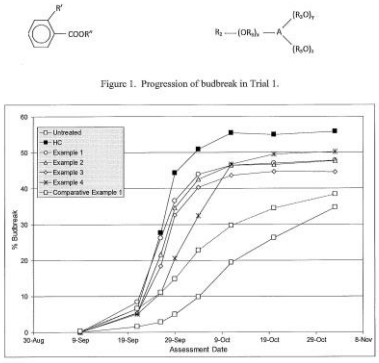
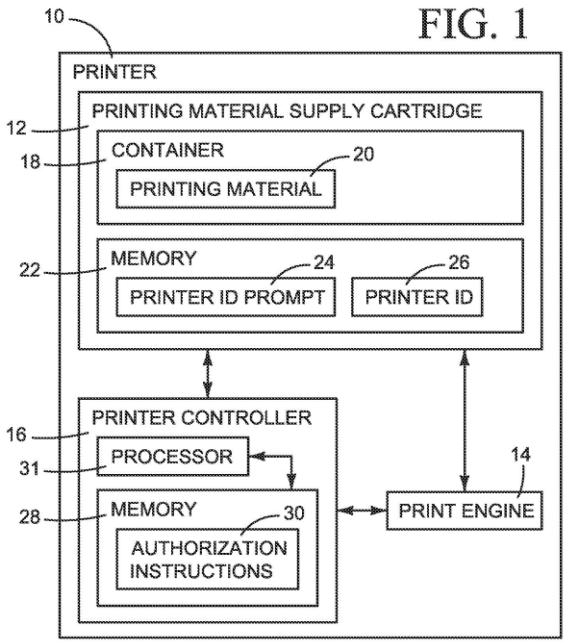


Figure 1. Progression of budbreak in Trial 1.

21: 2017/05027. 22: 2017-07-24. 43: 2022-01-07
51: B41J
71: Hewlett-Packard Development Company, L.P.
72: JERAN, Paul
54: PRINTING MATERIAL CARTRIDGE
00: -

In one example, a printing material cartridge includes a container to contain a printing material and a memory to prompt a printer in which the cartridge is installed to write a printer identifier to the memory.



21: 2017/05090. 22: 2017-07-26. 43: 2022-01-07
51: B04B
71: Weir Minerals Australia Ltd
72: TRENCH, Michael
33: AU 31: 2015900108 32: 2015-01-15
54: CENTRIFUGAL SCROLL SCREEN APPARATUS
00: -

In a centrifugal scroll screen apparatus there is provided a scroll assembly (20) driven by a scroll assembly drive shaft (25) and being connected to the scroll assembly by an axial adjuster comprising a shaft cam portion (92) and a scroll portion (96) each having a respective camming surface (94) whereby relative rotation of the scroll portion (96) and the shaft portion (92) axially adjusts the proximity of the vanes to a coaxial conical screening surface, and a locking ring (97) selectively operable to rotationally secure the scroll portion (96) and the shaft portion (92).

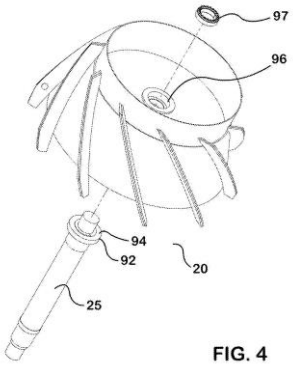
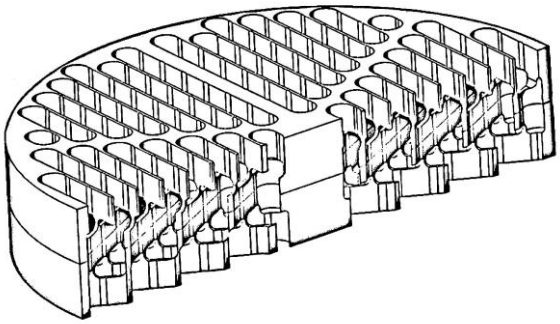
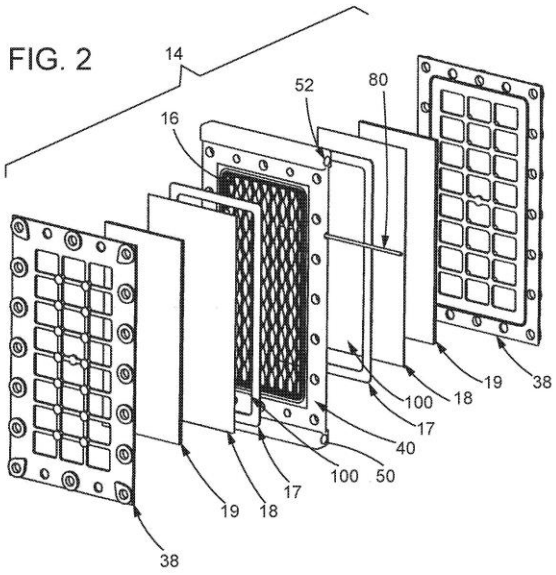


FIG. 4

21: 2017/05142. 22: 2017-07-28. 43: 2022-01-07
51: F28F
71: Joint Stock Company "AKME-Engineering"
72: NEEVIN, Viktor Semenovich, VAKHRUSHIN, Mihail Petrovich
33: RU 31: 2014153832 32: 2014-12-30
54: DEVICE FOR SPACING PIPES OF HEAT-EXCHANGE APPARATUS (VARIANTS)
00: -
The present invention relates to variants of a device for spacing pipes of a heat-exchange apparatus, primarily intended for operating in a heavy liquid metal coolant medium. The utilization thereof provides for a more-reliable fastening of the pipes of a heat-exchange apparatus while simultaneously spacing same. According to a first variant, the device contains at least one support/spacing grid (1), each of which consists of a cylindrical housing (2) and two, three or more tiers of slats (3, 4) which are distanced from one another by a predetermined amount, wherein the width of each slat lies in a plane which is parallel to the axis of the housing, and the ends of all slats are affixed to the housing in such a way that the slats of any tier are spaced, with a preset gap, parallel to one another, wherein the slats of two tiers are crossed at an angle of 60 degrees when viewed along the axis of the housing, and are connected to one another at the location of this crossing. According to a second variant, the device has three section-forming dividers which pass through the axis of the cylinder and are connected by the ends thereof to the housing with a 60-degree shift relative to one another.



21: 2017/05164. 22: 2017-07-31. 43: 2022-01-07
51: C02F; C25B
71: Spraying Systems Co.
72: SWARTZ, James B., MOYER, James I., HAZELWOOD, John, ROSSOM, James D.
33: US 31: 62/111,980 32: 2015-02-04
54: ELECTROLYTIC CARTRIDGE, SYSTEMS AND METHODS OF USING SAME
00: -
Electrolytic cartridges for, systems for, and methods of electrolyzing a brine solution of water and an alkali salt to produce acidic electrolyzed water and alkaline electrolyzed water are provided. The system includes an internal chamber for receiving the brine solution and at least two electrolytic cartridges immersed in a brine bath. Each electrolytic cartridge includes an electrode, an ion selective membrane disposed on a side of the electrode so as to define a space adjacent to at least a portion of the electrode, a permeable insert covering the ion selective membrane on a side opposite the space, and a bonding plate disposed on the permeable insert on a side opposite the side facing the ion selective membrane. The methods recycle at least a portion of alkaline electrolyzed water into the feed of a cartridge having a positively charged electrode.



21: 2017/05197. 22: 2017-08-01. 43: 2022-01-07
51: A24D; A24F; A61M
71: Fontem Holdings 1 B.V.
72: WENSLEY, Martin, HUFFORD, Michael, LLOYD, Peter
33: US 31: 62/106,679 32: 2015-01-22
54: ELECTRONIC VAPORIZATION DEVICES
00: -
A device for generating a condensation aerosol includes vaporization chamber having an upstream first inlet and a downstream outlet. A tube supplies liquid to a heater in the vaporization chamber. The liquid is pumped out of the tube and onto the heater, which vaporizes the liquid. Air flows from inlets through the vaporization chamber, and generally perpendicular to the tube. The vaporized liquid is entrained in the air, forming a condensation aerosol having a particle size in a selected range. A second inlet provides a substantially laminar flow of air into the airflow path, wherein the second inlet is downstream of the heater; and the device capable of changing air flow in the vaporization chamber to change the particle size of the condensation aerosol and/or to change the amount of visible vapor emitted from the device.

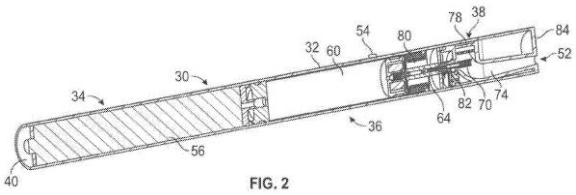


FIG. 2

21: 2017/05223. 22: 2017-08-02. 43: 2022-01-07
51: A61K
71: F. Hoffmann-La Roche AG
72: DZIADEK, Sebastian, LIFKE, Alexander, LIFKE, Valeria, HILLRINGHAUS, Lars
33: EP(CH) 31: 15155598.4 32: 2015-02-18
54: IMMUNOCONJUGATES FOR SPECIFIC INDUCTION OF T CELL CYTOTOXICITY AGAINST A TARGET CELL
00: -
The present invention relates to immunoconjugates for specific induction of T cell cytotoxicity against a target cell, comprising at least one T cell response eliciting peptide that is presentable via MHC class I coupled to a target cell binding moiety via a cleavable bond and methods of their production and uses thereof.

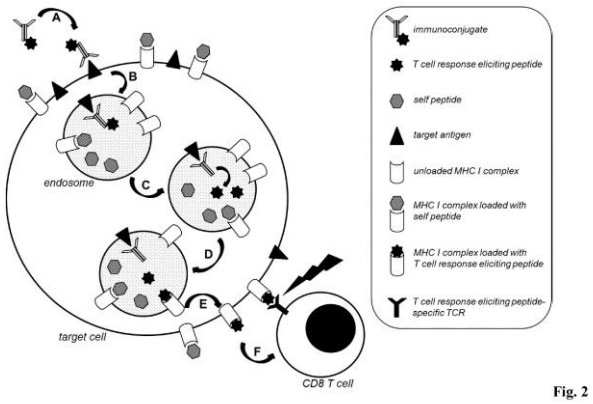
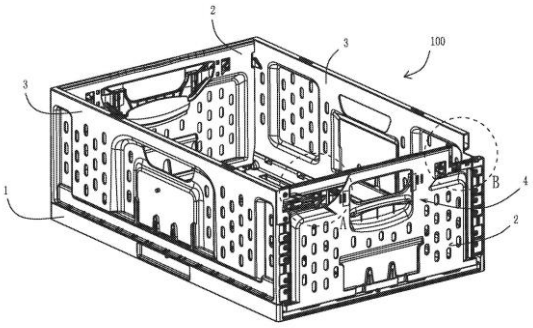


Fig. 2

21: 2017/05367. 22: 2017-08-08. 43: 2022-01-07
51: B65D
71: Shanghai Hongyan Returnable Transit Packagings Co., Ltd.
72: SU, Yongping
33: CN 31: 201510023594.2 32: 2015-01-16
54: FOLDING BOX
00: -
A folding box (100), comprising: a bottom plate (1), and a pair of first side plates (2) and a pair of a second side plates (3) capable of being folded with respect to the bottom plate (1). The first side plates (2) and the second side plates (3) are releasably

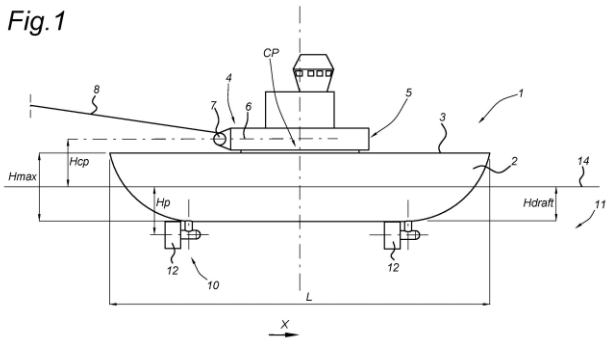
interlocked via a locking mechanism (4). The locking mechanism (4) comprises a handle (41), a locking member (42), and a guidance feature (31). When the first side plates (2) and the second side plates (3) are in a locked state, the handle (41) restricts the position of the locking member (42), thus limiting the movement of the locking member (42), when the handle (41) moves and provides the locking member (42) space required for movement of the locking member (42), the locking member (42) cooperates with the guidance feature (31) to drive the locking member (42) to move so as to unlock the same. When the folding box is empty and recycled, the side plates are easy and convenient to unlock, and are difficult to be unlocked by an accidental triggering when using.



21: 2017/05371. 22: 2017-08-08. 43: 2022-01-07
51: B63B; B63H
71: Nova Patent B.V.
72: MULLER, Cornelis Levinus
33: NL 31: 2014304 32: 2015-02-17
54: TUGBOAT PROVIDED WITH A CARROUSEL-TYPE TOWING SYSTEM
00: -

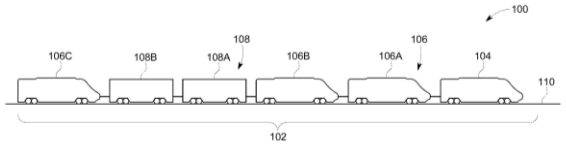
The invention relates to a tugboat (1), comprising a single hull (2), a deck (3) and a towing system (4) having a base (5) connected to the deck, the base having a centre point (CP), and a cart (6) that is moveable over the base over 360°, wherein the cart comprises a powered winch (7), wherein two propulsion units (12) are provided, capable of providing thrust over 360° in a horizontal plane, wherein the propulsion units are aligned in the longitudinal direction, wherein the distance between the propulsion units is at least 10% of a length (L) of the tugboat in the longitudinal direction, wherein the tugboat is configured such that during towing the vertical distance between the centre point and the waterline (H_{cp}) divided by the vertical distance between the centre of thrust of the propulsion units and the waterline (H_p) is 0,3 - 1,5.

Fig.1



21: 2017/05803. 22: 2017-08-25. 43: 2022-01-07
51: H04L
71: General Electric Company
72: SMITH, Eugene, PELTONEN, Glen Paul, KELLNER, Steven Andrew
33: US 31: 14/616,809 32: 2015-02-09
54: PROTOCOL CONVERSION SYSTEM AND METHOD FOR A VEHICLE SYSTEM
00: -
A method and system for converting protocols of messages receive a first wireless message onboard a first vehicle in a vehicle consist that includes the first vehicle and one or more additional vehicles. The method and system also determine a first protocol of the first wireless message, determine a different, second protocol used by a control system disposed onboard the first vehicle, change the first wireless message to a different, second message by

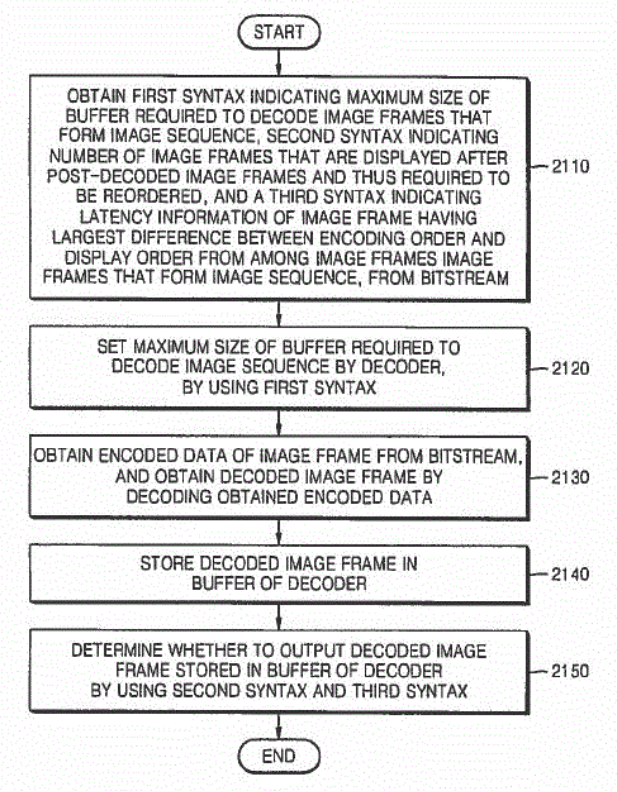
modifying the first protocol of the first wireless message to the different, second protocol, and communicate the second message to the control system.



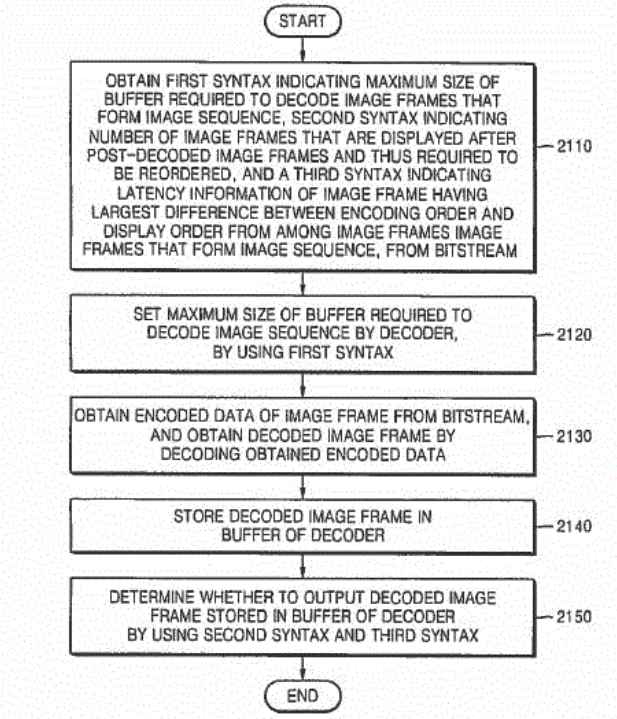
21: 2017/05804. 22: 2017-08-25. 43: 2022-01-07
51: A01N; A01P; C07C
71: Universidad Técnica Federico Santa María
72: DIAZ PERALTA, Katy Paulina, ESPINOZA CATALAN, Luis Javier, OLEA CARRASCO, Floreal Andres, PEÑA CORTES, Hugo Alberto, TABORGA MORALES, Lautaro Liber
33: CL 31: 200-2015 32: 2015-01-27
54: METHOD FOR THE SYNTHESIS OF LINEAR GERANYLORCINOL DERIVATIVES FROM GERANIOL AND ORCINOL, COMPOUNDS DERIVED FROM LINEAR GERANYLORCINOLS, AND USE OF SAID COMPOUNDS AS ANTIFUNGALS AGAINST BOTRYTIS CINEREA
00: -
The invention relates to a synthesis method for producing compounds derived from linear geranylorcinols, comprising the condensation of geraniol with orcinol, catalysed by a Lewis acid and the use of a secondary catalyst, to compounds derived from linear geranylorcinols, and to the use of said compounds as antifungals against *Botrytis cinerea*.

21: 2017/06380. 22: 2017-09-21. 43: 2022-02-18
51: A61K; C07D; A61P
71: QURIENT CO., LTD, LEAD DISCOVERY CENTER GMBH
72: KIYEAN, Nam, JAESEUNG, Kim, SEOHYUN, Ahn, YEEJIN, Jeon, DOOHYUNG, Lee, DONGSIK, Park, YOUNG-IN, Yang, SAEYEON, Lee, JEONGJUN, Kim, JIYE, Ahn, HANA, Kim, CHUN-WON, Jung, SCHULTZ-FADEMRECHT, Carsten
33: US 31: 62/147,262 32: 2015-04-14
33: US 31: 62/147,925 32: 2015-04-15
54: QUINOLINE DERIVATIVES AS TAM RTK INHIBITORS
00: -
The present invention relates to novel compounds which are inhibitors of TAM (Axl, Mer and Tyro 3) and/or Met family receptor tyrosine kinases (RTKs). These compounds are suitable for the treatment of disorders associated with, accompanied by, caused by or induced by a receptor of the TAM family, in particular a hyperfunction thereof. The compounds are suitable for the treatment of hyperproliferative disorders, such as cancer, particularly immune-suppressive cancer, refractory cancer and cancer metastases.

21: 2017/06411. 22: 2017-09-22. 43: 2022-01-07
51: H04N
71: Samsung Electronics Co., Ltd.
72: PARK, Young-o, KIM, Chan-yul, CHOI, Kwang-pyo, PARK, Jeong-hoon
33: US 31: 61/563,678 32: 2011-11-25
54: IMAGE DECODING METHOD
00: -
The present invention relates to an image coding method and device for buffer management of a decoder, and an image decoding method and device. The image coding method according to the present invention: determines the maximum size of a buffer required for decoding each image frame in a decoder and the number of image frames requiring realignment, and latency information on an image frame which has the greatest difference between a decoding order and a display order among image frames forming an image sequence, based on the decoding order of each image frame of a coded image sequence, a decoding order of a reference frame that each image frame refers to, the display order of each image frame and a display order of the reference frame; and adds a first syntax representing the maximum size of a buffer, a second syntax representing the number of image frames requiring realignment, and a third syntax representing latency information to a set of essential sequence parameters that is a set of information related to the coding of an image sequence.



21: 2017/06412. 22: 2017-09-22. 43: 2022-01-07
51: H04N
71: Samsung Electronics Co., Ltd.
72: PARK, Young-o, KIM, Chan-yul, CHOI, Kwang-pyo, PARK, Jeong-hoon
33: US 31: 61/563,678 32: 2011-11-25
54: IMAGE DECODING APPARATUS
00: -
The present invention relates to an image coding method and device for buffer management of a decoder, and an image decoding method and device. The image coding method according to the present invention: determines the maximum size of a buffer required for decoding each image frame in a decoder and the number of image frames requiring realignment, and latency information on an image frame which has the greatest difference between a decoding order and a display order among image frames forming an image sequence, based on the decoding order of each image frame of a coded image sequence, a decoding order of a reference frame that each image frame refers to, the display order of each image frame and a display order of the reference frame; and adds a first syntax representing the maximum size of a buffer, a second syntax representing the number of image frames requiring realignment, and a third syntax representing latency information to a set of essential sequence parameters that is a set of information related to the coding of an image sequence.



21: 2017/06701. 22: 2017-10-05. 43: 2022-03-04
51: B29B
71: BOREALIS AG
72: Stefan HOCHRADL, Wolfgang STOCKREITER, Karl WURM, Robert GUBO
33: EP 31: 15168960.1 32: 2015-05-22
54: A PROCESS FOR PRODUCING OF A FIBRE-REINFORCED POLYMER COMPOSITION
00: -
Process for producing a fibre-reinforced polymer composition comprising the following steps: a) providing a polymer composition, b) melting the polymer composition in a compounding device, c) feeding a non-woven fabric into the compounding device in the presence of the molten polymer composition, and d) withdrawing the fibre-reinforced polymer composition from the compounding device. Furthermore, the product obtained by the process and the use of a non-woven fabric in an extruder to reinforce a polymer with fibres are disclosed.

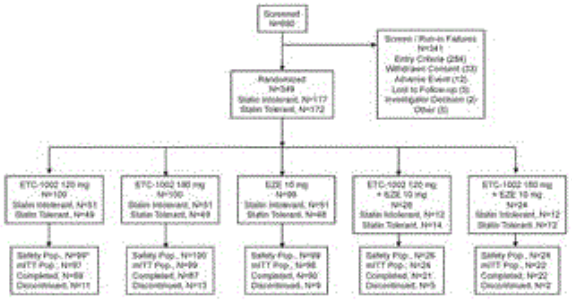
21: 2017/06919. 22: 2017-10-12. 43: 2022-01-10
51: A61K

71: ESPERION THERAPEUTICS, INC.
72: NEWTON, ROGER SCHOFIELD, ROSENBERG, NOAH LABAN, MACDOUGALL, DIANE ELAINE
33: US 31: 62/133,128 32: 2015-03-13
33: US 31: 62/250,921 32: 2015-11-04

54: FIXED DOSE COMBINATIONS AND FORMULATIONS COMPRISING ETC1002 AND EZETIMIBE AND METHODS OF TREATING OR REDUCING THE RISK OF CARDIOVASCULAR DISEASE

00: -

Disclosed herein are compositions comprising fixed doses of ETC-1002 and Ezetimibe. Also disclosed herein are methods for using fixed doses of ETC-1002 and Ezetimibe. Uses include methods of treating cardiovascular disease or reducing the risk of cardiovascular disease in a subject. Uses also include methods of treating hypercholesterolemia in a subject.

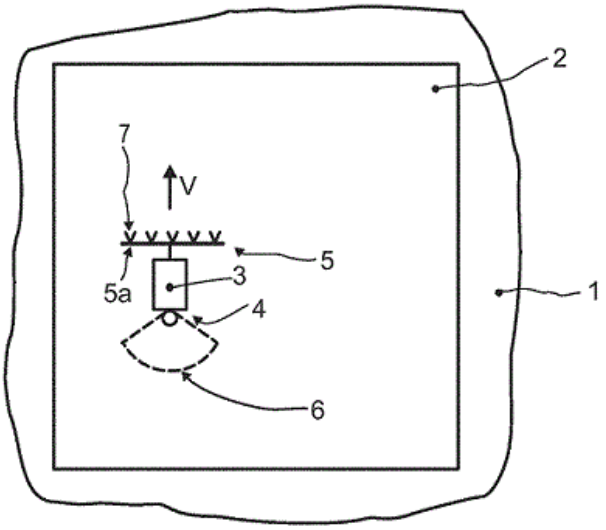


21: 2017/07087. 22: 2017-10-19. 43: 2022-01-10
51: A01C
71: BASF SE
72: ZERULLA, Wolfram, SCHMID, Markus, PASDA, Gregor
33: EP 31: 15161117.5 32: 2015-03-26
33: EP 31: 15173320.1 32: 2015-06-23

54: METHOD AND VEHICLE FOR APPLYING AN AGROCHEMICAL MIXTURE TO A WORKING AREA OF A FIELD

00: -

The present invention relates to a method for applying an agrochemical mixture to a working area (2) of a field (1) using a vehicle (3) moving on the field (1). Thereby, a solid fertilizer (6) is spread on the working area (2) using a fertilizer spreading device (4) mounted on the vehicle (3; 3a) and a liquid fertilizer additive (7) is sprayed on the working area (2) using a field sprayer (5), mounted on the vehicle (3) separately from the fertilizer spreading device (4). Therein, the liquid fertilizer additive (7) is prevented from coming into contact with surfaces of the fertilizer spreading device (4), which also come into contact with the solid fertilizer (6). Moreover, the invention relates to a vehicle (3) for applying an agrochemical mixture to a working area (2) of a field (1) while moving on the field (1).

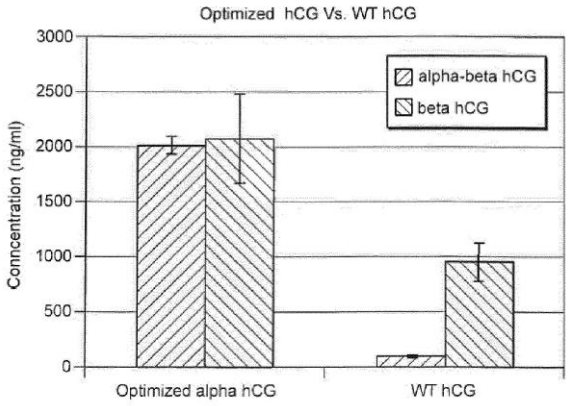


21: 2017/07136. 22: 2017-10-20. 43: 2022-01-10
51: C07K
71: Ferring B.V.
72: PLAKSIN, Daniel, GRINHUT, Ayelet
33: EP(NL) 31: 15164965.4 32: 2015-04-24

54: METHOD OF PRODUCTION OF GONADOTROPHIN

00: -

A host cell characterized in that it comprises integrated into its genome a sequence coding for the a chain of hCG, and use of the host cell to produce recombinant hCG.



21: 2017/07694. 22: 2017-11-14. 43: 2022-02-03
51: E21D
71: NCM INNOVATIONS (PTY) LTD
72: CROMPTON, Brendan Robert; VISSER, Henri
33: ZA 31: 2016/07829 32: 2016-11-14
54: AN IMPROVED LOAD SUPPORT SYSTEM
00: -
A preload device which includes a pressure vessel which has an outer dished component which comprises an outer base wall and an outer sidewall circumscribing the outer base wall, an inner dished component, with an inner baser wall and an inner sidewall circumscribing the inner base wall and which inner dished component is received in the outer dished component to provide a socket, bordered by the inner cylindrical sidewall, in which an end portion of a prop is received, the inner sidewall is contiguous with the outer sidewall along a sealed join line to seal the interior of the body, a pressure releasing inlet valve exteniding through a wall of the body through which a hydraiuulic fluid is passed to inflate the body wherein the outer base wall is profiled to define a first place against which a hanging wall abuts, wherein the inner base wall, within the socket, is profiled to define a second plane on which an end of the prop finds support and wherein the first plane is spaced from the second plane in an axial direction of the prop.

21: 2017/08245. 22: 2017-12-05. 43: 2022-01-10
51: A01N; C12N
71: NEWLEAF SYMBIOTICS, INC.
72: RIOUX, Renée
33: US 31: 62/173,789 32: 2015-06-10
54: ANTIFUNGAL METHYLOBACTERIUM COMPOSITIONS AND METHODS OF USE
00: -
Compositions comprising Methylobacterium with anti-fungal activity, methods for controlling plant pathogenic fungi, and methods of making the compositions are provided.

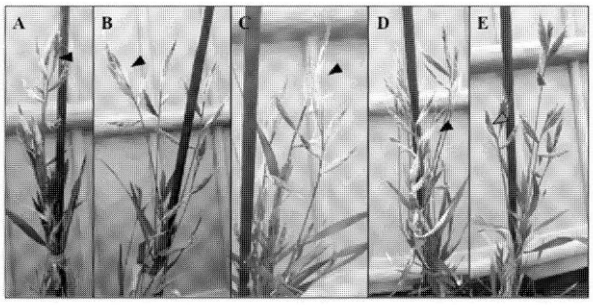


FIGURE 1A, B, C, D, E

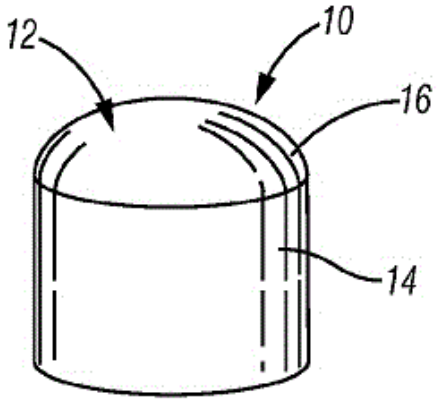
21: 2017/08264. 22: 2017-12-05. 43: 2022-01-10
51: C12Q; G06F; C40B; G01N
71: KARIUS, INC.
72: BLAUWKAMP, TIMOTHY A, CHRISTIANS, FRED, VILFAN, IGOR D, SMITH, SCOTT, KERTESZ, MICHAEL
33: US 31: 62/334,348 32: 2016-05-10
33: US 31: 62/163,273 32: 2015-05-18
54: COMPOSITIONS AND METHODS FOR ENRICHING POPULATIONS OF NUCLEIC ACIDS
00: -
This disclosure provides methods and compositions that are useful for enriching a particular population of nucleic acids (a "population of interest") within a complex mixture of nucleic acids. The population of interest may make up a minor portion of a complex mixture of nucleic acids. The methods and compositions provided herein are useful for detecting, predicting, diagnosing, or monitoring a disease or disorder, particularly a disease or disorder caused by a foreign microbe or pathogen.

21: 2017/08592. 22: 2017-12-18. 43: 2022-01-31
51: A61K; C01B
71: BIOLOGICAL E LIMITED
72: GANAPATHY, Ravi, GADE, Nagireddy, MANOHAR, Manish, PARADKAR, Vikram Madhusadan, DATLA, Mahima
33: IN 31: 2963/CHE/2015 32: 2015-06-12
54: METHOD FOR PREPARATION OF ALUMINIUM PHOSPHATE GEL FOR APPLICATION IN VACCINE FORMULATIONS
00: -
The present invention relates to an improved process for production of Aluminium phosphate (AlPhos) gel wherein the solutions of aluminium salt and alkaline phosphate salt are added to water by maintaining the pH under stirring to obtain the precipitate, followed by sterilization of the said

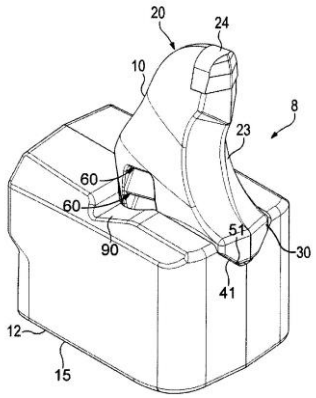
precipitate and finally obtaining the Aluminum phosphate gel.

21: 2017/08640. 22: 2017-12-19. 43: 2022-03-04
51: B32B
71: ARCELORMITTAL
72: Denis JACQUET
33: WO 31: PCT/IB2015/001135 32: 2015-07-07
54: METHOD FOR PRODUCING A SANDWICH STRUCTURE
00: -
The invention relates to a method for producing a sandwich structure comprising two steel face sheets separated by a polymer layer, said method comprising the following steps: - the sandwich structure is sized according to an objective to be achieved, by carrying out the following sub-steps: - the objective to be achieved is defined in terms of three target values, that is to say tensile stiffness Tc, expressed in kN/mm, bending stiffness Bc, expressed in kN/mm and mass per unit area Mc, expressed in Kg/m2; - a tolerance margin for achieving the target values is defined; - the sandwich structure is defined in terms of five variables, that is to say the thickness Ea of the steel face sheets, expressed in mm, the thickness Ep of the polymer layer, expressed in mm, the intrinsic Young's modulus Yp of the polymer layer, the intrinsic density dp of the polymer layer and the volume fraction Rp of the polymer layer, expressed as volume percent of the material polymer layer; - the combinations of Ea, Ep, Yp, dp and Rp that make it possible to achieve the target values within the defined tolerance margin are defined; - for every variable a useful range is determined from the above; - the steel and polymer layer are selected for which every variable is situated in the range defined in the previous step; - and the corresponding sandwich structure is produced.

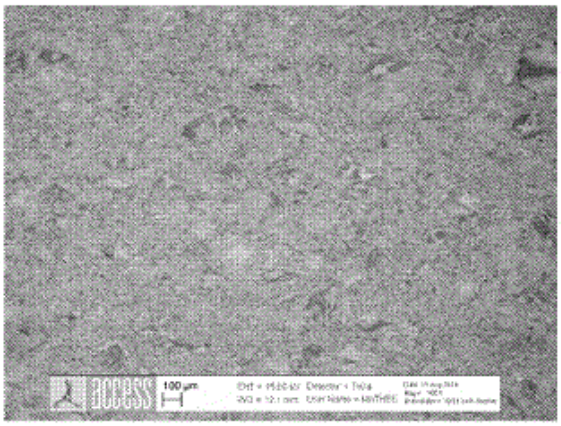
21: 2018/00418. 22: 2018-01-19. 43: 2022-02-11
51: E21B
71: SMITH INTERNATIONAL, INC.
72: JOHN DANIEL BELNAP, YI FANG, MICHAEL DAVID FRANCE, DAVID P DENBOER, HAIBO ZHANG
33: US 31: 62/195,500 32: 2015-07-22
54: CUTTING ELEMENTS WITH IMPACT RESISTANT DIAMOND BODY
00: -
Cutting elements include a diamond-bonded body attached with a substrate. The substrate has a coercivity of greater than about 200 Oe, and has a magnetic saturation of from about 73 to 90. The diamond-bonded body has a compressive stress at the surface of greater than about 0.9 GPa after heat treatment, and greater than about 1.2 GPa prior to heat treatment.



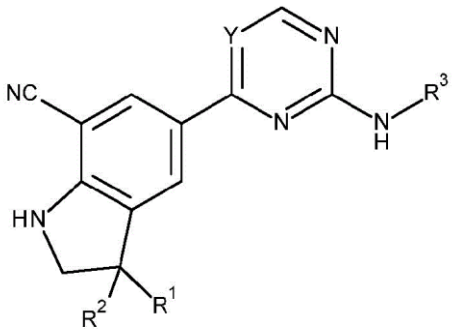
21: 2018/01785. 22: 2018-03-16. 43: 2022-01-07
51: E02F; E21C
71: ESCO Group LLC
72: CHEYNE, Mark A., RICKEY, Jack C.
33: US 31: 62/108,675 32: 2015-01-28
54: MINERAL WINNING PICK, HOLDER, AND COMBINATION
00: -
A pick for mineral winning includes an elongate shank configured to be positioned into a cavity of a holder. A profile is defined on an outside surface of the shaft which includes a first surface formed into the profile and disposed to receive a leveraging device to enable a first forced translational movement of the shaft relative to the holder, and a second surface formed into the profile and disposed to receive the leveraging device to enable a second forced translational movement of the shaft relative to the holder.



21: 2018/02178. 22: 2018-04-04. 43: 2022-01-27
51: C22B
71: COMPANHIA BRASILEIRA DE METALURGIA E MINERAÇÃO
72: SERNIK, KLEBER A
33: US 31: 14/533,843 32: 2014-11-05
54: PROCESSES FOR PRODUCING LOW NITROGEN, ESSENTIALLY NITRIDE-FREE CHROMIUM AND CHROMIUM PLUS NIOBIUM-CONTAINING NICKEL-BASED ALLOYS AND THE RESULTING CHROMIUM AND NICKEL-BASED ALLOYS
00: -
Processes for producing low nitrogen, essentially nitride-free chromium or chromium plus niobium-containing nickel-based alloys include charging elements or compounds which do not dissolve appreciable amounts of nitrogen in the molten state to a refractory crucible within a vacuum induction furnace, melting said elements or compounds therein under reduced pressure, and effecting heterogeneous carbon-based bubble nucleation in a controlled manner. The processes also include, upon cessation of bubble formation, adding low nitrogen chromium or a low nitrogen chromium-containing master alloy with a nitrogen content of below 10 ppm to the melt, melting and distributing said added chromium or chromium-containing master alloy throughout the melt, bringing the resulting combined melt to a temperature and surrounding pressure to permit tapping, and tapping the resulting melt, directly or indirectly, to a metallic mold and allowing the melt to solidify and cool under reduced pressure.



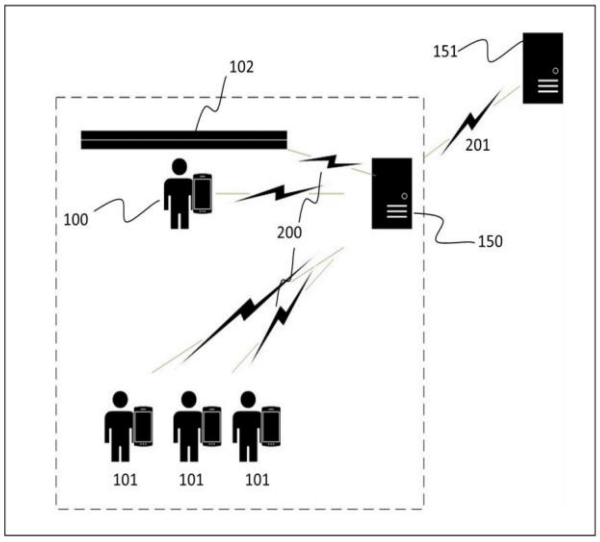
21: 2018/04688. 22: 2018-07-13. 43: 2022-01-27
51: A61K; A61P; C07D
71: Janssen Pharmaceutica NV
72: STANSFIELD, Ian, QUEROLLE, Olivier Alexis Georges, PONCELET, Virginie Sophie, GROSS, Gerhard Max, JACOBY, Edgar, MEERPOEL, Lieven, KULAGOWSKI, Janusz Jozef, MACLEOD, Calum, MANN, Samuel Edward, GREEN, Simon Richard, HYND, George
33: EP(BE) 31: 16152416.0 32: 2016-01-22
54: NEW SUBSTITUTED CYANOINDOLINE DERIVATIVES AS NIK INHIBITORS
00: -
The present invention relates to pharmaceutical agents of formula (I) useful for therapy and/or prophylaxis in a mammal, and in particular to inhibitors of NF-



(I)

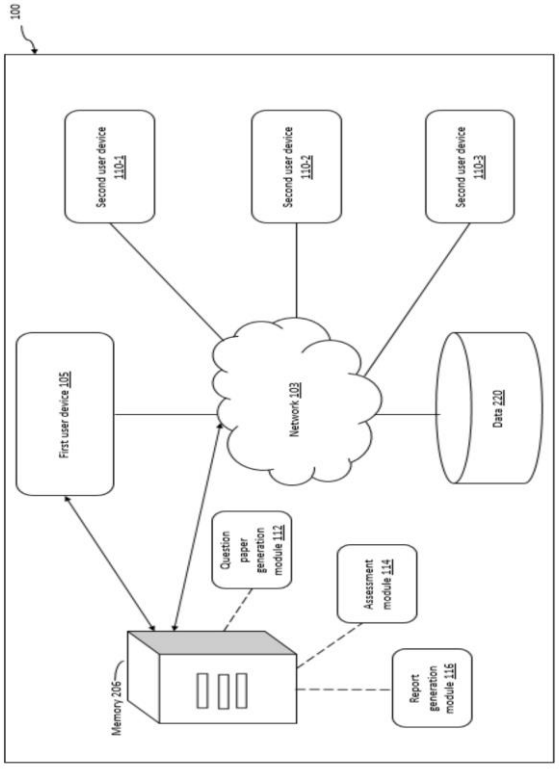
21: 2018/04859. 22: 2018-07-19. 43: 2022-01-27
51: G09B
71: EXTRAMARKS EDUCATION INDIA PVT LTD
72: KULSHRESTHA, Atul, ROY, Swagata
33: IN 31: 201811013307 32: 2018-04-06
54: A SYSTEM AND METHOD FOR LEARNING AND ASSESSMENT IN A CLASSROOM ENVIRONMENT

00: -
The invention provides a smart classroom environment to facilitate real-time activities to enhance the learning standards. The smart classroom system includes interactive board, smart devices, classroom server, main server that are interconnected through communication network. The attendance is automatically registered when the attendee logs onto the smart device. The instructor can edit the attendance of the attendees in the instructor device based on pre-defined events of discontinuance of the attendees' from the classroom. Further, the instructor can display and annotate documents stored in the instructor device on the interactive board in real-time and the annotated document can be shared with the attendees in the classroom. The system allows the control and coordination of interactive board, smart devices, and the servers to deliver an interactive setup in the classroom and facilitates the information transmission to and from the attendees. It enhances the instructor and attendees' interaction in the classroom and increases attendee's interest.



21: 2018/04860. 22: 2018-07-19. 43: 2022-01-27
51: G09B
71: EXTRAMARKS EDUCATION INDIA PVT LTD
72: KULSHRESTHA, Atul, ROY, Swagata
33: IN 31: 201811013308 32: 2018-04-06
54: A METHOD AND SYSTEM FOR DYNAMIC CONTENT GENERATION AND ASSESSMENT
00: -

The present invention is related to a method and system of generating and assessing a question paper based on the various pre-defined parameters selected by a first user. The method includes selecting a type of mode from among a programmed and a semi-automatic programmed mode of question paper generation and assessment to obtain standardized question papers with minimal number of parameters required from the user as inputs. Further, the generated question papers are evaluated either automatically by the system or provides the first user benefit of manually evaluating responses to the questions and provide remarks. Moreover, the generated question paper by a first user may be shared with other similar first users. The said method and the system enables a more standardized, robust and convenient system for generating and assessing question papers that has significantly higher processing capabilities and is time-saving.

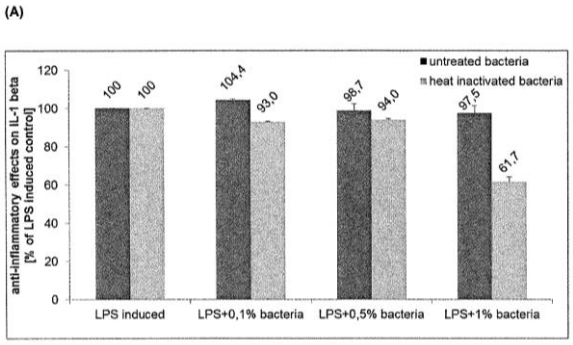


21: 2018/04863. 22: 2018-07-19. 43: 2022-01-27
51: A61K; A61P; A61Q
71: PROBI AB
72: FISCHER, Jörg Thilo, GÖTZ, Marcus Rudolf, MOLIN, Göran, AHRNE, Siv
33: GB 31: 1600975.5 32: 2016-01-19

54: NOVEL PROBIOTIC BACTERIAL STRAIN OF LACTOBACILLUS PLANTARUM AND COMPOSITIONS AND USES THEREOF IN THE TREATMENT OF INFLAMMATION

00: -

The present invention relates to a novel bacterial strain, L plantarum GOS 42 (DSM 32131), isolated preparations and compositions thereof; and their use in medicine, especially in the treatment and/or prevention of inflammation.

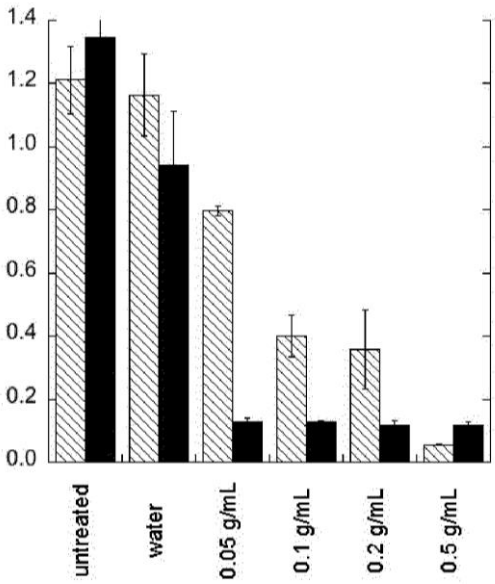


21: 2018/04938. 22: 2018-07-23. 43: 2022-01-27
51: A61K; A61P
71: GEDEA BIOTECH AB
72: ELLERVIK, Ulf, STERNER, Olov, STREVENS, Helena, MANNER, Sophie
33: SE 31: 1650467-2 32: 2016-04-06

54: GLUCONO DELTA-LACTONE FOR TREATMENT OF VAGINAL FUNGAL INFECTIONS

00: -

The present invention relates to a pharmaceutical formulation for vaginal administration, wherein the formulation comprises a pharmaceutical acceptable excipient and glucono δ-lactone, wherein the glucono δ-lactoneis present in an amount of 5 to 99 wt % of the formulation. The invention also relates to a pharmaceutical formulation according to the invention for use in the prevention or treatment of a urogenital fungal infection. Furthermore, the invention relates to glucono δ-lactone (formula (III)), for use in the in the prevention or treatment of a fungal infection.



21: 2018/04978. 22: 2018-07-24. 43: 2022-01-27
51: B32B; C08J
71: AMPACET CORPORATION
72: CARROLL, LINDA, MCMANUS, MARK, NEVINS, DANNY, DAVIS, DON, MICKEY, TOM, BROWNFIELD, DOUG
33: US 31: 62/294,516 32: 2016-02-12

54: MULTILAYERED POLYMERIC FILM

00: -

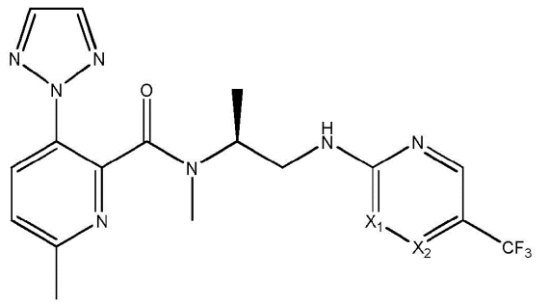
Disclosed are compositions and methods for creating a textured or patterned surface on elastomeric extruded film.

21: 2018/05046. 22: 2018-07-26. 43: 2022-01-27
51: A61K; A61P; C07D
71: C4X Discovery Limited
72: MARTIN, Barrie
33: GB 31: 1601703.0 32: 2016-01-29

54: THERAPEUTIC COMPOUNDS

00: -

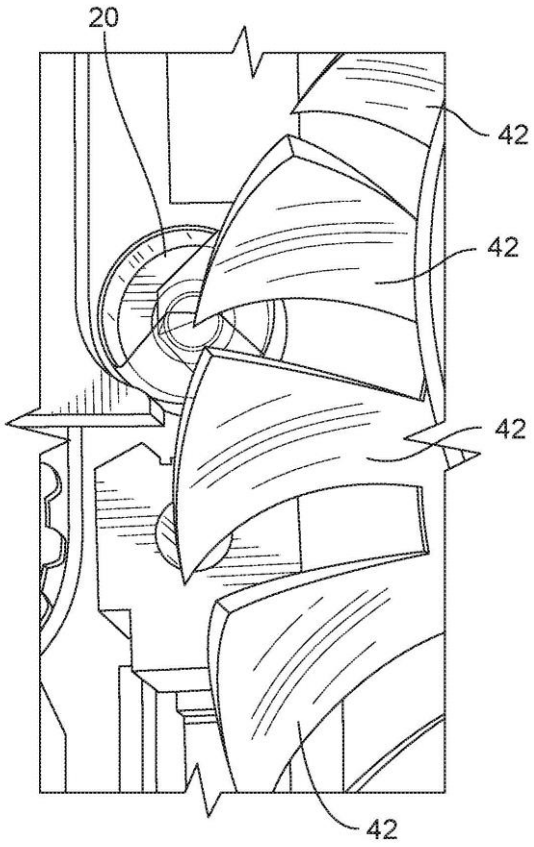
The present invention relates to compounds that are antagonists of the orexin-1 receptor. The compounds have the structural formula (I) defined herein. The present invention also relates to processes for the preparation of these compounds, to pharmaceutical compositions comprising them, and to their use in the treatment of diseases or disorders associated with orexin-1 receptor activity.



(I)

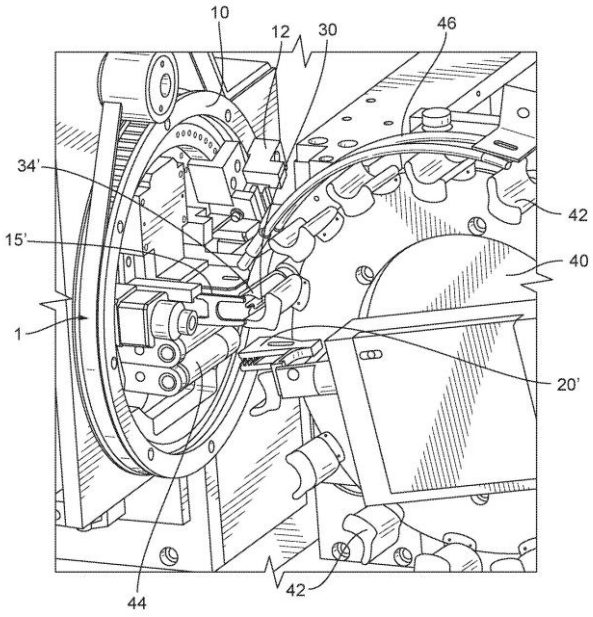
21: 2018/05069. 22: 2018-07-27. 43: 2022-01-27
51: B01J; C07B; C07C
71: JXTG Nippon Oil & Energy Corporation
72: YOKOI, Mayumi, SHINGU, Masaki, ARAKI, Yasuhiro, AKIYAMA, Masanari
33: JP 31: 2016-015582 32: 2016-01-29
54: METHOD FOR PRODUCING CATALYST FOR FISCHER-TROPSCH SYNTHESIS AND METHOD FOR PRODUCING HYDROCARBON
00: -
This method for producing a catalyst for Fischer-Tropsch synthesis includes a reduction step in which a catalyst for Fischer-Tropsch synthesis is obtained by reduction treatment of an unreduced catalyst. In the reduction step, a reducing gas is brought into contact with the unreduced catalyst, the temperature is increased to a reduction temperature of 340-385°C at a temperature increase rate of less than 50°C/min, the result is held at the reduction temperature for 4-20 hours, and reduction treatment of the unreduced catalyst is performed.

21: 2018/05099. 22: 2018-07-30. 43: 2022-01-27
51: A61F; B65B
71: Johnson & Johnson GmbH
72: CANKAR, Thomas, KLAR, Markus, BERGERMANN, Martin, ARNESEN, Jens-Petter, ANGER, Markus
33: US 31: 62/273,775 32: 2015-12-31
54: METHOD OF FORMING PRIMARY PACKAGE TUBE FOR TAMPONS
00: -
High-speed methods to close tubular plastic wrappers may include providing a packaging film on a mandrel in the form of a hollow tube, forming a folded surface by rotating the hollow tube and mandrel while counter-rotating a plate having a plurality of folding blades extending outwardly therefrom, to form a plurality of folds that define the folded surface, substantially perpendicular to the longitudinal axis of the hollow tube, each folding blade engaging a portion of the protruding tube portion, applying heat and pressure to the folded surface to form a closed end, inserting the tampon into the tube, and closing the first end of the tube. The film material comprises at least one thermoplastic surface, and the mandrel has a first end extending from a revolving platform and a second end, distal the first end. The mandrel can rotate with respect to the revolving platform on which it is mounted.

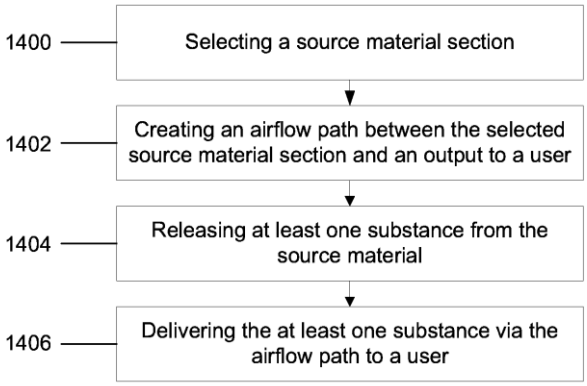


21: 2018/05100. 22: 2018-07-30. 43: 2022-01-27
51: A61F; B65H
71: Johnson & Johnson GmbH
72: CANKAR, Thomas, KLAR, Markus, ANGER, Markus, BERGERMANN, Martin, ARNESEN, Jens-Petter
33: US 31: 62/273,791 32: 2015-12-31
54: METHOD OF WINDING UP TAMPON MATERIAL
00: -

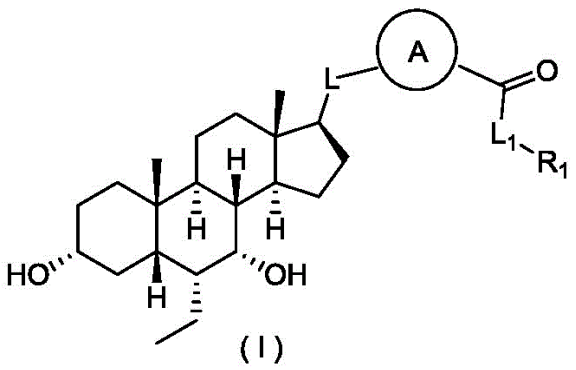
of the Disclosure An improved apparatus for forming tampon blanks for further processing into compressed, self-sustaining tampons, permits increased speed and accuracy of the process step. The apparatus includes a sliver guide; a gripper capable of reciprocating motion and arranged and configured to cooperate with the sliver 5 guide to grasp an end of a sliver maintained therein; a winding mandrel; a plurality of winding cups; and e) a string application and knotter apparatus comprising a circular ring bearing having a string conveyor mounted thereon. The circular ring bearing of the string application and knotter apparatus defines a plane perpendicular to the sliver guide and motion of the gripper and parallel to the 10 winding axis of the winding mandrel.



21: 2018/05147. 22: 2018-07-31. 43: 2022-01-27
51: A24F; A61M
71: SYQE MEDICAL LTD.
72: DAVIDSON, Perry, SCHWARTZ, Binyamin, SCHORR, Aaron, RESHEF, Nimrod, OREN, Eran, KATZNELSON, Be'eri
33: US 31: 62/277,060 32: 2016-01-11
54: PERSONAL VAPORIZING DEVICE
00: -
According to some embodiments there is provided a device configured for releasing at least one substance from source material, comprising: a housing; a plurality of source material sections positioned at fixed locations with respect to the housing; a plurality of airflow paths, each airflow path associated with at least one source material section; each airflow path associated with at least one blocking element which prevents flow of air through the path; and an actuator operably coupled to the blocking element, the actuator configured for unblocking the airflow path of at least one selected source material section to allow flow of air to and through source material within the selected section.



21: 2018/05231. 22: 2018-08-03. 43: 2022-02-11
51: A61K; C07J; A61P
71: CHIA TAI TIANQING PHARMACEUTICAL GROUP CO., LTD.
72: HE, Haiying, XIAO, Hualing, LI, Peng, DU, Chunyan, LUO, Zhi, CHEN, Shuhui
33: CN 31: 201610061293.3 32: 2016-01-28
33: CN 31: 201610331759.7 32: 2016-05-18
54: STEROID DERIVATIVE FXR AGONIST
00: -
The present invention relates to a compound represented by formula (I), a tautomer thereof or a pharmaceutically acceptable salt thereof, and relates to applications thereof in the preparation of drugs for treating FXR related diseases.

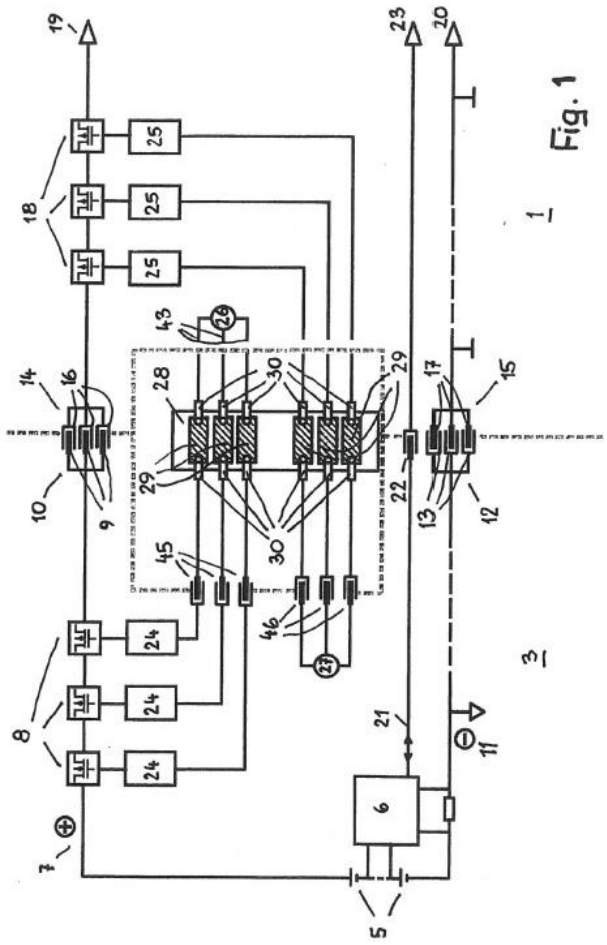


(I)

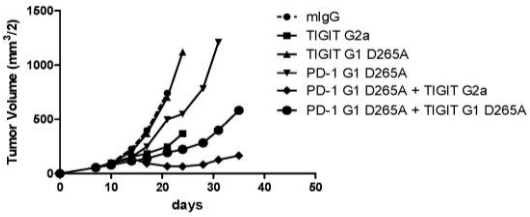
21: 2018/05743. 22: 2018-08-28. 43: 2022-02-11
51: C07K
71: UNIVERSITÄT ZÜRICH, UNIVERSITÄT BASEL
72: MARROQUIN BELAUNZARAN, Osiris, RENNER, Christoph, PETRAUSCH, Ulf
33: EP 31: 16159099.7 32: 2016-03-08
54: HLA-B57 OPEN CONFORMERS
00: -
The invention relates to a HLA-B57 open conformer or a HLA-B57 Fc fusion protein for use in the treatment or prevention of cancer. The Fc open conformer comprises or consists of a first and a second monomer, and each monomer comprises a HLA-B57 chain. The Fc fusion protein further comprises a protein stabilizing polypeptide sequence and optionally an amino 5 acid linker. Further aspects of the invention provide combination medicaments comprising the HLA-B57 Fc open conformer and immune checkpoint inhibitors and/or checkpoint agonist agents. Furthermore, the invention relates to the use of HLA-B57 open conformer as an immunomodulator, particularly in diseases where modulation of diverse immune cell 10 components (e.g. cytotoxic CD8+ T cells, Tregs) is a therapeutic strategy, e.g. infectious diseases.

21: 2018/05797. 22: 2018-08-29. 43: 2022-01-27
51: C07K
71: Guard Therapeutics International AB
72: ROSENLÖF, Lena Wester, HÄGERWALL, Anneli Edström, ÅKERSTRÖM, Bo
33: DK 31: PA 2016 70158 32: 2016-03-18
54: NOVEL ALPHA-1-MICROGLOBULIN DERIVED PROTEINS AND THEIR USE
00: -
This invention relates to an alpha-1-microglobulin derived protein for medical use.

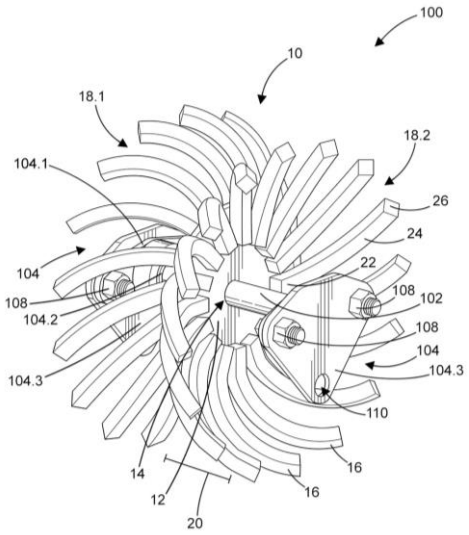
21: 2018/06187. 22: 2018-09-14. 43: 2022-03-04
51: G01B; G01D; G01F; H01L; H01R
71: BARTEC GmbH
72: Wolfgang EMMERT, Sebastian KUHN, Ralph LANIG
33: DE 31: 10 2017 010 107.8 32: 2017-10-26
54: DEVICE FOR USE IN HAZARDOUS AREAS
00: -
The device for use in an explosive atmospheres zone has a device housing and at least one energy supply part that comprises at least one battery or at least one rechargeable battery as well as energy-associated supply contacts. They interact with device-associated supply contacts when the energy supply part is connected to the device. The supply contacts have connected upstream thereof switches that, prior to separation of the energy supply part from the device, can be controlled by means of a circuit such that they deenergize the supply contacts.



21: 2018/06307. 22: 2018-09-20. 43: 2022-01-07
51: C07K
71: Bristol-Myers Squibb Company
72: MAURER, Mark F., CHEN, Tseng-hui Timothy, DEVAUX, Brigitte, SRINIVASAN, Mohan, JULIEN, Susan H., SHEPPARD, Paul O., ARDOUREL, Daniel F., CHAKRABORTY, Indrani
33: US 31: 62/096,267 32: 2014-12-23
54: ANTIBODIES TO TIGIT
00: -
The present invention provides antibodies, or antigen binding fragments thereof, that bind to human TIGIT (T cell immunoreceptor with Ig and ITIM domains), as well as uses of these antibodies or fragments in therapeutic applications, such as in the treatment of cancer or chronic viral infection. Such method of treatment include combination therapy with inhibitors of other immunomodulatory receptor interactions, such as the PD-1/PD-L1 interaction. The invention further provides polynucleotides encoding the heavy and/or light chain variable region of the antibodies, expression vectors comprising the polynucleotides encoding the heavy and/or light chain variable region of the antibodies, cells comprising the vectors, and methods of making the antibodies or fragments by expressing them from the cells.

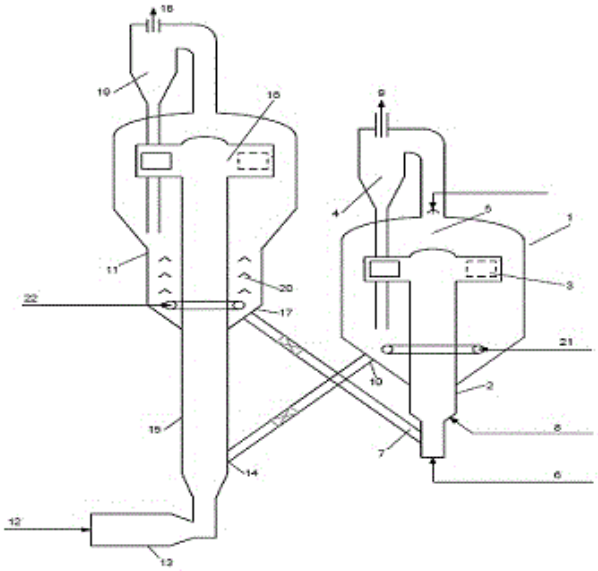


21: 2018/06394. 22: 2018-09-26. 43: 2022-01-20
51: A01C
71: VAN DER MERWE, Lodewyk Johannes, VAN DER MERWE, Petrus Willem
72: VAN DER MERWE, Lodewyk Johannes, VAN DER MERWE, Petrus Willem
33: ZA 31: 2017/04405 32: 2017-06-29
54: WHEELS
00: -
The invention provides a furrow closing wheel which includes a central hub containing a central aperture, and spokes extending radially from the central hub. The spokes are arranged to define a set of soil engaging formations which are laterally spaced apart on their outer circumferences and are shaped that upon rotation of the furrow closing wheel, they displace soil towards a central region between the soil engaging formations without applying downwards pressure to the displaced soil. The invention further provides for a furrow closing apparatus which includes a furrow closing wheel, an axle through the wheel, and attachment means receiving ends of the axle and operable to attach the furrow closing apparatus to pulling means. Upon movement of the pulling means, the furrow closing wheel rotates, the set of soil engaging formations fragmentizing side walls of a furrow and evenly distributing soil over the furrow to close it.

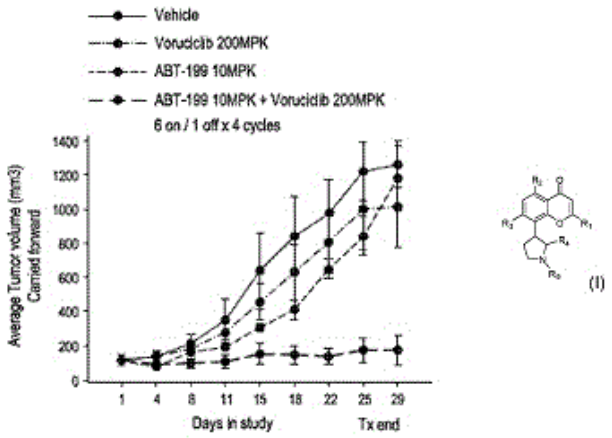


21: 2018/06783. 22: 2018-10-11. 43: 2022-01-27
51: C07C; B01J
71: HALDOR TOPSØE A/S
72: LARSEN, MORTEN BOBERG, OSMUNDSEN, CHRISTIAN MÅRUP, TAARNING, ESBEN
33: DK 31: PA 2016 00351 32: 2016-06-16
33: DK 31: PA 2016 00371 32: 2016-06-22
54: THERMOLYTIC FRAGMENTATION OF SUGARS
00: -
A process for large scale and energy efficient production of oxygenates from sugar is disclosed in which a sugar feedstock is introduced into a thermolytic fragmentation reactor comprising a fluidized stream of heat carrying particles. The heat carrying particles may be separated from the fluidized stream prior to cooling the fragmentation product and may be directed to a reheater to reheat

the particles and recirculate the heated particles to the fragmentation reactor.



21: 2018/06819. 22: 2018-10-12. 43: 2022-01-27
51: A61K; A61P
71: PRESAGE BIOSCIENCES, INC.
72: KLINGHOFFER, RICHARD, DEY, JOYOTI
33: US 31: 62/314,356 32: 2016-03-28
54: PHARMACEUTICAL COMBINATIONS FOR THE TREATMENT OF CANCER
00: -
The disclosure herein provides combination therapies for the treatment of cancers such as Leukemia, lymphoma and triple negative breast cancer. The disclosure provides combination therapies of CDK inhibitors, e.g., a CDK inhibitor represented by Formula (I): or a pharmaceutically acceptable salt thereof together with a BCL-2 inhibitor or proteasome inhibitor for the treatment of cancer.

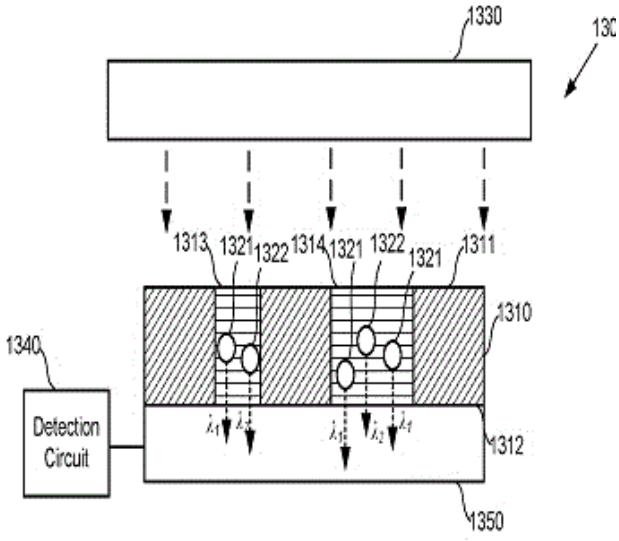


21: 2018/06892. 22: 2018-10-16. 43: 2022-01-27
51: A61K; A61P
71: SHIELD TX (UK) LIMITED
72: POWELL, JONATHAN JOSEPH, PEREIRA, DORA I A
33: GB 31: 1605474.4 32: 2016-03-31
54: FERRIC MALTOL COMPOSITIONS FOR USE IN THE TREATMENT OR PREVENTION OF CANCER AND TUMOURS
00: -
The use of ferric maltol compositions for the treatment or prevention of cancer and tumours is disclosed, in particular for the treatment or prevention of gastrointestinal cancers or gastrointestinal tumours, such as large bowel (colorectal), small bowel or upper gastrointestinal cancers.

21: 2018/06896. 22: 2018-10-16. 43: 2022-01-27
51: A01N; A23B
71: AGROFRESH INC.
72: MALEFYT, TIMOTHY, MACLEAN, DANIEL
33: US 31: 62/323,247 32: 2016-04-15
54: LARGE-SCALE METHODS OF UNIFORMLY COATING PACKAGING SURFACES WITH A VOLATILE ANTIMICROBIAL TO PRESERVE FOOD FRESHNESS
00: -
The present application relates to large-scale methods of uniformly coating packaging surfaces with a benzoxaborole compound.

21: 2018/06924. 22: 2018-10-17. 43: 2022-01-27
51: G02B; G01N; H01L
71: ILLUMINA, INC.

72: TOPOLANCIK, JURAJ, ZHONG, CHENG FRANK
33: US 31: 62/326,568 32: 2016-04-22
54: PHOTONIC STUCTURE-BASED DEVICES AND COMPOSITIONS FOR USE IN LUMINESCENT IMAGING OF MULTIPLE SITES WITHIN A PIXEL, AND METHODS OF USING THE SAME
00: -
A device for use in luminescent imaging. The device can include an array of imaging pixels, and a photonic structure disposed over the array of imaging pixels. The device further can include an array of features disposed over the photonic structure. A first feature of the array of features can be disposed over a first pixel of the array of imaging pixels, and a second feature of the array of features can be disposed over the first pixel and spatially displaced from the first feature. A first luminophore can be disposed within or over the first feature, and a second luminophore can be disposed within or over the second feature. The device further can include a radiation source configured to generate first photons having a first characteristic at a first time, and configured to generate second photons having a second characteristic at a second time. The second characteristic can be different than the first characteristic, and the second time can be different than the first time. The first pixel can selectively receive luminescence emitted by the first luminophore responsive to the first photons at the first time, and can selectively receive luminescence emitted by the second luminophore responsive to the second photons at the second time.



21: 2018/06946. 22: 2018-10-18. 43: 2022-01-27
51: A61P; A61K; C07K
71: MILLENNIUM PHARMACEUTICALS, INC.
72: DILUZIO, WILLOW, TRUONG, NOBEL T, VARGA, CSANAD M, PALANIAPPAN, VAITHIANATHAN, BROWN, JASON, FOX, IRVING H, SCHOLZ, CATHERINE
33: US 31: 61/481,533 32: 2011-05-02
33: US 31: 61/550,545 32: 2011-10-24
33: US 31: 61/585,859 32: 2012-01-12
54: FORMULATION FOR ANTI-A4ß7 ANTIBODY
00: -
Antibody formulations are described comprising a mixture of a non-reducing sugar, an anti-α4β7 antibody and at least one amino acid. The disclosed formulations have improved stability, reduced aggregate formation, and may retard degradation of the anti-α4β7 antibody therein or exhibit any combinations thereof. The present invention further provides a safe dosing regimen of these antibody formulations that is easy to follow, and which results in a therapeutically effective amount of the anti-α4β7 antibody in vivo.

21: 2018/06991. 22: 2018-10-19. 43: 2022-01-27
51: C08L
71: BOREALIS AG
72: WANG, Jingbo, KNIESEL, Claudia, AARNIO-WINTERHOF, Minna, FRIEDRICH, Karlheinz, BERGER, Friedrich
33: EP 31: 16176089.7 32: 2016-06-24
54: NOVEL POLYPROPYLENE COMPOSITIONS WITH LOW FOGGING
00: -

Polypropylene composition comprising (A) 60 to 95 wt% of a heterophasic polypropylene (HECO) comprising 10 to 30 wt% of dispersed phase with the dispersed phase having a comonomer content of 30 to 45 wt% and the HECO having a melt flow rate MFR PP in the range of 12 to 200 g/10 min and being prepared in the presence of a Ziegler Natta catalyst (ZN-C),(B) 0 to 15 wt% of one or more elastomers, (C) 5 to 20 wt% of at least one filler wherein the polypropylene composition fulfils inequation (1) fogging =0.02 MFR Comp + 0.3. The composition allows for a well-balanced combination of a good impact/stiffness balance, a good scratch resistance, low VOC and FOG emissions and remarkable good fogging values.

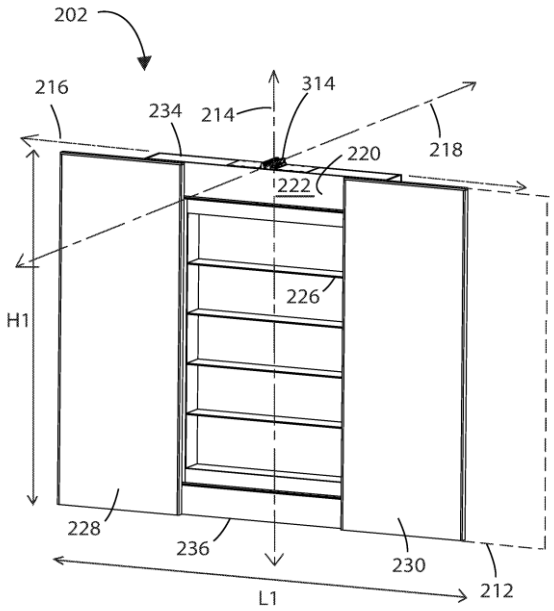
21: 2018/07384. 22: 2018-11-05. 43: 2022-03-04
51: A61B
71: Muhammad Yusuf HASSAN
72: Muhammad Yusuf HASSAN
33: ZA 31: 2017/08726 32: 2017-12-21
54: EXERCISE ARRANGEMENT
00: -
The invention discloses an exercise arrangement, which includes a software application which is adapted to enable a user to choose warm up/cardio exercises and to select a string of exercises and includes an exercise reminder to alert the user to repeat exercise during course of day at specific time.

21: 2018/08486. 22: 2018-12-14. 43: 2022-03-16
51: C08B
71: CROSSING SRL
72: BEGHETTO, Valentina, AGOSTINIS, Lodovico
33: IT 31: 102016000064894 (ITUA20164602) 32: 2016-06-22
54: USE OF 2,4-DIHALO-6-SUBSTITUTED-1,3,5-TRIAZINES AND DERIVATIVE THEREOF AS CONDENSATION, CROSS-LINKING, TANNING, GRAFTING AND CURING AGENTS
00: -
Use of 2,4-dihalo-6-substituted-1,3,5-triazines as condensing, cross-linking, tanning, grafting, curing agents for the production of amides, esters, thioesters, and stabilized collagen and leather, CMC (carboxymethyl cellulose), synthetic and natural polymers. The process enables to obtain non-toxic and totally free of heavy metals products characterized by Tg values between 80 °C and 100 °C.

21: 2019/00011. 22: 2019-01-02. 43: 2022-02-25
51: A61K; A61P
71: CIPLA LIMITED
72: RAO, Dharmaraj Ramachandra, MALHOTRA, Geena, PATHI, Srinivas Laxminarayan, PHULL, Manjinder Singh, CHENNURU, Ramanaiah
33: IN 31: 201721047383 32: 2017-12-30
54: POLYMORPHIC FORMS OF (9-[(R)-2-[[(S)-[[(S)-1-(ISOPROPOXYCARBONYL)ETHYL]AMINO]PHENOXY PHOSPHINYL]METHOXY]PROPYL] ADENINE AND PHARMACEUTICALLY ACCEPTABLE SALTS THEREOF
00: -
The present invention discloses novel crystalline polymorphic forms of (9-[(R)-2-[[(S)-[[(S)-1-(isopropoxy carbonyl) ethyl] amino] phenoxyphosphinyl] methoxy]propyl] adenine hemifumarate and 9-[(R)-2-[[(S)-[[(S)-1-(isopropoxycarbonyl)ethyl] amino]phenoxy phosphinyl]methoxy]propyl] adenine monofumarate, methods of preparation, pharmaceutical compositions and methods of therapeutic treatment involving polymorphic forms thereof.

21: 2019/00601. 22: 2019-01-29. 43: 2022-02-25
51: E04H
71: SAINT-GOBAIN PLACO

72: NATRAJAN, Vinay, KOLESHWAR, Atul, PAINUMGAL, Unnikrishnan V
33: IN 31: 201641023767 32: 2016-07-12
54: MODULAR ROOM
00: -
A movable drywall is provided. The movable drywall includes a supporting member and a pair of wings operatively coupled to the supporting member. The pair of wings is configured to move relative to the supporting member.

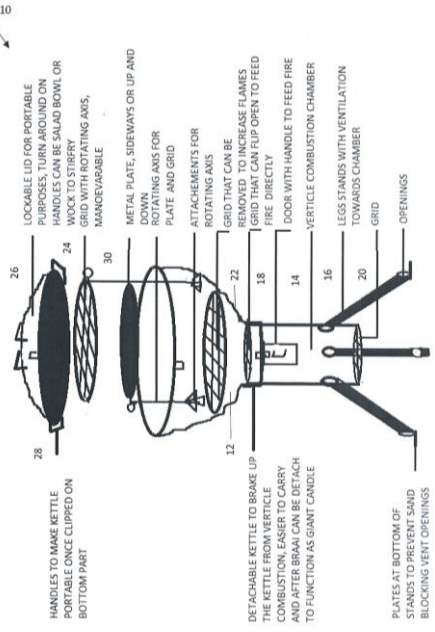


21: 2019/00716. 22: 2019-02-04. 43: 2022-01-10
51: A61P; C07D
71: Pfizer Inc.
72: BEHENNA, Douglas Carl, CHEN, Ping, FREEMAN-COOK, Kevin Daniel, HOFFMAN, Robert Louis, JALAIE, Mehran, NAGATA, Asako, NAIR, Sajiv Krishnan, NINKOVIC, Sacha, ORNELAS, Martha Alicia, PALMER, Cynthia Louise, RUI, Eugene Yuanjin
33: US 31: 62/371,602 32: 2016-08-15
54: PYRIDOPYRIMDINONE CDK2/4/6 INHIBITORS
00: -

This invention relates to compounds of general Formula (I), and pharmaceutically acceptable salts thereof, in which R^1, R^2, R^{2A}, R^{2B}, R^3, R^4, R^{5A}, R^{5B}, R^6, R^7, R^8, R^9, p, q and r are as defined herein, to pharmaceutical compositions comprising such compounds and salts, and to methods of using such compounds, salts and compositions for the treatment of abnormal cell growth, including cancer.

21: 2019/00827. 22: 2019-02-08. 43: 2022-02-16
51: A47J
71: BOTHA, Johannes Christiaan
72: BOTHA, Johannes Christiaan
54: BARBEQUE ARRANGEMENT
00: -

The invention discloses a barbeque arrangment, which includes at least one horizontal combustion chamber and at least one vertical combustion chamber, the horizontal combustion chamber and the vertical combustion chamber being adapted to provide instananeous heat to cook food immediately. The horizontal combustion chamber is located above the vertical combustion chamber. The arrangement includes supporting legs to support the vertical combustion chamber and which are hollow to allow oxygen to flow through the supporting legs to supply oxygen to the vertical combustion chamber and / or the horizontal combustion chamber.



21: 2019/01489. 22: 2019-03-11. 43: 2022-01-10
51: E21B
71: Sandvik Mining and Construction Oy
72: KIVELÄ, Tuomo, LAUNIS, Sirpa, PUURA, Jussi
33: EP(FI) 31: 18170127.7 32: 2018-04-30
54: DRILLING BOOM AND ROCK DRILLING RIG
00: -

A drilling boom and rock drilling rig. The drilling boom (3) comprises a basic boom part (BB) a distal end of which is provided with a front joint assembly (8) of wrist. The wrist connects a feed beam assembly (FBA) to the basic boom part. The wrist has three joints, which are a roll-over joint (15), a feed tilt joint (16) and a feed swing joint (17). Order of the joints of the wrist is optimized when the joints are in the mentioned or-der. The rock drilling rig (1) is provid-ed with one or more such drilling booms provided with face drilling units or bolting heads.

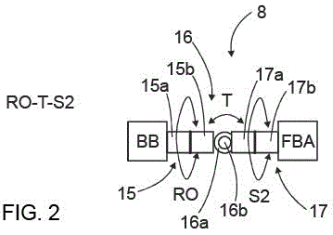
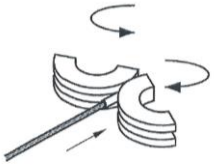


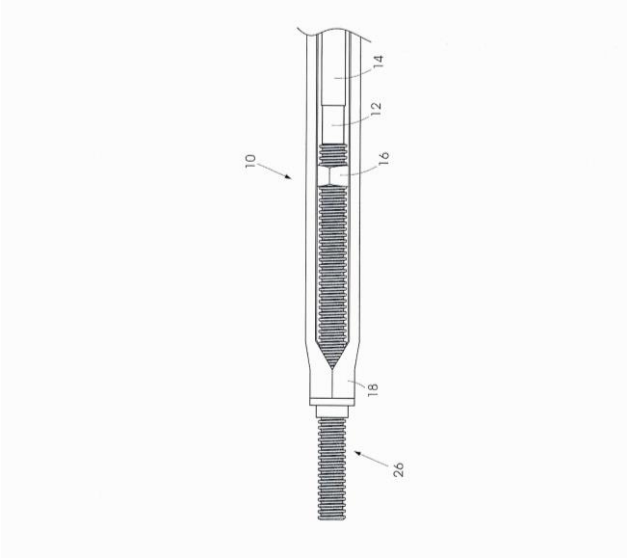
FIG. 2

21: 2019/01880. 22: 2019-03-27. 43: 2022-02-25
51: E21D
71: NCM INNOVATIONS (PTY) LTD
72: PASTORINO, Paolo Ettore
33: ZA 31: 2018/02009 32: 2018-03-27
54: CABLE ANCHOR WITH SWAGED CONNECTOR ELEMENT
00: -
The invention provides a method of manufacturing a cable anchor with at least one connector element which includes: providing a length of a high tensile steel cable which extends between a first end and a second end; providing a first connector element which comprises a cylindrical body of a steel material which extends between a proximal end and a distal end and bore which extends longitudinally within the body and which bore has an opening at least at the proximal end; providing a pair of opposed rolling swage dies, each die having an arcuate body with an arcuate pressing surface into which a groove is formed, the grooves of the pair, in adjacency, forming a swaging channel; inserting an end section of the cable into the bore of the cylindrical body through the opening to provide a cable assembly; introducing the connector element of the cable assembly to the swaging channel; and causing the pair of dies to roll on the connector element to progressively apply a focussed swaging force to each point on the connector element over which the dies roll to attach the connector element to the cable.



21: 2019/02325. 22: 2019-04-12. 43: 2022-01-10
51: A61K; A61P; C07D
71: Bayer Aktiengesellschaft, Bayer Pharma Aktiengesellschaft
72: TELLER, Henrik, VAKALOPOULOS, Alexandros, BOULTADAKIS ARAPINIS, Melissa, STRAUB, Alexander, TINEL, Hanna, BRECHMANN, Markus, WITTWER, Matthias Beat, KULLMANN, Maximilian Andreas, FREUDENBERGER, Till, MONDRITZKI, Thomas, MARQUARDT, Tobias
33: EP(DE) 31: 16188728.6 32: 2016-09-14
54: 7-SUBSTITUTED 1-ARYL-NAPHTHYRIDINE-3-CARBOXYLIC ACID AMIDES AND USE THEREOF
00: -
The invention relates to novel 7-substituted 1-aryl-naphthyridine-3-carboxylic acid amides, to methods for producing the same, to the use thereof either alone or in combination in the treatment and/or prevention of diseases and to their use for producing medicaments for the treatment and/or prevention of diseases, especially for the treatment and/or prevention of cardiovascular diseases and kidney diseases.

21: 2019/02922. 22: 2019-05-10. 43: 2022-02-25
51: E21D
71: EPIROC HOLDINGS SOUTH AFRICA (PTY) LTD
72: KNOX, Greig, PASTORINO, Paolo Ettore, ABREU, Rual
33: ZA 31: 2018/03083 32: 2018-05-11
33: ZA 31: 2018/04372 32: 2018-06-29
54: METHOD OF ENSURING CONTROLLED FAILURE OF ROCK BOLT BAR
00: -
The invention provides a method of adapting a metal bar, for use as a rock bolt, to ensure that the bar will break in a predictable manner, the method including the step of removing material from the bar in a circumferential band to reduce a diameter of the bar within the band to a minor diameter thereby to provide a failure zone within which the bar will break if subjected to enough tensile load.

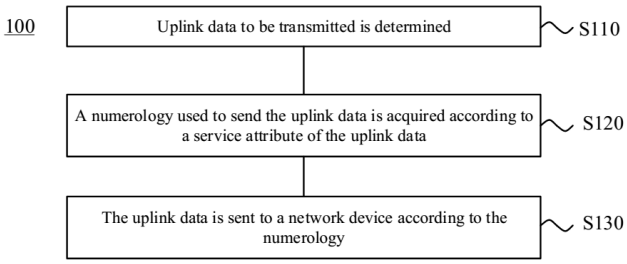


21: 2019/03212. 22: 2019-05-21. 43: 2022-02-18
51: H04W
71: GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.
72: YANG, Ning

54: METHOD FOR TRANSMITTING DATA, TERMINAL DEVICE AND NETWORK DEVICE

00: -

Disclosed are a method for transmitting data, a network device and a terminal device. The method comprises: determining uplink data to be transmitted; according to a service attribute of the uplink data, obtaining a basic parameter set used for sending the uplink data; according to the basic parameter set, sending the uplink data to a network device. The method, network device and terminal device increase system transmission flexibility.

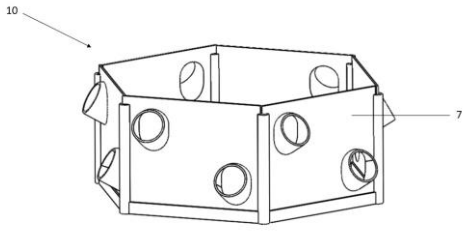


21: 2019/03398. 22: 2019-05-29. 43: 2022-02-11
51: A01G
71: IMPILO PONICS
72: BRYANT, ANTHONY DAVID, ALLAN, MICHAEL DAN
33: ZA 31: 2018/03813 32: 2018-06-06

54: MODULAR AEROPONIC SYSTEM

00: -

A modular aeroponic system comprises a plurality of panels, at least one holder means protruding from a surface of the panel, which is sized and shaped for holding a receptacle therein. There is at least one external protruding formation protruding and extending across at least a portion of the height of at least one of the external opposing side edges of the panel and at least one external receiving formation, shaped for receiving at least two panels, across at least, a portion of the height of at least one of the external side edges of each panel. In use, a plurality of panels can be joined together to form a geometric formation. It comprises a base members where a top portion of the base member is sized and shaped to receive the geometric formation of panels. The base member is hollow, such that in use, any run-off liquid from the receptacles can be caught and stored by the base member.



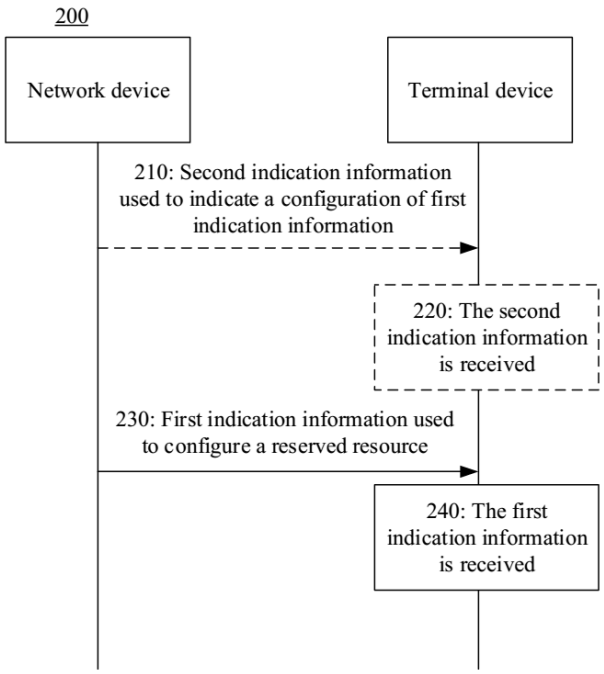
21: 2019/03586. 22: 2019-06-04. 43: 2022-02-16
51: H04W
71: GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.
72: YANG, Ning, LIN, Yanan

54: INFORMATION TRANSMISSION METHOD, NETWORK APPARATUS, AND TERMINAL APPARATUS

00: -

Provided in embodiments of the present application are an information transmission method, network apparatus, and terminal apparatus, enabling flexible distribution of reserved resources, and accordingly improving efficiency of using the reserved resources. The method comprises: a network apparatus sending second instruction information used to configure first instruction information; and the network apparatus sending, according to the configuration of the first instruction information, the

first instruction information used to instruct resource reservation.



21: 2019/03621. 22: 2019-06-06. 43: 2022-02-25
51: E21D
71: NCM INNOVATIONS (PTY) LTD
72: KNOX, Greig, ABREU, Rual, BERGHORST, Adrian
54: PNEUMATIC DRILL INSTALLED ROCK ANCHOR
00: -

The invention provides a friction bolt assembly, adapted for use with a pneumatically operable drill, which includes: a friction fit tubular sleeve which longitudinally extends between a leading end and a trailing end; a rod which longitudinally extends through the sleeve, between a first end and a second end, and which projects from either end of the sleeve to define, between the first end of the rod and the leading end of the sleeve and the second end of the rod and the trailing end of the sleeve respectively, a leading part and a trailing part; an expansion element mounted on, or integrally formed with the rod, on the leading part; a drill engaging element which is axially fixed in position on the second end of the bolt and which is adapted to engage a chuck or an end of the rock drill; a first load bearing formation mounted on the trailing part of the rod and which engages the trailing end of the sleeve; and a second load bearing formation mounted over the trailing part of the rod between the first load bearing formation and the drill engaging element.

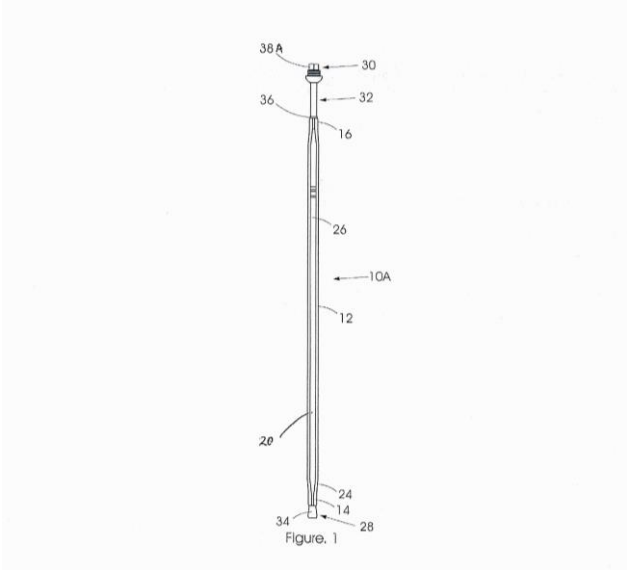
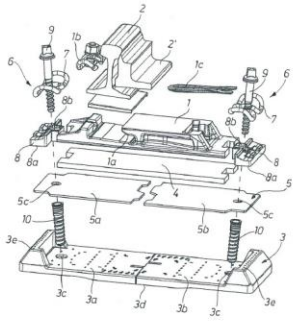


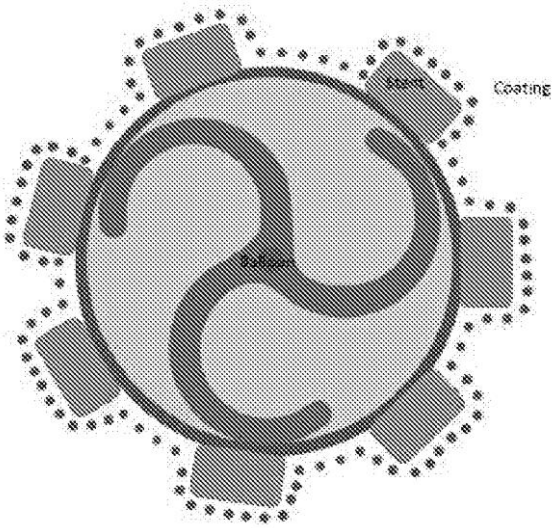
Figure. 1

21: 2019/03790. 22: 2019-06-12. 43: 2022-02-25
51: E01B
71: Schwihag AG Gleis- und Weichentechnik
72: Tilmann RÜTZEL, Stefan LIENHARD, Frank MEYER
33: DE 31: 10 2018 117 453.5 32: 2018-07-19
54: RAIL FASTENING SYSTEM
00: -

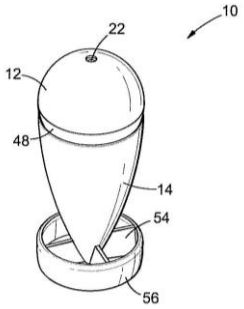
Rail fastening system for fastening at least one rail (2) to a rail substrate, preferably a solid travel path, which comprises: a rail support plate (1) arranged for holding the rail (2), wherein the rail (2) in the mounted state is in contact with the rail support plate and is fastened thereto by means of a rail mount (1a, 1b, 1c); a base plate (3) arranged for fastening the rail support plate (1) on the rail substrate, wherein the rail support plate (1) in the mounted state is fastened on the base plate (3) by way of one or more, preferably two, retaining elements (6) and the base plate (3) is in contact with the rail substrate; wherein the base plate (3) is of multi-part, preferably two-part, construction so that this is adjustable to different dimensions of the rail support plate (1).



21: 2019/03981. 22: 2019-06-19. 43: 2022-02-25
51: A61F; A61L
71: ENVISION SCIENTIFIC PRIVATE LIMITED
72: DOSHI, Manish Indulal, SOJITRA, Prakash Nanjibhai, DOSHI, Parth Manish, SHAH, Dinesh
33: IN 31: 201721012262 32: 2017-08-05
54: IMPLANTABLE DEVICE WITH ENHANCED DRUG DELIVERY AREA
00: -
Disclosed is an implantable device with enhanced drug delivery area, wherein a pre- crimped stent assembly mounted on a balloon further comprises a homogenous coating of drug and associated polymeric matrix resulting in the formation of a circumferential cylindrical film formation, upon expansion of the balloon. The cylindrical film formation by the drug delivery medical devices enables maximum coverage area of the vascular lumen area, thereby preventing any untreated area within a lumen.



21: 2019/04028. 22: 2019-06-21. 43: 2022-02-25
51: F42B
71: BUYS, André Johann
72: BUYS, André Johann
33: ZA 31: 2018/01898 32: 2018-03-22
54: LESS-LETHAL WINDOW PIERCING PROJECTILE
00: -
This invention relates to a non-lethal (also known as a less-than-lethal projectile). More particularly, the invention relates to a non-lethal projectile to be fired from a launcher such as a gas gun or paintball gun, and used to pierce a target, such as a window. According to a first aspect of the invention there is provided a piercing arrangement for a less-lethal projectile, the piercing arrangement comprising a piercing body terminating in a tip; and a fixing means for fixing the piercing body relative to an inside of the less-lethal projectile, such that the tip of the piercing body extends in a direction towards an operative front end of the projectile, and such that the tip of the piercing body is operatively provided in proximity of the operative front end of the projectile.



21: 2019/04056. 22: 2019-06-21. 43: 2022-02-16
51: H04L
71: GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.
72: LIN, Yanan
54: DATA PROCESSING METHOD, AND TERMINAL DEVICE AND NETWORK DEVICE
00: -
Provided are a data processing method, a terminal device and a network device. The method comprises: a terminal device receiving first indication information, used for code block segmentation, sent by a network device; the terminal device performing, according to the first indication information, code block segmentation on the current data, so as to obtain at least one code block, wherein the current data is data received by the terminal device from the network device, or the current data is data to be sent by the terminal device to the network device; and the terminal device encoding or decoding the at least one code block. The embodiments of the present invention improve the flexibility of an encoding/decoding process.

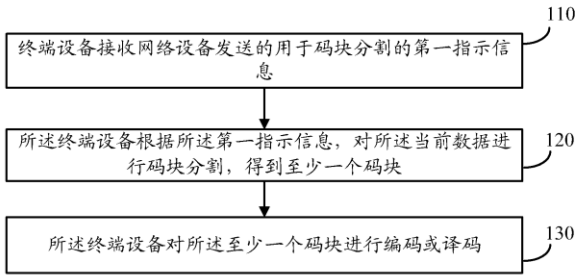


图 1

110 A terminal device receiving first indication information, used for code block segmentation, sent by a network device
120 The terminal device performing, according to the first indication information, the code block segmentation on the current data, so as to obtain at least one code block
130 The terminal device encoding or decoding the at least one code block

21: 2019/04078. 22: 2019-06-24. 43: 2022-02-11
51: B61G
71: TRANSNET SOC LTD
72: MALEKA, AUDREY MAKGALAKE, MATJEKE, VELAPHI JEFFREY, PILLAY, KESHINI, GOVENDER, DHURASHA, MUKWEVHO, GOODNESS, MAMPHEKGO, TEFELO CALYSTUS
33: ZA 31: 2018/07380 32: 2018-11-05
54: RAILCAR KNUCKLE
00: -
This invention relates to a railway car knuckle comprising a knuckle body comprising a forward portion, wherein the forward portion defines an arrangement of cavities. The invention further relates to a method of modifying an existing knuckle and the method of manufacturing a knuckle that has the cavity arrangement.

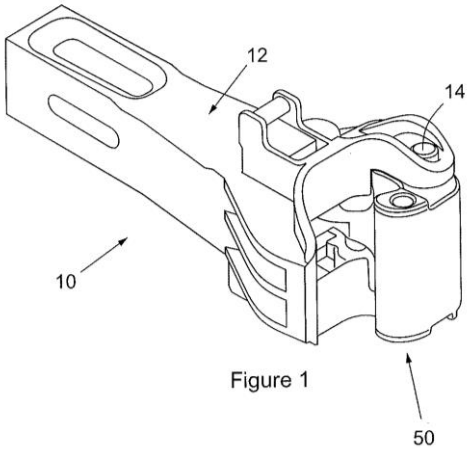
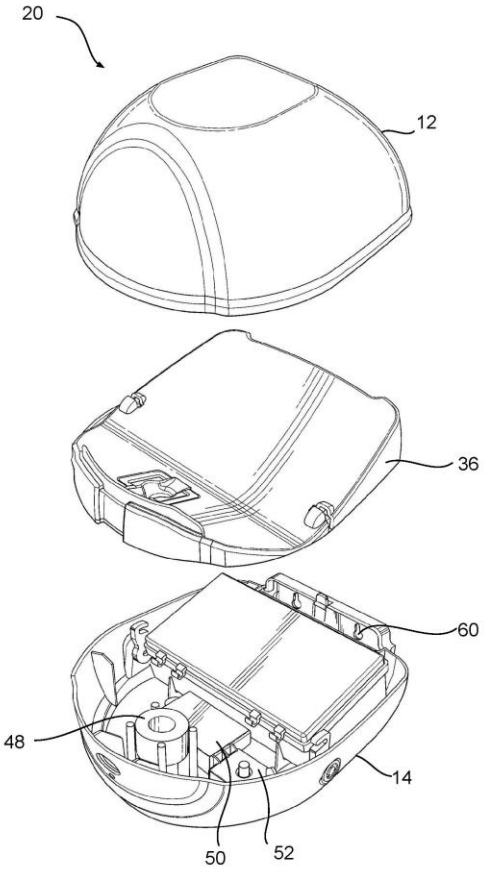


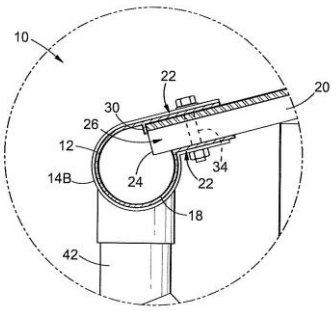
Figure 1

21: 2019/04214. 22: 2019-06-27. 43: 2022-02-25

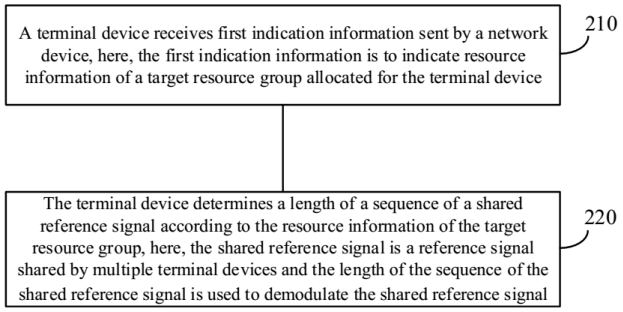
51: A47K; B67D
71: COOPER, Paul Jacobus
72: COOPER, Paul Jacobus
33: ZA 31: 2018/04332 32: 2018-06-28
54: LIQUID DISPENSER
00: -
A liquid soap dispenser comprising a generally hemispherical housing having a dispensing port and a detachable dome, a proximity detector, a fluid reservoir tray for receiving a fluid bag, and control circuitry coupled to the proximity detector for dispensing a quantity of fluid to the port, the control circuitry being housed in a fluid resistant casing for protecting the control circuitry against damage from leakage of fluid onto the circuitry.



21: 2019/04256. 22: 2019-06-28. 43: 2022-02-16
51: E04D
71: HENTINA TRUST
72: LANGE, Leslie, William
33: ZA 31: 2018/04369 32: 2018-06-29
54: GUTTER SYSTEM
00: -
This invention relates to a gutter system 10 comprising at least one elongate gutter elements 12 that includes an elongate liquid collector portion 18 for collecting liquid from a roof section 20, and opposing gripping means 22 for respectively gripping opposing faces of the roof section 20 to secure the liquid collector portion 18 to an operatively lower edge 24 of the roof section 20.



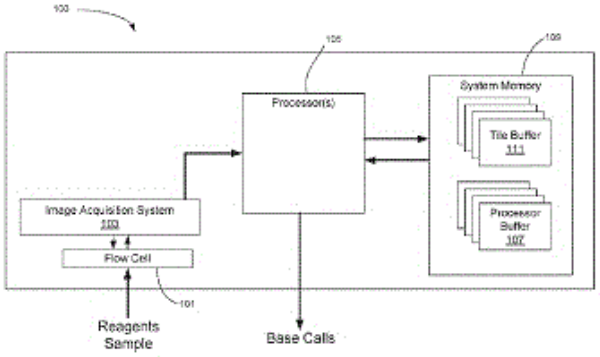
21: 2019/04264. 22: 2019-06-28. 43: 2022-02-18
51: H04W
71: GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.
72: TANG, Hai
54: METHOD FOR DEMODULATING SHARED REFERENCE SIGNAL, TERMINAL DEVICE, AND NETWORK DEVICE
00: -
Embodiments of the present application provide a method for demodulating a shared reference signal, a terminal device, and a network device. The method comprises: a terminal device receives first indication information sent by a network device, the first indication information being used for indicating resource information of a target resource group allocated for the terminal device; and the terminal device determines the length of the sequence of a shared reference signal according to the resource information of the target resource group, wherein the shared reference signal is a reference signal shared by multiple terminal devices, and the length of the sequence of the shared reference signal is used for demodulating the shared reference signal. Embodiments of the present application can implement channel estimation or channel measurement.



21: 2019/04267. 22: 2019-06-28. 43: 2022-02-18
51: C12N; C12P; C12R
71: LESAFFRE ET COMPAGNIE
72: DESFOUGERES, Thomas, FRITSCH, Emilie, PIGNEDE, Georges, RAVE, Christophe, THOREL, Claire
33: FR 31: 1750550 32: 2017-01-24
54: OBTAINING HIGH-PERFORMANCE YEAST STRAINS FOR METABOLIZING ARABINOSE
00: -
The present invention relates to methods for obtaining yeast strains suitable for metabolizing arabinose, and to improved strains with good performance as regards their capacity to ferment arabinose as well as xylose and glucose, including in the presence of inhibitors such as acetic acid.

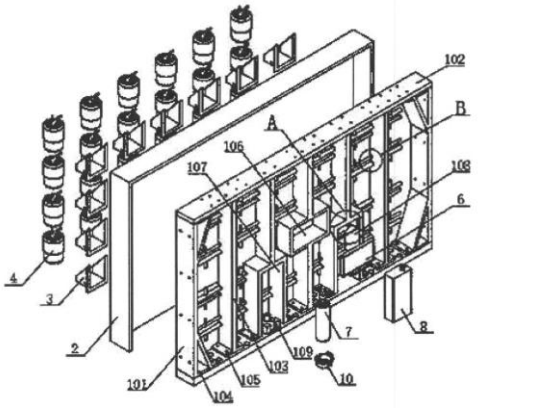
21: 2019/04280. 22: 2019-06-28. 43: 2022-01-10
51: A61K; A61P
71: Les Laboratoires Servier, Novartis AG
72: PORTER, Dale, HALILOVIC, Ensar, CHANRION, Maïa, MARAGNO, Ana Leticia, GENESTE, Olivier, MERINO, Delphine, WHITTLE, James, VAILLANT, François, VISVADER, Jane, LINDEMAN, Geoffrey, LESSENE, Guillaume, MARANGONI, Elisabetta
33: US 31: 62/443,082 32: 2017-01-06
54: COMBINATION OF A MCL-1 INHIBITOR AND A TAXANE COMPOUND, USES AND PHARMACEUTICAL COMPOSITIONS THEREOF
00: -
A combination comprising a MCL-1 inhibitor and a taxane compound, and compositions and uses thereof.

21: 2019/04381. 22: 2019-07-03. 43: 2022-01-27
51: G06F; C12Q
71: ILLUMINA, INC.
72: LANGLOIS, ROBERT, BELITZ, PAUL
33: US 31: 62/443,294 32: 2017-01-06
54: PHASING CORRECTION
00: -
Memory efficient methods determine corrected color values from image data acquired by a nucleic acid sequencer during a base calling cycle. Such methods may: (a) obtain an image of a substrate (e.g., a portion of a flow cell) including a plurality of sites where nucleic acid bases are read; (b) measure color values of the plurality of sites from the image of the substrate; (c) store the color values in a processor buffer of the sequencer's one or more processors; (d) retrieve partially phase-corrected color values of the plurality of sites, where the partially phase-corrected color values were stored in the sequencer's memory during an immediately preceding base calling cycle; (e) determine a prephasing correction; and (f) determine the corrected color values. In various implementations, these operations are all performed during a single base calling cycle. In certain embodiments, the methods additionally include using the corrected color values to make base calls for the plurality of sites. Sequencers may be designed or configured to implement such methods.

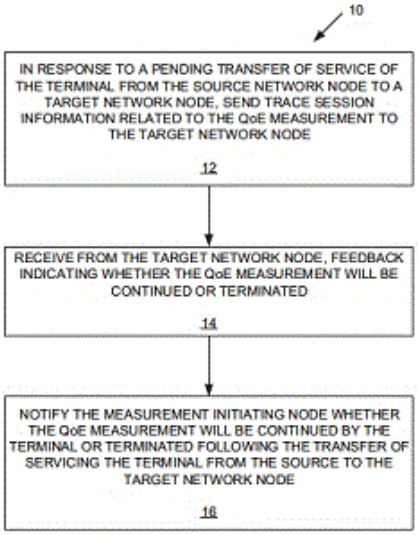


21: 2019/04489. 22: 2019-07-09. 43: 2022-03-14
51: A01G
71: Shandong Institute of Agricultural Sustainable Development
72: LIU, Tao, CUI, Fangmei, JIA, Chunlin, YAO, Huimin, YANG, Jie, WANG, Yong, LIU, Yang
33: CN 31: 20180759749.2 32: 2018-07-11
54: ANTI-FREEZING URBAN GREEN WALL APPLICABLE TO GROWTH OF GREENHOUSE PLANTS
00: -
The present invention discloses an anti-freezing urban green wall applicable to growth of greenhouse plants, which includes a main frame, a wall panel

arranged at the front end of the main frame, supporting seats arranged on the front end face of the wall panel and cultivation rooms arranged in the supporting seats, where the main body of the main frame has a frame structure, and side supporting plates having K-shaped frame structures are symmetrically arranged on the left side and the right side of the main frame. A plant is cultivated in the cultivation room, a closed structure of the cultivation room has excellent thermal insulation and heat preservation capability, and the carbon dioxide gas cylinder group transports carbon dioxide into the cultivation room through the gas pipe to form greenhouse effect in the cultivation room so as to ensure that the whole cultivation room has excellent anti-freezing capability and to be capable of facilitating better growth of the plant in the cultivation room; and the wall body of the whole green wall is formed by the main frame and the wall panel, and a separated structure of the main frame is convenient to assemble and transport the whole wall body such that a mountable range of the whole green wall is wider.



21: 2019/04702. 22: 2019-07-17. 43: 2022-01-17
51: H04W
71: TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)
72: SHI, NIANSHAN, EKLÖF, CECILIA
33: US 31: 62/459,883 32: 2017-02-16
54: METHOD AND NETWORK NODES TO MANAGE QOE MEASUREMENT COLLECTION DURING RELOCATION OR HANDOVER
00: -
Quality of Experience (QoE) Measurement collection is continued from a source network node (200) servicing a terminal (210) to a target network node (200) following a relocation or handover of the terminal (210). When the source network node (200) is preparing for the relocation, e.g., SRNS Relocation, Intra-RAT handover (e.g., X2 handover), or Inter-RAT handover, for a terminal (210) which has QoE Measurement configured, the trace session information, which has been received by the source network node from a Measurement Initiating node (200), is sent (12) from the source network node (200) to the target network node (200). The target network node (200) provides (14, 26) information about the handling of the ongoing Qo E measurement to the source network node (200), e.g., whether the QoE measurement is to be continued or terminated. The source network node (200) updates to the Measurement Initiating node (200) that the trace session is transferred to the target network node (200). The Measurement Initiating node (200) may then continue the trace session management towards the target network node (200). The trace session information transferred (12, 22) to the target network node (200) may be the same as that in the source network node (200), or it may be modified by the Measurement Initiating node (200).



21: 2019/04937. 22: 2019-07-26. 43: 2022-01-17
51: B41J
71: Hewlett-Packard Development Company, L.P.
72: NG, Boon Bing, PAN, Rui, SUDHAKAR, Mohan Kumar, HALL, Brendan
54: SELECTORS FOR NOZZLES AND MEMORY ELEMENTS

00: -
In some examples, a circuit for use with a memory element and a nozzle for outputting fluid, includes a data line, a fire line, and a selector responsive to the data line to select the memory element or the nozzle. The selector is to select the memory element responsive to the data line having a first value, and to select the nozzle responsive to the data line having a second value different from the first value. The fire line is to control activation of the nozzle in response to the nozzle being selected by the selector, and to communicate data of the memory element in response to the memory element being selected by the selector.

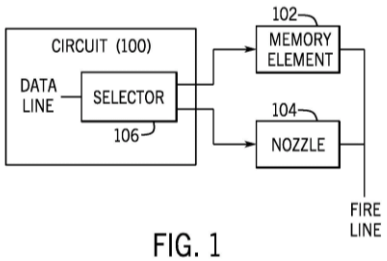
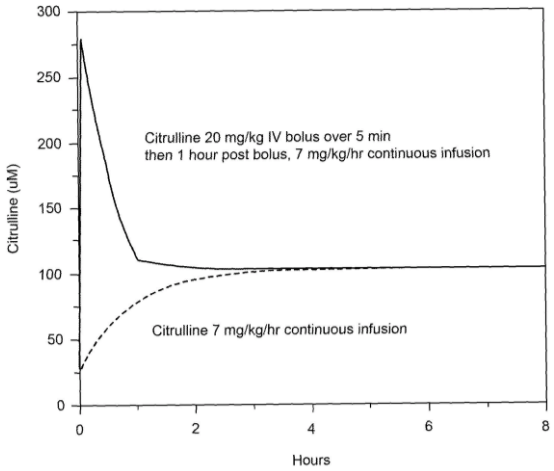
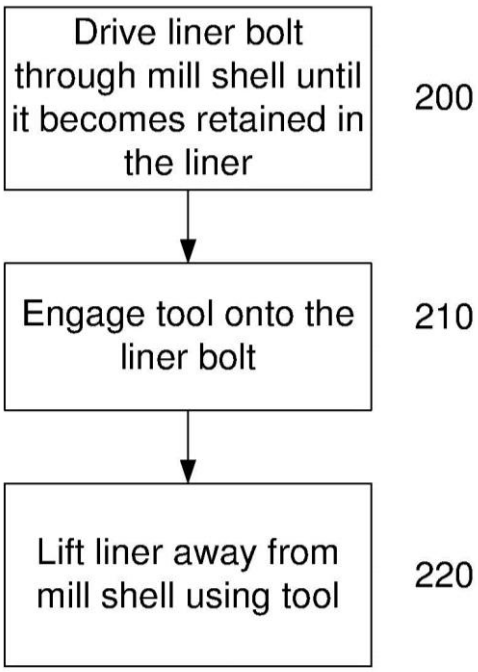


FIG. 1

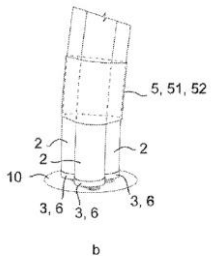
21: 2019/05081. 22: 2019-07-31. 43: 2022-01-10
51: A61K
71: Vanderbilt University, The University of Mississippi Medical Center
72: SUMMAR, Marshall, BARR, Frederick, MAJUMDAR, Suvankar
33: US 31: 62/463,931 32: 2017-02-27
54: CITRULLINE FOR TREATMENT OF SICKLE CELL CRISIS
00: -
A method for administration of citrulline for the treatment of sickle cell disease and other complications of sickle cell disease thereof.



21: 2019/05382. 22: 2019-08-14. 43: 2022-01-10
51: B02C; B23P
71: Russell Mineral Equipment Pty Ltd
72: WATERS, Steven Mark, RUBIE, Peter John
33: AU 31: 2017900684 32: 2017-02-28
54: MILL LINER REMOVAL SYSTEM
00: -
The present disclosure relates to a method of removing a liner from a mill, the liner fastened to a mill shell by at least one liner bolt, the method including: (a) driving the at least one liner bolt through the mill shell until it becomes retained in the liner, whereby in a retained position, a head of the at least one liner bolt is exposed so as to project proud of the liner towards an interior of the mill; (b) engaging a tool onto the at least one liner bolt; and, (c) lifting the liner away from the mill shell using the tool to thereby enable the liner to be removed from the mill. A system for removing a liner from a mill and tool for use in removing a liner from a mill are also described.



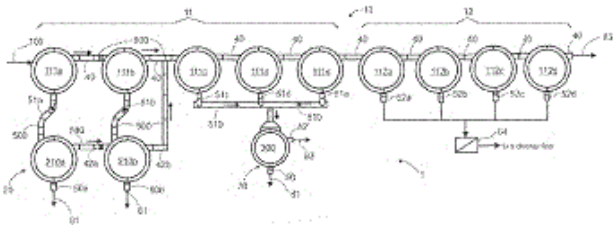
21: 2019/05578. 22: 2019-08-23. 43: 2022-02-25
51: E04H
71: ZEPELIN, S.R.O.
72: Juraj BREZAN (Slovakian Citizen), Henrich HODÁK (Slovakian Citizen), Pavol OCHODNICKÝ (Slovakian Citizen)
33: SK 31: PUV50015-2017 32: 2017-02-14
54: INFLATABLE BEAM AND USE OF THIS INFLATABLE BEAM
00: -
Inflatable beam (1) comprising fire hoses or other industrial seamless hoses with woven textile braiding, inner air-tight lining and optional outer protective coating, is composed of an assembly of at least three hoses (2) arranged longitudinally side by side, where ends of the hose (2) are closed by a closure (3). At least one of the hoses (2) comprises at least one inlet and/or discharge member (4) for an inflating medium. The hoses (2) are at the point of contact of their circumferences, or at place of the closest distance of their circumferences mechanically connected by stiff connections (5) spaced along the length of the assembly of the hoses (2), where at least one length (L) of at least one hose (2) between adjacent connections (5) of the hoses (2) is smaller than the length (M) of the other hoses (2) between these connections (5).



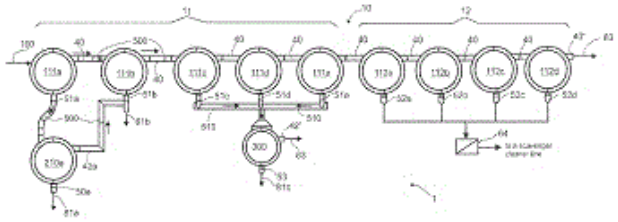
21: 2019/05583. 22: 2019-08-23. 43: 2022-01-10
51: A21D; C12N
71: Novozymes A/S, Puratos nv/sa
72: OESTDAL, Henrik, LANDVIK, Sara Maria, OLINSKI, Robert Piotr, AGACHE, Evelien, VAN WINCKEL, Bruno, ARNAUT, Filip
33: EP(DK) 31: 17156925.4 32: 2017-02-20
54: LIPOLYTIC ENZYME FOR USE IN BAKING
00: -
A polypeptide having lipolytic enzyme activity, selected from the group consisting of: (a) a polypeptide having at least 65% sequence identity to amino acids 21 to 309 of SEQ ID NO: 1; (b) a polypeptide encoded by a polynucleotide that hybridizes under medium stringency conditions with the polypeptide coding sequence of SEQ ID NO: 2; (c) a polypeptide encoded by a polynucleotide having at least 65% sequence identity to the polypeptide coding sequence of SEQ ID NO: 2; and (d) a fragment of the polypeptide of (a), (b) or (c) that has lipolytic enzyme activity.

21: 2019/05593. 22: 2019-08-23. 43: 2022-01-27
51: B03D; C22B
71: OUTOTEC (FINLAND) OY
72: RINNE, ANTTI, BOURKE, PETER
33: FI 31: PCT/FI2017/050094 32: 2017-02-15
54: FLOTATION ARRANGEMENT
00: -
A flotation arrangement for treating mineral ore particles suspended in slurry is presented. The arrangement comprises a primary flotation line (10) with a rougher part (11) comprising at least two rougher primary flotation cells (111a, 111b) and a scavenger part (12) comprising at least two scavenger primary flotation cells (112a, 112b), and a secondary flotation line (20) comprising at least two secondary flotation cells (210a, 210b). A first secondary flotation cell (210a) is arranged to receive primary overflow (51 a) from at least one rougher primary flotation cell (111a), and a further secondary

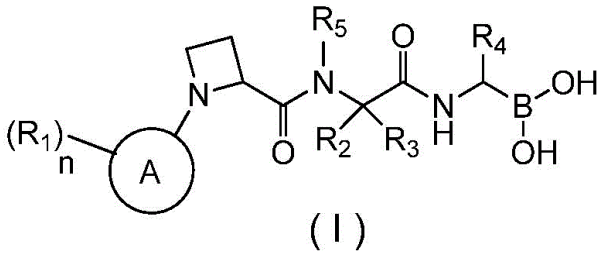
flotation cell (210b) to receive primary overflow (51 b) from at the least one further rougher primary flotation cell (111b). The further secondary flotation cell (210b) is arranged in fluid communication with a previous secondary flotation cell (210a), and underflow (42a) from a first secondary flotation cell (210a) is arranged to flow into the further secondary flotation cell (210b), or arranged to be combined with secondary underflow (42b) of the further secondary flotation cell.



21: 2019/05624. 22: 2019-08-26. 43: 2022-01-27
51: B03D; C22B
71: OUTOTEC (FINLAND) OY
72: RINNE, ANTTI, BOURKE, PETER
33: FI 31: PCT/FI2017/050094 32: 2017-02-15
54: FLOTATION ARRANGEMENT
00: -
A flotation arrangement for treating mineral ore particles suspended in slurry is presented. The arrangement comprises a primary flotation line (10) with a rougher part (11) and a scavenger part (12). Overflow of at least one rougher primary flotation cell (111a) is arranged to flow directly into a rougher cleaner cell (210a). Underflow (42a) from a first cleaner flotation cell is arranged to be combined into overflow (51b) from a rougher primary flotation cell downstream (111b) from the rougher primary flotation cell from which the first rougher cleaner flotation cell (210a) is arranged to receive primary overflow (51a); or into combined overflows (51b, 51c, 51d, 51e) from rougher primary flotation cells (111c, 111d, 111e) downstream from the rougher primary flotation cell from which the first rougher cleaner flotation cell is arranged to receive primary overflow; or into overflow (42b) from an additional rougher cleaner cell (210b) arranged to receive primary overflow from at least one rougher primary flotation cell downstream from the rougher primary flotation cell from which the first rougher cleaner flotation cell is arranged to receive primary overflow.



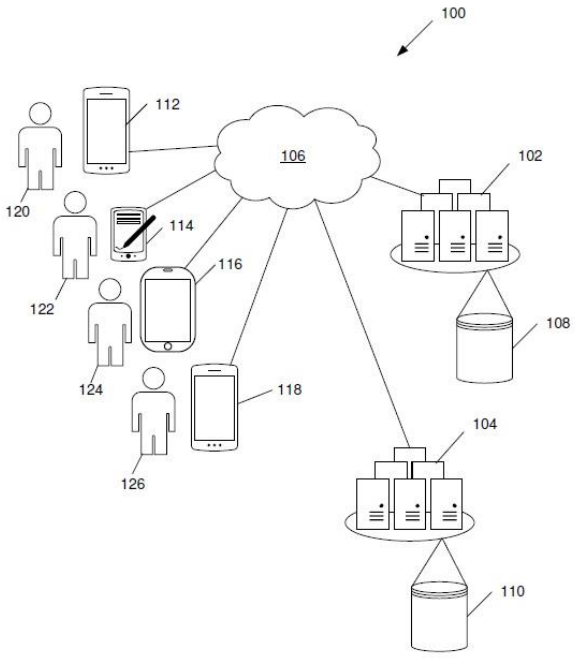
21: 2019/05646. 22: 2019-08-27. 43: 2022-01-20
51: A61K; A61P; C07F
71: Chia Tai Tianqing Pharmaceutical Group Co., Ltd.
72: XIONG, Jian, XIE, Cheng, CHEN, Kevin X., XU, Xiongbin, ZHANG, Xuejin, GONG, Zhen, LI, Jian, CHEN, Shuhui, ZHANG, Aiming, JIANG, Zhulian, ZHANG, Xiquan, TIAN, Xin
33: CN 31: 201710112350.0 32: 2017-02-28
54: AZETIDINE DERIVATIVE
00: -
Disclosed in the present application are a compound represented by formula (I), or a pharmaceutically acceptable salt, a tautomer thereof, a stereoisomer thereof, or a geometrical isomer thereof, and uses thereof in the preparation of drugs for treating or preventing multiple myeloma.



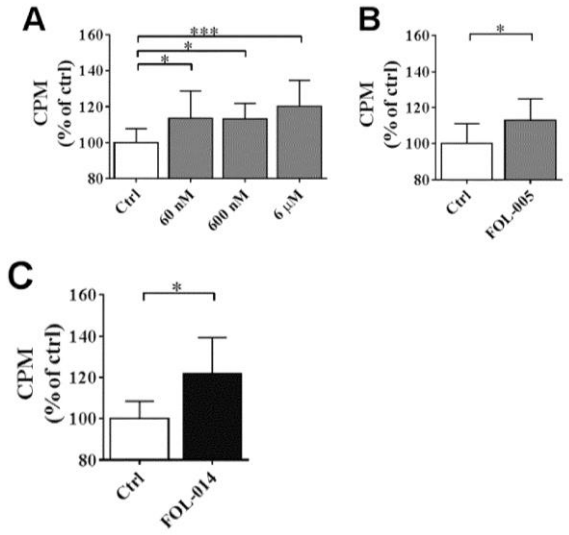
(I)

21: 2019/05836. 22: 2019-09-04. 43: 2022-02-25
51: H04N
71: GREYLING, Eben-Haeser
72: GREYLING, Eben-Haeser
33: ZA 31: 2017/01698 32: 2017-03-09
33: ZA 31: 2017/01697 32: 2017-03-09
33: ZA 31: 2017/01699 32: 2017-03-09
54: SYSTEM AND METHOD FOR NAVIGATING IN A DIGITAL ENVIRONMENT
00: -
The invention provides a system and method for navigating in a digital environment. The method includes providing a playback region on a display associated with the electronic device and providing a preview screen in the playback region prior to and/or after playback of a primary video. The playback region is divided into multiple secondary preview

sections, and each section is selectable and represents a link to a location which may be associated with the primary video. A play button is provided and associated with the primary video. If a user selects the play button, the primary video is played. If a user selects a secondary preview section, navigation to the link of the secondary preview section is performed.

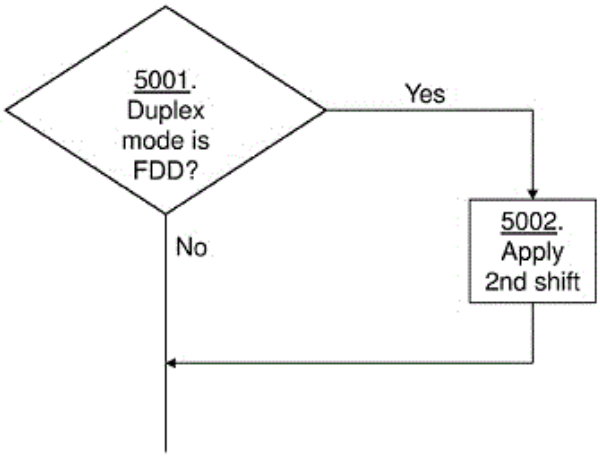


21: 2019/05891. 22: 2019-09-06. 43: 2022-02-18
51: A61K; C07K; A61P
71: FOLLICUM AB
72: ALENFALL, Jan, DUNÉR, Pontus, HULTGÅRDH NILSSON, Anna, WALSE, Björn
33: EP 31: 17169500.0 32: 2017-05-04
54: PEPTIDES FOR TREATMENT OF DIABETES
00: -
The present disclosure concerns agents and their use in the treatment of endocrine, nutritional and/or metabolic diseases in a mammal. The disclosure furthermore concerns novel peptides.



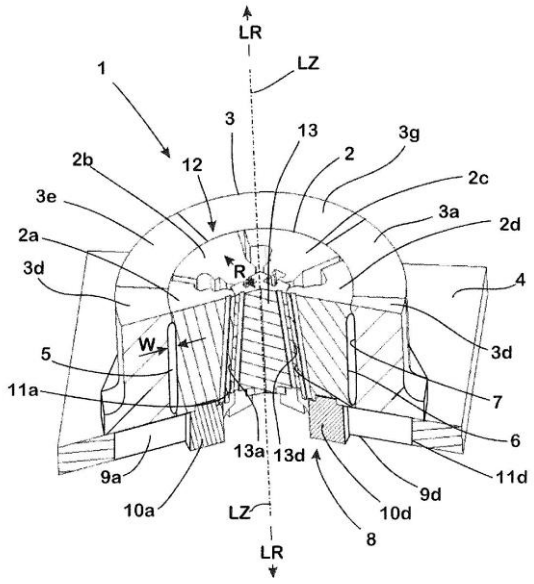
21: 2019/05975. 22: 2019-09-10. 43: 2022-01-27
51: H04L; H04W
71: TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)
72: BALDEMAIR, ROBERT, WANG, YI-PIN ERIC, DAHLMAN, ERIK, PARKVALL, STEFAN, BERGMAN, JOHAN, LIBERG, OLOF
33: US 31: 62/475,983 32: 2017-03-24
54: RADIO NETWORK NODE, WIRELESS DEVICE AND METHODS PERFORMED THEREIN FOR HANDLING COMMUNICATION IN A WIRELESS COMMUNICATION NETWORK
00: -
Embodiments herein disclose e.g. a method performed by a wireless device (10) for handling communication for the wireless device in a second wireless communication network. The second wireless communication network coexists with a first wireless communication network on a same bandwidth in frequency, wherein the first wireless communication network applies a first shift in frequency in uplink transmissions. The wireless device receives from a radio network node (12,13), an indication indicating application of a second shift in frequency to uplink transmissions in case the second wireless communication network uses Frequency Division Duplex (FDD). The wireless device further applies the second shift in frequency to uplink transmissions, wherein the second shift defines a shift in frequency to a subcarrier relative to a subcarrier grid of the second wireless communication network or a shift in frequency to the

subcarrier grid of the second wireless communication network.



21: 2019/06005. 22: 2019-09-11. 43: 2022-01-27
51: B22C
71: Nemak, S.A.B. de C.V.
72: GRESSENBAUER, Markus, STRASSL, Gerhard, RESCH, Michael
33: DE 31: 10 2017 105 478.2 32: 2017-03-15
54: DEVICE FOR SHOOTING A CASTING CORE
00: -

The present invention relates to a device (1; 100) for shooting a casting core (G) that encloses a free inner chamber (I) at its outer boundaries, wherein the device (1; 100) has a mould cavity (5) that forms the casting core (G), which mould cavity encircles an inner slide (2) that extends along a longitudinal axis (LZ) and is bounded on its external side by an outer slide (3) that encircles the mould cavity (5), wherein the inner width (W) of the mould cavity (5) is determined by the distance between the inner surface (7) of the outer slide (3) allocated to the mould cavity (5) and the outer surface (6) of the inner slide (2). The device (1; 100) according to the invention enables operationally reliable production, including on a large scale, of casting cores (G) that have a basic tube shape but a fine wall structure. This is achieved in that the inner slider segments (2a-2e) can be adjusted between a receiving position, in which they are positioned closer to each other and to the longitudinal axis (LZ) of the inner slide (2) and the inner width (W) of the mould cavity between the inner slide (2) and the outer slide (3) is enlarged, and a shooting position, which is closer to the outer slide (3) and in which the inner width (W) of the mould cavity (5) corresponds to a specification for the casting core (G) to be shot.



21: 2019/06028. 22: 2019-09-12. 43: 2022-01-14
51: F42D
71: AEL MINING SERVICES LIMITED
72: PIENAAR, Andre, WILSON, Laurence, KADER, Shaffee Mohamed
33: ZA 31: 2018/07644 32: 2018-11-14
54: AUTONOMOUS EXPLOSIVES LOADING
00: -

An explosive delivery vehicle for use in a system for autonomously loading an explosive into a borehole the vehicle including a chassis, a container on the chassis for storing a quantity of the explosive, a mechanism for discharging the explosive from the container in a controlled manner, drive means for movably supporting the chassis on the ground, a primary motive source, a first drive chain, a second drive chain, and a selector for operatively engaging, according to requirement, the first drive chain or the second drive chain with the primary motive source thereby to transfer motive energy from the primary motive source to the drive means and so cause movement of the drive means over the ground.

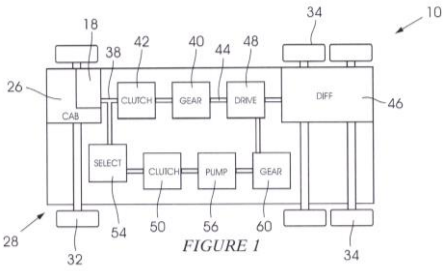
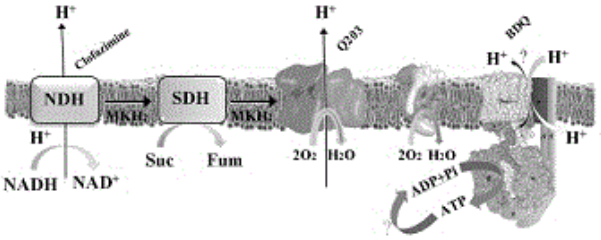


FIGURE 1

21: 2019/06036. 22: 2019-09-12. 43: 2022-01-17
51: A01N; A01P
71: BIO-FERM BIOTECHNOLOGISHE ENTWICKLUNG UND PRODUKTION GMBH.
72: BINDER, Eva-Maria, DONAT, Christina Maria
33: AT 31: A 104/2017 32: 2017-03-15
54: PREPARATION CONTAINING AT LEAST FLUDIOXONIL AND A MIXTURE CONTAINING AUREOBASIDIUM PULLULANS STRAINS
00: -
The invention relates to a preparation containing at least one chemical fungicide. In addition to the at least one chemical fungicide, a mixture is included which contains at least the strains of Aureobasidium pullulans DSM 14940 and DSM 14941. The at least one chemical fungicide and the mixture of the strains Aureobasidium pullulans are present in the preparation in synergistically active quantities, and the at least one chemical fungicide is selected from fludioxinil or a combination containing fludioxinil and at least one second chemical fungicide. The invention also relates to the use of the preparation and to a method for the prophylaxis or the reduction of the spread of at least one plant disease which is produced by a fungal pathogen.

21: 2019/06047. 22: 2019-09-12. 43: 2022-01-27
51: C07D; A61K; A61P
71: NANYANG TECHNOLOGICAL UNIVERSITY, NATIONAL UNIVERSITY OF SINGAPORE
72: GRÜBER, GERHARD, BATES, RODERICK WAYLAND, HOTRA, ADAM, DICK, THOMAS, PETHE, KEVIN
33: SG 31: 10201701210T 32: 2017-02-15
54: COMPOUNDS FOR TREATING TUBERCULOSIS
00: -
The present invention relates to pyrimidine compounds and compositions for treating tuberculosis. These compounds may be used to target the F1 domain of F-ATP synthase and may be used with bedaquiline or 6-chloro-2-ethyl-N-[[4-[4-[4-(trifluoromethoxy)phenyl]piperidin-1 -yl]phenyl]methyl]imidazo[1,2-a]pyridine-3-carboxamide (Q203) or a combination thereof.



21: 2019/06107. 22: 2019-09-16. 43: 2022-01-27
51: A61K; A61P; C07D
71: The Scripps Research Institute, BlackThorn Therapeutics, Inc.
72: ROBERTS, Edward, GUERRERO, Miguel A., URBANO, Mariangela, ROSEN, Hugh, JONES, Robert M., LAXAMANA, Candace Mae, ZHAO, Xianrui, TURTLE, Eric Douglas
33: US 31: 62/473,209 32: 2017-03-17
54: KAPPA OPIOID RECEPTOR ANTAGONISTS AND PRODUCTS AND METHODS RELATED THERETO
00: -
Compounds are provided that antagonize the kappa-opioid receptor (KOR) and products containing such compounds, as well as to methods of their use and synthesis. Such compounds have the structure of Formula (I), or a pharmaceutically acceptable isomer, racemate, hydrate, solvate, isotope or salt thereof: (I) wherein X, Y, R^1, R^2, R^4, R^5 R^6, R^7, R^8 and R^{11} are as defined herein.

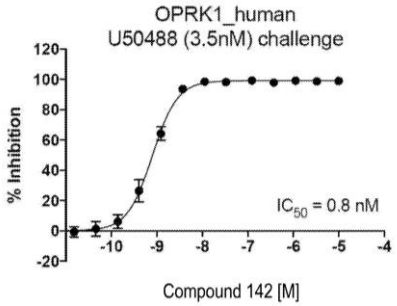
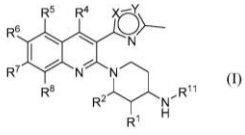
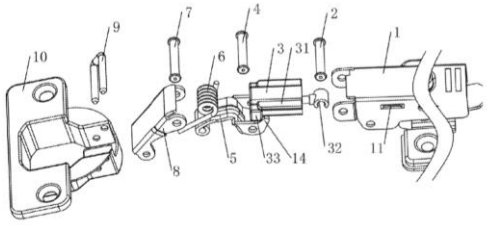


FIG. 7A

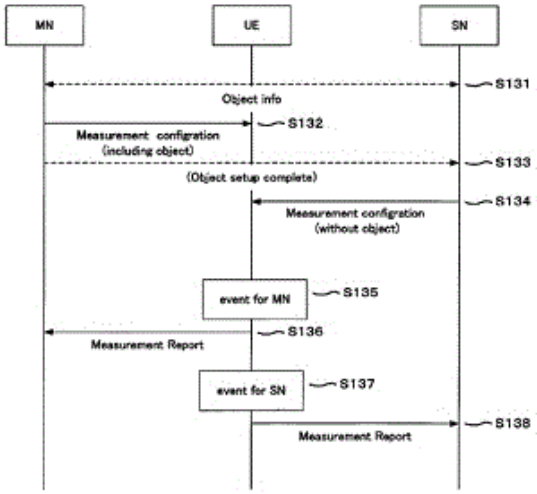

(I)

21: 2019/06109. 22: 2019-09-16. 43: 2022-01-20

51: E05F
71: LIANG, Peiling
72: LIANG, Yelin, LAO, Qingjun, ZHU, Haihui
33: CN 31: 201710378852.8 32: 2017-05-25
54: DOOR HINGE HAVING BUFFERING FUNCTION
00: -
Disclosed is a door hinge having a buffering function, including: a casing (1) within which a damper (3) is disposed in an axially movable manner, an end portion of a piston rod at the front end of the damper (3) being fixedly connected to the casing (1); a hinge cup (10); a linking member A (5) with a right end rotatably disposed inside the casing (1) via a first rotating shaft (4) and a left end rotatably connected to the hinge cup (10) via a third rotating shaft; and a connecting member B (8) with a right end rotatably disposed inside the casing (1) via a second rotating shaft (7) and a left end rotatably connected to the hinge cup (10) via a fourth rotating shaft. The end portion at the right end of the linking member A (5) or the connecting member B (8) is disposed corresponding to the rear end of the damper (8). The moving direction of the damper (3) is same as that of the linking member A (5) or the connecting member B (8), which greatly extends the stroke of the linking member A (5) or the connecting member B (8), thus achieving a better technical effect of buffering.



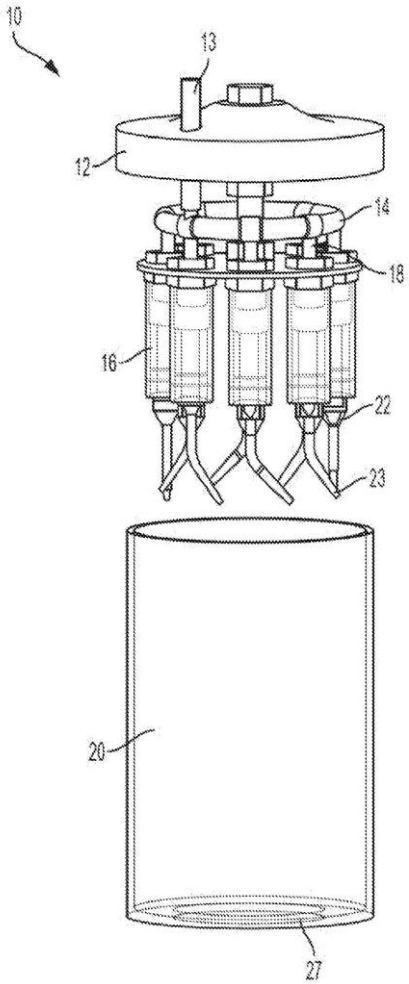
21: 2019/06114. 22: 2019-09-16. 43: 2022-01-27
51: H04W
71: SHARP KABUSHIKI KAISHA, FG INNOVATION COMPANY LIMITED
72: TSUBOI, HIDEKAZU, YAMADA, SHOHEI, YOKOMAKURA, KAZUNARI, TAKAHASHI, HIROKI
33: JP 31: 2017-055588 32: 2017-03-22
54: TERMINAL APPARATUS, BASE STATION APPARATUS, COMMUNICATION METHOD, AND INTEGRATED CIRCUIT
00: -
A terminal apparatus receives a first measurement configuration from a first base station apparatus via a first SRB and receives a second measurement configuration from a second base station apparatus via a second SRB, and transmits via the first SRB a first measurement result for the first measurement configuration configured from the first base station apparatus via the first SRB and transmits via the second SRB a second measurement result for the second measurement configuration configured from the second base station apparatus via the second SRB.



21: 2019/06158. 22: 2019-09-18. 43: 2022-01-27
51: A01N; A01P
71: UPL LTD
72: FABRI, Carlos Eduardo, SHROFF, Rajju Devidas, SHROFF, Jaidev Rajnikant, SHROFF, Vikram Rajnikant
33: IN 31: 201731008009 32: 2017-03-07
54: FUNGICIDAL COMBINATIONS
00: -
A combination comprising a multi-site contact fungicide, a succinate dehydrogenase inhibitor fungicide and a second systemic fungicide and a method using the same.

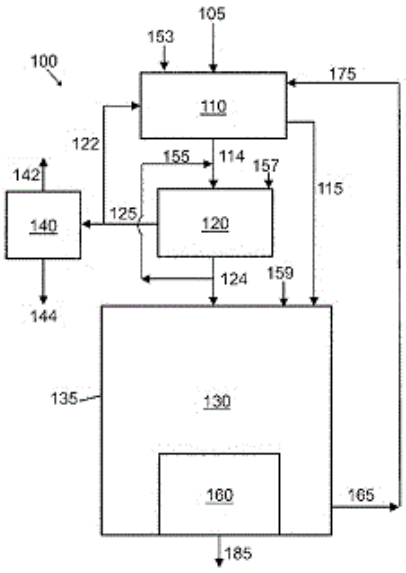
21: 2019/06161. 22: 2019-09-18. 43: 2022-01-10
51: B65B; B67C
71: Profounda Health and Beauty Inc.
72: MACLAUGHLAN, Todd Ewen
33: US 31: 62/525,324 32: 2017-06-27
54: TIP FILLING METHOD AND IMPROVEMENTS

00: -
A device for filling a container, such as a dispensing tip, with a powdered or liquid material, and methods of use of the device are disclosed. The device generally includes a vacuum manifold having at least one port, and a vacuum source for creating a negative pressure in the vacuum manifold. The device may further include at least one container having an axial bore therethrough, a proximal end, and a distal end which includes a stop positioned therein. The negative pressure created in the vacuum manifold by the vacuum pump is sufficient to pull the powdered or liquid material through the distal end into the axial bore of the at least one container. A clearance between an outer surface of the stop and an inner wall of the container is configured to prevent passage of the powdered or liquid material.



21: 2019/06166. 22: 2019-09-18. 43: 2022-01-27

51: C02F
71: EVOQUA WATER TECHNOLOGIES LLC
72: ERDOGAN, ARGUN OLCAYTO, ZACERKOWNY, OREST
33: US 31: 62/482,328 32: 2017-04-06
54: WASTEWATER TREATMENT SYSTEM AND METHOD
00: -
Systems and methods for treating wastewater including a contact tank configured to mix influent wastewater with activated sludge to form a mixed liquor, a dissolved air flotation unit having an inlet and an outlet, the inlet of the dissolved air flotation unit in fluid communication with an outlet of the contact tank, and a membrane bioreactor including a biological treatment vessel having an inlet in fluid communication with the outlet of the dissolved air flotation unit and an activated sludge outlet in fluid communication with an inlet of the contact tank.



21: 2019/06197. 22: 2019-09-19. 43: 2022-01-27
51: E21B; E21C; E21D
71: Sandvik Intellectual Property AB
72: GARCIA, Luis, STABER, Guenther, HUETTER, Erika
33: EP(SE) 31: 17166796.7 32: 2017-04-18
54: CUTTING APPARATUS
00: -
Cutting apparatus (100) for creating tunnels or subterranean roadways comprises: a support structure (800) having first and second cutting assemblies (900), with a rotatable cutting head (128)

and a mounting assembly (902), which includes a first pivot axis (400) wherein the cutting head is movable about the first pivot axis (400) thereby enabling the cutting head (128) to move in a generally sideways direction, mounting assembly includes second pivot axis (401) wherein the cutting head (128) is movable about the second pivot axis (401) thereby enabling the cutting head (128) to move in an upwards-downwards direction; cutter (127) includes disc body (711) and buttons (710) for abrading rock, wherein some buttons (710) have a central longitudinal axis (745) that subtends an angle with respect to reference axis (746), which extends perpendicularly outwards from the central longitudinal axis (704) of the shaft, wherein the angle is between 20° and 34°.

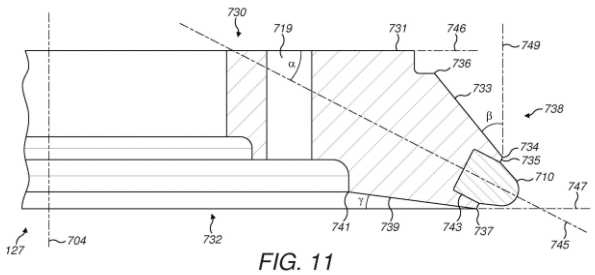
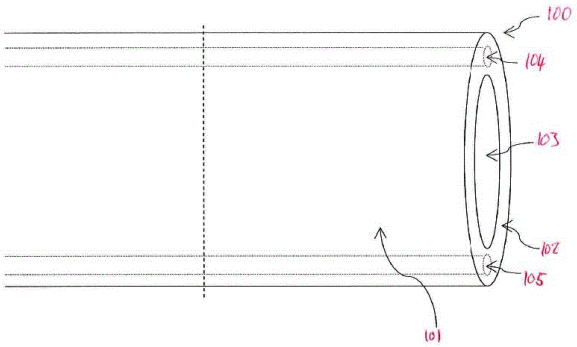


FIG. 11

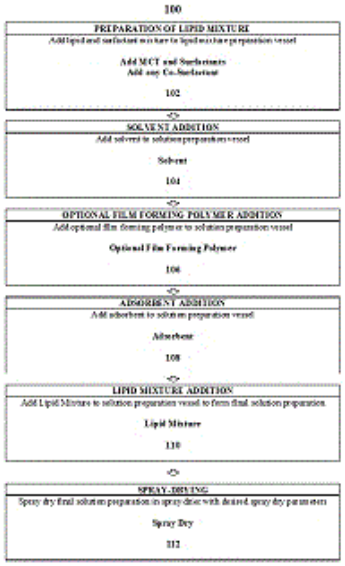
21: 2019/06213. 22: 2019-09-19. 43: 2022-01-27
51: A61K; C07D
71: THE BROAD INSTITUTE, INC., PRESIDENT AND FELLOWS OF HARVARD COLLEGE
72: COMER, EAMON, KATO, NOBUTAKA, MORNINGSTAR, MARSHALL, MELILLO, BRUNO
33: US 31: 62/473,771 32: 2017-03-20
54: COMPOUNDS AND METHODS FOR THE TREATMENT OF PARASITIC DISEASES
00: -
Provided herein are compounds useful for the treatment of various parasitic diseases. These compounds, as well as pharmaceutically acceptable salts thereof may be formulated in pharmaceutical compostions, veterinary compositions and may be used in methods of treatment and/or prophylaxis of diseases spread by parasites, including malaria and cryptosporidiosis.

21: 2019/06266. 22: 2019-09-23. 43: 2022-01-27
51: H01B
71: NOKIA SHANGHAI BELL CO., LTD.
72: PABST, Markus, WENDORFF, Bernhard, GWINNER, Jan, MALTI, Ahmed

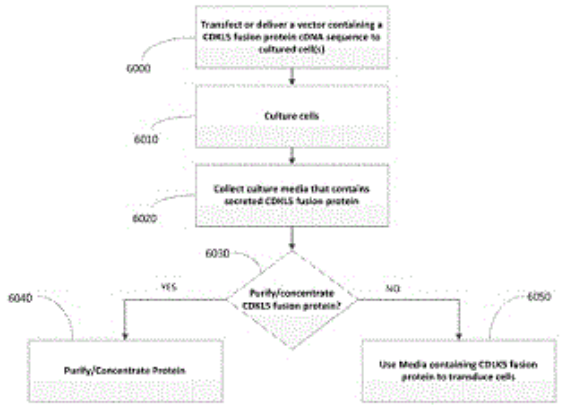
54: APPARATUS, METHOD AND SYSTEM FOR ELECTRICAL INTERCONNECTION
00: -
An apparatus 100 comprising: an outer longitudinally extending member 101 comprising a longitudinally extending perimeter region 102 defining an inner longitudinally extending cavity 103; and at least a first longitudinally extending conductor 104 and a separate second longitudinally extending conductor 105; wherein the at least first and second longitudinally extending conductors 104, 105 are embedded within the longitudinally extending perimeter region 102 and extend along the length thereof.



21: 2019/06274. 22: 2019-09-23. 43: 2022-01-27
51: A61K
71: CERECIN INC.
72: BADENOCH, AARON M, BOIVIN, TARYN, DUBOSE, DEVON B, HENDERSON, SAMUEL T, HOSTETLER, CHRISTI LYNN, LYON, DAVID K, SATHER, CRAIG A, SHAFFER, MATTHEW J
33: US 31: 62/471,836 32: 2017-03-15
54: PHARMACEUTICAL COMPOSITIONS HAVING HIGH DRUG LOADINGS OF MEDIUM CHAIN TRIGLYCERIDES AND METHODS RELATED THERETO
00: -
This invention relates to high drug load compositions of medium chain triglycerides (MCT), and to methods for treatment with such compositions at amounts effective to elevate ketone body concentrations so as to treat conditions associated with reduced neuronal metabolism, for example Alzheimer's disease.



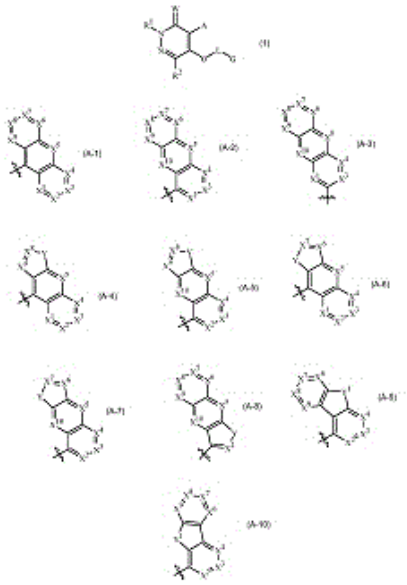
21: 2019/06304. 22: 2019-09-25. 43: 2022-01-27
51: C07K; C12N
71: ALMA MATER STUDIORUM-UNIVERSITA DI BOLOGNA
72: CIANI, ELISABETTA, LACCONE, FRANCO
33: US 31: 61/946,280 32: 2014-02-28
54: TATK-CDKL5 FUSION PROTEINS, COMPOSITIONS, FORMULATIONS, AND USE THEREOF
00: -
Disclosed herein are compositions and formulations containing a TATk-CDKL5 fusion protein. Also disclosed are methods of producing a TATk-CDKL5 fusion protein from vectors containing a TATk-CDKL5 cDNA and methods of transducing cells with the vectors containing a TATk-CDKL5 cDNA and the TATk-CDKL5 fusion protein.



21: 2019/06323. 22: 2019-09-25. 43: 2022-01-27
51: B01D
71: HALDOR TOPSØE A/S
72: GABRIELSSON, PÄR L. T.
33: DK 31: PA 2017 00278 32: 2017-05-02
33: DK 31: PA 2017 00265 32: 2017-04-26
54: METHOD AND SYSTEM FOR THE REMOVAL OF NOXIOUS COMPOUNDS FROM FLUE-GAS USING FABRIC FILTER BAGS WITH AN SCR CATALYST
00: -
Method and system for the removal of nitrogen oxides, from flue gas at low temperatures.

21: 2019/06324. 22: 2019-09-25. 43: 2022-01-27
51: B01D
71: HALDOR TOPSØE A/S
72: GABRIELSSON, PÄR L. T
33: DK 31: PA 2017 00265 32: 2017-04-26
33: DK 31: PA 2017 00288 32: 2017-05-08
33: DK 31: PA 2017 00278 32: 2017-05-02
54: METHOD AND SYSTEM FOR THE REMOVAL OF PARTICULATE MATTER AND NOXIOUS COMPOUNDS FROM FLUE-GAS USING A CERAMIC FILTER WITH AN SCR CATALYST
00: -
Method and system for the removal of nitrogen oxides, from flue gas at low temperatures.

21: 2019/06367. 22: 2019-09-26. 43: 2022-01-27
51: C07D; A01N
71: FMC CORPORATION
72: MCCANN, STEPHEN FREDERICK
33: US 31: 62/477,685 32: 2017-03-28
54: NOVEL PYRIDAZINONE HERBICIDES
00: -
Disclosed are compounds of Formula 1, including all stereoisomers, *N-oxides*, and salts thereof, agricultural compositions containing them and their use as herbicides (Formula 1), wherein R^1, R^2, L, G and W are as defined in the disclosure, and A is selected from (Formula A-1, A-2, A-3, A-4, A-5, A-6, A-7, A-8, A-9 and A-19) and X^1, X^2, X^3, X^4, X^5, X^6, X^7, X^8, X^9, X^{10}, Y and Y1 are as defined in the disclosure.



21: 2019/06390. 22: 2019-09-27. 43: 2022-01-27
51: A61G; E04H; H01R
71: Care Strategic D.I.R. Holdings Pty. Ltd.
72: BALLANTYNE, Anna Louise, BALLANTYNE, Justin Douglas, BURKWOOD, James Edward Robert
33: AU 31: 2017900925 32: 2017-03-16
54: ISOLATION TENT
00: -
Apparatus for use in providing isolation, the apparatus including an isolation tent having a body including a roof member, at least one wall extending between a supporting surface and the roof member in use to thereby at least partially define an internal volume substantially isolated from a surrounding environment, a plurality of connectors coupled to the body, the plurality of connectors being adapted to physically attach the body to a frame and an electrical component electrically connected to at least one of the plurality of connectors to allow electrical signals to be transferred to or from the electrical component via the connector.

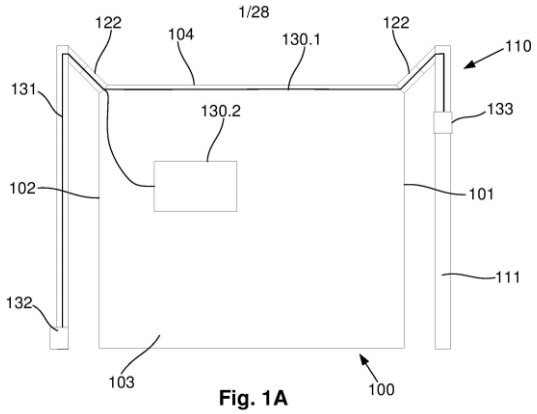


Fig. 1A

21: 2019/06512. 22: 2019-10-03. 43: 2022-01-20
51: E01F; E02D
71: REAL INNOVATIONS AUSTRALIA PTY LTD
72: KATHAGE, Wade
33: AU 31: 2017900767 32: 2017-03-06
54: RIB, WALL, SLOPE AND ROOF SAFETY SYSTEM
00: -
A deflection system and containment system are provided. The deflection system is for deflecting debris falling from a wall or roof. The deflection system comprises: two or more anchors; a support line extending between the anchors; and a deflection net, supported by the support line and spaced from the wall or roof, and configured to deflect debris falling from the wall or roof.

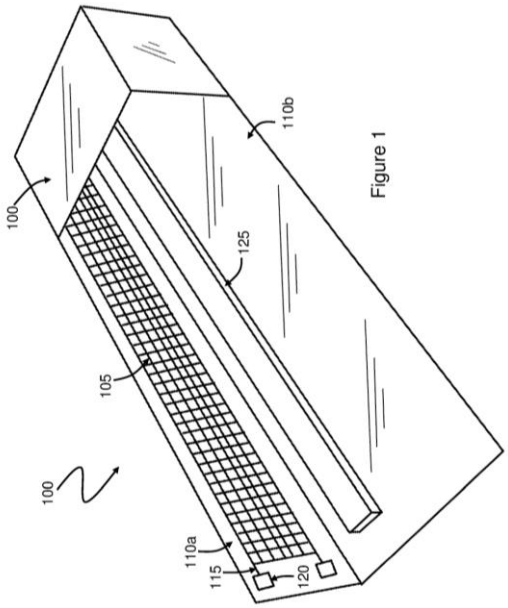
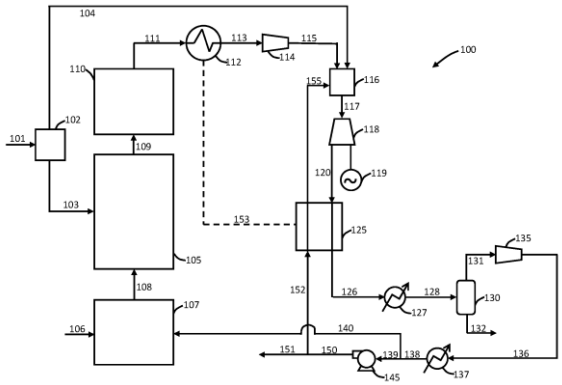


Figure 1

21: 2019/06537. 22: 2019-10-04. 43: 2022-02-18
51: F23B; F23D; F23G; F23R
71: 8 RIVERS CAPITAL, LLC
72: GREGORY, Brent, FETVEDT, Jeremy Eron, LU, Xijia, BONILHA, Chris, LENERTZ, James, TSCHIRREN, Stefan, ABDULSATER, Hassan
33: US 31: 62/468,183 32: 2017-03-07
33: US 31: 62/526,022 32: 2017-06-28
54: SYSTEM AND METHOD FOR COMBUSTION OF SOLID FUELS AND DERIVATIVES THEREOF
00: -
The present disclosure relates to apparatuses and methods that are useful for one or more aspects of a power production plant. More particularly, the disclosure relates to combustor apparatuses and methods for a combustor adapted to utilize different fuel mixtures derived from gasification of a solid fuel. Combustion of the different fuel mixtures within the combustor can be facilitated by arranging elements of the combustor controlled so that a defined set of combustion characteristics remains substantially constant across a range of different fuel mixtures.



21: 2019/06538. 22: 2019-10-04. 43: 2022-02-18
51: A24F
71: RAI STRATEGIC HOLDINGS, INC.
72: SEBASTIAN, Andries Don, DAVIS, Michael F., PHILLIPS, Percy D.
33: US 31: 15/472,966 32: 2017-03-29
54: AEROSOL DELIVERY DEVICE INCLUDING SUBSTRATE WITH IMPROVED ABSORBENCY PROPERTIES
00: -
The present disclosure relates to aerosol delivery devices (100), methods of forming such devices, and elements of such devices. In some embodiments, the present disclosure provides substrates for use in storing an aerosol precursor liquid and/or transporting the liquid to a heater (134,230,330,430,830) for vaporization. The substrates can be formed form fibers (500) that can provide improved absorbency and/or transport qualities. Multi-layer substrates (700) are also disclosed and can include a high absorbency layer (760) and a hydrophobic layer (770).

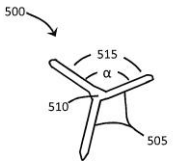


FIG. 5A

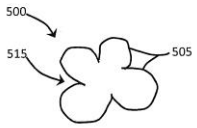


FIG. 5B

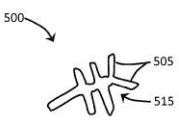


FIG. 5C

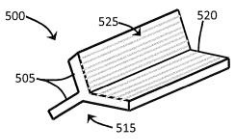


FIG. 5D

21: 2019/06557. 22: 2019-10-04. 43: 2022-01-27
51: H01L

71: CARDLAB APS
72: NIELSEN, FINN, NIELSEN, HENNING BONDE, GIEDENBACHER, ROBERT BERNT
33: DK 31: PA 2017 70214 32: 2017-03-24
54: ASSEMBLY OF A CARRIER AND A PLURALITY OF ELECTRICAL CIRCUITS FIXED THERETO, AND METHOD OF MAKING THE SAME
00: -
A method of obtaining an elongate carrier (12) to which a plurality of circuits (14) are fixed at their outer portions. The central portions (141) of the circuits are removed while the outer portions remain fixed to the carrier. A circuit (14) is fastened to a carrier (12) where electrical conductors extend from conducting pads of the circuit through holes (121) in the carrier to conducting pads of the carrier on an opposite side of the carrier.

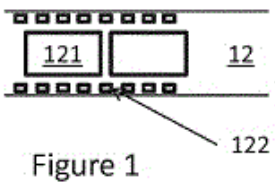


Figure 1

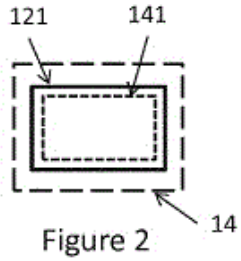


Figure 2

21: 2019/06582. 22: 2019-10-07. 43: 2022-01-27
51: G06T
71: MAXX MEDIA GROUP, LLC
72: FREEMAN, Richard S., HOLLINGER, Scott A.
33: US 31: 15/481,447 32: 2017-04-06
54: SYSTEM, METHOD AND SOFTWARE FOR PRODUCING VIRTUAL THREE DIMENSIONAL IMAGES THAT APPEAR TO PROJECT FORWARD OF OR ABOVE AN ELECTRONIC DISPLAY
00: -
A system, method and software for producing a virtual scene (10) to be viewed on an electronic display (12). A virtual reference plane (24) is defined. The reference plane (24) has peripheral boundaries (27, 28, 29, 30). A virtual object (20) is positioned above the reference plane (24) in the virtual scene (10). Stereoscopic camera viewpoints (25, 26) are calculated that enable the virtual object (20) to be imaged with the reference plane (24) within the peripheral boundaries (27, 28, 29, 30) of the reference plane (24). The virtual object (20) is digitally altered before and/or after being stereoscopically imaged. The altering includes bending, tapering or tilting a portion of the virtual object (20), and/or tilting a portion of the reference plane (24). A common set of boundaries are set for a superimposed image to create a final image (48).

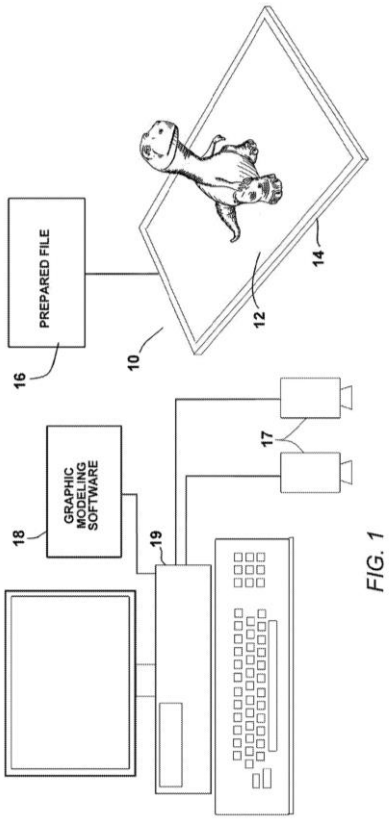
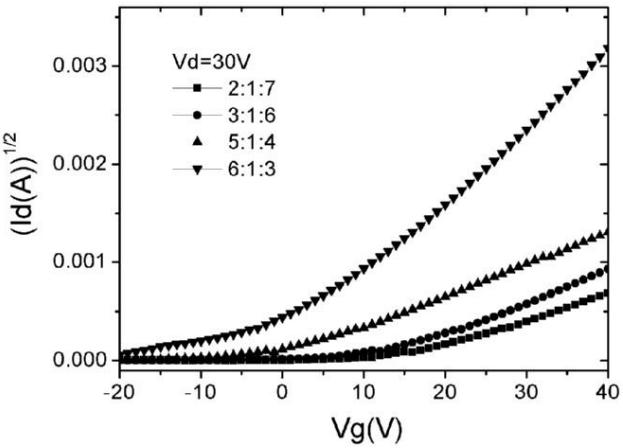


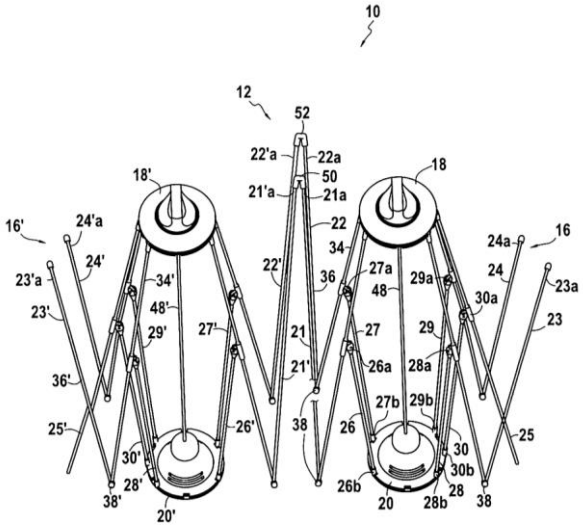
FIG. 1

21: 2019/06609. 22: 2019-10-08. 43: 2022-03-15
51: H01L
71: Jilin Jianzhu University
72: YAN, Xingzhen, SHI, Kai, ZHOU, Lu, BIAN, Hongyu, LI, Xu, CHI, Yaodan, YANG, Xiaotian
33: CN 31: 201811184476. X 32: 2018-10-11
54: METHOD FOR PREPARING DIFFERENT TYPES OF INDIUM GALLIUM ZINC OXIDE THIN FILM TRANSISTORS
00: -
Abstract The present invention belongs to the technical field of semiconductors, and particularly relates to a method for preparing different types of indium gallium zinc oxide thin film transistors. The present invention adjusts a molar ratio of an indium ion, a gallium ion and a zinc ion in an indium gallium zinc oxide thin film precursor solution to obtain an enhanced transistor or depleted transistor. The method is simple, convenient and reliable, can

reduce the preparation cost of the transistors, and is suitable for promotion and use.



21: 2019/06645. 22: 2019-10-09. 43: 2022-01-27
51: E04H
71: DECATHLON
72: LAFOUX, Benjamin, GENERO, Alexandre
33: FR 31: 1859616 32: 2018-10-17
54: FOLDABLE TENT COMPRISING TWO UMBRELLA STRUCTURES
00: -
Foldable tent comprising a roof (12) having a tent canvas (14), a first mastless umbrella structure (16), a second mastless umbrella structure (16'), and at least a first junction configured to connect in a hinged manner the distal end (21a) of a first rib (21) of the first umbrella structure and the distal end (21'a) of a first rib (21') of the second umbrella structure, the foldable tent being able to assume a deployed position in which the first and second umbrella structures are in the open position and a folded position in which the first and second umbrella structures are in the closed position.



21: 2019/06671. 22: 2019-10-09. 43: 2022-01-27
51: A61K; A61P
71: ONCONOVA THERAPEUTICS, INC.
72: MANIAR, MANOJ
33: US 31: 62/485,355 32: 2017-04-13
33: US 31: 15/688,320 32: 2017-08-28
33: US 31: PCT/US2017/48890 32: 2017-08-28
54: FORMULATION OF (E)-2,4,6-TRIMETHOXYSTYRYL-3-[(CARBOXYMETHYL)AMINO]-4-METHOXYBENZYLSULPHONE WITH ENHANCED STABILITY AND BIOAVAILABILITY
00: -
Pharmaceutical compositions of (E)-2,4,6-trimethoxystyryl-3-[(carboxymethyl)amino]-4-methoxybenzylsulphone and pharmaceutically acceptable salts thereof are described as well as methods of their use, and a dose regimen of (E)-2,4,6-trimethoxystyryl-3- [(carboxymethyl)amino]-4-methoxybenzylsulphone, sodium salt to reduce the incidence of urothelial toxicity.

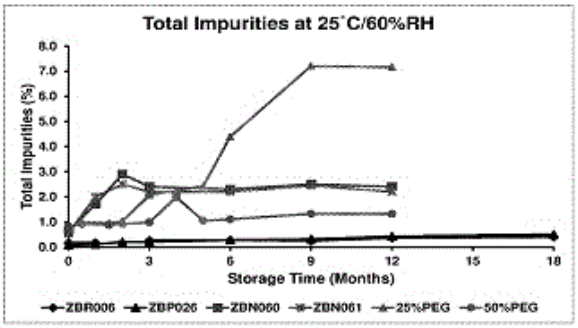


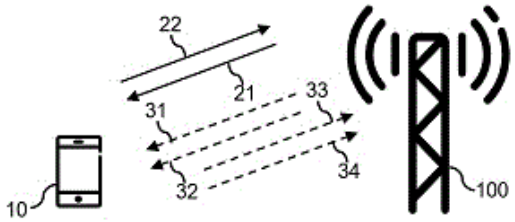
Figure 1. The total impurity (%) among different batches at 25°C/60%RH storage condition.

21: 2019/06673. 22: 2019-10-09. 43: 2022-01-27
51: H04W
71: TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)
72: KARAKI, REEM, MUKHERJEE, AMITAV
33: US 31: 62/486492 32: 2017-04-18

54: COORDINATION OF UPLINK RADIO TRANSMISSIONS ON UNLICENSED CARRIERS

00: -

A radio device (10) controls a first uplink radio transmission on a first carrier (33) from an unlicensed frequency spectrum on the basis of a first access scheme. Further, the radio device (10) controls a second uplink radio transmission on a second carrier (34) from the unlicensed frequency spectrum. The latter is accomplished on the basis of a second access scheme which is different from the first access scheme. Further, the radio device (10) coordinates the first uplink radio transmission and the second uplink radio transmission.

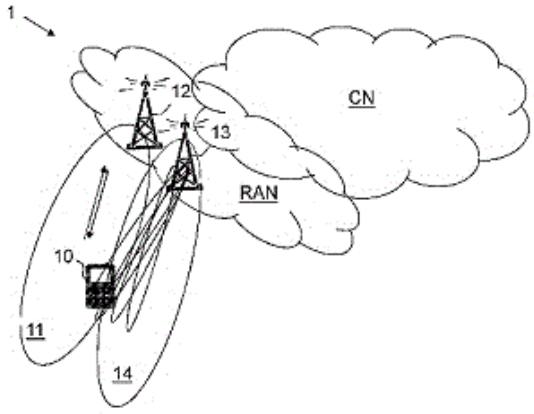


21: 2019/06701. 22: 2019-10-10. 43: 2022-01-27
51: H04W
71: TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)
72: FAN, RUI, DA SILVA, ICARO L. J, PEISA, JANNE, RAMACHANDRA, PRADEEPA
33: US 31: 62/501,812 32: 2017-05-05

54: NETWORK NODE INDICATING BEAM FOR HANDOVER TO A WIRELESS DEVICE

00: -

Some embodiments herein relate to a method performed by a wireless device (10) for handling communication of the wireless device (10) in a wireless communication network (1), wherein a first radio network node serves the wireless device (10) and the wireless communication network (1) further comprises a second radio network node (13). The wireless device receives a handover command from the first radio network node (12) indicating a handover to a cell served by the second radio network node (13), the handover command comprises a beam indication, such as a threshold, controlling which beam of the cell to select by the wireless device (10). The wireless device (10) further selects a beam of the cell based on at least the beam indication.



21: 2019/06763. 22: 2019-10-14. 43: 2022-01-27
51: H04B
71: TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)
72: NILSSON, ANDREAS, REIAL, ANDRES

54: BEAM SELECTION FOR A RADIO TRANSCEIVER DEVICE

00: -

There is provided mechanisms for beam selection. A method is performed by a first radio transceiver device. The method comprises obtaining link quality estimates of a radio signal conveyed to the first radio transceiver device from a second radio transceiver device by means of at least a first beam taken from a first beam set and a second beam. The second beam is wider than the first beam. The method comprises selecting which one of the first beam and

the second beam to use for continued communications of radio signals with the second radio transceiver device in accordance with a comparison between the link quality estimates of the first beam and compensated link quality estimates of the second beam.

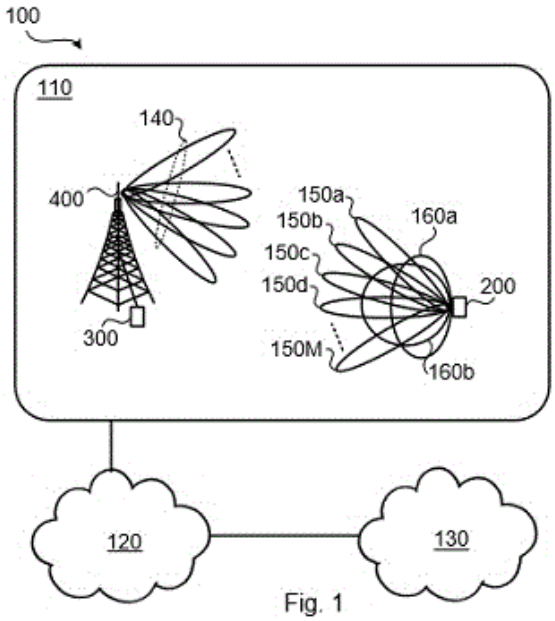
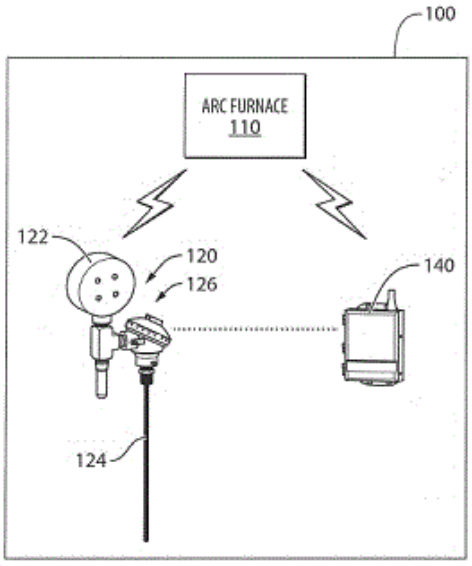


Fig. 1

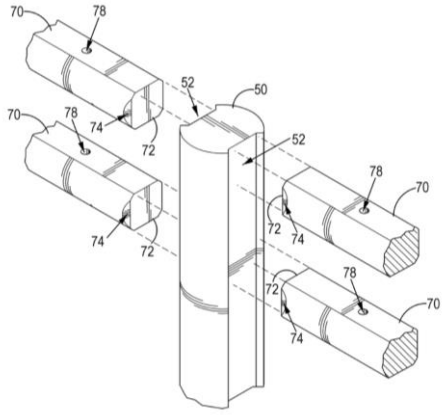
21: 2019/06784. 22: 2019-10-15. 43: 2022-01-27
51: B01J; C01C; C05C; C06B
71: YARA INTERNATIONAL ASA
72: LEDOUX, Francois
33: EP 31: 17177652.9 32: 2017-06-23
54: IMPROVEMENT OF ANTI-CAKING PROPERTIES OF AMMONIUM NITRATE PARTICLES THAT ARE STORED IN A CLOSED CONTAINER
00: -
The present application relates to a closed container containing ammonium nitrate (AN) particles in an amount of 91 to 99.75 weight% and desiccant in an amount of 0.25 and 9 weight%, wherein the AN particles have a water content of between 0 and 0.7 weight%, and the desiccant particles comprise between 50 and 95 weight% of AN and between 5 and 50 weight% of magnesium nitrate dispersed in the AN. The application furthermore relates to a method for producing of ammonium nitrate particles that are stored in a closed container and having improved anti-caking properties.

21: 2019/06797. 22: 2019-10-15. 43: 2022-01-27
51: H02J; G08C; H01F; H04W; C22B; G01K; H01M
71: HATCH LTD.
72: GORCZYCA, MATTHEW, GERRITSEN, TERRY
33: US 31: 62/504,468 32: 2017-05-10
54: MAGNETIC ENERGY HARVESTING DEVICE AND METHOD FOR ELECTRIC METALLURGICAL FURNACES AND SIMILAR ENVIRONMENTS
00: -
An electronic device, and a magnetic energy harvesting device and method of harvesting magnetic energy, for electric metallurgical furnaces and similar environments. The device comprises a conductor which is configured to become induced with electricity in response to a time-varying magnetic field. The field may be irregular, such as near a metallurgical furnace or a similar environment. The electronic device may be a transmitter in a metallurgical electric furnace. The transmitter may be connected to an environment sensor. The electronic device may be powered by the magnetic energy harvesting device. The magnetic energy harvesting device may a wire loop or a coil. The method comprises inductively harvesting energy from magnetic field fluctuations caused by a metallurgical furnace or a similar environment to wirelessly power the electronic device.

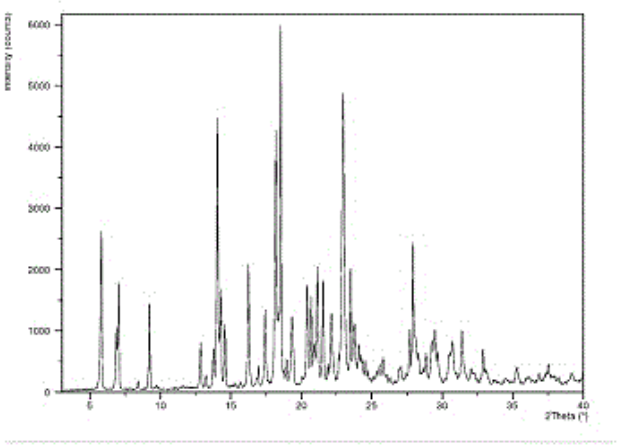


21: 2019/06805. 22: 2019-10-16. 43: 2022-01-20
51: E04B; E04C
71: DU PREEZ, Newton Stephanus
72: DU PREEZ, Newton Stephanus
54: LOG STRUCTURES

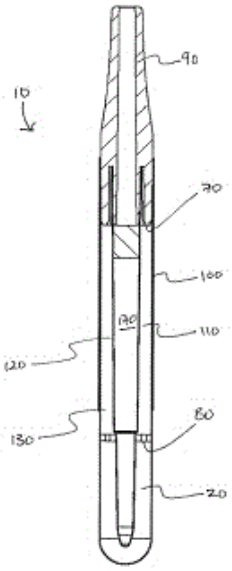
00: -
The invention provides a method of constructing a timber log structure which includes the steps of: providing a plurality of log pillars each having at least one slot formation which extends at least partially along the length of each log pillar, providing a plurality of log crossbars each having butt-end profiles on both ends which are bevelled to fit exactly into the at least one slot formation, securing the plurality of log pillars at spaced-apart positions in a vertical orientation relative to the ground to provide log pillars, and then securing the plurality of log crossbars between the log pillars in a horizontal orientation relative to the ground to provide log panels which are connected to the log pillars on either side. Advantageously, the butt-end profiles of the log crossbars fit into the at least one slot formation of the log pillars exactly such that butt-ends are hidden from view.



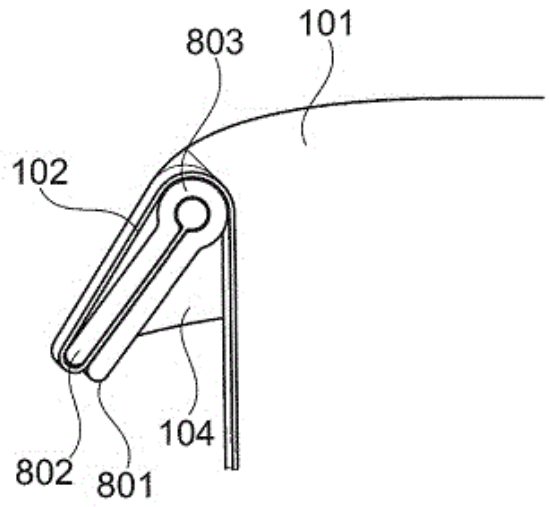
21: 2019/06829. 22: 2019-10-16. 43: 2022-01-27
51: C07D
71: H. LUNDBECK A/S
72: PETERSEN, HANS
33: DK 31: PA201700264 32: 2017-04-25
54: PROCESS FOR THE MANUFACTURE OF VORTIOXETINE HBR ALPHA-FORM
00: -
A process for the manufacture of vortioxetine HBr α-form is provided.



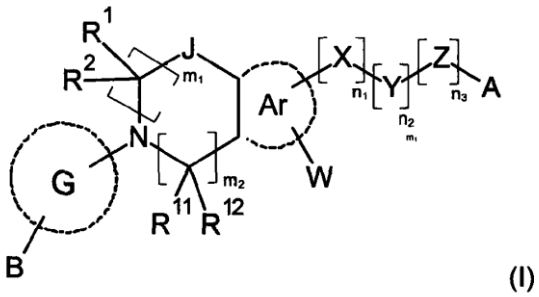
21: 2019/06834. 22: 2019-10-16. 43: 2022-01-27
51: A24F; A61M; B65D
71: SELBY, RYAN DANIEL, KARKAIRAN, RYAN
72: SELBY, RYAN DANIEL, KARKAIRAN, RYAN
33: US 31: 62/473,154 32: 2017-03-17
54: CLOSED BOTTOM VAPORIZER POD
00: -
A closed bottom vaporizer pod prevents vaporizable material from exiting the pod and entering into a heat source of a vaporizer. A closed bottom vaporizer pod further reduces contamination and/or fouling of a vaporizer and comprises a closed bottom capsule, at least one air inlet for drawing air into the closed bottom capsule, and at least one air outlet for drawing air out of the closed bottom capsule. An air flow path is created from the at least one air inlet, the closed bottom capsule, and the air outlet which prevents contamination of the vaporizer.



21: 2019/06861. 22: 2019-10-17. 43: 2022-01-27
51: A47G; A41D
71: GLOVAC INTERNATIONAL APS
72: HANSEN, JAN ERIK VEST
33: EP 31: 17166288.5 32: 2017-04-12
54: A GLOVE AND A METHOD OF MANUFACTURING A GLOVE
00: -
The invention relates to a ring-shaped member for engaging with an opening of a glove to form a circumferential trough around the opening of the glove. The invention further relates to a glove and to a method of manufacturing a glove comprising a conical collar forming a circumferential trough around the opening of the glove and where the collar comprises such ring-shaped member. The ring-shaped member comprises a first annular portion of a conical shape, a second annular portion of a conical shape, and a central annular portion in between the first and the second annular portions. The ring-shaped member is foldable about the central portion to attain a folded configuration wherein the second annular portion is folded down to lie essentially alongside the first annular portion.



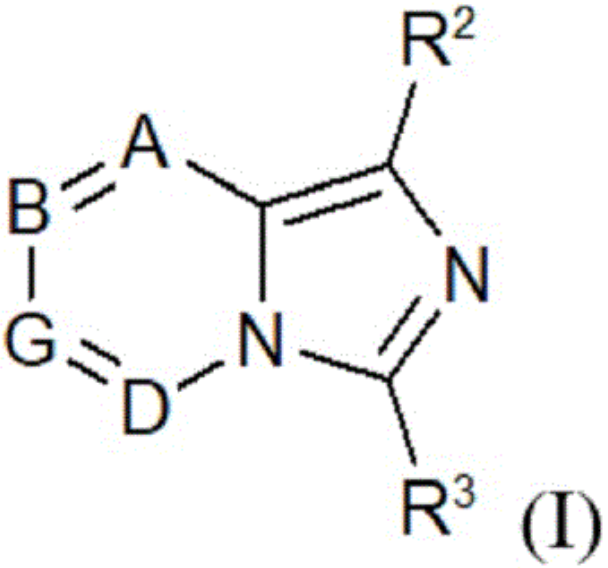
21: 2019/06873. 22: 2019-10-18. 43: 2022-02-18
51: A61K; C07D; A61P
71: CALDAN THERAPEUTICS LIMITED
72: BROWN, Jane, CONNOLLY, Stephen, HANSEN, Steffen V. F., MILNE, Gavin, SHIMPUKADE, Bharat, SMYTH, Don, THOMAS, Gerard, ULVEN, Trond, BRVAR, Matjaz, RIGBY, Aaron
33: GB 31: 1704714.3 32: 2017-03-24
54: TETRAHYDRO-BENZO[D]AZEPINE DERIVATIVES AS GPR120 MODULATORS
00: -
Novel tetrahydroisoquinoline and tetrahydrobenzazepine compounds of formula (I) capable of modulating the G-protein-coupled receptor GPR120, compositions comprising the compounds, and methods for their use for controlling insulin levels in vivo and for the treatment of conditions such as of diabetes, inflammation, obesity and metabolic diseases. (I)



(I)

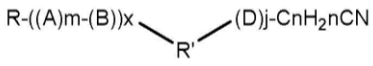
21: 2019/06887. 22: 2019-10-18. 43: 2022-01-27
51: C07D; A61K
71: SUZHOU BAIJIBUGONG PHARMACEUTICAL TECHNOLOGY CO. LTD., LIAO, XIBIN

72: LIAO, XIBIN, LI, JIA, LU, ZHIJIAN, ZHOU, YUBO, GAO, ANHUI
33: US 31: 62/474,686 32: 2017-03-22
54: BRUTON'S TYROSINE KINASE INHIBITORS
00: -
Bruton's tyrosine kinase (Btk) inhibitors have the following Formula (I).

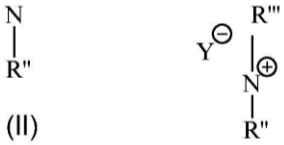


21: 2019/06919. 22: 2019-10-21. 43: 2022-01-27
51: B03D; C22B
71: Nouryon Chemicals International B.V.
72: LEWIS, Andrew Clist, SIIRAK, Juhan, CASSEL, Anders Öijar, SMOLKO-SCHVARZMAYR, Natalija, SLIKTA, Alberto
33: EP(NL) 31: 17162623.7 32: 2017-03-23
54: PROCESS TO TREAT METAL OR MINERAL ORES AND COLLECTOR COMPOSITION THEREFOR
00: -

The present invention relates to a process to treat metal or mineral ores with a collector composition that comprises a nitrile group-containing compound of the formula (I) wherein R is a saturated or unsaturated, linear or branched, hydrocarbon group containing 8 to 26 carbon atoms, R' = O or (II) or (III) or (IV) R" is a saturated or unsaturated, linear or branched, hydrocarbon group containing 1 to 26 carbon atoms or a hydrogen atom or (-(D)$_j$-C$_n$H$_{2n}$CN) group or R-((A)$_m$-(B))$_x$ group, A is (-O-CH$_2$CH$_2$-); (-O-CH(CH$_3$)CH$_2$-) or (-O-CH(CH$_2$CH$_3$)CH$_2$-) B is (-O-C$_p$H$_{2p}$-) D is (-CH$_2$CH$_2$-O-); (-CH(CH$_3$)CH2-O-) or (-CH(CH$_2$CH$_3$)CH2-O-) x is 0 or 1 R"' is hydrocarbon group containing 1 to 4 carbon atoms Y is halide or methylsulfate m, j are each independently an integer of 0-5 R"" is a saturated or unsaturated, linear or branched, hydrocarbon group containing 1 to 26 carbon atoms and n and p are each independently an integer of 1 to 5. The invention also relates to collector composition containing the above nitrile group-containing compound and at least one further collector or frother compound.

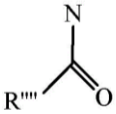


(I)



(II)

(III)



(IV)

21: 2019/06934. 22: 2019-10-22. 43: 2022-02-25
51: H04L; G06Q; H04W
71: CIBECS INTERNATIONAL LTD
72: WALDRON, Cameron Ian, DEWING, Neal Robert
33: US 31: 16/166,420 32: 2018-10-22
54: A DATA PROTECTION SYSTEM AND METHOD
00: -
There is disclosed a data protection system which includes a backend server for providing a secure data storage facility to a network, the network being managed by an administrator. The system includes at least one key controller hosted on the network, and a hierarchy of cryptographic keys for cryptographically protecting data of the network. The hierarchy of keys are distributed between the network, the key controller and the backend server. The hierarchy of keys includes first and second master keys Ax, Cx that are associated with the administrator and the key controller respectively. One or more derived keys are derived from the first

and second master keys. At least one of the first and second master keys are kept resident on the network and at least one of the derived keys are kept resident on the backend server.

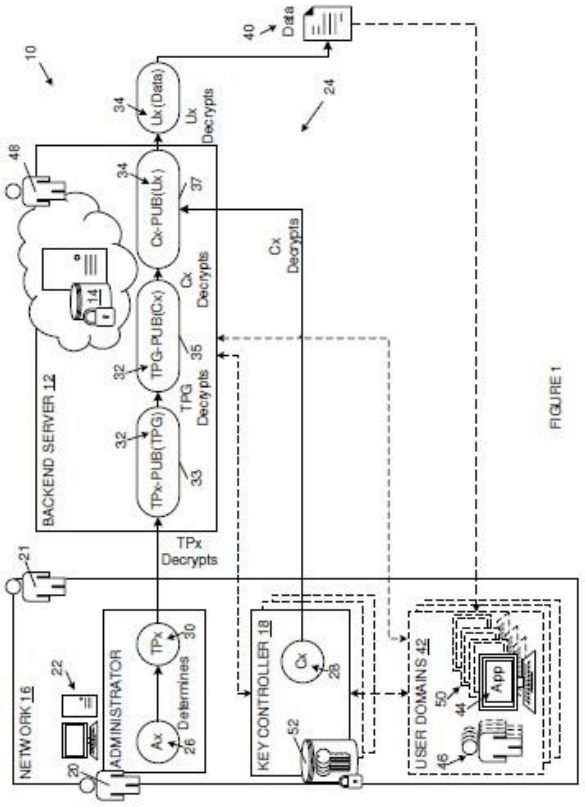
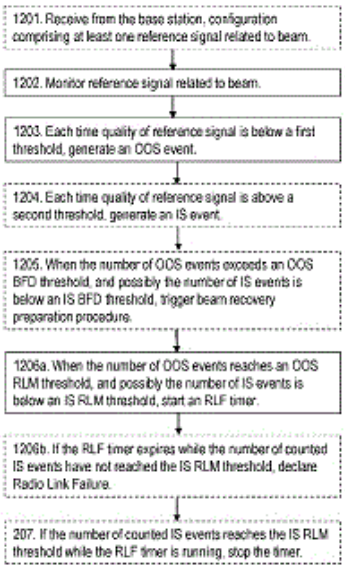


FIGURE 1

21: 2019/06955. 22: 2019-10-22. 43: 2022-01-27
51: A61K; C07K
71: Eli Lilly and Company
72: LIU, Wen, MEZO, Adam Robert, VALENZUELA, Francisco Alcides
33: US 31: 62/511,690 32: 2017-05-26
54: ACYLATED INSULIN COMPOUND
00: -
The presently described compounds relate to the treatment of diabetes and/or hyperglycemia. More particularly, the described compounds relate to acylated insulin compounds that lower blood glucose, pharmaceutical compositions containing such compounds, therapeutic uses of such compounds, and an intermediate compound used to make the acylated insulin compounds.

21: 2019/06963. 22: 2019-10-22. 43: 2022-01-27
51: H04B
71: TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)
72: DA SILVA, ICARO L J, TIDESTAV, CLAES
33: US 31: 62/501,823 32: 2017-05-05
54: USER EQUIPMENT, BASE STATION AND METHODS IN A RADIO COMMUNICATIONS NETWORK
00: -
According to a first aspect of embodiments herein, the object is achieved by a method performed by a User Equipment (UE) for monitoring a beam transmitted by a base station in a radio communications network. The base station is serving the UE. The UE monitors (1202) a reference signal related to the beam, from the base station. Each time a quality of the reference signal is below a first threshold, the UE generates (1203) an Out-Of-Synchronization (OOS) event When the number of OOS events reaches an OOS Beam Failure Detection (BFD) threshold, the UE triggers (1205) a beam recovery preparation procedure, and when the number of OOS events reaches an OOS Radio Link Monitoring (RLM), threshold, the UE starts (1206a) an RLF timer.

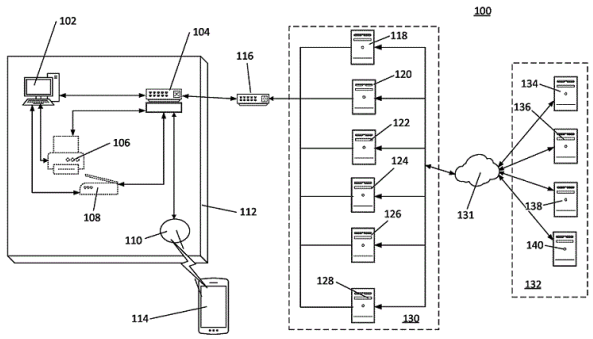


21: 2019/06983. 22: 2019-10-23. 43: 2022-01-27
51: C08G C08J
71: BASF SE
72: ZARBAKHSH, Sirus, KLASSEN, Johann, ELBING, Mark
33: EP 31: 17163074.2 32: 2017-03-27
54: POLYOL COMPONENTS AND USE THEREOF FOR THE PRODUCTION OF RIGID POLYURETHANE FOAMS
00: -

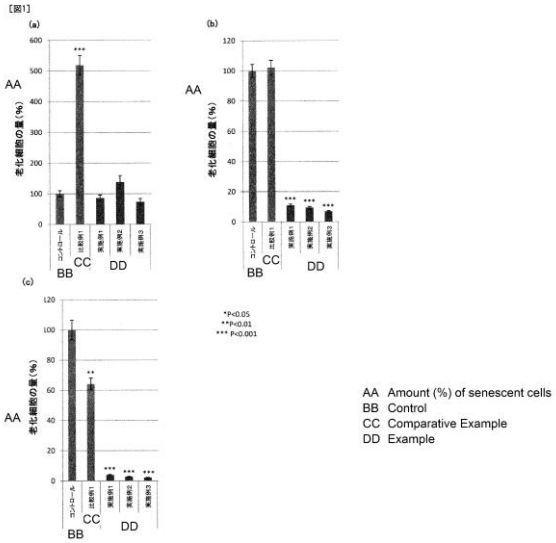
The invention relates to a polyol component P), a process for manufacturing rigid polyurethane foams using said polyol component P), and rigid polyurethane foams.

21: 2019/07054. 22: 2019-10-25. 43: 2022-01-27
51: C07K; G01N
71: GENENTECH, INC., AC IMMUNE SA
72: ADOLFSSON, OSKAR, AYALON, GAI, DI CARA, DANIELLE MARIE, HOTZEL, ISIDRO
33: US 31: 62/171,693 32: 2015-06-05
54: ANTI-TAU ANTIBODIES AND METHODS OF USE
00: -
The invention provides anti-Tau antibodies and methods of using the same.

21: 2019/07269. 22: 2019-11-01. 43: 2022-01-27
51: G07F G06Q
71: JCM AMERICAN CORPORATION
72: KUBAJAK, David, MOHRHARDT, Dominic
33: US 31: 15/482,668 32: 2017-04-07
54: DEVICE, SYSTEM, AND METHOD FOR FACILITATING COMMUNICATIONS BETWEEN ELECTRONIC GAMING MACHINES AND MOBILE DEVICES
00: -
Various system, method, and device embodiments are disclosed for establishing and utilizing a wireless connection between an electronic gaming machine and a mobile device associated with a player. Such embodiments include use of a first component configured to communicate information with the mobile device using near-field communications and use of a second component configured to automatically pair the mobile device with the mobile interface device, using a Bluetooth connection, wherein the pairing of the mobile device with the mobile interface device utilizes the information communicated to the mobile device using the first component.

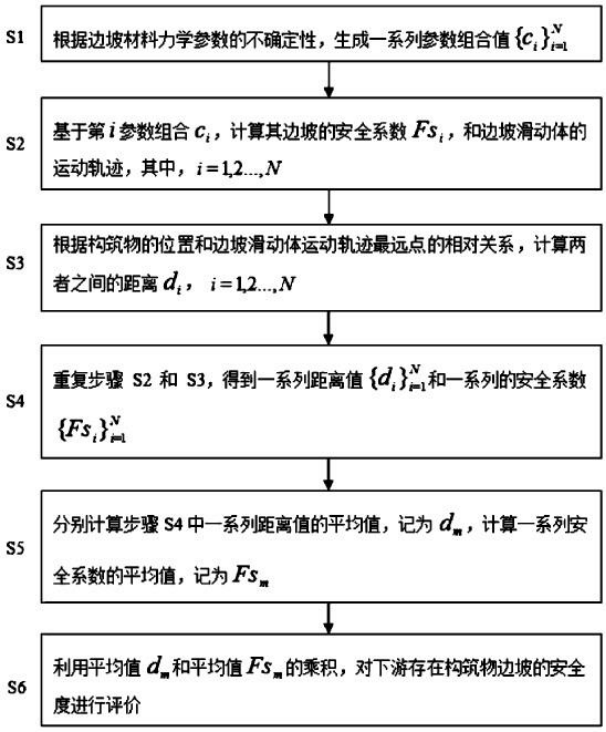


21: 2019/07308. 22: 2019-11-04. 43: 2022-01-27
51: A23L; A61Q
71: NAGAO, Tsukasa
72: NAGAO, Tsukasa
54: Health food and cosmetics for increasing the amount of apoptosis cells and decreasing the amount of necrosis cells and a method of manufacturing a sprout-forcing grape seed-derived ingredient for increasing the amount of apoptosis cells and decreasing the amount of necrosis cells
00: -
[Problem] To provide: an anti-aging health food and cosmetic having a better anti-aging effect than known potential anti-aging substances (e.g., resveratrol); and a method for producing a grapeseed-derived anti-aging component which has an excellent anti-aging effect. [Solution] The anti-aging health food and anti-aging cosmetic according to the present invention contain a grapeseed-derived anti-aging component comprising a grapeseed-derived polyphenol in an amount of 60% by weight or more after crude purification.



21: 2019/07322. 22: 2019-11-05. 43: 2022-03-14
51: E02D
71: Qingdao University of Technology
72: LI, Liang, ZHAI, Ming, YU, Guangming, LU, Shibao, YUAN, Changfeng, CHU, XUESONG
33: CN 31: 201811323341.7 32: 2018-11-08
54: METHOD FOR EVALUATING SAFETY DEGREE OF SLOPE BASED ON DAMAGE DEGREE OF DOWNSTREAM STRUCTURE
00: -

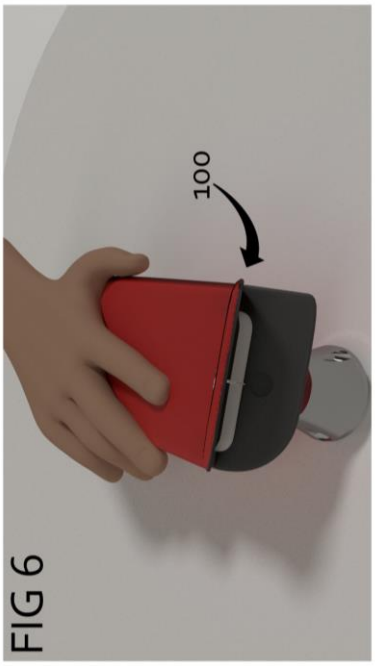
The present invention relates to a method for evaluating a safety degree of a slope based on a damage degree of a downstream structure. Including: assuming to generate a series of parameter combination values $\{c_i\}_{i=1}^{N}$ according to uncertainty of a material mechanics parameter of a slope; calculating a safety factor Fs_i of the slope and a motion trajectory of a slope slide mass; calculating a distance d_i between a position of a structure in the downstream of the slope and a position of a furthest point in the motion trajectory of the slope slide mass; repeatedly conducting above steps to obtain a series of distance values $\{d_i\}_{i=1}^{N}$ and a series of safety factors $\{Fs_i\}_{i=1}^{N}$; recording an average value of the distance values and an average value of the safety factors as d_m, Fs_m; evaluating the safety degree of the slope with a structure in the downstream thereof by utilizing a product of d_m and Fs_m



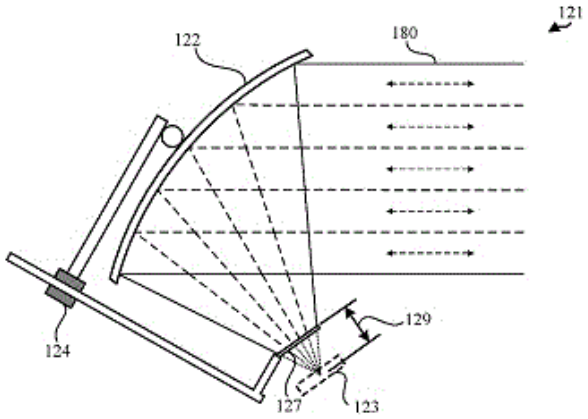
21: 2019/07324. 22: 2019-11-05. 43: 2022-01-20
51: A45C; A45F; B65D
71: NSINAMWA, Mbiganyi Benzi
72: NSINAMWA, Mbiganyi Benzi
33: BW 31: BW/P/2019/00003 32: 2019-05-21
54: LOCKABLE ELECTRONIC MOBILE PHONE OR DEVICE POUCH
00: -

Disclosed is an apparatus capable of restricting and limiting usage or user control of an electronic mobile phone or device. The realization of this apparatus may be a pouch designed exclusively to receive an electronic mobile phone or device, this pouch having a means of locking and releasing securely by means of an opening in the pouch. Once locked, the user of the mobile electronic phone or device will have no access to their device, nor will they be able to interact with it until certain conditions have been met. It is expected that the disclosed apparatus will curb and reduce a common behavior of people when attending events, to reduce their dependence on mobile electronic phones or devices and to maximize concentration at the event they will be attending. Additionally, the apparatus is expected to reduce unwanted content such as media recordings, photos, videos, documents from ever leaving the

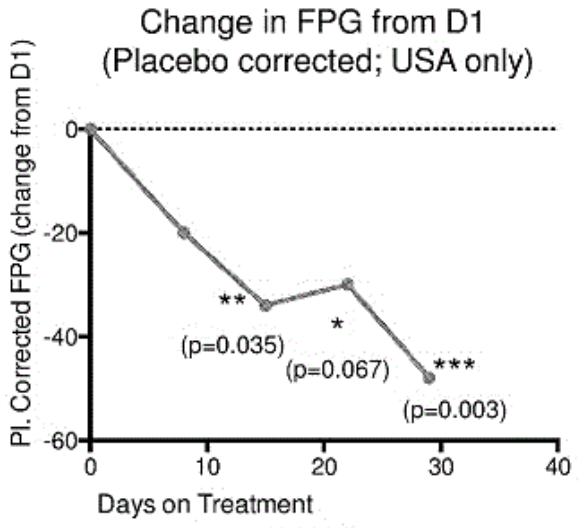
event without authorization of the event host's permission.



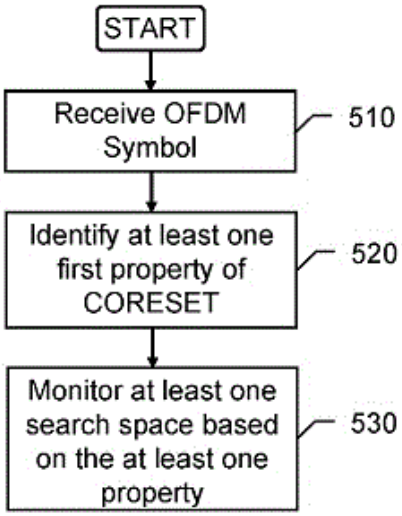
21: 2019/07367. 22: 2019-11-06. 43: 2022-01-27
51: H01Q
71: VIASAT, INC.
72: MENDELSOHN, AARON, RUNYON, DONALD
54: COVERAGE AREA ADJUSTMENT TO ADAPT SATELLITE COMMUNICATIONS
00: -
The described features generally relate to adjusting a native antenna pattern of a satellite to adapt communications via the satellite. For example, a communications satellite may include an antenna having a feed array assembly, a reflector, and a linear actuator coupled between the feed array assembly and the reflector. The feed array assembly may have a plurality of feeds for communicating signals associated with a communications service, and the reflector may be configured to reflect the signals transmitted between the feed array assembly and one or more target devices. The linear actuator may have an adjustable length, or otherwise provide an adjustable position between the feed array assembly and the reflector. By adjusting the position of the feed array assembly relative to the reflector, the communications satellite may provide a communications service according to a plurality of native antenna patterns.



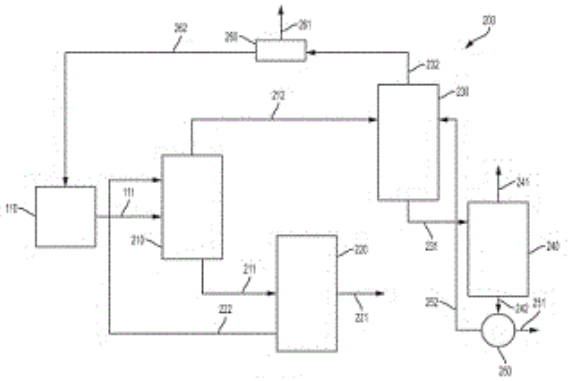
21: 2019/07401. 22: 2019-11-07. 43: 2022-01-27
51: A61K; C07D
71: MELIOR PHARMACEUTICALS I, INC., BOARD OF SUPERVISORS OF LOUISIANA STATE UNIVERSITY AND AGRICULTURAL AND MECHANICAL COLLEGE
72: REAUME, ANDREW G, CONG, WEINA, GREENWAY, FRANK, COULTER, ANN
33: US 31: 62/483,584 32: 2017-04-10
54: TREATMENT OF ADIPOCYTES
00: -
The present disclosure provides compositions comprising a lyn kinase activator and TRPM8 agonist, and to methods of: reducing blood glucose levels, weight gain, or fat depot levels; treating metabolic syndrome, Syndrome X, obesity, prediabetes, type II diabetes, type I diabetes; treating hypercholesterolemia, hypertension, coronary heart disease, diabetic neuropathy, lipodystrophy, diabetic retinopathy, erectile dysfunction, kidney disease, dyslipidemia, dyslipoproteinemia, a peroxisome proliferator activated receptor-associated disorder, septicemia, a thrombotic disorder, or pancreatitis; inducing the beiging of adipocytes; and preventing pancreatic beta cell degeneration.



21: 2019/07490. 22: 2019-11-12. 43: 2022-01-27
51: H04L
71: TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)
72: PARKVALL, STEFAN, KOORAPATY, HAVISH, LARSSON, DANIEL
33: US 31: 62/505,553 32: 2017-05-12
54: SEARCH SPACE MONITORING
00: -
A wireless device (UE1, UE2, UE3) monitors search spaces by receiving (510) an orthogonal frequency-division multiplexing, OFDM, symbol in a downlink slot. The OFDM symbol is included in a control-resource set, CORESET, (210, 220, 230) of resource elements configured to carry control information. The CORESET (210, 220, 230) is associated with at least one property. The wireless device (UE1, UE2, UE3) identifies (520) at least one first property (P) of the at least one property of the CORESET (210, 220, 230). Then, the wireless device (UE1, UE2, UE3) monitors at least one particular search space for a control message related to the wireless device (UE1, UE2, UE3) based on the identified at least one first property (P) of the CORESET (210, 220, 230).

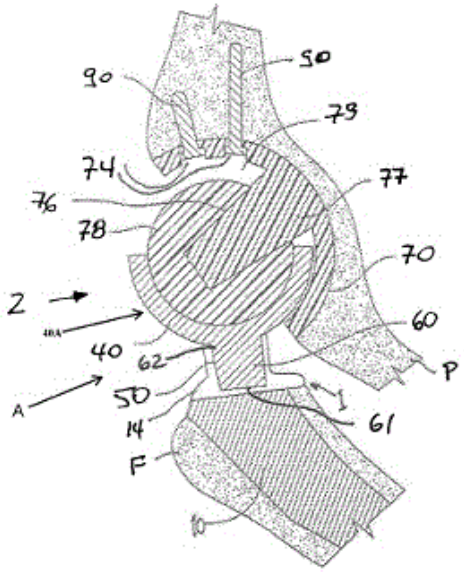


21: 2019/07502. 22: 2019-11-12. 43: 2022-01-27
51: B01D; C01B; C07C
71: DOW GLOBAL TECHNOLOGIES LLC
72: FISH, BARRY BRENT, GROENENDIJK, PETER E, MALEK, ANDRZEJ, NIESKENS, DAVY L.S., STEARS, BRIEN A
33: US 31: 62/491,663 32: 2017-04-28
54: PROCESSES AND SYSTEMS FOR SEPARATING CARBON DIOXIDE IN THE PRODUCTION OF ALKANES
00: -
A method for separating $CO_2$from $C_2$to C_5alkanes includes introducing a first stream including $C_2$to C_5alkanes and CO_2into a first separation zone, the first separation zone including a hydrocarbon solvent, and separating the first stream into a recycle stream and a second stream in the first separation zone. The recycle stream including $CO_2$and one or more of CO, H_2, and CH_4, and the second stream including $C_2$to C_5alkanes. The method further includes introducing the second stream into a second separation zone, and separating the second stream into a third stream and a fourth stream, wherein the third stream includes C_2alkanes and the fourth stream includes $C_3$to C_5alkanes.



21: 2019/07514. 22: 2019-11-13. 43: 2022-01-27
51: G01N
71: LOCUS AGRICULTURE IP COMPANY, LLC, INTELLIGENT MATERIAL SOLUTIONS INC.
72: ZORNER, Paul, MATHUR, Eric, J., COLLINS, Josh, BELL, Howard, SHIBATA, Scott, Alan
33: US 31: 62/507,895 32: 2017-05-18
54: DIAGNOSTIC ASSAYS FOR DETECTING, QUANTIFYING, AND/OR TRACKING MICROBES AND OTHER ANALYTES
00: -
The subject invention provides methods and assays for multiplexed detection of analytes using nanocrystals that are uniform in morphology, size, and composition based on their unique optical characteristics. The described methods and assays are particularly useful for detection of microbes and/or microbe-based agents in a complex environmental sample.

21: 2019/07523. 22: 2019-11-13. 43: 2022-01-27
51: A61F
71: HIP INNOVATION TECHNOLOGY, LLC
72: TERMANINI, ZAFER, DIAMANTONI, GEORGE, VANHIEL, BRIAN, DAVIS, TAYLOR
33: US 31: 62/509,304 32: 2017-05-22
54: RECONFIGURABLE HIP PROSTHESIS, METHOD OF USE AND KIT
00: -
Disclosed is a reconfigurable hip joint prosthesis and elements therefor which is adapted to be surgically implantable in a human body, a part (10) in the upper femur, another part (70) in the pelvis. The implantable prosthesis may be configured in a reversible manner, and provide alternative configurations as may be desired or necessary. The present invention also includes a method of implanting into a human body a prosthesis as described herein, and subsequently reconfiguring the prosthesis as may be desired or necessary. A still further aspect of the invention is a kit of component parts used in providing a configured implantable prosthesis.



21: 2019/07546. 22: 2019-11-14. 43: 2022-01-20
51: C04B; E04B; E04C; E04D
71: THE SHREDDED TIRE, INC.
72: SPREEN, Richard
33: US 31: 62/506,849 32: 2017-05-16
54: ENVIRONMENTALLY RESPONSIBLE INSULATING CONSTRUCTION BLOCKS AND STRUCTURES
00: -
Environmentally responsible insulating construction blocks and structures constructed primarily of recycled materials are disclosed. The environmentally friendly construction blocks and structures comprise shredded rubber tire pieces coated with silica fume, slag cement and cement, which are then mixed with water and formed in a mold. A layer of grout or a fireproof material may be disposed on one side of the environmentally responsible insulating construction block. The environmentally responsible insulating construction blocks provide high insulation as well as strength for applications such as green roofing, wall construction and green roofing decks. Environmentally friendly structures can be built by pouring the coated shredded rubber tire pieces into molds to form walls, and then to pour a layer of the coated shredded

rubber tire pieces as a roof deck, thereby creating a self-supporting structure in a monolithic pour.

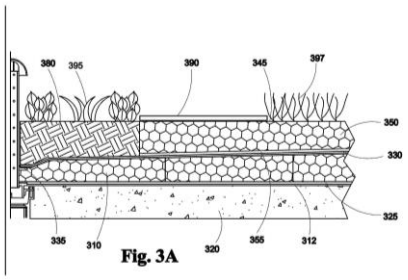


Fig. 3A

21: 2019/07556. 22: 2019-11-14. 43: 2022-01-27
51: C07K; C12N
71: Transactiva S.r.l.
72: MARCHETTI, Stefano, PATTI, Tamara
33: IT 31: 102017000042052 32: 2017-04-14
54: EXPRESSION VECTOR AND METHOD FOR THE STABLE PRODUCTION OF A PROTEIN IN A PLANT, IN PARTICULAR A WHOLE RECOMBINANT ANTIBODY IN A CEREAL ENDOSPERM
00: -
Expression vector for the stable production of a protein in plants, in particular a whole recombinant antibody in a cereal endosperm, comprising an expression cassette for the light polypeptide chain (L) of the antibody and an expression cassette for the heavy polypeptide chain (H) of the antibody, having the same orientation and the same control and regulatory elements of gene expression.

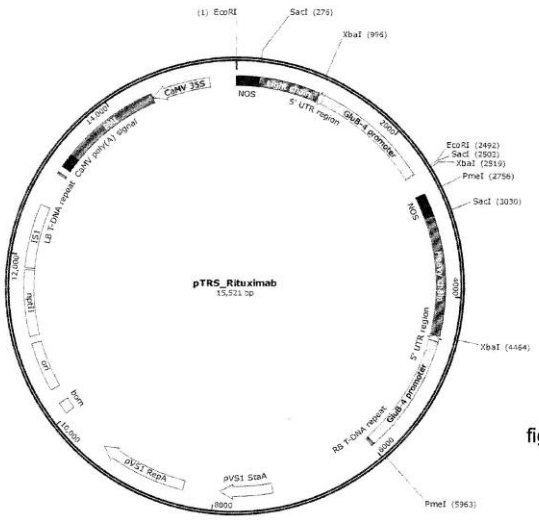
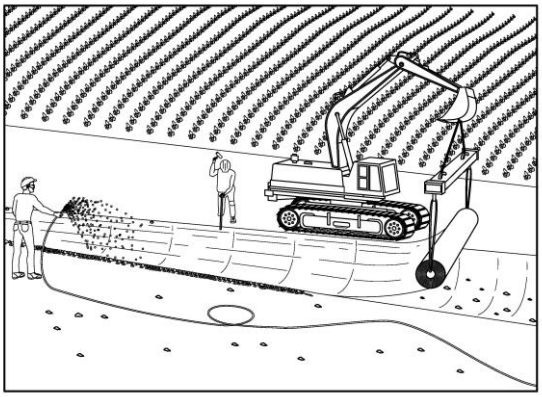


fig. 2

21: 2019/07616. 22: 2019-11-18. 43: 2022-01-27
51: C04B; E01C; E04C
71: Cortex Composites, Inc.
72: KRASNOFF, Curren E.
33: US 31: 62/487,351 32: 2017-04-19
54: CEMENTITIOUS COMPOSITE MAT
00: -
A cementitious composite for in-situ hydration includes a first layer, a second layer, a cementitious mixture, and an adhesive layer. The cementitious mixture is disposed along the first layer. The cementitious mixture includes a plurality of cementitious particles. The second layer is disposed along the cementitious mixture, opposite the first layer. The adhesive layer is positioned to secure at least one of (i) the first layer to the cementitious mixture, (ii) the second layer to the cementitious mixture, and (iii) the first layer and the second layer together. The first layer and the second layer are configured to at least partially prevent the plurality of cementitious particles from migrating out of the cementitious composite.

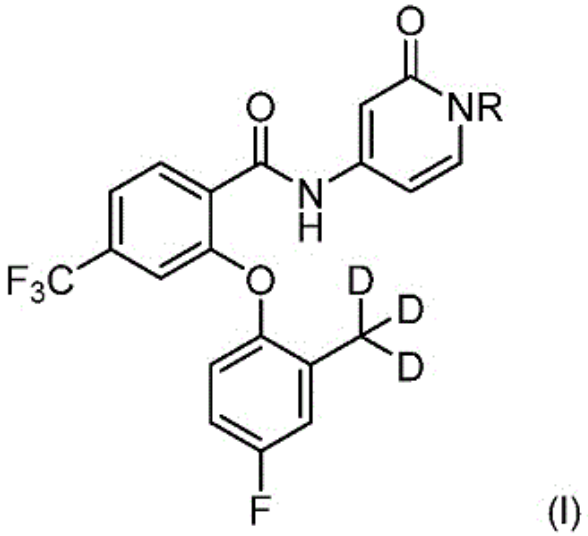


21: 2019/07619. 22: 2019-11-18. 43: 2022-01-27
51: C07D; C07B; C07F; A61P
71: VERTEX PHARMACEUTICALS INCORPORATED
72: JIANG, LICONG, HADIDA RUAH, SARA SABINA
33: US 31: 62/507,172 32: 2017-05-16
33: US 31: 62/547,718 32: 2017-08-18

54: DEUTERATED PYRIDONE AMIDES AND PRODRUGS THEREOF AS MODULATORS OF SODIUM CHANNELS

00: -

Compounds, and pharmaceutically acceptable salts thereof, useful as inhibitors of sodium channels are provided. The compounds have the formula (I) wherein R is H or $CH_2OPO(OH)_2$. Also provided are pharmaceutical compositions comprising the compounds or pharmaceutically acceptable salts and methods of using the compounds, pharmaceutically acceptable salts, and pharmaceutical compositions in the treatment of various disorders, including pain.



(I)

21: 2019/07648. 22: 2019-11-19. 43: 2022-01-27
51: C07D
71: BASF SE
72: WOERZ, Nicolai, Tonio, MUELLER, Ulrich, PARVULESCU, Andrei-Nicolae, RIEDEL, Dominic, KRAMP, Marvin, URBANCZYK, Daniel, WEGERLE, Ulrike, MUELLER, Christian, METZEN, Bernd, WEBER, Markus, TELES, Joaquim, Henrique
33: EP 31: 17167780.0 32: 2017-04-24

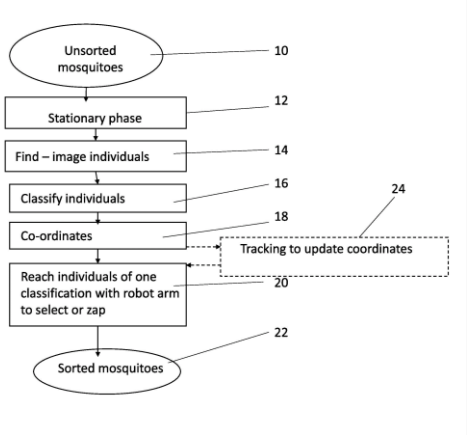
54: PROPENE RECOVERY BY SCRUBBING WITH A SOLVENT/WATER MIXTURE

00: -

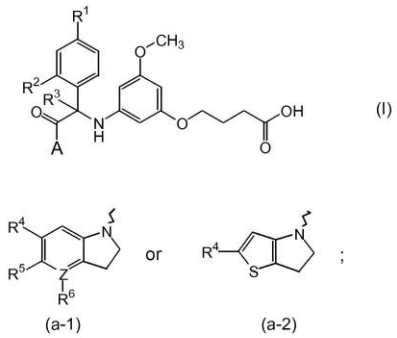
The invention relates to a process for preparing propylene oxide, comprising (i) providing a stream comprising propene, propane, hydrogen peroxide or a source of hydrogen peroxide, water, and an organic solvent; (ii) passing the liquid feed stream provided in (i) into an epoxidation zone comprising an epoxidation catalyst comprising a titanium zeolite, and subjecting the liquid feed stream to epoxidation reaction conditions in the epoxidation zone, obtaining a reaction mixture comprising propene, propane, propylene oxide, water, and the organic solvent; (iii) removing an effluent stream from the epoxidation zone, the effluent stream comprising propene, propane, propylene oxide, water, and the organic solvent; (iv) separating propene and propane from the effluent stream by distillation, comprising subjecting the effluent stream to distillation conditions in a distillation unit, obtaining a gaseous stream (S1) which is enriched in propene and propane compared to the effluent stream subjected to distillation conditions, and a liquid

bottoms stream (S2) which is enriched in propylene oxide, water and organic solvent compared to the effluent stream subjected to distillation conditions; (v) separating propane from the stream (S1) in a separation zone, comprising subjecting the stream (S1) to washing conditions in a scrubber, wherein a solvent mixture comprising organic solvent and water is added as entraining agent, obtaining a bottoms stream (S3), which comprises organic solvent, water and at least 70 weight-% of the propene comprised in (S1); and a gaseous top stream (S4), which comprises at least 5 weight-% of the propane comprised in stream (S1).

21: 2019/07691. 22: 2019-11-20. 43: 2022-01-27
51: A01K; G01N
71: Senecio Ltd.
72: LEPEK, Hanan, NAVE, Tamir, FLEISCHMANN, Yoram, EISENBERG, Rom, KARLIN, Baruch E., TIROSH, Itamar
33: US 31: 62/449,050 32: 2017-01-22
54: METHOD FOR SEX SORTING OF MOSQUITOES AND APPARATUS THEREFOR
00: -
Method and apparatus for mechanical sex-sorting of mosquitoes by extracting a class of mosquitoes from unsorted mosquitoes comprises obtaining unsorted mosquitoes, obtaining images of individual mosquitoes in a stationary phase, electronically classifying the individuals from the images into male mosquitoes and/or female mosquitoes, and possibly also unclassified objects; obtaining co-ordinates of individuals of at least one of the male mosquito and female mosquito classifications, and using a robot arm to reach an individual identified by the obtained coordinates to store or remove the individuals, thereby to provide sex-sorted mosquitoes.



21: 2019/07713. 22: 2019-11-21. 43: 2022-01-27
51: A61K; A61P; C07D
71: Janssen Pharmaceuticals, Inc., Katholieke Universiteit Leuven
72: BONFANTI, Jean-François, KESTELEYN, Bart Rudolf Romanie, BARDIOT, Dorothée Alice Marie-Eve, MARCHAND, Arnaud Didier M., COESEMANS, Erwin, DE BOECK, Benoît Christian Albert Ghislain, RABOISSON, Pierre Jean-Marie Bernard
33: EP(BE) 31: 17172247.3 32: 2017-05-22
54: SUBSTITUTED INDOLINE DERIVATIVES AS DENGUE VIRAL REPLICATION INHIBITORS
00: -
The present invention concerns substituted indoline derivatives, methods to prevent or treat dengue viral infections by using said compounds and also relates to said compounds for use as a medicine, more preferably for use as a medicine to treat or prevent dengue viral infections. The present invention furthermore relates to pharmaceutical compositions or combination preparations of the compounds, to the compositions or preparations for use as a medicine, more preferably for the prevention or treatment of dengue viral infections. The invention also relates to processes for preparation of the compounds.



21: 2019/07738. 22: 2019-11-22. 43: 2022-01-27
51: A23L; C13B
71: Biomass Technologies Pty Ltd
72: BROWN, Rodney A., SCOTT, Maxwell A., DIAMOND, Mark
33: AU 31: 2017901576 32: 2017-05-01
54: SYSTEM FOR AND METHOD OF PROCESSING SUGAR CANE
00: -
A method of processing raw sugar cane juice, comprising: reducing the pH of the sugar cane juice to a pH at which microbiological activity is substantially eliminated; separating chlorophyll from the sugar cane juice; separating particles having a diameter greater than 0.5 microns from the sugar cane juice; denaturing polyphenol oxidase (PPO) in the sugar cane juice by pasteurisation; separating the denatured polyphenol oxidase from the sugar cane juice.

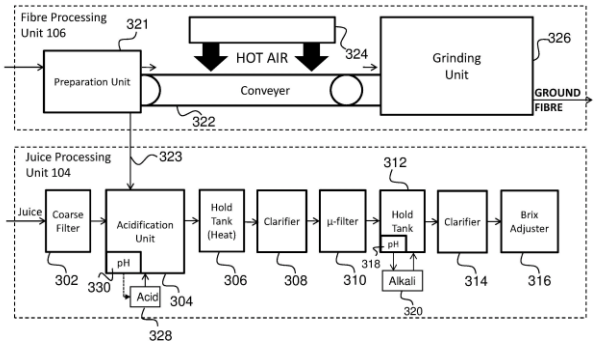
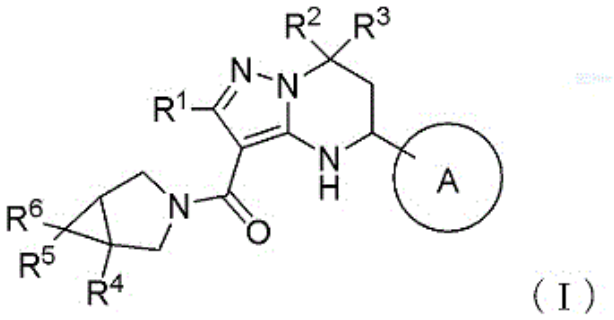


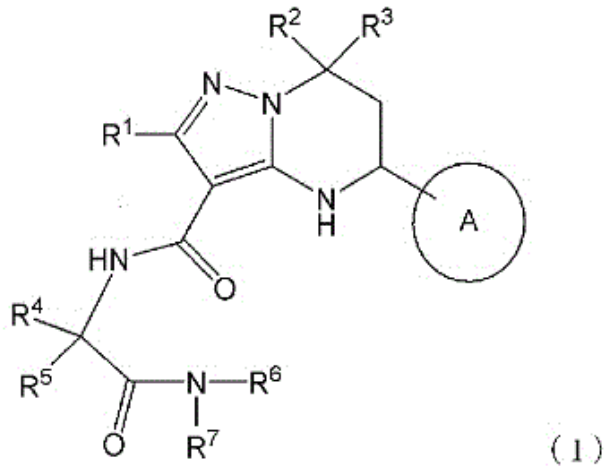
Figure 3

21: 2019/07792. 22: 2019-11-25. 43: 2022-01-27
51: C07D; A61K; A61P
71: TAKEDA PHARMACEUTICAL COMPANY LIMITED
72: KITAMURA, SHUJI, IKEDA, ZENICHI, MORIMOTO, SACHIE, IKOMA, MINORU, WATANABE, KOJI, HIROSE, HIDEKI, YUKAWA, TAKAFUMI, SATO, KENJIRO
33: JP 31: 2017-087959 32: 2017-04-27
54: HETEROCYCLIC COMPOUND
00: -
The present invention provides a compound or a salt thereof having a calcium-sensing receptor antagonistic activity, and being expected to be useful as an agent for preventing or treating heart failure, pulmonary hypertension, or the like. The compounds represented by formula (I) or a salt thereof has a calcium-sensing receptor antagonistic activity, and is expected to be useful as an agent for preventing or treating heart failure, pulmonary hypertension, or the like, wherein each symbol is as described in the specification.



21: 2019/07793. 22: 2019-11-25. 43: 2022-01-27
51: C07D; A61K; A61P
71: TAKEDA PHARMACEUTICAL COMPANY LIMITED
72: KITAMURA, SHUJI, IKEDA, ZENICHI, IKOMA, MINORU, WATANABE, KOJI, HIROSE, HIDEKI, YUKAWA, TAKAFUMI, MORIMOTO, SACHIE, NISHIZAWA, NAOKI, ASAMI, TAIJI
33: JP 31: 2017-087950 32: 2017-04-27
54: HETEROCYCLIC COMPOUND
00: -
The present invention provides a compound or a salt thereof having a calcium-sensing receptor antagonistic activity, and being expected to be useful as an agent for preventing or treating heart failure, pulmonary hypertension, or the like. The compounds represented by formula (I) or a salt thereof has a calcium-sensing receptor antagonistic activity, and is expected to be useful as an agent for preventing or treating heart failure, pulmonary

hypertension, or the like, wherein each symbol is as described in the specification.



(1)

21: 2019/07802. 22: 2019-11-25. 43: 2022-01-27
51: E21B
71: Sandvik Intellectual Property AB
72: BRUANDET, Olivier
33: EP(SE) 31: 17174126.7 32: 2017-06-02
54: DOWN THE HOLE DRILLING MACHINE AND METHOD FOR DRILLING ROCK
00: -
A down the hole rock drilling machine and a method of drilling rock. The drilling machine comprises a reciprocating piston (19), which has sleeve-like configuration. Inside a central opening (20) of the piston is arranged one or more fluid passages for conveying pressurized fluid during work cycle of an impact device of the drill machine.

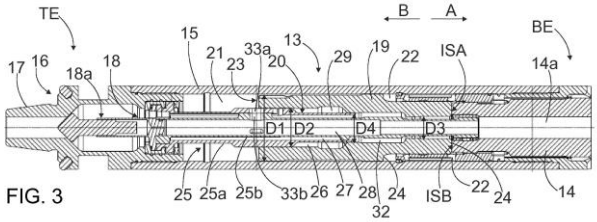


FIG. 3

21: 2019/07828. 22: 2019-11-26. 43: 2022-01-27
51: A61F
71: DRYLOCK TECHNOLOGIES NV
72: SMET, STEVEN, VAN INGELGEM, WERNER, DERYCKE, TOM, VERDUYN, DRIES
33: EP 31: 17198368.7 32: 2017-10-25
33: EP 31: 17196434.9 32: 2017-10-13
33: EP 31: 17198652.4 32: 2017-10-26
33: EP 31: 17202006.7 32: 2017-11-16
33: EP 31: 17183453.4 32: 2017-07-27
33: EP 31: 17171110.4 32: 2017-05-15
33: EP 31: 17190395.8 32: 2017-09-11
33: EP 31: 17200847.6 32: 2017-11-09
33: EP 31: 17198349.7 32: 2017-10-25
54: ABSORBENT ARTICLE WITH CHANNELS AND METHOD FOR MANUFACTURING THEREOF
00: -
An absorbent article comprising a liquid pervious topsheet, a liquid impervious backsheet, and an absorbent core comprising an absorbent material between a top core wrap sheet and a back core wrap sheet, said absorbent core being positioned in between said topsheet and said backsheet, said absorbent core having a first and second longitudinal edge and a first and second transverse edge, said absorbent core having a first portion (130a), (130b) and a second portion (130b), (130a) on either side of a transverse crotch line (L), wherein the absorbent core is provided with a plurality of attachment zones where the top core wrap sheet is attached to the back core wrap sheet, wherein, measured in a transverse direction, a first maximum distance between a first and a second attachment zone is bigger than a second maximum distance between a third and a fourth attachment zone.

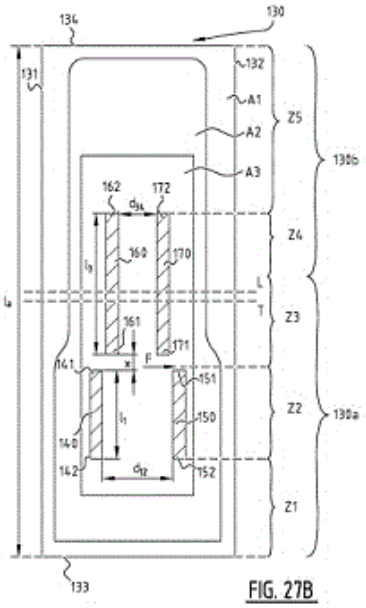
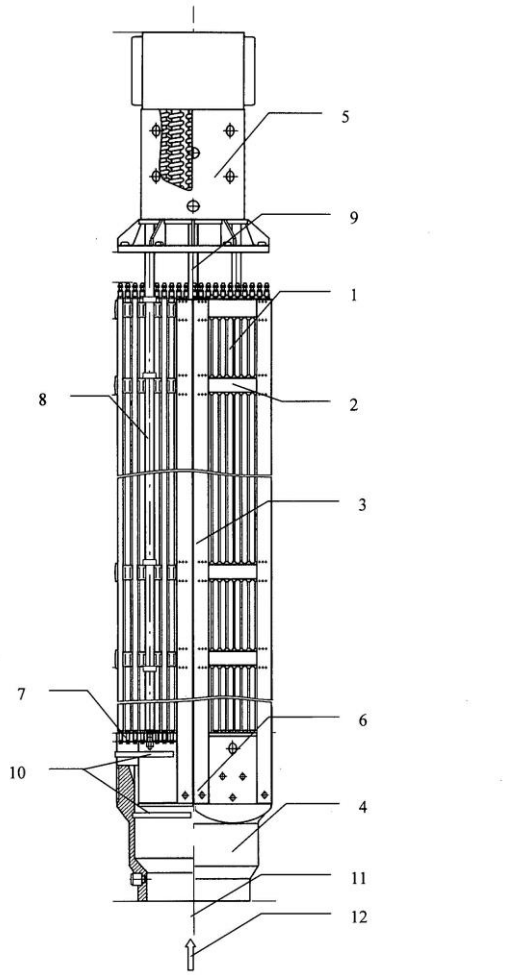


FIG. 27B

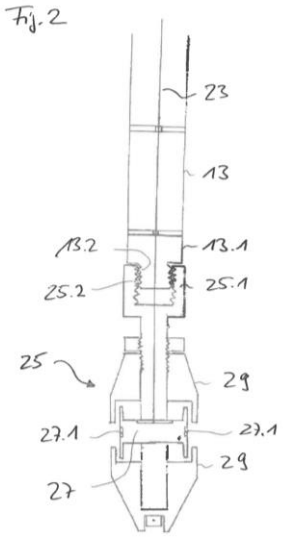
21: 2019/07837. 22: 2019-11-26. 43: 2022-01-27
51: B01D; G21C

71: Joint-Stock Company "Tvel", Public Joint Stock Company "Mashinostroitelny Zavod"
72: AKSENOV, Pyotr Mikhaylovich, LUZAN, Yuriy Vasil'yevich, LERNER, Alexandr Yefimovich, MYAKOV, Sergey Alexandrovich, SAMOYLOV, Oleg Borisovich, SIMANOVSKAYA, Irina Evgen'evna, SHIPOV, Dmitriy Leonidovich, SHOLIN, Evgeniy Vasil'yevich

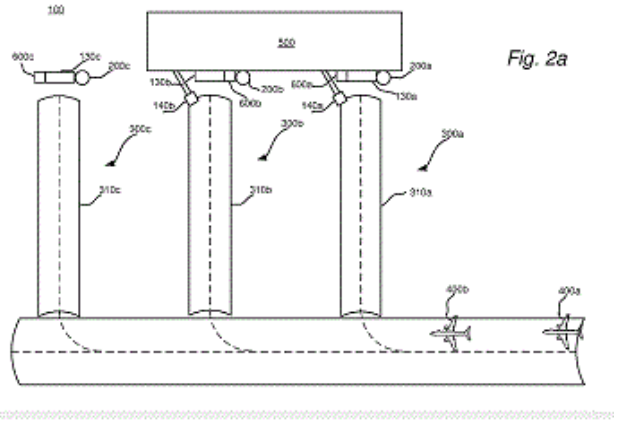
54: NUCLEAR REACTOR FUEL ASSEMBLY
00: -
The invention relates to nuclear reactor fuel assemblies. A nuclear reactor fuel assembly comprises a head, a bundle of fuel elements, spacer grids and an anti-debris filter. The anti-debris filter is mounted in a bottom nozzle of the fuel assembly and is in the form of groups of rectilinear plates arranged in the cross section of the bottom nozzle. An upper and a lower group of plates are arranged at an angle to the longitudinal axis of the fuel assembly and are connected by a central group of plates parallel to the longitudinal axis of the fuel assembly so as to form channels of rectangular cross section along the longitudinal axis of the fuel assembly for the passage of coolant. Furthermore, channels formed by the upper and central groups of plates are arranged at an angle of 0...15° to the longitudinal axis of the fuel assembly. Channels formed by the central and lower groups of plates are arranged at an angle of 15...25° to the longitudinal axis of the fuel assembly with an inclination opposed to the inclination of the channels formed by the upper and central groups of plates. The upper and the lower group of plates are arranged with a gap along the longitudinal axis of the fuel assembly. The technical result is an increase in the reliability and efficiency of a fuel assembly owing to the improvement in the design of the anti-debris filter.



21: 2019/07907. 22: 2019-11-28. 43: 2022-01-20
51: B08B
71: REINING, Christian
72: REINING, Christian
33: EP 31: 18000949.0 32: 2018-12-07
54: CLEANING APPARATUS FOR BAG FILTERS
00: -
A cleaning apparatus for a bag filter with a cleaning head, which is connected to a pressure medium source via a pressure medium hose and has a cleaning bore hole, which can be rotated around a main axis of the cleaning head and through which pressure medium flows out, and with a control device for controlling operating parameters, is characterized in that the cleaning head is connected to a drive device via a drive shaft, which rotates the cleaning bore hole, wherein the control device also controls the drive device.



21: 2019/07935. 22: 2019-11-28. 43: 2022-01-27
51: G08G
71: ADB SAFEGATE SWEDEN AB
72: HÅKANSSON, OLA
33: EP 31: 17172453.7 32: 2017-05-23
54: CONTROL SYSTEM AT AN AIRPORT
00: -
This invention relates to a control system at an airport and a method implemented in such a control system. The system comprising: an input unit being arranged to communicate with an airport surveillance system at an airport, a control unit being arranged to receive, from the input unit, identification data for an aircraft on ground, position data, indicating a position of the aircraft, and, to provide the identification data to a data storage and receive an identifier of a designated gate for the aircraft from the data storage, wherein the control unit is further arranged to provide a signal to a gate control system at the designated gate for preparing the designated gate to receive the aircraft if the position of the aircraft is within a predetermined distance from the designated gate.

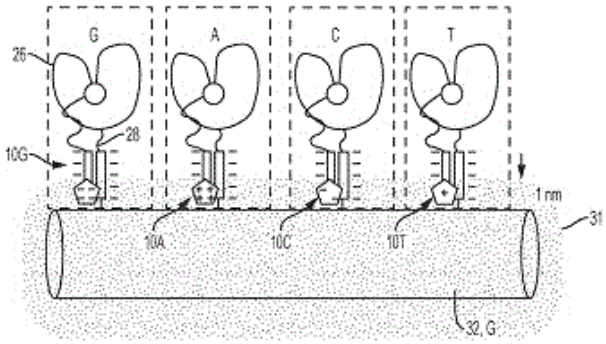


21: 2019/07973. 22: 2019-11-29. 43: 2022-01-27
51: A61K; A61P
71: FUJIFILM Toyama Chemical Co., Ltd.
72: KOBAYASHI, Hiroshi, MATSUMOTO, Yoshihiko
33: JP 31: 2017-109885 32: 2017-06-02
54: AGENT FOR PREVENTING OR TREATING BRAIN ATROPHY
00: -
The present invention addresses the problem of providing a chemical agent for suppressing the progression of Alzheimer-type dementia and a method for suppressing the progression of Alzheimer-type dementia. 1-(3-(2-(1-benzothiophen-5-yl)ethoxy)propyl)azetidin-3-ol or a salt thereof has an effect of suppressing brain atrophy, and is useful as a prophylactic or therapeutic agent for brain atrophy. Thus, it is possible to prevent or treat brain atrophy observed in the aging process or in neurodegenerative diseases by administering 1-(3-(2-(1-benzothiophen-5-yl)ethoxy)propyl)azetidin-3-ol or a salt thereof.

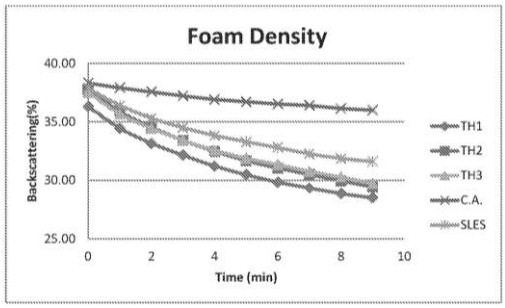
21: 2019/07974. 22: 2019-11-29. 43: 2022-01-27
51: A61K; A61P
71: FUJIFILM Toyama Chemical Co., Ltd.
72: KOBAYASHI, Hiroshi, MATSUMOTO, Yoshihiko, OKUDA, Tomohiro
33: JP 31: 2017-109885 32: 2017-06-02
54: AGENT FOR PREVENTING OR TREATING SPINOCEREBELLAR ATAXIA
00: -
The present invention addresses the problem of providing a superior prophylactic or therapeutic agent for spinocerebellar ataxia. 1-(3-(2-(1-benzothiophen-5-yl)ethoxy)propyl)azetidin-3-ol or a salt thereof has an effect of suppressing brain atrophy, in particular, cerebellar atrophy, and thus is

useful as a prophylactic or therapeutic agent for spinocerebellar ataxia. Hence, it is possible to prevent or treat cerebellar atrophy observed in spinocerebellar ataxia by administering 1-(3-(2-(1-benzothiophen-5-yl)ethoxy)propyl)azetidin-3-ol or a salt thereof.

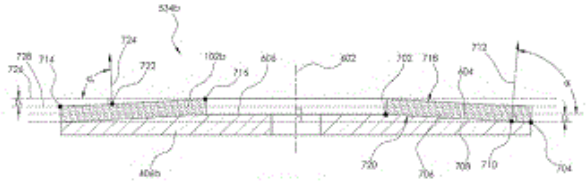
21: 2019/07988. 22: 2019-11-29. 43: 2022-01-27
51: C07H; G01N
71: ILLUMINA, INC.
72: MANDELL, JEFFREY, BARNARD, STEVEN, MOON, JOHN, ROGERT BACIGALUPO, MARIA CANDELARIA
33: US 31: 62/710,465 32: 2018-02-16
54: LABELED NUCLEOTIDES AND USES THEREOF
00: -
A labeled nucleotide includes a nucleotide, a linking molecule attached to a phosphate group of the nucleotide, and a redox-active charge tag attached to the linking molecule. The redox-active charge tag is to be oxidized or reduced by an electrically conductive channel when maintained in proximity of a sensing zone of the electrically conductive channel.



21: 2019/08023. 22: 2019-12-03. 43: 2022-01-27
51: A61K; A61Q
71: Johnson & Johnson Consumer Inc.
72: BLACHECHEN, Tatiana, GUEDES JORGE, Maria Cristina, MORAIS, Jacqueline, BISHOP, Christina, DEXTER, Marni
33: US 31: 62/501,213 32: 2017-05-04
54: IMPROVED CLEANSING COMPOSITIONS
00: -
Sulfate-free cleansing compositions that include a surfactant and a conditioning agent are disclosed. The cleansing compositions are suitably thick and have a desired level of clarity. The cleansing compositions, which are slightly acidic, are mild to the skin and/or eyes.



21: 2019/08028. 22: 2019-12-03. 43: 2022-01-27
51: H02K
71: E-CIRCUIT MOTORS, INC.
72: MILHEIM, GEORGE HARDER
33: US 31: 15/983,985 32: 2018-05-18
33: US 31: 62/515,256 32: 2017-06-05
33: US 31: 62/515,251 32: 2017-06-05
54: PRE-WARPED ROTORS FOR CONTROL OF MAGNET-STATOR GAP IN AXIAL FLUX MACHINES
00: -
An assembly for use in an axial flux motor or generator includes a rotor plate and a magnet, the magnet having a surface that is orthogonal to a magnetization direction of the magnet. The rotor plate is adapted to engage a rotor shaft that rotates about an axis of rotation, and the magnet is attached to the rotor plate. The rotor plate and magnet are configured and arranged such that, if the rotor plate and the magnet are separated from all other magnetic field generating components, then a distance between a first plane that intercepts a first point on the surface and to which the axis of rotation is normal and a second plane that intercepts a second point on the surface and to winch the axis of rotation is normal is substantially greater than zero.



21: 2019/08081. 22: 2019-12-05. 43: 2022-03-04
51: A43B; B63B

71: MARES SPA
72: Alessandro AGUGLIA (Italian Ciizen)
33: IT 31: 102018000010970 32: 2018-12-12
54: MULTI-PURPOSE WATER SHOE
00: -
Multi-purpose footwear comprising a sole, a shoe tongue and a shoe vamp as a portion of the shoe upper and one or more paddle portions mounted so as to be displaceable to two or more alternative and predetermined positions with respect to said shoe.

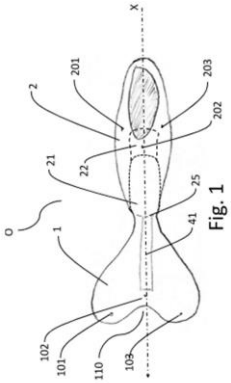
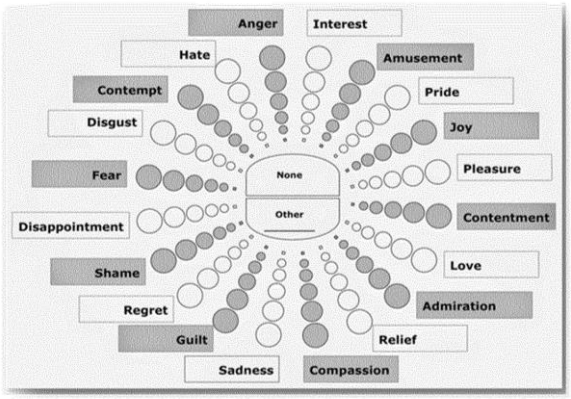


Fig. 1

21: 2019/08094. 22: 2019-12-05. 43: 2022-01-27
51: A61K; A61Q
71: Symrise AG, Johnson & Johnson Consumer Inc.
72: PRIGGE, Katharine A., PANSINI, Kathleen Casey, DUGAN, Karen Solari, PATNEY, Mansi Batra, MCDERMOTT, Keith, HUANG, Lena Quay Siew, BRAUN, Dirk, PENG, Cheong Ai, SULBARAN, Alejandra, ZUNINO, Helene, LUEDTKE, Kathryn, GARCIA, Devin, KEYNES, Kirsten, NIKOLOVSKI, Janeta
33: US 31: 62/502,928 32: 2017-05-08
54: NOVEL FRAGRANCE COMPOSITIONS AND PRODUCTS WITH MOOD ENHANCING EFFECTS
00: -
The present invention primarily relates to novel fragrance compositions suitable for enhancing the mood of a subject, preferably a human, novel products containing the same as well as novel uses and methods of such compositions and products.



Emotional wheel - score sheet

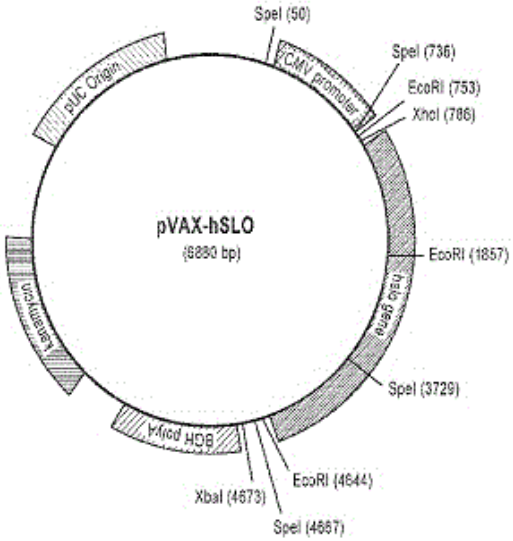
INSTRUCTIONS:

Please select the emotion you felt while smelling the scent. You may choose more than one emotion.

Please indicate the intensity with which you experienced the emotion by filling in the appropriate circle (the bigger the circle, the stronger your emotional experience).

21: 2019/08208. 22: 2019-12-10. 43: 2022-01-27
51: A61K; C07K; A61P
71: ION CHANNEL INNOVATIONS, LLC
72: MELMAN, ARNOLD, CHRIST, GEORGE, ANDERSSON, KARL-ERIK
33: US 31: 62/505,382 32: 2017-05-12
54: COMPOSITIONS AND METHODS FOR TREATING IDIOPATHIC OVERACTIVE BLADDER SYNDROME AND DETRUSOR OVERACTIVITY
00: -
The present invention provides methods of alleviating one or more signs or symptoms of smooth muscle diseases. Compositions of the disclosure may include a plasmid vector containing a nucleic acid that encodes a Maxi-K channel peptide. Compositions of the disclosure may be administered intradetrusorally to at least two or more sites at a single unit dose.

FIG. 8 pVax/hSLO plasmid map



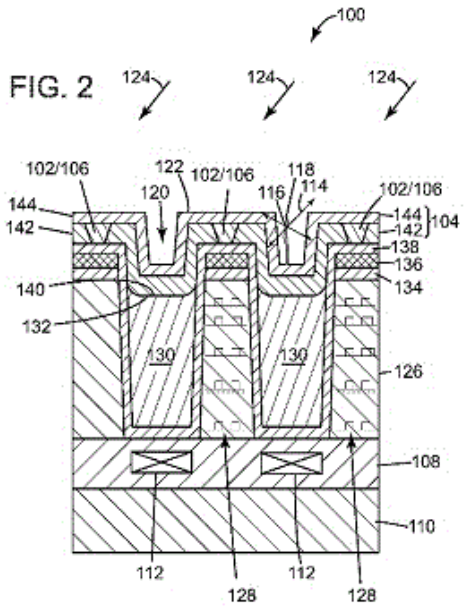
21: 2019/08211. 22: 2019-12-10. 43: 2022-01-27
51: H01L
71: ILLUMINA, INC.
72: CAI, XIUYU, AGAH, ALI, FUNG, TRACY H, DEHLINGER, DIETRICH
33: US 31: 62/610,354 32: 2017-12-26
33: NL 31: 2020615 32: 2018-03-19

54: IMAGE SENSOR STRUCTURE

00: -

An example image sensor structure includes an image layer. The image layer includes an array of light detectors disposed therein. A device stack is disposed over the image layer. An array of light guides is disposed in the device stack. Each light guide is associated with at least one light detector of the array of light detectors. A passivation stack is disposed over the device stack. The passivation stack includes a bottom surface in direct contact with a top surface of the light guides. An array of nanowells is disposed in a top layer of the passivation stack. Each nanowell is associated with a light guide of the array of light guides. A crosstalk blocking metal structure is disposed in the passivation stack. The crosstalk blocking metal structure reduces crosstalk within the passivation stack.

FIG. 2

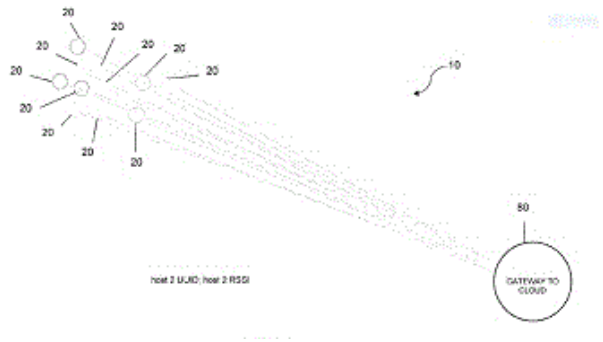


21: 2019/08213. 22: 2019-12-10. 43: 2022-01-27
51: A01K
71: AUSTRALIAN WOOL INNOVATION LIMITED
72: MAJAS, MARGUS, SROYSUWAN, POLLAPEE
33: AU 31: 2017100671 32: 2017-06-07
33: AU 31: 2017902180 32: 2017-06-07

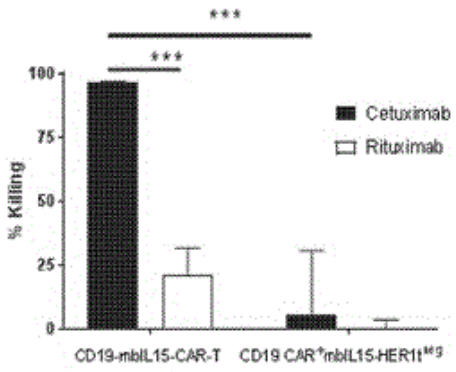
54: LONG RANGE WIRELESS MONITORING SYSTEMS

00: -

A tag attachable to an animal, the tag comprising: a battery connected to a radio transceiver that consumes power from the battery during transmissions and receptions of signals to and from one or more proximate tags attachable to one or more other animals to generate paired tag readings; and a controller configured to operate the radio transceiver for a predetermined duration and frequency of transmissions, and a predetermined duration and frequency of receptions; wherein the predetermined duration and frequency of transmissions and the predetermined duration and frequency of receptions are based on power consumptions of the radio transceiver during transmissions and receptions, and a targeted number of paired tag readings of the tag.



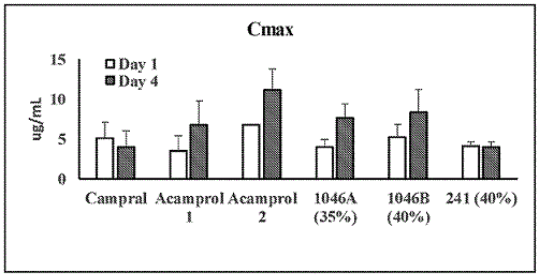
21: 2019/08215. 22: 2019-12-10. 43: 2022-01-27
51: C12Q; C07K; A61K
71: INTREXON CORPORATION
72: SHAH, RUTUL, EMTAGE, PETER, YARLAGADDA, RAMYA
33: US 31: 62/516,639 32: 2017-06-07
54: EXPRESSION OF NOVEL CELL TAGS
00: -
Disclosed herein are polynucleotides encoding cell tags for use in immunotherapeutic applications, and systems comprising polynucleotide cell tags for regulating the activity of a cell. The compositions, methods and systems described herein provide tools for regulating activity of genetically engineered cells in a subject.



21: 2019/08217. 22: 2019-12-10. 43: 2022-01-27
51: C01B; C25B
71: HALDOR TOPSØE A/S
72: AASBERG-PETERSEN, KIM, HAN, PAT A, MORTENSEN, PETER MØLGAARD
33: DK 31: PA 2018 00345 32: 2018-07-06
33: DK 31: PA 2017 00425 32: 2017-07-25
33: DK 31: PA 2017 00522 32: 2017-09-25
33: DK 31: PA 2018 00237 32: 2018-05-28
54: METHOD FOR THE PREPARATION OF SYNTHESIS GAS
00: -
Method for the preparation of synthesis gas by combining electrolysis of water, autothermal reforming and heat ex- change reforming of a hydrocarbon feed stock.

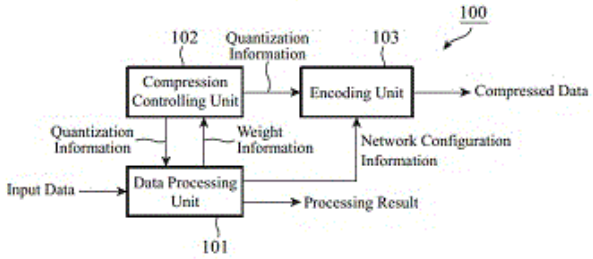
21: 2019/08239. 22: 2019-12-11. 43: 2022-01-27
51: A01G; A01N
71: LOCUS AGRICULTURE IP COMPANY, LLC
72: FARMER, Sean, ALIBEK, Ken, MOLDAKOZHAYEV, Alibek
33: US 31: 62/564,517 32: 2017-09-28
54: TREATMENT OF MOSAIC VIRUSES AND BACTERIAL INFECTIONS OF PLANTS
00: -
Compositions and methods are provided for treating certain plant pathogens using microbe-based products. In particular, the subject invention relates to treatment of plant pathogenic viruses, including mosaic virus, as well as plant pathogenic bacteria, using beneficial microbes and/or their growth by-products. In certain embodiments, the growth by-products are biosurfactants.

21: 2019/08264. 22: 2019-12-11. 43: 2022-01-27
51: A61K A61P
71: CONFLUENCE PHARMACEUTICALS, LLC
72: JOHNS, Steven, PAYIE, Kenneth, DONIPARTHI, Badrinath
33: US 31: 62/507,532 32: 2017-05-17
33: US 31: 62/660,690 32: 2018-04-20
54: FORMULATIONS OF HOMOTAURINES AND SALTS THEREOF
00: -
Orally-administrable, pharmaceutical formulations comprising a plurality of pellets are described herein. The pellets comprise a core, a release coating, and an enteric coating, where the release coating comprises, for example, an HPMC.



21: 2019/08272. 22: 2019-12-11. 43: 2022-01-27

51: G06N; H03M
71: MITSUBISHI ELECTRIC CORPORATION
72: MINEZAWA, AKIRA, MORIYA, YOSHIMI, WANG, MENGXIONG, SUGIMOTO, KAZUO
54: DATA PROCESSING DEVICE, DATA PROCESSING METHOD, AND STORAGE MEDIUM
00: -
A data processing unit (101) processes input data using a neural network. A compression control unit (102) generates quantization information that defines quantization steps. An encoding unit (103) generates compressed data by encoding the quantization information and network configuration information including parameter data that has been quantized in the quantization steps determined by the compression control unit (102).



21: 2019/08295. 22: 2019-12-12. 43: 2022-01-27
51: B65G; B65H
71: Sacmi Cooperativa Meccanici Imola Societa' Cooperativa
72: MIRRI, Marco, VILLA, Fabrizio
33: IT 31: 102018000011062 32: 2018-12-13
54: METHOD AND APPARATUS FOR ADVANCING PRODUCTS TO BE FORMED
00: -
An advancing method is disclosed that uses an advancing apparatus (1) to advance a plurality of sheet metal products in sheet form to be formed to perform the following steps: conveying a first product (P1) of a plurality of products (P1, P2, P3) to a first zone (1a) of the advancing apparatus (1); in the first zone (1a) taking first pushing means (2) to abut on the first product (P1) by moving the first pushing means (2) at least along a first direction (D1); advancing said first product (P1) from the first zone (1a) to a second zone (1b) of said advancing apparatus (1) along a second direction (D2) that is transverse to first direction (D1) initially with continuous motion and subsequently with intermittent motion; conveying a second product (P2) of said plurality of products (P1, P2, P3) to said first zone (1a); take said second pushing means (3) to abut movably along said at least one first direction (D1) on said second product (P2); advancing said second product (P2) to the second zone (1b) along said second direction (D2), initially with continuous motion and subsequently with intermittent motion whilst said first product (P1) advances from said first zone (1a) to the second zone (1b); moving in the second zone (1b) said first pushing means (2) away from said first product (P1), moving the first pushing means (2) along a third direction (D3) transverse to said second direction (D2); moving with continuous motion said first pushing means (2) from said second zone (1b) to said first zone (1a) along a fourth direction (D4) parallel to and opposite said second direction (D2) whilst the second pushing means continues to push the second product (P2); again moving said first pushing means (2) along said at least one main direction (D1) to take the first pushing means (2) to abut on a third product (P3) of said plurality of products (P1, P2, P3) that has in the meantime been conveyed to said first zone (1a).

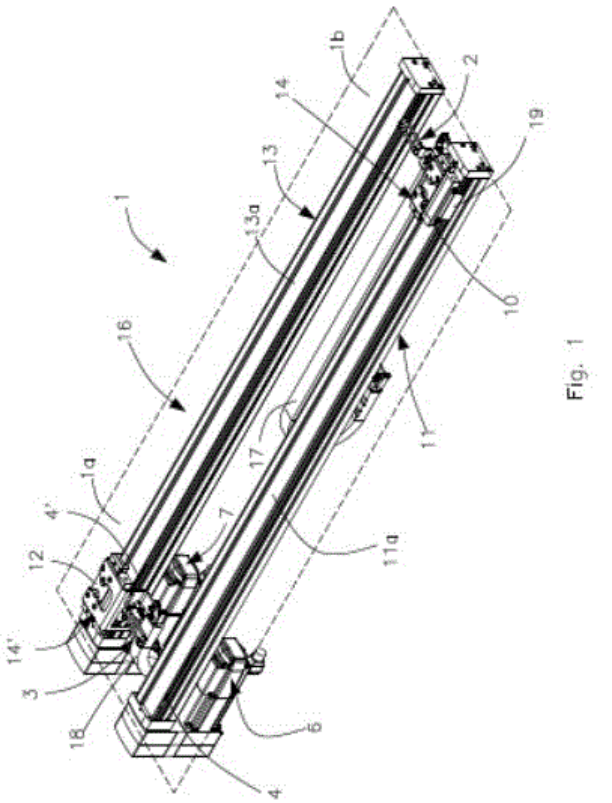
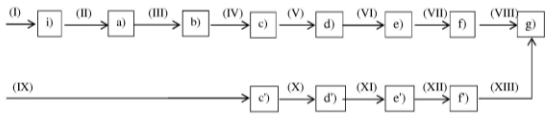


Fig. 1

21: 2019/08309. 22: 2019-12-12. 43: 2022-01-27

51: C10L
71: IFP ENERGIES NOUVELLES, AXENS, COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES, TOTAL RAFFINAGE CHIMIE, thyssenkrupp Industrial Solutions AG, AVRIL, BIONEXT
72: PLENNEVAUX, Thomas, GAZARIAN, Jeremy, BOURNAY, Laurent, ULLRICH, Norbert
33: FR 31: 1756406 32: 2017-07-07
54: METHOD FOR PROCESSING BIOMASS BY CO-GRINDING WITH A FOSSIL-BASED FEEDSTOCK
00: -
The present invention relates to a method for processing a biomass-containing feedstock, said method comprising the following steps: a) a step of drying said feedstock at a temperature between 20 and 80°C for a duration of between 5 and 180 minutes, b) a step of torrefaction of the dried feedstock coming from step a) in order to produce at least one solid torrefied biomass effluent, and c) a step of co-grinding the solid torrefied biomass effluent from step b) in the presence of at least one solid fossil-based feedstock in order to obtain a powder.



21: 2019/08318. 22: 2019-12-12. 43: 2022-01-27
51: B60P; B60R
71: METSO SWEDEN AB
72: LARSSON, FREDRIK, PERSSON, HENRIK, AHLBERG, PETER, JOHANSSON, MAGNUS, HÄLLEVALL, NICLAS
33: EP 31: 17177445.8 32: 2017-06-22
54: A LINING, A HAUL TRUCK BODY COMPRISING THE SAME AND A HAUL TRUCK
00: -
The disclosure relates to a lining (100) for a haul truck body (10), said lining (100) being arranged to extend over surfaces of said haul truck body (10), wherein said surfaces define at least one impact region (110a, 110b) and at least one wear region (120); wherein said lining (100) within said at least one impact region (110a,110b) presents one or more impact lining elements (130); wherein said lining (100) within said at least one wear region (120) presents one or more wear lining elements (140); and wherein said impact lining elements (130) have a higher impact resistance than said wear lining elements (120) and said wear lining elements (120) have a higher wear resistance than the impact lining elements (130). The disclosure further relates to a haul truck body (10) comprising the lining (100) and a haul truck (1) comprising the haul truck body (10).

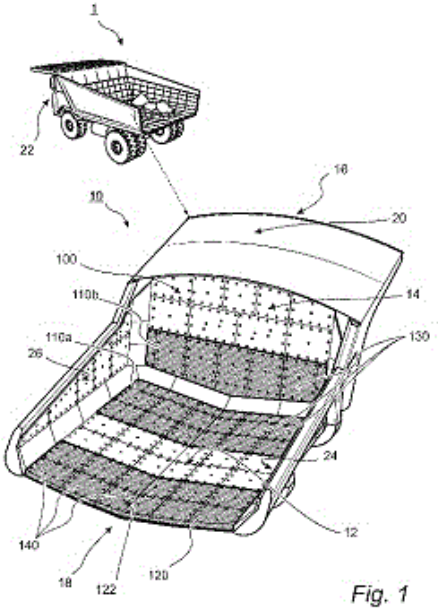


Fig. 1

21: 2019/08319. 22: 2019-12-12. 43: 2022-01-27
51: B60P; B60R
71: METSO SWEDEN AB
72: PERSSON, HENRIK, LARSSON, FREDRIK, JOHANSSON, MAGNUS, AHLBERG, PETER, HÄLLEVALL, NICLAS
33: EP 31: 17177445.8 32: 2017-06-22
54: A LINING, A HAUL TRUCK BODY COMPRISING THE SAME AND A HAUL TRUCK
00: -
The disclosure relates to a lining (300) for a haul truck body, said lining (300) being arranged to extend over a haul truck body (30) for carrying a load, wherein the lining is formed by a plurality of lining elements comprising at least a first type of lining elements, termed load-breaking lining elements (320), and a second type of lining elements, different from the load-breaking lining elements (320), said load-breaking lining elements (320) being structured and arranged to restrict, to a higher degree than the second type of lining elements, movement of said load in relation to the lining (300). The disclosure further relates to a haul

truck body (10) comprising the lining (300) and a haul truck (1) comprising the haul truck body (10).

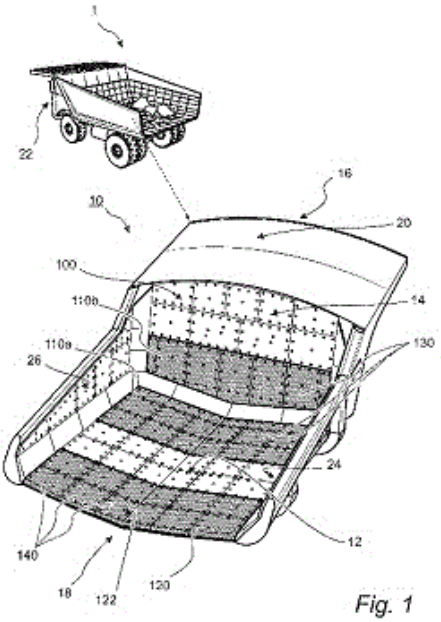


Fig. 1

21: 2019/08327. 22: 2019-12-12. 43: 2022-01-27
51: B60P; B60R
71: METSO SWEDEN AB
72: LARSSON, FREDRIK, PERSSON, HENRIK, GRÖNVALL, LARS
33: EP 31: 17177441.7 32: 2017-06-22
54: WEIGHT OPTIMIZATION
00: -
A lining element (2) for a wear-resistant haul truck body lining comprises a reinforcement plate (4) being at least partly embedded in elastic material (20). The reinforcement plate (20) comprises a plurality of mounting holes (6) which are arranged for mounting the lining element (2) to a haul truck body (100) and which are not covered by the elastic material (20), and one or more weight-reducing cut-out openings (8) which are larger than the mounting holes (6) and which are covered by the elastic material (20).

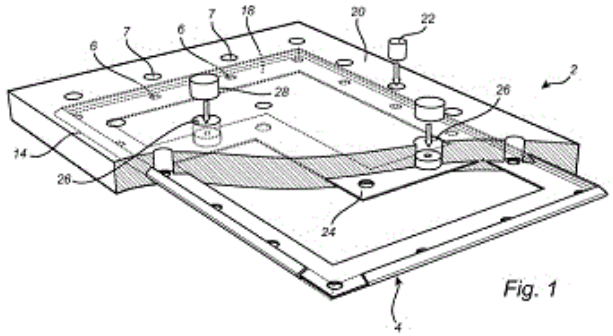


Fig. 1

21: 2019/08328. 22: 2019-12-12. 43: 2022-01-27
51: B60P; B60R
71: METSO SWEDEN AB
72: LARSSON, FREDRIK, PERSSON, HENRIK
33: EP 31: 17177442.5 32: 2017-06-22
54: A HAUL TRUCK BODY AND A METHOD FOR MANUFACTURING A HAUL TRUCK BODY
00: -
The invetion relates to a haul truck body (2), comprising a front wall (5) and two opposing side walls (6). Each side wall (6) presenting an inner surface (7) and an upper edge portion (8) extending rearwardly from a rear end (9) of side wall (6) towards the front wall (5). Also, each side wall (6) presents an upper reinforcement element (10) which is integrally formed with the side wall (6) and extends along the upper edge portion (8) of the side wall (6). The invention also relates to a truck (1) and a method for manufacturing a haul truck body (2).

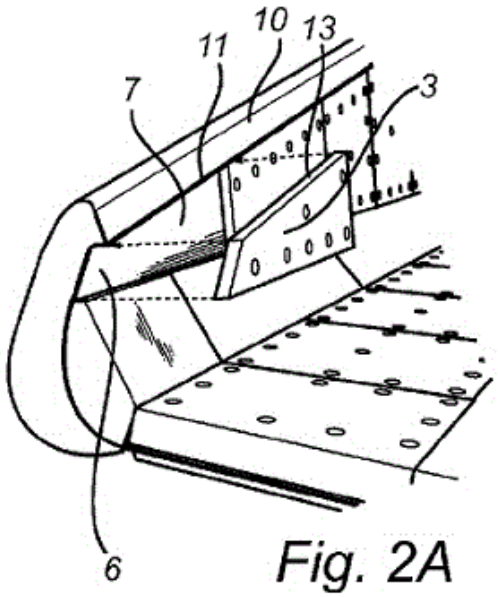


Fig. 2A

21: 2019/08345. 22: 2019-12-13. 43: 2022-01-07
51: C07D; C07F
71: Incyte Holdings Corporation
72: LIU, Pingli, WANG, Dengjin, WU, Yongzhong, CAO, Ganfeng, XIA, Michael
33: US 31: 61/773,659 32: 2013-03-06
54: PROCESSES AND INTERMEDIATES FOR MAKING A JAK INHIBITOR
00: -
This invention relates to processes and intermediates for making {1-{1-[3-fluoro-2-(trifluoromethyl)isonicotinoyl]piperidin-4-yl}-3-[4-(7H-pyrrolo[2,3-d]pyrimidin-4-yl)-1H-pyrazol-1-yl]azetidin-3-yl}acetonitrile, useful in the treatment of diseases related to the activity of Janus kinases (JAK) including inflammatory disorders, autoimmune disorders, cancer, and other diseases.

21: 2019/08354. 22: 2019-12-13. 43: 2022-01-20
51: B32B; E04F
71: CHAMPION LINK INTERNATIONAL CORPORATION
72: BAERT, Thomas Luc Martine, DREVET, Anthony
33: NL 31: 2019108 32: 2017-06-22
54: FLOOR PANEL AND METHOD OF PRODUCING SUCH A FLOOR PANEL
00: -
The invention relates to a floor panel, in particular a magnesium oxide based floor panel, which is preferably provided with interconnecting coupling parts for mutually connecting adjacent floor panels to each other. The invention also relates to a method of producing a floor panel, in particular a magnesium oxide based floor panel.

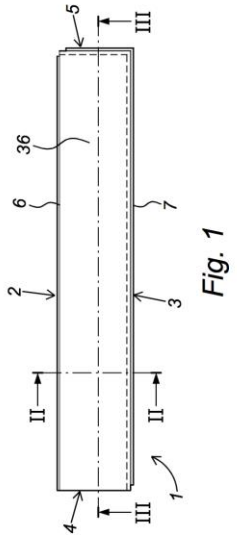


Fig. 1

21: 2019/08366. 22: 2019-12-13. 43: 2022-01-20
51: B32B
71: CHAMPION LINK INTERNATIONAL CORPORATION
72: BAERT, Thomas Luc Martine, DREVET, Anthony
33: NL 31: 2019121 32: 2017-06-26
54: PANEL SUITABLE FOR FORMING A FLOOR COVERING, PROCESS FOR PRODUCING A PANEL, USE OF AN ADHESIVE PRECURSOR
00: -
Panel suitable for forming a floor covering by assembling a plurality of said panels adjacent to each other, which is of a substantially planar design, having a planar top side and a planar bottom side, said panel being composed from a layered structure that comprises: - a waterproof core layer; - a top layer adhered on the top side of said core layer, wherein the top layer comprises at least one ply of cured resin impregnated paper; - an adhesive layer between the core layer and the top layer; characterized in that the adhesive layer is a cured mixture which comprises - a polymeric adhesive compound, and - an additional constituent which is either - at least one resin component which is also present in the cured resin impregnated paper, and which is not included in the polymeric adhesive compound, or - an epoxy resin.

21: 2019/08375. 22: 2019-12-13. 43: 2022-01-27
51: G01N; H01L
71: ILLUMINA, INC.

72: YUAN, DAJUN, QIANG, LIANGLIANG, GUO, MINGHAO
33: US 31: 62/684,907 32: 2018-06-14
33: NL 31: N2021258 32: 2018-07-05
54: DEVICE FOR LUMINESCENT IMAGING
00: -
A device includes a plurality of imaging pixels in a spatial pattern with a formation of features disposed over the pixels. A first and a second feature of the formation of features are disposed over a first pixel. A first luminophore is disposed within or over the first feature. A second luminophore is disposed within or over the second feature. A structured illumination source is to direct at least a portion of first photons in an illumination pattern to the first feature at a first time, and to direct at least a portion of second photons in the illumination pattern to the second feature at a second time. The structured illumination source includes an illumination pattern generator having an illumination pattern generator actuator connected to the illumination pattern generator to cause the illumination pattern to translate or rotate relative to the formation of features.

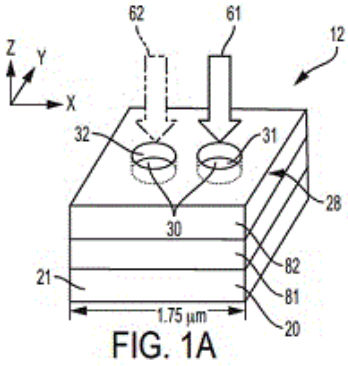
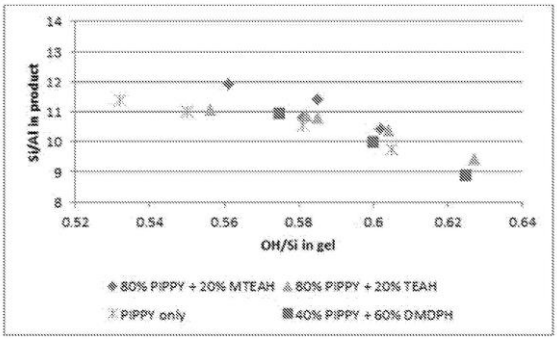


FIG. 1A

21: 2019/08408. 22: 2019-12-17. 43: 2022-01-27
51: C22B; C01F; C01G
71: AUSTRALIAN NUCLEAR SCIENCE & TECHNOLOGY ORGANISATION
72: GRIFFITH, CHRIS
33: AU 31: 2017902476 32: 2017-06-27
54: SEPARATION OF ACTINIUM FROM PROCESS LIQUORS
00: -
The present specification relates to a method for removing actinium from process liquors comprising ions of interest (which may be, for example, rare earth ions) and actinium ions. In this method, a low solubility metal sulfate salt is caused to precipitate from a solution comprising ions of interest and actinium ions. Actinium ions become associated with the precipitate causing them to be removed from the solution. The method allows actinium to be removed from the solution selectively i.e. without the concurrent removal of substantial amounts of the ions of interest present in the solution.

21: 2019/08443. 22: 2019-12-18. 43: 2022-01-27
51: C01B
71: SACHEM, Inc.
72: MOULTON, Roger, LITTLE, Charles B.
33: US 31: 62/521,949 32: 2017-06-19
54: PROCESS FOR SSZ-39 SYNTHESIS USING MODIFIED REACTION COMPOSITION
00: -
A process for making SSZ-39 zeolite employing at least one organic structure-directing agent (OSDA), in which a substantial quantity of the at least one OSDA, which otherwise would be required to form a zeolite such as SSZ-39, is replaced by at least one quaternary ammonium or phosphonium compound (PFA) or a mixture of two or more thereof that is not itself an OSDA for making SSZ-39. A composition including at least one oxide of silicon; faujasite; at least one organic structure directing agent (OSDA) for making SSZ-39 zeolite; at least one PFA that is not an OSDA for making SSZ-39 zeolite; an alkali metal hydroxide; and water.

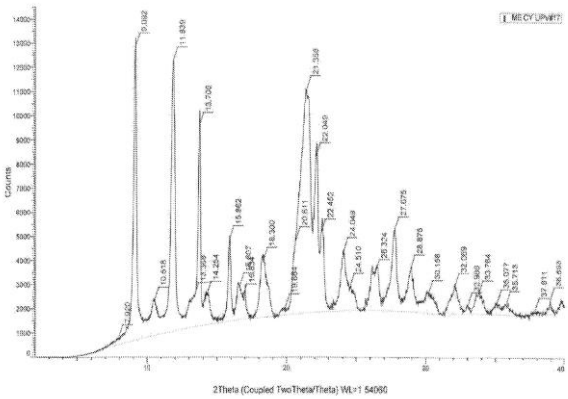


21: 2019/08444. 22: 2019-12-18. 43: 2022-01-27
51: A01N; C07C
71: UPL LTD
72: DESAI, Jignesh Amrutlal, PANCHAL, Digish Manubhai, SHROFF, Jaidev Rajnikant, SHROFF, Vikram Rajnikant
33: IN 31: 201731021418 32: 2017-06-19

54: POLYMORPHS OF MESOTRIONE METAL CHELATE AND PREPARATION PROCESS

00: -

The invention provides mesotrione copper chelate form I and mesotrione copper chelate form II. A process for preparing mesotrione copper chelate form I and mesotrione copper chelate form II is also disclosed. Further, the present invention provides process for preparing mesotrione metal chelate polymorphs and agrochemical formulations comprising such polymorphs.



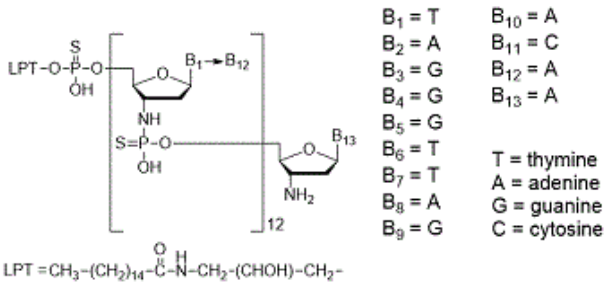
21: 2019/08452. 22: 2019-12-18. 43: 2022-01-27
51: C07H
71: GERON CORPORATION
72: MUSLEHIDDINOGLU, JALE, GALA, DINESH, ALBANEZE-WALKER, JENNIFER ELIZABETH
33: EP 31: 17180426.3 32: 2017-07-10

54: IMPROVED PROCESS FOR PREPARING IMETELSTAT

00: -

The present invention relates to a process for preparing the telomerase inhibitor imetelstat using a 3 steps per cycle solid- phase support bound process comprising the steps of deprotection of the 3'-amino group of the support-bound oligonucleotide, coupling with a 5'-phosphoramidite, and sulfurization with an acyl disulfide, characterized by the absence of an additional capping step in each cycle that is used to prevent unreacted 3'-amino oligonucleotide groups from reacting during subsequent cycles. Imetelstat has formula below.

imetelstat



21: 2019/08453. 22: 2019-12-18. 43: 2022-01-27
51: G01N
71: COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION
72: HU, SHENGGEN, O'BRIEN, MICHAEL
33: AU 31: 2017902604 32: 2017-07-04

54: SYSTEM AND METHOD FOR MONITORING AT LEAST ONE CHARACTERISTIC PROPERTY OF A MULTIPHASE FLUID

00: -

A system for monitoring at least one characteristic property of a multiphase fluid is disclosed. The system comprises at least one pair of electrodes immersed within a multiphase fluid and defining a sample region located therebetween, signal generating means configured to generate and apply an electrical signal across the at least one pair of electrodes, measuring means configured for measuring an electrical parameter of the multiphase fluid in the sample region, the measured electrical parameter being caused to change in response to a flow of electrical current between the at least one pair of electrodes, and a processor configured to calculate relative impedance data corresponding to a ratio of a magnitude of an electrical impedance of at least one phase constituent of the multiphase fluid within the sample region measured at a first selected frequency point relative to a magnitude of an electrical impedance of at least one other phase constituent measured at a second selected frequency point, wherein the value or degree of variation of the relative impedance data is proportional to at least one characteristic property of the at least one phase constituent of the multiphase fluid.

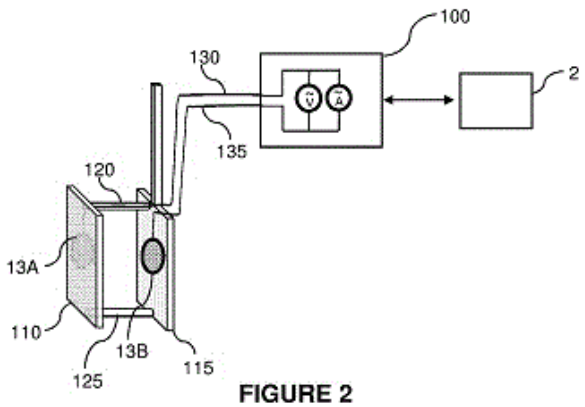


FIGURE 2

21: 2019/08475. 22: 2019-12-19. 43: 2022-01-27
51: A61C
71: Johnson & Johnson Consumer Inc.
72: DORWARD, Brian, FOURRE, Tara, MCDONOUGH, Justin, MIKSA, Davide, SEO, Jin, SHARMA, Deepak
33: US 31: 15/611,031 32: 2017-06-01
54: ORAL CARE CLEANING SYSTEM UTILIZING ENTRAINED FLUID
00: -
The present invention provides for oral care systems (10) comprising: an appliance (50) comprising a first and second plurality of nozzles, the appliance configured to be held in the mouth of a user with the first and second plurality of nozzles in fluid communication with one or more surfaces of the user's oral cavity; a source of gas; a source of liquid; and a fluid controller (40) for directing entrained fluid to the appliance. Also disclosed are methods of cleaning, or otherwise providing oral care benefits to, one or more surfaces of the oral cavity using a system of the present invention.

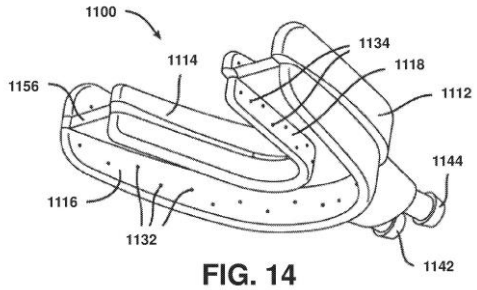
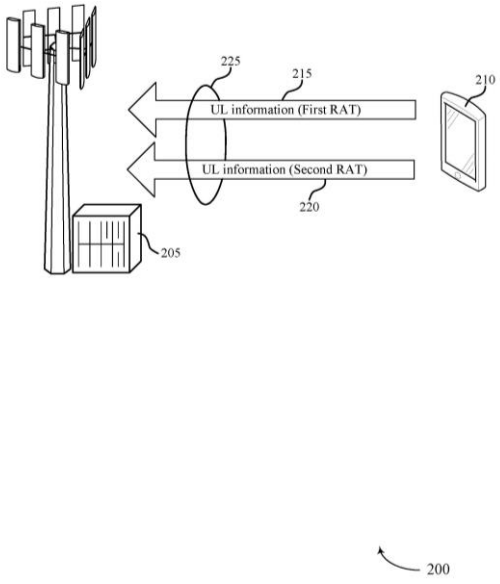


FIG. 14

21: 2019/08478. 22: 2019-12-19. 43: 2022-01-27
51: H04B; H04L
71: QUALCOMM Incorporated
72: GAAL, Peter, HUANG, Yi, GOROKHOV, Alexei Yurievitch
33: US 31: 62/523,248 32: 2017-06-21
54: TECHNIQUES FOR CARRIER SHARING BETWEEN RADIO ACCESS TECHNOLOGIES
00: -
Techniques are described herein for addressing tone misalignment between signals of a first radio access technology (RAT) and signals of a second RAT in a combined signal. In some wireless communications systems, the tones of uplink (UL) signals may be shifted up or down based on the configuration of the particular RAT. If UL signals of the first RAT are not shifted in frequency and UL signals of the second RAT are shifted in frequency, processing the combined signal may include additional processing to account for the mismatch.



21: 2019/08481. 22: 2019-12-19. 43: 2022-01-27
51: F03D
71: SILA PRIRODI Limited Liability Company (SILA PRIRODI LLC)
72: YAKIMCHUK, Vyacheslav Antonovich
33: RU 31: 2017117571 32: 2017-05-22
33: RU 31: 2017117570 32: 2017-05-22
54: METHOD AND SYSTEM FOR CONVERTING WIND ENERGY
00: -
The invention relates to a method and system for converting wind energy into electrical energy. The method consists in that wind energy receivers mounted on the body of movable wind energy conversion modules which perform a linear movement along a guide belt connected to a contact guide which interacts with said wind energy

conversion modules convert wind energy into motion energy of said wind energy conversion modules and into electrical energy by means of an electrical energy generating device. The system comprises a device for controlling and coordinating the movement of the wind energy conversion modules. At the same time, in accordance with external conditions, constant adjustments are made to the total area of all of the wind energy receivers brought onto the guide belt, and the device for controlling and coordinating the movement of the modules is designed to be capable of adjusting the number of modules in operation by introducing additional modules onto the guide belt or by removing modules from the guide belt depending on the current wind conditions. The invention is directed towards increasing wind power efficiency.

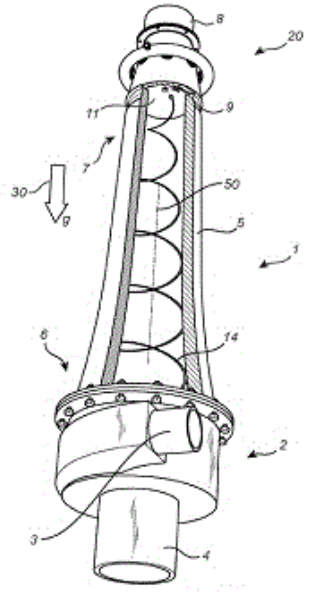


Fig. 2A

21: 2019/08500. 22: 2019-12-19. 43: 2022-01-27
51: B04C
71: METSO MINERALS INDUSTRIES, INC.
72: KNORR, BRIAN, GRÖNVALL, LARS, GALLIMORE, MATT
33: US 31: 15/966,900 32: 2018-04-30
33: EP 31: 17177480.5 32: 2017-06-22
54: HYDROCYCLONE SEPARATOR
00: -

A hydrocyclone separator and a method for classifying solid material in liquid suspension are presented. The hydrocyclone separator comprises a head portion having an inlet conduit and an overflow discharge tube arranged in the head portion. The hydrocyclone separator further has an apex discharge port and a tapered separation portion arranged between the head portion and the apex discharge port. The tapered separation portion is tapering distally away from the head portion. Moreover, the hydrocyclone separator has a flow support portion with at least one flow support inlet configured to inject a fluid along at least a portion of an inner surface of the flow support portion towards the apex discharge port, when the hydrocyclone separator is oriented such that the apex discharge port is at a vertically elevated position relative to the overflow discharge tube. Hereby, a hydrocyclone separator capable of achieving improved operational efficiency with reduced risk of clogging the apex discharge port is presented.

21: 2019/08501. 22: 2019-12-19. 43: 2022-01-27
51: B04C
71: METSO MINERALS INDUSTRIES, INC.
72: KNORR, BRIAN, GRÖNVALL, LARS
33: EP 31: 17177481.3 32: 2017-06-22
54: HYDROCYCLONE SEPARATOR
00: -

A hydrocyclone separator (1) and a system comprises a plurality of such hydrocyclone separators (1) are presented. The hydrocyclone separator comprises a head portion (2) having an inlet conduit (3) and an overflow discharge tube (4) arranged in the head portion (2). The hydrocyclone separator (1) further has an apex discharge port (8) and a tapered separation portion (5) arranged between the head portion and the apex discharge port. The tapered separation portion is tapering distally away from the head portion. Moreover, the head portion further comprises an emptying port arranged in the head portion separately from the overflow discharge tube. Hereby, a hydrocyclone separator capable of achieving improved operational efficiency with reduced risk of coarse fraction being misplaced and left in the head portion is presented. This effectively reduces maintenance needs and prolongs the lifespan of the hydrocyclone.

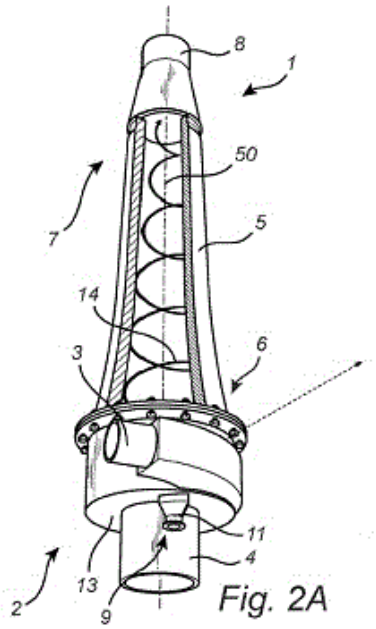
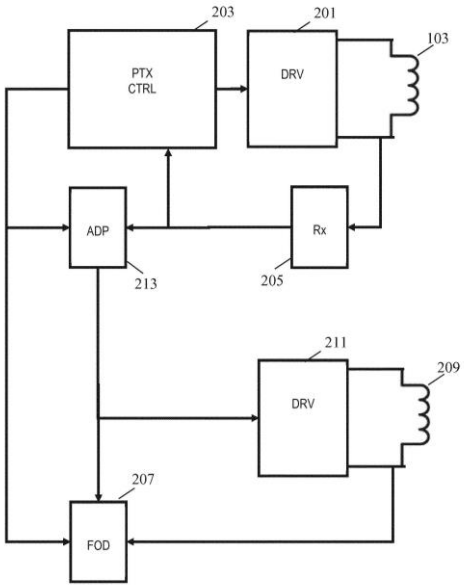


Fig. 2A

21: 2019/08568. 22: 2019-12-23. 43: 2022-02-18
51: A23L
71: HEILONGJIANG BAYI AGRICULTURAL UNIVERSITY
72: CAO, Longkui, KANG, Ziyue, ZHANG, Xuejuan, WANG, Weihao, GE, Yunfei
33: CN 31: 201910898296.6 32: 2019-09-23
54: MEAL REPLACEMENT SHAKE, PREPARATION METHOD AND APPLICATION THEREOF
00: -
The present invention provides a meal replacement shake, a preparation method and an application thereof, and pertains to the technical field of health food; the meal replacement shake includes the following raw materials in parts by weight: 300-340 parts of coarse cereal-natto complex powders, 150-170 parts of dietary fiber complex powders, 4-10 parts of black fungus powders, 4-10 parts of wolfberry powders, 0.5-2 parts of salt, and 1-4 parts of xylitol. In the present invention, the meal replacement shake is rich in dietary fiber and nattokinase; synergism between dietary fiber and nattokinase has good cholesterol-lowering activity. Moreover, by-products of coarse cereals and miscellaneous beans are properly used in the present invention, which not only improve economic performance, but also reduce environmental pollution.

21: 2019/08589. 22: 2019-12-23. 43: 2022-01-27
51: H02J
71: Koninklijke Philips N.V.
72: VAN WAGENINGEN, Andries, ETTES, Wilhelmus Gerardus Maria, VELTMAN, Eddy Gerrit, STARING, Antonius Adriaan Maria, THEELEN, Richard Henricus Maria, KABLAU, Johannes Gerardus Fredericus
33: EP(NL) 31: 17173465.0 32: 2017-05-30
54: FOREIGN OBJECT DETECTION IN A WIRELESS POWER TRANSFER SYSTEM
00: -
A power transmitter (101) for a wireless power transfer system comprises a transmitter coil (103) and a driver (201) generates a drive signal for the transmitter coil (103) employing a repeating time frame with a power transfer time interval and a foreign object detection time interval. A test generator (211) generates a test drive signal for a test coil (209) during the foreign object detection time interval. A foreign object detector (207) performs a foreign object detection test based on a measured parameter for the test drive signal. Prior to entering a power transfer phase, an adapter (213) controls the power transmitter (101) to operate in a foreign object detection initialization mode in which a preferred value of a signal parameter for the test drive signal is determined in response to at least a first message received from the power receiver (105). During the foreign object detection time interval the signal parameter of is set to the preferred value.



21: 2020/00300. 22: 2020-01-16. 43: 2022-01-10
51: A61K; A61P; C07D
71: Acerta Pharma B.V.
72: BLATTER, Fritz, INGALLINERA, Tim, BARF, Tjeerd, ARET, Edwin, KREJSA, Cecile, EVARTS, Jerry
33: US 31: 62/188,468 32: 2015-07-02
54: SOLID FORMS AND FORMULATIONS OF (S)-4-(8-AMINO-3-(1 -(BUT-2-YNOYL)PYRROLIDIN-2-YL)IMIDAZO[1,5-A]PYRAZIN-1-YL)-N-(PYRIDIN-2-YL)BENZAMIDE
00: -

In some embodiments, the invention relates to crystalline solid forms, including polymorphs, hydrates, and salt forms, of(*S*)-4-(8-amino-3-(1 -(but-2-ynoyl)pyrrolidin-2-yl)imidazo[1,5-α]pyrazin-l-yl)-*N*-(pyridin-2-yl)benzamide. In some embodiments, the invention also relates to pharmaceutical compositions containing the crystalline solid forms, and methods for treating conditions or disorders by administering to a subject a pharmaceutical composition that includes the forms, including pharmaceutical compositions and methods for overcoming the effects of acid reducing agents. Formula (I)

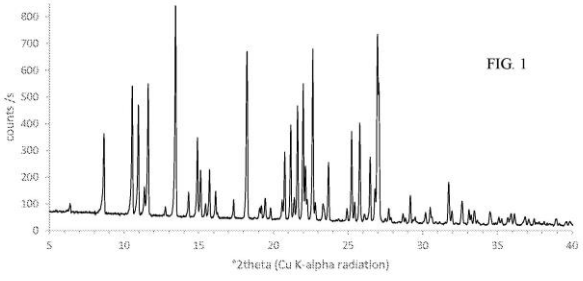
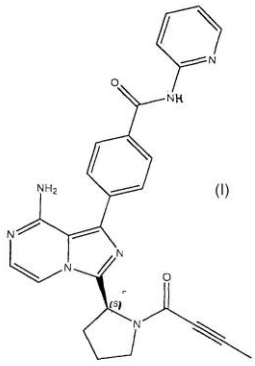
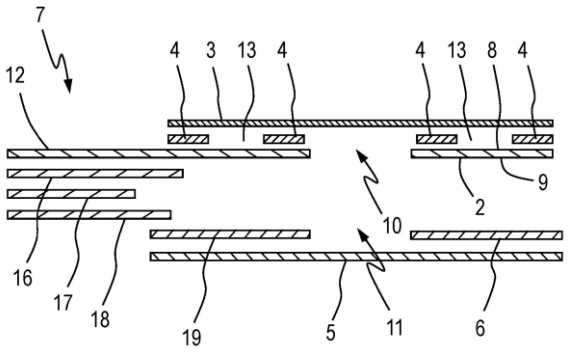


FIG. 1

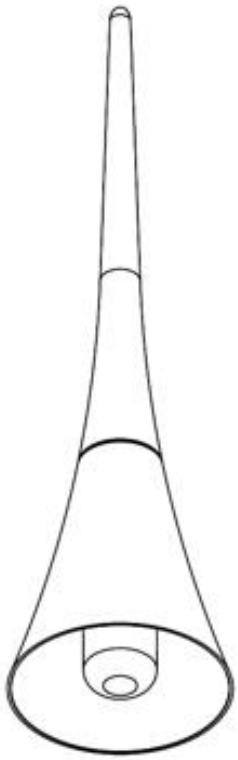


21: 2020/01014. 22: 2020-02-18. 43: 2022-01-10
51: A61F
71: MEDTRADE PRODUCTS LIMITED
72: HOGGARTH, Andrew, HARDY, Craig, GRIST, Matthew
33: GB 31: 1713272.1 32: 2017-08-18
54: WOUND DRESSING
00: -

The present invention relates to wound dressings for use in cases of a patient suffering a penetrating chest trauma. The wound dressing comprises a base layer having a lower surface facing the wound and an upper surface facing away from the wound, and an aperture therethrough for locating over the wound, and a top layer extending over the aperture and at least a part of the upper surface. The base layer is connected to the top layer such that the wound dressing can transition from an open configuration in which the aperture and an area external to the wound dressing are in fluid communication via at least one opening at a perimeter between the base layer and the top layer, to a closed configuration in which the top layer forms a seal over the aperture.

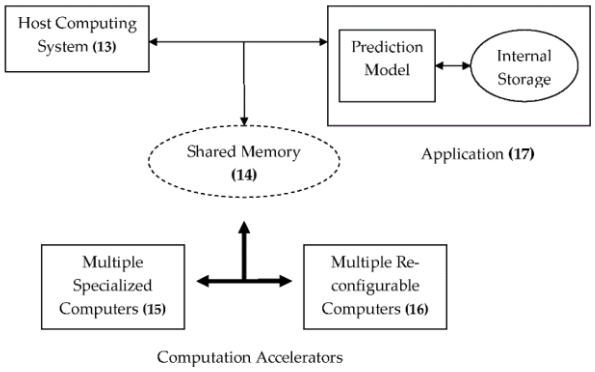


21: 2020/01130. 22: 2020-02-24. 43: 2022-01-27
51: A47K
71: FUTURE BY DESIGN CC
72: Christopher Iain BRYANT
54: TOILET CLEANING DEVICE AND HOLDER ASSEMBLY
00: -
The present invention relates to a toilet cleaning device and holder assembly, the toilet cleaning device comprising an elongate handle affixed or affixable to a spatulate head, the spatulate head having a broad apex and tapered base and comprising one or more ridges on at least one of the substantially flat surfaces of the spatulate head extending towards its apex, and an affixing means on its tapered base for affixing the spatulate head to the elongate handle, the holder comprising an inner receptacle having walls configured to surround the spatulate head of the toilet cleaning device and a receiving end that supports the weight of the toilet cleaning device when not in use.



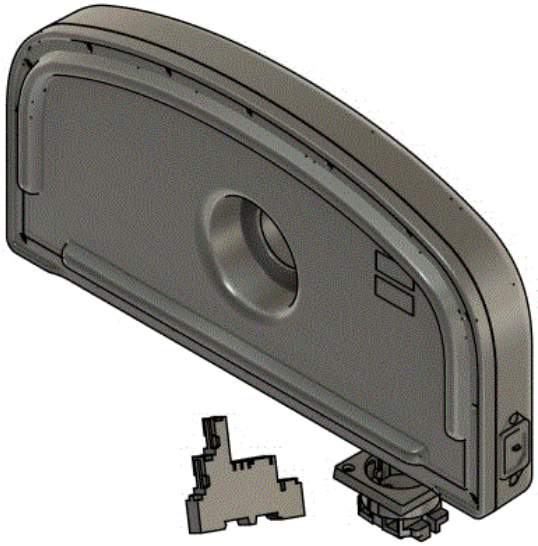
21: 2020/01132. 22: 2020-02-24. 43: 2022-01-20
51: G06F; G06Q
71: ONLINE PSB LOANS LIMITED
72: CHAKRABORTY, Aviruk, SHAH, Jinand Vikasbhai
33: IN 31: 201721026534 32: 2017-07-26
54: AN AUTOMATED SYSTEM FOR DEFAULT PROBABILITY PREDICTION OF LOANS AND METHOD THEREOF
00: -
The present invention discloses an automated system for default probability prediction and method for foreseeing default probability prediction for non-performing assets and derelict properties comprises various system components such as host computing system (13) consists of high-performance processor-based system, computer accelerator having multiple specialized computers (15) and multiple re-configurable computers (16), and memory (14). The loan application is filled by the loan applicant via smart contract; relevant data is collected and validated for safety measures. The Sham Dearth Score then generated to identify the chances of delinquency. Further, Confederate Semantic Knowledge Engineering Model fetches previous data and provides outstanding results for recognizing

plausible delinquent. Later on, the smart contract is generated for loan disbursement and the system of the present invention then monitors the disbursed loan for identifying defaulters, insolvency, delinquency, non-performing assets, and derelict properties. Afterwards, the red flag alerts have been sent to such delinquent cases to overcome financial risks.



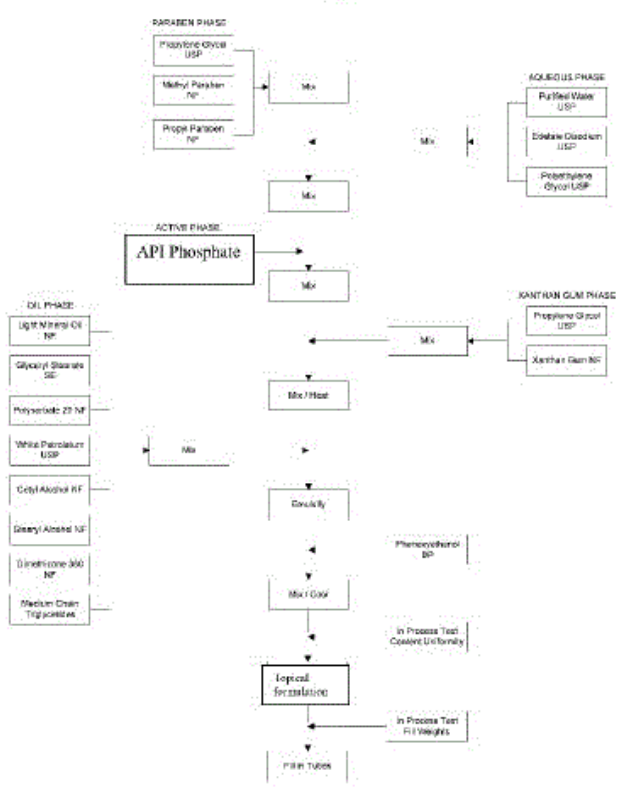
21: 2020/01335. 22: 2020-03-02. 43: 2022-01-20
51: C12N
71: LOCUS AGRICULTURE IP COMPANY, LLC
72: FARMER, Sean, ALIBEK, Ken, MAZUMDER, Sharmistha
33: US 31: 62/564,683 32: 2017-09-28
54: LARGE SCALE PRODUCTION OF LIQUID AND SOLID TRICHODERMA PRODUCTS
00: -
The subject invention provides method of producing Trichoderma fungi on an industrial scale. In specific embodiments, the subject invention provides methods of producing both a liquid Trichoderma-based product and a solid-state Trichoderma-based product from the same starting seed culture and inoculant.

21: 2020/01495. 22: 2020-03-10. 43: 2022-01-20
51: A61L E03D
71: VAN DEN BERG, Gaston, MEYER, Eugene
72: VAN DEN BERG, Gaston
33: ZA 31: 2019/01011 32: 2019-02-18
54: TOILET CISTERN AIR EXTRACTION AND FILTRATION SYSTEM
00: -
The invention provides for a cistern lid in a toilet system having a close coupled cistern from which flush water is directed into the toilet bowl, wherein the cistern lid mounted extraction and odour absorption or filtration system which is provided internally to the cistern and lid whereby a vent point is provided on the cistern lid for expelling of the filtered or otherwise odour reduced air into the surroundings, said system including an extraction fan, a power supply means, a filtration and/or odour absorption means, and a conduit for directing the odour reduced air out of the cistern. The invention extends to a method of extracting odour laden air from a toilet by drawing the odour laden air out of the toilet bowl through the water flush channel provided in a rim portion of a toilet bowl, said air being drawn through said channel into the flush water pipe leading from the toilet bowl into the cistern, and through an extraction fan mounted in a lid of the cistern into a filtration and/or odour absorption means whereafter it is expelled from the cistern through an opening in the cistern lid to which an outlet of or a conduit from the extraction fan is connected.



21: 2020/01999. 22: 2020-05-04. 43: 2022-01-07
51: A61K
71: Incyte Holdings Corporation
72: PARIKH, Bhavnish, SHAH, Bhavesh, YELESWARAM, Krishnaswamy
33: US 31: 61/347,132 32: 2010-05-21
54: TOPICAL FORMULATION FOR A JAK INHIBITOR
00: -
This invention relates to pharmaceutical formulations for topical skin application comprising (R)-3-cyclopentyl-3-[4-(7H-pyrrolo[2,3-d]pyrimidin-4-yl)-1H-

pyrazol-1-yl]propanenitrile, or a pharmaceutically acceptable salt thereof, and use in the treatment of skin disorders.



21: 2020/02686. 22: 2020-05-12. 43: 2022-01-25
51: B22C; E04G; B28B; E02D
71: SOLETANCHE FREYSSINET
72: BENNANI BRAOULI, YASSINE, ARESSY, MATTHIEU
33: IB 31: PCT/IB2017/001445 32: 2017-10-18
54: METHOD OF MANUFACTURING A FACING ELEMENT FOR A REINFORCED SOIL STRUCTURE
00: -
A void former is arranged in a mold (30). The void former includes an insert (1) made of flexible material that forms a loop around a core region (15) within the mold. Casting material is added in a fluid state into the mold so as to fill a predefined volume for the facing element, including the core region. After hardening of the casting material, the facing element (10) is removed from the mold, and the void former is removed from the facing element. The facing element comprises an anchoring core formed by the hardened casting material in the core region (15). Removing the void former comprises pulling the insert (1) away from a rear surface of the facing element (10). The flexible material of the at least one insert is deformed around the anchoring core (15) while it is pulled.

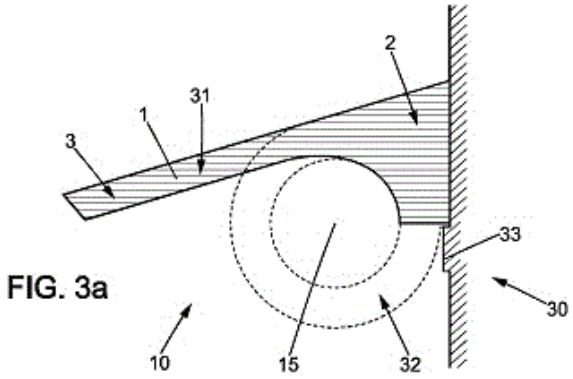
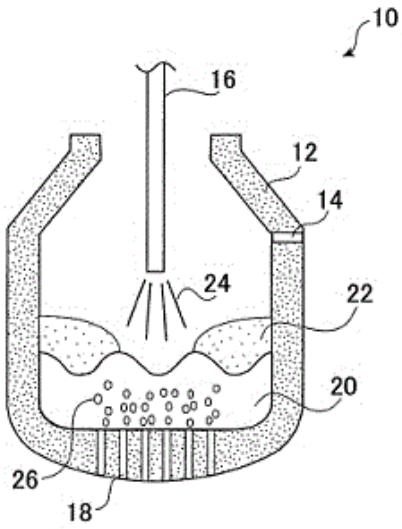
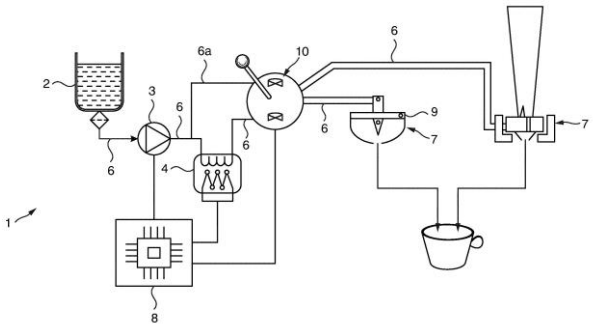


FIG. 3a

21: 2020/03036. 22: 2020-05-22. 43: 2022-01-10
51: C22C
71: MIZUSHIMA FERROALLOY CO., LTD.
72: HIGUCHI, IPPEI, MASUKAWA, MASANOBU, SHIOTA, TOSHIO
33: JP 31: 2017-226583 32: 2017-11-27
54: LOW/MEDIUM-CARBON FERROMANGANESE PRODUCTION METHOD
00: -
Provided is a low/medium-carbon ferromanganese production method capable of improving the overall yield rate of manganese by reducing both loss due to formation of manganese slag and loss due to evaporation. The low/medium-carbon ferromanganese production method carries out decarburization refining by loading high-carbon ferromanganese melt into a reaction vessel having a top-blowing lance and a bottom-blowing tuyere and blowing in an oxygen-containing gas from the top-blowing lance while blowing in an inert gas from the bottom-blowing tuyere, wherein before and/or during the decarburization refining of the high-carbon ferromanganese melt, return slag formed during past decarburization refining of high-carbon ferromanganese is loaded into the reaction vessel.



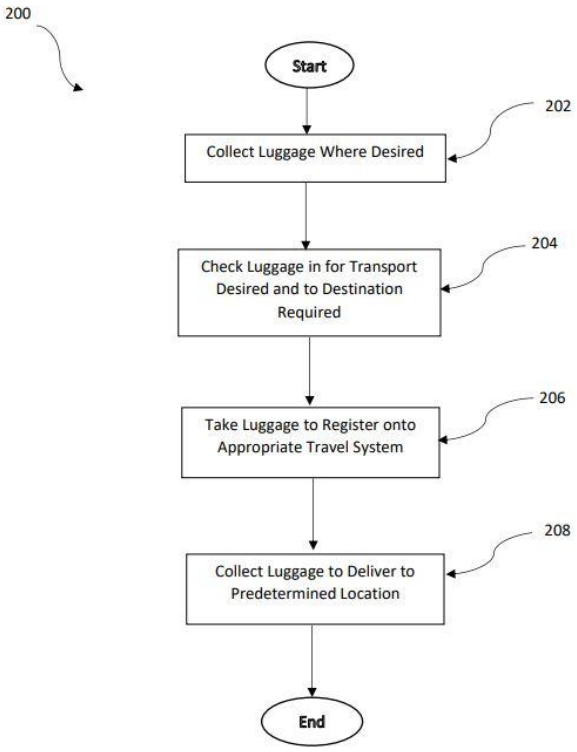
21: 2020/03383. 22: 2020-06-05. 43: 2022-01-20
51: A47J
71: Société des Produits Nestlé S.A.
72: TALON, Christian, HEYDEL, Christophe Sébastien Paul, JARISCH, Christian, NOTH, André, BONACCI, Enzo, DENISART, Jean-Luc, YOAKIM, Alfred
33: EP(CH) 31: 17201864.0 32: 2017-11-15
54: A SYSTEM FOR MULTI-INGREDIENT BEVERAGE PREPARATION FROM VARIOUS CONTAINER TYPES
00: -
The invention concerns a beverage preparation machine (1) comprising a fluid system comprising a fluid source (2), a pump (3), a heating element (4), at least two container holders (7a, 7b) adapted for receiving ingredient containers (11, 17), a control unit (8) for controlling the fluid system to prepare a beverage by mixing fluid with the beverage ingredient contained in the containers to produce a mixed beverage component in each of the containers, wherein the control unit is further arranged to dispense part or whole of the mixed components sequentially or simultaneously to produce the beverage, wherein the container holders (7a, 7b) differ from one another for holding containers of different sizes and/or types and, and wherein it further comprises separate fluid injection interfaces (9a, 9b) having different structural and kinematic configurations, and arranged for independently delivering fluid in one of the corresponding ingredient containers; each interface being connected to the fluid system and being adapted to a different container.



21: 2020/03414. 22: 2020-06-08. 43: 2022-01-11
51: C07K; A61K; A61P
71: UCB BIOPHARMA SRL
72: DOWNEY, PATRICK, TYSON, KERRY LOUISE, KRIEK, MARCO, DE LICHTERVELDE, LORENZO, LIGHTWOOD, DANIEL JOHN, MCMILLAN, DAVID JAMES, ELLIOTT, PETER CHARLES, BAKER, TERENCE SEWARD
33: GB 31: 1720970.1 32: 2017-12-15
54: ANTI-ALPHA SYNUCLEIN ANTIBODIES
00: -
The present invention relates to alpha synuclein binding antibodies and fragments thereof capable of binding alpha synuclein as a monomer and in fibrils and preventing alpha synuclein aggregation induced by alpha synuclein fibrils. The antibodies of the present invention are for use in the treatment of alpha synucleinopathies, including Parkinson's disease.

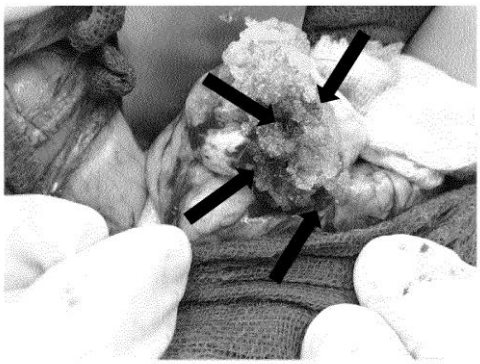
21: 2020/03659. 22: 2020-06-18. 43: 2022-02-04
51: A45C
71: BagPortr (PTY) LTD
72: BagPortr (PTY) LTD
33: ZA 31: 2019/01684 32: 2019-03-19
54: A SYSTEM FOR, AND METHOD OF COLLECTING AND CHECKING IN LUGGAGE FOR TRAVEL
00: -
According to the first aspect of the invention, there is provided a system for collecting and checking in luggage for travel, the system including one or more of the following: a mobile and/or off-site baggage check-in facility operable to be located wherever desired. In an embodiment of the invention, said mobile and/or off-site baggage check-in facility includes one or more of the following: a baggage tag issuing apparatus, a tracking apparatus, a bag wrapping apparatus, a security tag apparatus (where required) and a weighing apparatus. In an

embodiment of the invention, said baggage tag issuing apparatus includes one or more equipment operable to easily issue baggage tags with reference to an intended destination of travel. In this embodiment, said baggage tag issued by the baggage tag issuing apparatus may be in the example form of a physical paper based type tag and/or a radio frequency type tag (RFID) and/or a microchip type tag.

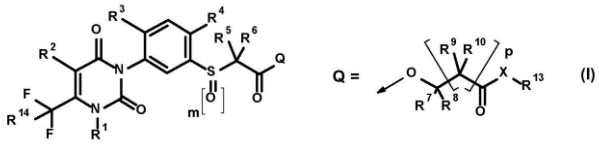


21: 2020/03671. 22: 2020-06-18. 43: 2022-01-27
51: A61K
71: MAGLE CHEMOSWED HOLDING AB, UNIVERSITÄT HEIDELBERG
72: JOHANSSON, Henrik, SCHUISKY, Peter, PAUSCH, Thomas, HACKERT, Thilo
33: EP 31: 17208850.2 32: 2017-12-20
54: A BODY FLUID LEAKAGE DETECTION AQUEOUS COMPOSITION
00: -
A body fluid leakage detection aqueous composition, for use e.g. in intraoperative pancreatic fluid leakage detection. The composition comprises a gelling agent, increasing the viscosity of the composition, and buffering species, the composition thereby being buffered. The gelling agent is cross-linked a-glucan microspheres. Further, the composition comprises a pH-indicator. The pH of the composition is at least 0.1 pH units lower, or higher, than a pKa of the pH-indicator.

Fig. 1b



21: 2020/03676. 22: 2020-06-18. 43: 2022-01-27
51: A01N; A01P; C07D
71: Syngenta Crop Protection AG
72: HEINEMANN, Ines, FRACKENPOHL, Jens, WILLMS, Lothar, BEFFA, Roland, DIETRICH, Hansjörg, GATZWEILER, Elmar, MACHETTIRA, Anu Bheemaiah, ROSINGER, Christopher Hugh, LÜMMEN, Peter, ASMUS, Elisabeth
33: EP(CH) 31: 17208493.1 32: 2017-12-19
54: SUBSTITUTED THIOPHENYL URACILS, SALTS THEREOF AND THE USE THEREOF AS HERBICIDAL AGENTS
00: -
The invention relates to substituted thiophenyl uracils of general formula (I) or salts (I) thereof, wherein the groups in general formula (I) are as defined in the description, and to the use thereof as herbicides, in particular for controlling weeds and/or weed grasses in crops of cultivated plants and/or as plant growth regulators for influencing the growth of crops of cultivated plants.



21: 2020/03682. 22: 2020-06-18. 43: 2022-01-27
51: G01J; H04N
71: Thales
72: BENNAI, Baya, MIDAVAINE, Thierry, NORMANDIN, Xavier, COURCOL, Yves, PERRUCHOT, Ludovic
33: FR 31: 1701327 32: 2017-12-19

54: METHOD AND SYSTEM FOR IMAGING AT HIGH AND LOW LIGHT LEVELS

00: -

The invention relates to a method for imaging a scene using an imaging system making it possible to obtain an image of the scene, the imaging system comprising a device for acquiring frames according to acquisition parameters, and a unit for processing the acquired frames. The method comprises the steps: A) selection of an imaging mode from among a conventional imaging mode, a natural photon-counting imaging mode and a forced photon-counting imaging mode, and, depending on the selected imaging mode, determination by the processing unit of corresponding acquisition parameters, B) acquisition of at least one frame by the acquisition device parameterized with said acquisition parameters, and transmission of the frames that were acquired to the processing unit in order to obtain an image, the image being obtained at the end of the following sub-steps if the selected imaging mode is the natural photon-counting imaging mode or the forced photon-counting imaging mode: -binarization of the frames that were acquired and -summing the binarized frames to obtain an image, C) estimation of the quality of the image obtained, D) D1) depending on the quality of the image obtained, determining a new imaging mode selected among the conventional imaging mode, the natural photon-counting imaging mode, and the forced photon-counting imaging mode, D2) repeating steps A, B, C and D with the new imaging mode selected as the imaging mode.

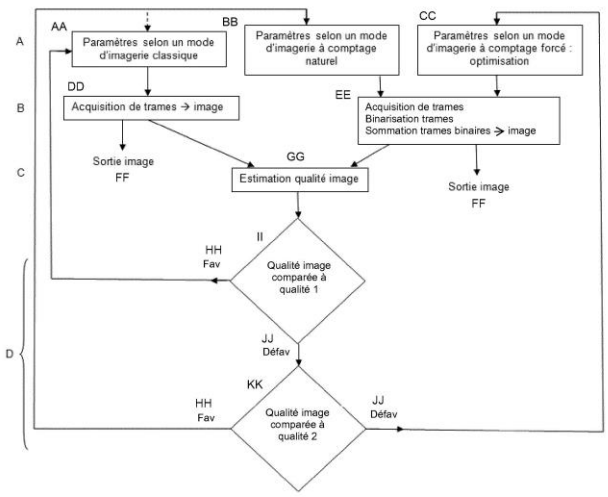


FIG.3

AA Parameters according to a conventional imaging mode
BB Parameters according to a natural counting imaging mode
CC Parameters according to a forced counting imaging mode: optimization
DD Acquisition of frames -> image
EE Acquisition of frames; Frame binarization; Summation of binary frames -> image
FF Image output
GG Estimation of image quality
HH Favorable
II Image quality compared to quality 1
JJ Unfavorable
KK Image quality compared to quality 2

21: 2020/03688. 22: 2020-06-18. 43: 2022-01-10
51: F16B; G01D
71: ESSITY HYGIENE AND HEALTH AKTIEBOLAG
72: KLING, Robert

54: SENSING DEVICE, ADAPTER, COMBINATION THEREOF, AND DISPENSER

00: -

This disclosure relates to a sensing device for removable mounting to an adapter, the sensing device having a main body including a sensor, and at least one mounting foot for mounting the sensing device to the adapter, the mounting foot including a supporting contact part with a supporting surface for supporting the sensing device on a sensing-device averted attachment surface of the mating adapter, and a connecting part connecting the supporting contact part to the main body. The disclosure further relates to an adapter and to a combination of sensing device and adapter.

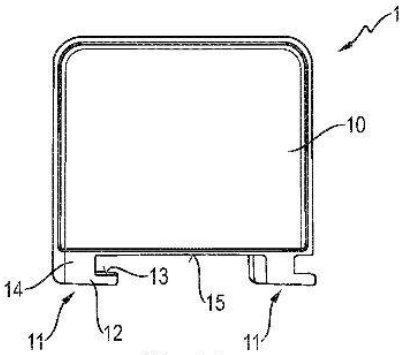


Fig. 1A

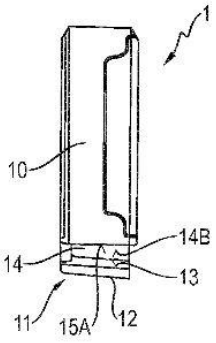


Fig. 1B

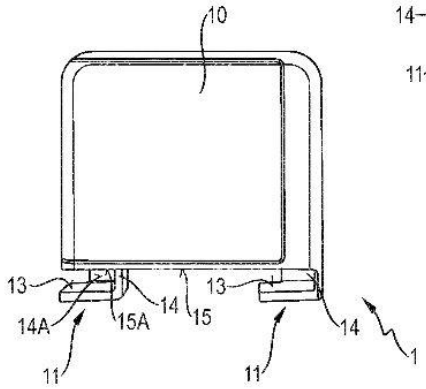


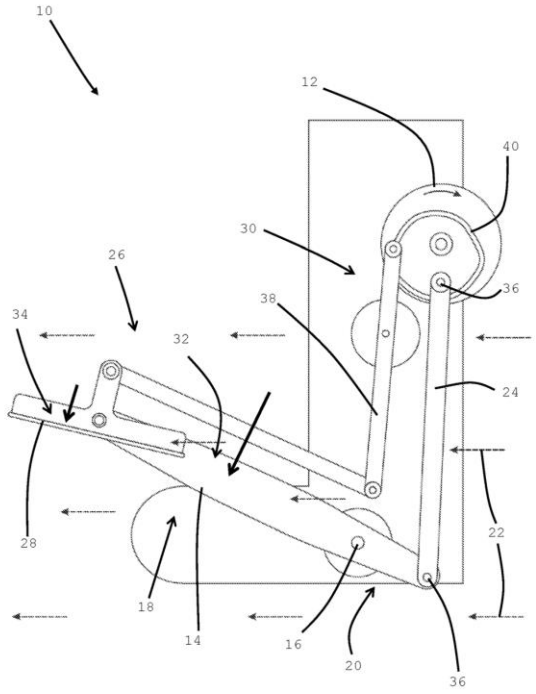
Fig. 1C

21: 2020/03830. 22: 2020-06-24. 43: 2022-01-20
51: C07K C12N C12P
71: CJ CHEILJEDANG CORPORATION
72: LEE, Seok Myung, CHEONG, Ki Yong, SEO, Chang Il, LEE, Ji Sun
33: KR 31: 10-2018-0151043 32: 2018-11-29
54: cAMP RECEPTOR PROTEIN MUTANT AND METHOD FOR PREPARING L-AMINO ACID BY USING SAME
00: -
The present application relates to a CAMP receptor protein mutant, a microorganism comprising same, and a method for preparing L-amino acid by using same.

21: 2020/03832. 22: 2020-06-24. 43: 2022-01-20
51: C08J C08L
71: EVONIK OPERATIONS GMBH
72: TRASSL, Christian, HOLLEYN, Denis, BERNHARD, Kay
33: EP 31: 17203688.1 32: 2017-11-27
54: PESU PARTICLE FOAMS FOR APPLICATION IN AVIATION INTERIORS
00: -
Polyethersulfone (PESU) based polymer foams comply with the statutory requirements on interiors in aviation demanded by the aviation industry. The requirements concerning fire behaviour, resistance to media and mechanical strength in particular represent significant challenges. Suitable polymer foams are produced as semi-finished products in the prior art. Post-processing into shaped parts is uneconomic in terms of time and the use of material, because of the large volumes of cutting waste, for instance. The invention solves this problem in that the material that is, in principle, suitable can be processed into particle-foam shaped parts. Said shaped parts can be produced without post-processing in short cycle times and hence economically. Furthermore, new options arise for function integration, such as the direct foam moulding of inserts, etc., and in respect of design freedom.

21: 2020/03834. 22: 2020-06-24. 43: 2022-02-03
51: F03B
71: ENGLISH, Douglas Richard
72: ENGLISH, Douglas Richard
33: AU 31: 2017903532 32: 2017-09-01
54: FLUID FLOW ENERGY HARVESTER
00: -
Provided is a fluid flow energy harvester (10) comprising a crankshaft (12) and at least one vane (14) pivoted into a sail portion (18) and a crank portion (20) on respective sides of the pivot (16). Both portions (18) and (20) are operatively oscillatable about the pivot (16) when the crank portion (20) is operatively arranged facing into a fluid flow (22). The crank portion (20) is linked to the crankshaft (12) via a crank (24) so that operative oscillation of the vane (14) imparts rotational force to said crankshaft (12). The harvester (10) also includes a fin arrangement (26) which includes a fin (28) arranged on, and configured to guide, the sail portion (18) of the vane (14) facing towards or in a direction of the fluid flow (22). The harvester (10) also includes a fin actuator (30) configured to control an orientation of the fin (28) relative to the sail portion (18), so that during oscillation of the sail portion (18), either a surface (32) of the sail portion or a surface of the fin (34) impedes the fluid flow (22) when a surface of the other is parallel to such fluid

flow. In this manner, stalling of the vane oscillation is counteracted thereby facilitating continuous rotation of the crankshaft (12) during fluid flow (22).



21: 2020/04039. 22: 2020-07-02. 43: 2022-01-10
51: B22F; C01G; C22B
71: Sherritt International Corporation
72: QIN, Fu
33: US 31: 62/242,184 32: 2015-10-15

54: HYDROGEN REDUCTION OF METAL SULPHATE SOLUTIONS FOR DECREASED SILICON IN METAL POWDER

00: -

Process to decrease silicon content of metal powder produced by hydrogen reduction from ammoniacal ammonium sulphate solutions containing metal ammine complexes, wherein metal (Me) is Ni, Co, or Cu. The process controls the precipitation of metal hydroxide, which is found to be an effective scavenger for silicon. Silicon is preferentially removed from metal diammine sulphate-containing solutions by precipitating with a small amount of a metal hydroxide, and then separating the silicon-bearing metal hydroxide precipitate from the solution. This solution, from which the silicon impurity has been removed with the metal hydroxide precipitate, can then be reduced in one or more densification cycles with a reducing gas to produce an elemental metal powder having a decreased silicon content. Alternatively, the solution is reduced to produce a low silicon metal powder seed material for the first of the one or more densification cycles.

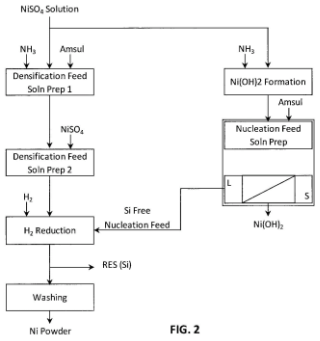


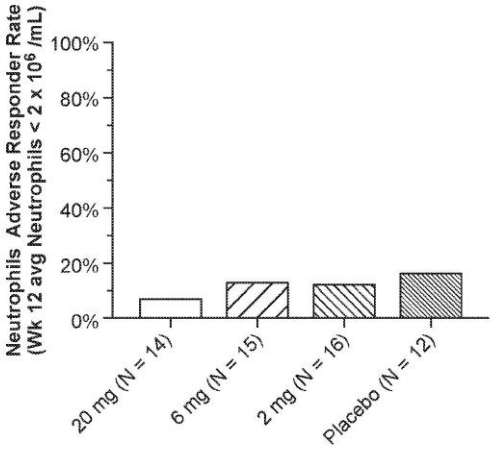
FIG. 2

21: 2020/04074. 22: 2020-07-03. 43: 2022-01-20
51: C07K; C12Q
71: Corvidia Therapeutics, Inc.
72: DEVALARAJA, Madhav N., DAVIDSON, Michael H., KAKKAR, Rahul
33: US 31: 62/614,134 32: 2018-01-05

54: METHODS FOR TREATING IL-6 MEDIATED INFLAMMATION WITHOUT IMMUNOSUPPRESSION

00: -

The disclosure provides methods of treating inflammation without inducing immune suppression. The method comprises administering a therapeutically effective amount of an IL-6 antagonist at a dose sufficient to reduce inflammation without causing immune suppression.



21: 2020/04153. 22: 2020-07-07. 43: 2022-01-11
51: G06K; H01L; H01Q
71: COMPOSECURE, LLC

72: LOWE, ADAM, LOGAN, MICHELE, SKELDING, DORI, HUSSAIN, SYEDA
33: US 31: 15/928,813 32: 2018-03-22
33: US 31: 62/623,936 32: 2018-01-30
54: DUAL INTERFACE CAPACITIVE EMBEDDED METAL CARD
00: -
A transaction card having a metal layer, an opening in the metal layer for a transponder chip, and at least one discontinuity extending from an origin on the card periphery to a terminus in the opening. The card has a greater flex resistance than a card having a comparative discontinuity with the terminus and the origin the same distance from a line defined by a first long side of the card periphery in an absence of one or more strengthening features. Strengthening features include a discontinuity wherein one of the terminus or the origin are located relatively closer to the first long side of the card periphery than the other, a plurality of discontinuities wherein fewer than all extend from the card periphery to the opening, a self-supporting, non-metal layer disposed on at least one surface of the card, or one or more ceramic reinforcing tabs surrounding the opening.

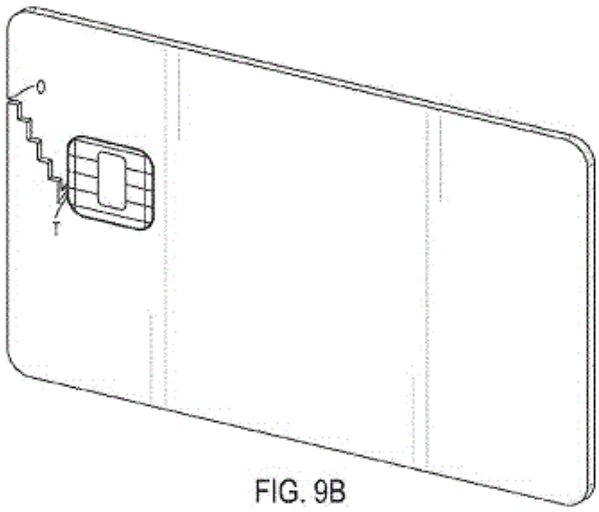


FIG. 9B

21: 2020/04289. 22: 2020-07-13. 43: 2022-01-10
51: C09K; F25B
71: DAIKIN INDUSTRIES, LTD.
72: ITANO, MITSUSHI, KARUBE, DAISUKE, YOTSUMOTO, YUUKI, TAKAHASHI, KAZUHIRO, OHKUBO, SHUN
33: JP 31: 2017-242185 32: 2017-12-18
54: COMPOSITION COMPRISING REFRIGERANT, USE THEREOF, REFRIGERATING MACHINE HAVING SAME, AND METHOD FOR OPERATING SAID REFRIGERATING MACHINE
00: -
The present invention addresses the problem of providing a mixed refrigerant having a combination of three types of performance, that is, a refrigeration capacity (also referred to as cooling capacity) and a coefficient of performance (COP) which are equivalent to those of R410A, and a sufficiently small GWP. As a means for solving the problem, there is provided a composition containing a refrigerant, wherein the refrigerant contains a trans-1,2-difluoroethylene (HFO-1132 (E)), a trifluoroethylene (HFO-1123), and a 2,3,3,3-tetrafluoro-1-propene (R1234yf).

21: 2020/04340. 22: 2020-07-15. 43: 2021-06-30
51: G02B; H02G
71: BOTHA, JACOB JOHANNES FRANCOIS, NETO, MICAEL
72: BOTHA, JACOB JOHANNES FRANCOIS, NETO, MICAEL
54: A FIBRE OPTIC CABLE SPLICE ENCLOSURE AND A METHOD OF ENCLOSING FIBRE OPTIC CABLES
00: -
According to a first aspect of the invention, there is provided a fibre optic splice enclosure, said enclosure including one or more of the following: a dome cover; and a dome base comprising of at least three round access ports, and a close-ended oval-shaped port. In an embodiment of the invention, said fibre optic splice enclosure includes a fibre routing tower. In this embodiment, the fibre optic splice enclosure includes a fibre cable splice tray holding area on the operatively anterior end of the routing tower, and a fibre fixation path and storage basket on the operatively posterior end of the routing tower. In an embodiment of the invention, the dome base defines a storage basket operable to store spare fibre cables and passive equipment on a first side thereof, and an uncut cable return path with routing paths back to the routing tower on a second side thereof.

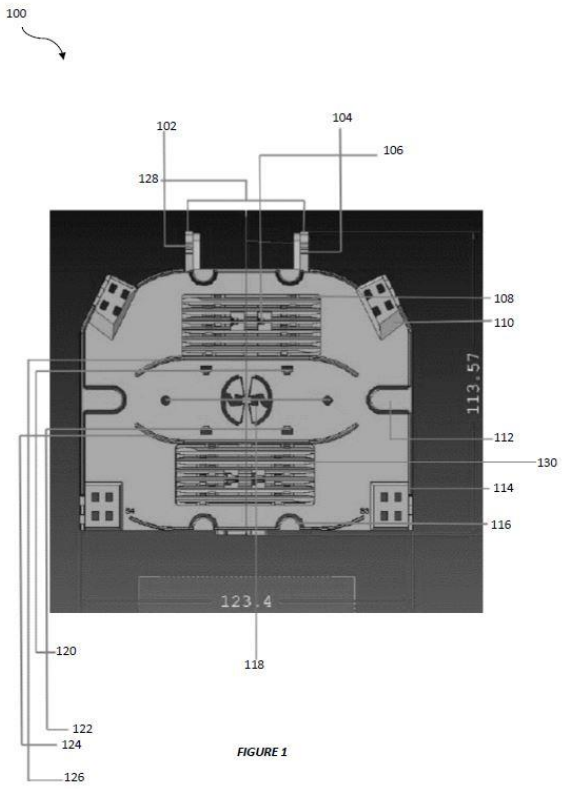


FIGURE 1

21: 2020/04367. 22: 2020-07-16. 43: 2022-02-04
51: G06Q
71: NCHAIN HOLDINGS LIMITED
72: SAVANAH, Stephane, WRIGHT, Craig Steven
33: GB 31: 1603125.4 32: 2016-02-23
33: GB 31: 1604225.1 32: 2016-03-11
54: UNIVERSAL TOKENISATION SYSTEM FOR BLOCKCHAIN-BASED CRYPTOCURRENCIES
00: -
A method of creating, redeeming and transferring tokens associated with tokens on a peer-to-peer distributed ledger. The method includes including metadata associated with the token in a redeem script, wherein the redeem script is associated with a transaction of cryptocurrency on the peer-to-peer distributed ledger. One aspect of the invention provides a method of issuing and/or transferring a token, comprising the steps of generating a blockchain transaction (Tx) having an output (TxO) related to a quantity of cryptocurrency such as Bitcoin, and a hash of a redeem script. The redeem script comprises metadata which in turn comprises a token. The token is a representation of, or a reference to, a tokenised entity. The redeem script also comprises at least one (preferably two or more) public cryptographic keys. The metadata is provided in the redeem script at a location which is designated in the underlying blockchain protocol as a location for a cryptographic key.

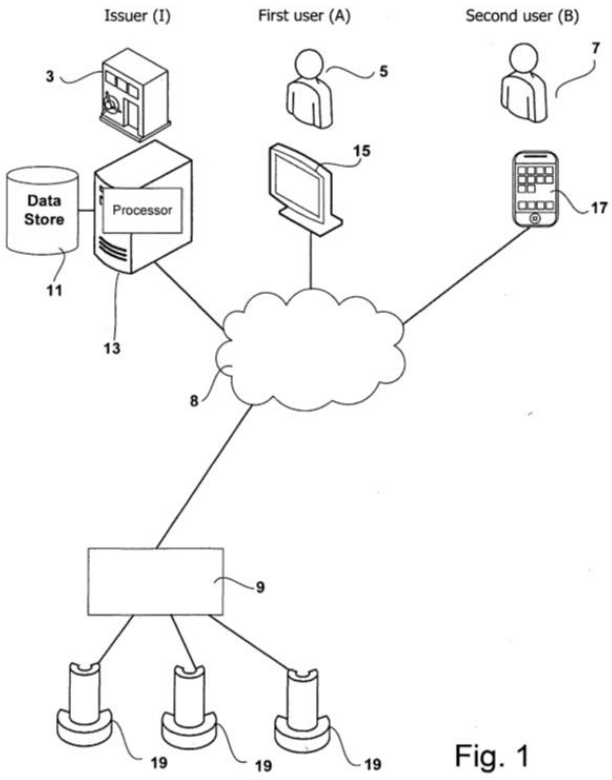
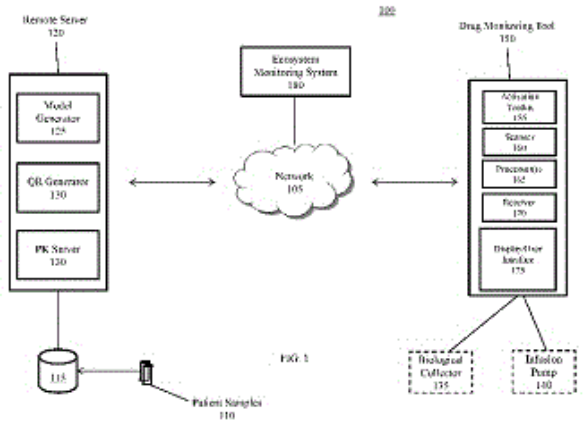


Fig. 1

21: 2020/04405. 22: 2020-07-17. 43: 2022-01-10
51: G06F; A61K; G06N; C07K; C12N
71: TAKEDA PHARMACEUTICAL COMPANY LIMITED
72: NELSON, MICHAEL, PICHLER, ROMAN, SPOTTS, GERALD
33: US 31: 62/451,391 32: 2017-01-27
54: A DRUG MONITORING TOOL
00: -
Embodiments of the present disclosure relate to a drug monitoring tool. The drug monitoring tool comprises a data receiver and an interactive user interface. The data receiver is configured to receive a pharmacokinetic (PK) profile of a patient. The interactive user interface is configured to display, to the patient, a time-varying therapeutic plasma protein level of the patient. The time-varying therapeutic plasma protein level is based on an administered dose of a clotting factor VIII and the PK profile of the patient.



21: 2020/04504. 22: 2020-07-21. 43: 2022-01-10
51: H05K
71: ALLBRO (PTY) LTD
72: LAMPRECHT, QUINTIN
33: ZA 31: 2017/08734 32: 2017-12-21
54: SECURITY ENCLOSURE
00: -
This invention concerns a security enclosure and in particular an outdoor, non-metallic security enclosure for electrical equipment. The enclosure has a body and a cover which is connected to the body using connecting means such that the cover is movable between a first, closed position wherein the security enclosure is closed and a second, open position wherein the security enclosure is open. The cover is lockable in its closed position. Complementary shaped engagement formations carried by the body and cover engage one another so as to create a mechanical seal between the body and cover when the cover is in its closed position. Retaining formations carried by the body and cover respectively are configured to prevent the cover from being removed from the body when the cover is in its closed position. The invention also concerns a security system including a number of security enclosures.

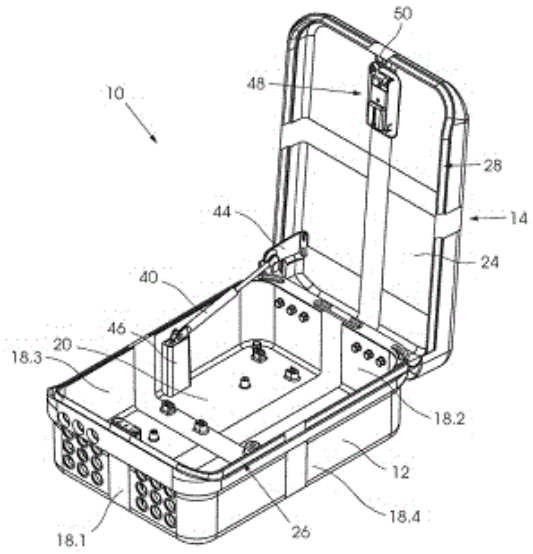
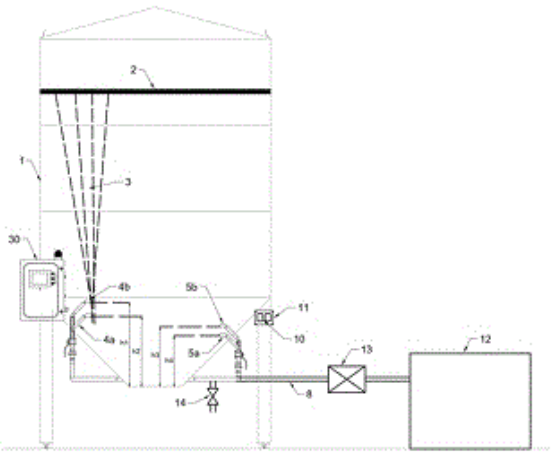
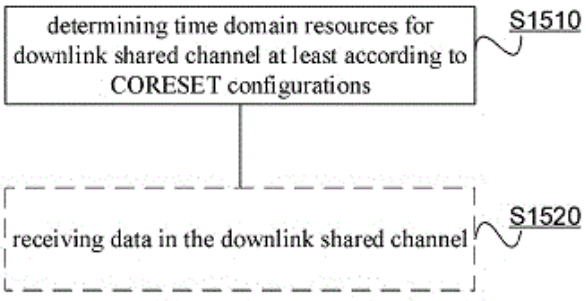


Fig. 2

21: 2020/04506. 22: 2020-07-21. 43: 2022-01-10
51: C12G
71: PRODUCTOS AGROVIN, S.A.
72: MANZANERO FERNÁNDEZ, IRENE, INIESTA ORTIZ, JUAN ALBERTO, JURADO FUENTES, RICARDO
33: ES 31: P201830476 32: 2018-05-18
54: METHOD FOR PUMPING OVER THE GRAPE HARVEST DURING MACERATION AND MEANS FOR PUMPING OVER A GRAPE HARVEST
00: -
The invention relates to a method and equipment for the pressurised injection of air or other gases in a controlled manner into wine making tanks or similar for the purpose of efficiently breaking up the cap and extracting the polyphenolic and aromatic compounds from the skins to the liquid portion (must) after the crushing of the grapes using the method for pumping over the grape harvest during the maceration thereof.



21: 2020/04507. 22: 2020-07-21. 43: 2022-01-10
51: H04W
71: TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)
72: LIN, ZHIPENG, LI, JINGYA, CHENG, JUNG-FU
33: CN 31: PCT/CN2018/076919 32: 2018-02-16
54: TIME DOMAIN RESOURCE ALLOCATION FOR DOWNLINK SHARED CHANNEL
00: -
A mechanism for time domain resource allocation for downlink shared channel is provided in which the time domain resource is allocated according to CORESET configurations when SS/PBCH block and RMSI CORESET are multiplexed with Type 1, Type 2 or Type 3 pattern.



21: 2020/04509. 22: 2020-07-21. 43: 2022-01-10
51: C03B
71: OWENS-BROCKWAY GLASS CONTAINER INC.
72: FAYERWEATHER, CARL L, GAERKE, DALE A, ROTH, ROBERT
33: US 31: 15/879,233 32: 2018-01-24
54: SYSTEM FOR PREHEATING GLASS MELTING FURNACE BATCH MATERIALS
00: -
A system (10) for preheating batch materials in a glass melting furnace (12) includes a preheater (16) having an outlet (84) through which fluid is exhausted and an inlet (82) that receives fluids exhausted from the furnace and recirculated from the preheater outlet. In one embodiment, a cyclonic separator (20) has an inlet (92) in communication with the preheater outlet and an outlet (94, 96) in fluid communication with a fan (30). A controller (70) controls the speed of the fan responsive to a drop in pressure between the separator inlet and outlet and a temperature at the separator outlet. In other embodiments, controllers (76, 77) control valves (34, 40, 44) that (i) control the amount of fluids exhausted from the preheater that are delivered to a flue (100) and recirculated to the preheater or (ii) control the amount of fluids diverted to charger (18) for the furnace, in response to temperatures in a duct coupled to the preheater inlet.

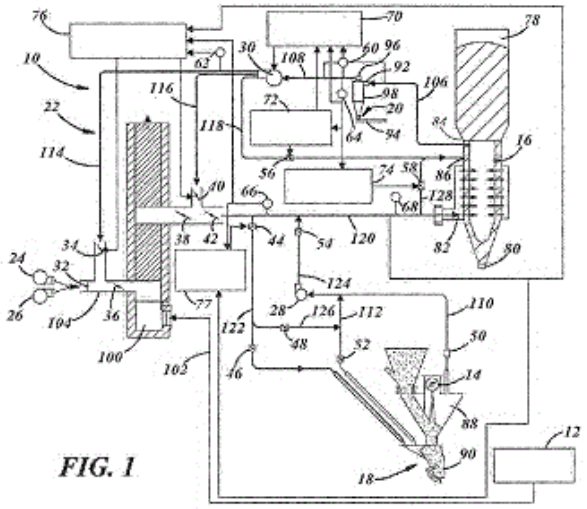


FIG. 1

21: 2020/04512. 22: 2020-07-21. 43: 2022-01-10
51: C03B; F27B; F27D
71: OWENS-BROCKWAY GLASS CONTAINER INC.
72: MASTEK, WITOLD, GUNNER, BRUCE, ALEXANDER, JEFF, FURLAN, MICHELE
33: US 31: 15/879,250 32: 2018-01-24
54: FURNACE SYSTEM
00: -
A furnace system (12) includes a mixing chamber (17) that receives separate streams of raw material and cullet mix and discharges a combined stream. The mixing chamber tapers from an inlet end (24) to

an outlet end (26). One inlet (36, 38) in the inlet end is configured to receive one of the material and mix and is aligned with an outlet (40) in the outlet end along a vertical axis (42). Another inlet (36, 38) is configured to receive the other of the material and mix and is offset from the outlet relative to the vertical axis such the material or mix is deposited on a sidewall of the tapered chamber before reaching the outlet. A charger (18) receives the combined stream from the mixing chamber and discharges the mixture into a molten bath in a furnace (12). A duct system (20) may be used to mix exhaust from the furnace with exhaust from the mixing chamber and charger.

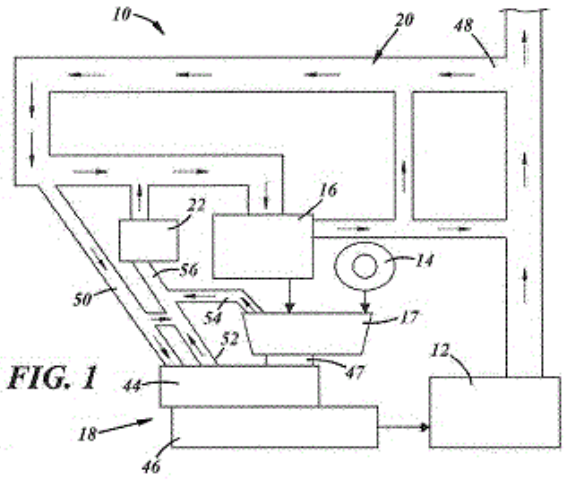
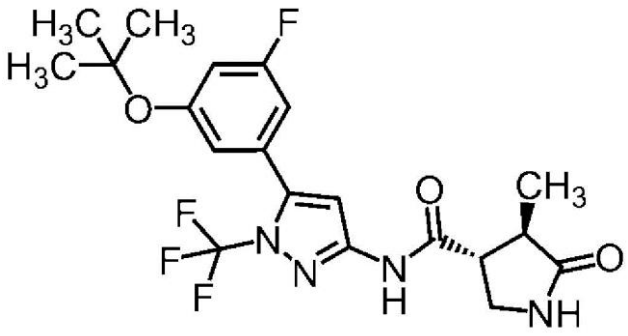


FIG. 1

21: 2020/04600. 22: 2020-07-24. 43: 2022-01-20
51: A61K; A61P; C07D
71: Japan Tobacco Inc.
72: MIURA, Tomoya, TAMATANI, Yoshinori
33: JP 31: 2018-036307 32: 2018-03-01
54: METHYLLACTAM RING COMPOUND AND PHARMACEUTICAL USE THEREOF
00: -
The purpose of the present invention is to provide: a methyllactam ring compound having an SGLT1 inhibitory activity and being useful as a medicine or a pharmacologically acceptable salt of the compound; a medicinal composition containing the compound or salt; and medicinal uses of the compound or salt and the medicinal composition. Provided are: the compound of formula [I] or a pharmacologically acceptable salt thereof; a medicinal composition containing the compound or salt; and medicinal uses of the compound or salt and the medicinal composition.



[I]

21: 2020/04601. 22: 2020-07-24. 43: 2022-01-10
51: A61K; A61P; C07K
71: Eli Lilly and Company
72: CHAI, Qing, FENG, Yiqing, NEWBURN, Kristin Paige, TRUHLAR, Stephanie Marie, VERDINO, Petra, YACHI, Pia Pauliina
33: US 31: 62/637,643 32: 2018-03-02
54: PD-1 AGONIST ANTIBODIES AND USES THEREOF
00: -
The present invention relates to anti-human PD-1 agonist antibodies, and uses thereof for treating autoimmune disorders such as rheumatoid arthritis or for decreasing rejection of transplanted cells and/or tissues.

21: 2020/04629. 22: 2020-07-27. 43: 2022-02-04
51: C05B; C05F; C05G
71: ANUVIA PLANT NUTRIENTS HOLDINGS, INC.
72: BURNHAM, Jeffrey C., SIEGEL, Sanford A.
33: US 31: 62/767,172 32: 2018-11-14
54: DELIVERY OF BIOACTIVE MOLECULES IN COATINGS OR SURFACE LAYERS OF ORGANICALLY ENHANCED INORGANIC FERTILIZERS
00: -
The invention is directed to coated fertilizer granules and methods for manufacturing granules and using organically enhanced inorganic fertilizer granules, which incorporate a coating of one or more concentric layers over a core such that the coating contains a bioactive agent such as a herbicide, pesticide, plant growth regulator, microorganism, or beneficial element. Application of the coating to the fertilizer granule preferably involves binding of the bioactive agent to the surface of granule or to the organic components within the granule. The release

of the bioactive agent from the coating and or the surface of the granule preferably results in a two-phased release, a first fast release and a second extended or slow-release of the bioactive agent into the soil metering the bioavailability of the bioactive agent for crop growth or protection, and/or for controlling unwanted vegetation or pests.

FIG. 1A

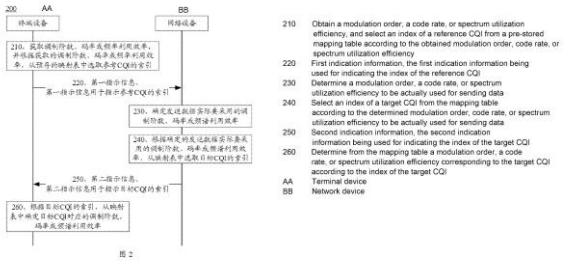
FIG. 1B

FIG. 1C

FIG. 1D

21: 2020/04659. 22: 2020-07-28. 43: 2022-01-10
51: B01D; C01B
71: CPPE Carbon Process & Plant Engineering S.A.
72: STRICKROTH, Alain
33: LU 31: 100 464 32: 2017-09-29
54: PROCESS FOR THE REMOVAL OF HEAVY METALS FROM LIQUIDS
00: -
The present invention discloses a process for the removal of heavy metals from a liquid comprising heavy metals, wherein hydrochloric acid is added to the liquid, wherein the liquid is brought in contact with a mixture comprising between 30 %vol. and 60 %vol. of an activated carbon catalyst impregnated with sulfur, between 30 %vol. and 60 %vol. of an activated carbon catalyst impregnated with iron and between 5 %vol. and 40 %vol. of a filler material, the total of these three ingredients being 100%vol. The liquid is left in contact with the mixture, the heavy metals are absorbed onto the mixture to obtain a liquid with a depleted level of heavy metals, which liquid is then evacuated from the mixture

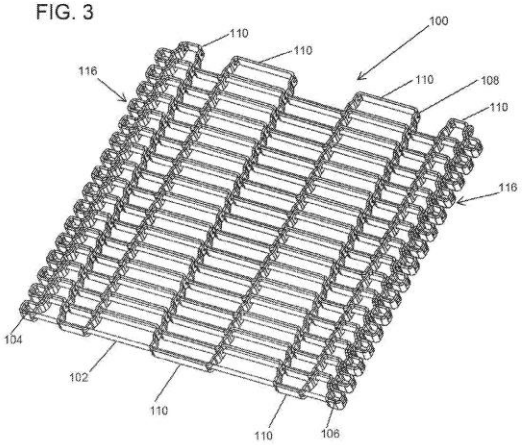
21: 2020/04664. 22: 2020-07-28. 43: 2022-01-10
51: H04L
71: Huawei Technologies Co., Ltd.
72: WANG, Jian, HUANG, Lingchen, QIAO, Yunfei, LI, Rong, WANG, Jun, DU, Yinggang, GE, Yiqun
33: CN 31: 201810050989.5 32: 2018-01-18
54: DATA SENDING OR RECEIVING METHOD AND COMMUNICATIONS DEVICE
00: -
The present application provides a method for sending a channel quality indicator (CQI) or a modulation and coding scheme (MCS). In an exemplary method, a terminal device obtains a modulation order, a code rate, or spectrum utilization efficiency, selects an index of a reference CQI (or an index of a reference MCS) from a pre-stored mapping table according to the obtained modulation order, code rate, or spectrum utilization efficiency, and reports the index of the reference CQI (or the index of the reference MCS) to a network device, wherein the mapping table comprises a mapping relationship between the index of the CQI (or the index of the reference MCS) and the modulation order, code rate, or spectrum utilization efficiency. A terminal device can process uplink or downlink data according to a determined modulation order, code rate, or spectrum efficiency, and a network device can determine, on the basis of a mapping table, a modulation order, a code rate, or spectrum utilization efficiency for sending data; thus, the reliability of data transmission can be improved.



21: 2020/04688. 22: 2020-07-29. 43: 2022-01-10
51: B65G
71: Cambridge International, Inc.
72: PERDUE, Thomas O., ULCHAK, Jeffrey D.
33: US 31: 62/623,888 32: 2018-01-30
54: SPLICE SYSTEM FOR CONVEYOR BELT
00: -
A splice system for a conveyor belt system includes a plurality of spaced tractive rods; a plurality of rows of flat wire pickets transversely disposed with respect to a direction of travel and interconnecting the plurality of spaced tractive rods, wherein at least one of the rows of flat wire pickets includes an outer edge link on each end thereof, the outer edge link including a reverse-turn closed edge on an outer side thereof; and wherein movement of at least one

of the plurality of rods is restricted by the reverse-turn closed edge on the outer edge link.

FIG. 3



21: 2020/04734. 22: 2020-07-30. 43: 2022-01-10
51: G06Q
71: Shanghai Hongyan Returnable Transit Packagings Co., Ltd.
72: LIAO, Qingxin, SUN, Yupeng
33: CN 31: 201810096826.0 32: 2018-01-31
54: INTELLIGENT CLOUD DELIVERY AND BILLING METHOD AND SYSTEM FOR LOGISTICS APPARATUS
00: -
An intelligent cloud delivery and billing method and system for a logistics apparatus, for solving the problem of low delivery efficiency of logistics apparatuses caused by mixed storage of logistics apparatuses of multiple users. Logistics apparatuses of a first user and of other users are mixedly stored in a first area; a server receives uploaded identifiers of N logistics apparatuses, the N logistics apparatuses being arbitrarily selected from the first area; the server adjusts, according to the identifiers of the N logistics apparatuses that involve in object delivery, the N logistics apparatuses that involve in the object delivery to belong to a second user, and adjusts the belonging relationships of logistics apparatuses in the first area other than the N logistics apparatuses that involve in the object delivery.

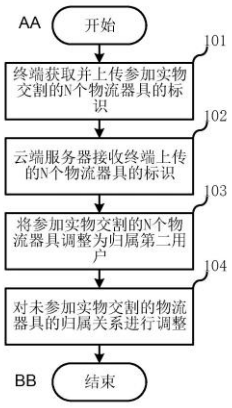
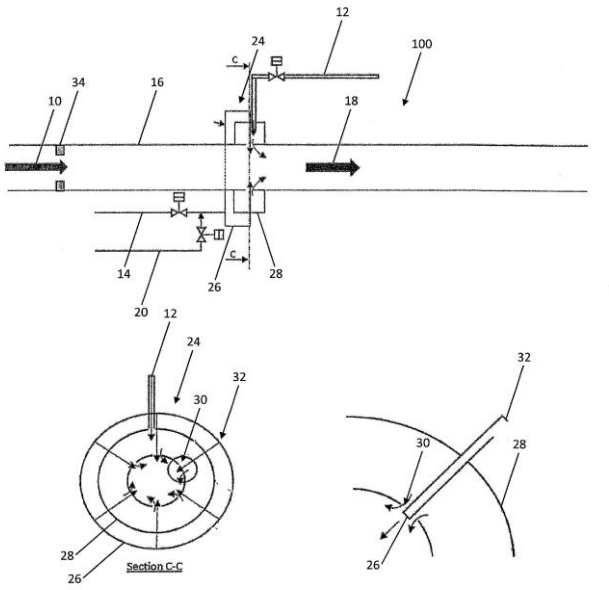


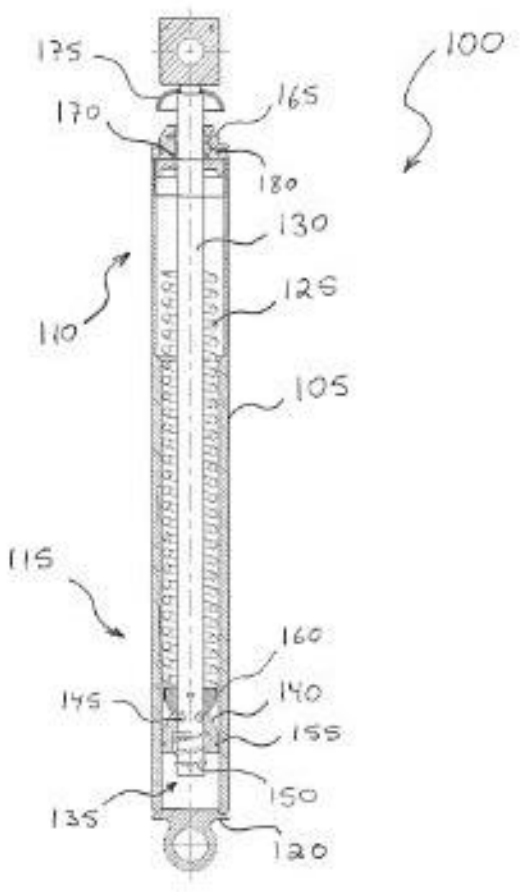
图 1

101 A terminal acquires and uploads identifiers of N logistics apparatuses that involve in object delivery
102 A cloud server receives the identifiers of the N logistics apparatuses uploaded by the terminal
103 Adjust the N logistics apparatuses that involve in the object delivery to belong to a second user
104 Adjust belonging relationships of logistics apparatuses that do not involve in the object delivery
AA Start
BB End

21: 2020/04738. 22: 2020-07-30. 43: 2022-01-10
51: C01B; C21B
71: Midrex Technologies, Inc.
72: MICHISHITA, Haruyasu, ELLIOTT, Antonio
33: US 31: 62/648,550 32: 2018-03-27
54: OXYGEN INJECTION SYSTEM FOR A DIRECT REDUCTION PROCESS
00: -
An oxygen injection system for a direct reduction process, including: a common circumferential gas injection header adapted to be coupled to an oxygen source and an enrichment natural gas source and adapted to deliver oxygen from the oxygen source and enrichment natural gas from the enrichment natural gas source to a reducing gas stream flowing through a conduit axially disposed within the common circumferential gas injection header through a plurality of circumferentially disposed ports to form a bustle gas stream; wherein the common circumferential gas injection header includes a circumferential oxygen injection header adapted to deliver the oxygen from the oxygen source to the reducing gas stream through the plurality of circumferentially disposed ports and a circumferential enrichment natural gas injection header adapted to deliver the enrichment natural gas from the enrichment natural gas source to the reducing gas stream through the plurality of circumferentially disposed ports.

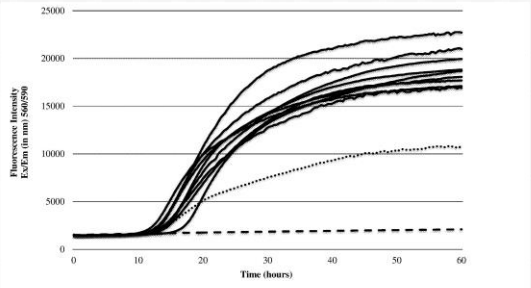


21: 2020/04778. 22: 2020-07-31. 43: 2021-06-30
51: F16F
71: OZAUTOGATE PTY LTD
72: SIMONELLI, Mathew Mario
33: AU 31: 2018900109 32: 2018-01-15
54: LINEAR MOTION DAMPENING SYSTEM
00: -
A linear motion dampening system enables a complex non-linear force response when it is used to control cyclical motion of a mechanical element. The system includes: a ram barrel having a fluid reservoir end and a tapered end closed by an end cap; a coil spring positioned inside the ram barrel; a ram shaft having a distal end that is slidable inside the tapered end of the ram barrel, the ram shaft extending through the coil spring and outward from the fluid reservoir end of the ram barrel; and a ram piston slidably attached to the distal end of the ram shaft; wherein an inner diameter of the tapered end of the ram barrel is tapered from a greater value nearer the fluid reservoir end to a smaller value nearer the end cap.



21: 2020/04913. 22: 2020-08-07. 43: 2022-01-20
51: A01H; C12N
71: Bayer CropScience LP
72: THOMAS, Varghese P., GOLOMB, Benjamin L., CURTIS, Damian
33: US 31: 62/615,816 32: 2018-01-10
54: IMPROVED MICROBES AND METHODS FOR PRODUCING THE SAME
00: -
The disclosure is generally directed to methods for screening, identifying, and producing microorganisms capable of imparting beneficial properties to plants. In some aspects, improved plant-associated soil microorganisms are generated by experimental evolution using a plant root exudate or root exudate compound.

FIG. 1



21: 2020/04914. 22: 2020-08-07. 43: 2022-01-20
51: G06Q
71: Domos, LLC
72: STRNAD II, James Frank
33: US 31: 62/614,720 32: 2018-01-08
54: METHOD AND APPARATUS FOR REAL TIME, DYNAMIC MANAGEMENT OF REAL ESTATE FINANCE, SERVICES, AND REPORTING
00: -
Real time, dynamic management of real estate finance, services, and reporting maintains a website accessible to a homeowner and an investor that displays terms, parameters, and upcoming actions under a housing finance arrangement; stores a housing instrument in a blockchain; implements adjustments under a balancing mechanism; receives, periodically, a message from a managing entity initiating a balancing entry onto the housing instrument; transmits a query to the blockchain for data relevant to a balancing calculation; receives the data; determines an updated balance; writes an updated account balance along with details of the computation on the housing instrument in the blockchain, modifies a website accessible to the homeowner and investor to display the updated account balance, and alerts the homeowner and investor of the updated account balance through a mobile device.

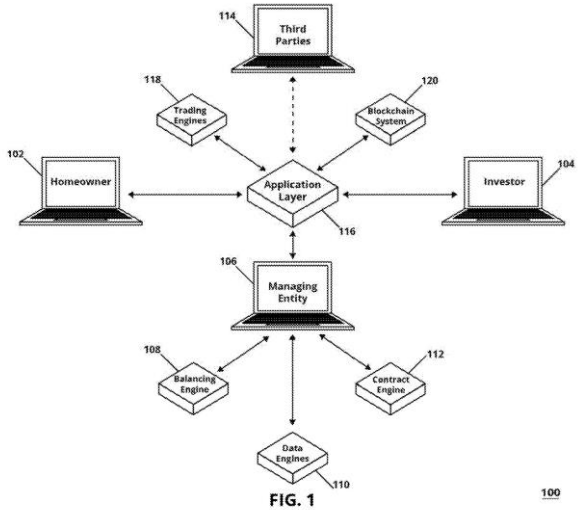
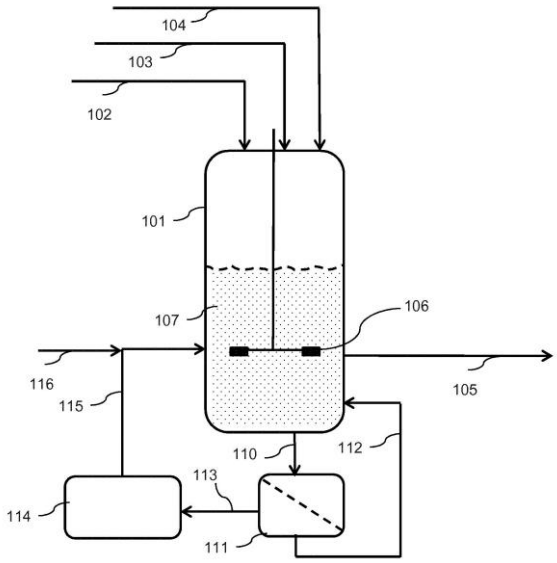
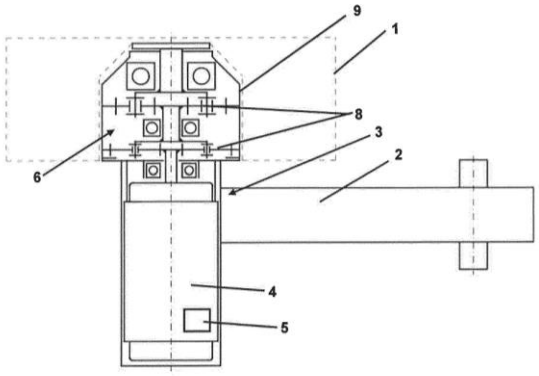


FIG. 1

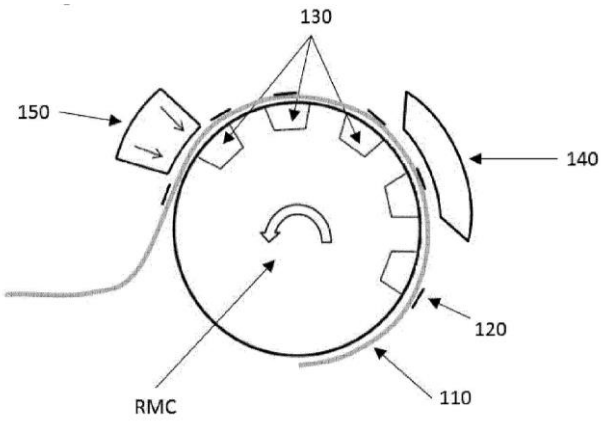
21: 2020/05006. 22: 2020-08-13. 43: 2022-01-10
51: B01J; C07C
71: AVANTIUM KNOWLEDGE CENTRE B.V.
72: VAN DER WAAL, Jan, Cornelis, MCKAY, Benjamin, SINGH, Jagdeep, DEKKER, Paula
33: NL 31: 2020585 32: 2018-03-14
54: PROCESS FOR THE PRODUCTION OF ETHYLENE GLYCOL AND HETEROGENEOUS CATALYST COMPOSITION
00: -
The invention relates to a process for the production of ethylene glycol including the steps of: (i) reacting, in a reactor, at a temperature in the range from equal to or more than 170°C to equal to or less than 270°C, at least a portion of a carbohydrate source in the presence of hydrogen, a solvent, a homogeneous catalyst, which homogeneous catalyst contains tungsten, and a heterogeneous catalyst, which heterogeneous catalyst contains one or more transition metals from groups 8, 9 and 10 of the Periodic Table of the Elements, yielding ethylene glycol and a spent heterogeneous catalyst; (ii) regenerating the spent heterogeneous catalyst by removing at least a portion of deposited tungsten species from the spent heterogeneous catalyst, yielding a regenerated heterogeneous catalyst; and (iii) using at least a portion of the regenerated heterogeneous catalyst as heterogeneous catalyst in the reaction of step (i). The invention further relates to a regenerated heterogeneous catalyst composition obtainable therein.



21: 2020/05018. 22: 2020-08-13. 43: 2022-01-10
51: E21C
71: Lloyd Dynamowerke GmbH
72: QUAST, Volker, LACHENMAIER, Sepp, LAUBE, Falk, MARCIC, André, RECKTENWALD, Jörg
33: DE 31: 10 2018 103 527.6 32: 2018-02-16
54: DRUM-TYPE SHEARER LOADER, AND A SHEARER DRUM OF A DRUM-TYPE SHEARER LOADER
00: -
In the case of a drum-type shearer loader for the extraction of mineral material in the mining sector, having at least one shearer drum (1) which is mounted rotatably on a pivotable support arm (2) and which is driven by a drive motor (4) arranged at the same end of the support arm (2) in the region of the support arm head (3), a compact drive unit for all operating states can be provided if the drive motor (4) is designed as a permanent-magnet-excited synchronous machine which, during operation of the shearer drum (1), provides the entire drive power required for rotating the shearer drum (1).

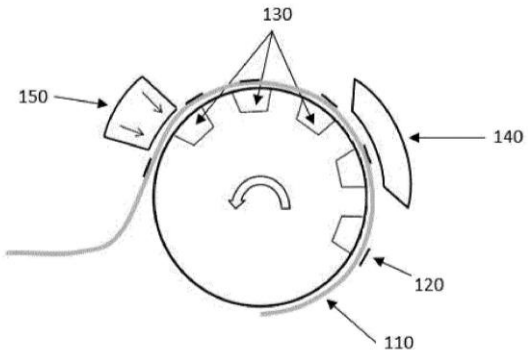


21: 2020/05039. 22: 2020-08-14. 43: 2022-01-10
51: B05D; B41F; B41M; B42D; C09D
71: SICPA HOLDING SA
72: SCHMID, Mathieu, LOGINOV, Evgeny, DESPLAND, Claude-Alain
33: EP(CH) 31: 18152082.6 32: 2018-01-17
33: EP (CH) 31: 18152081.8 32: 2018-01-17
54: PROCESSES FOR PRODUCING OPTICAL EFFECTS LAYERS
00: -
The present invention relates to the field of and processes and printing apparatuses for producing optical effect layers (OEL) comprising magnetically oriented platelet-shaped magnetic or magnetizable pigment particles on a substrate. In particular, the present invention relates to processes using printing apparatuses comprising a first magnetic-field-generating device mounted on a transferring device (TD) and a static second magnetic-field-generating device for producing said OELs as anti-counterfeit means on security documents or security articles or for decorative purposes.



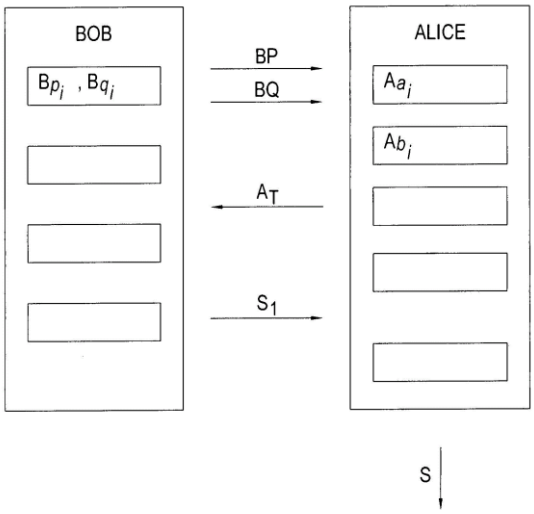
21: 2020/05040. 22: 2020-08-14. 43: 2022-01-10
51: B05D; B41F; B41M; B42D; C09D

71: SICPA HOLDING SA
72: SCHMID, Mathieu, LOGINOV, Evgeny, DESPLAND, Claude-Alain
33: EP (CH) 31: 18152082.6 32: 2018-01-17
33: EP(CH) 31: 18152081.8 32: 2018-01-17
54: PROCESSES FOR PRODUCING OPTICAL EFFECTS LAYERS
00: -
The present invention relates to the field of and processes and printing apparatuses for producing optical effect layers (OEL) comprising magnetically oriented platelet-shaped magnetic or magnetizable pigment particles on a substrate. In particular, the present invention relates to processes using printing apparatuses comprising a first magnetic-field-generating device mounted on a transferring device (TD) and a static second magnetic-field-generating device for producing said OELs as anti-counterfeit means on security documents or security articles or for decorative purposes.

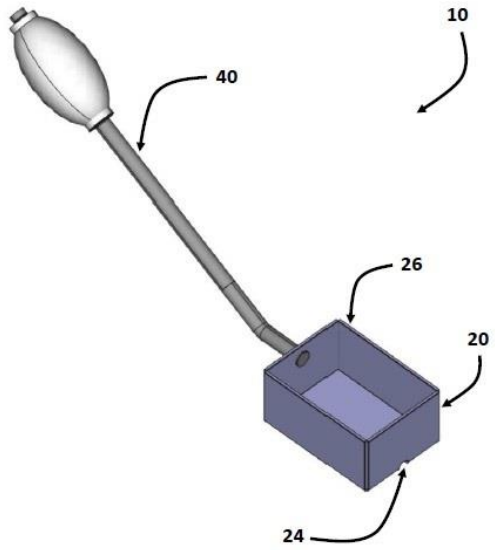


21: 2020/05041. 22: 2020-08-14. 43: 2022-01-10
51: H04L
71: nChain Holdings Limited
72: WRIGHT, Craig Steven
33: PCT/IB(GB) 31: 2018/050264 32: 2018-01-16
33: GB 31: 1800706.2 32: 2018-01-16
54: COMPUTER IMPLEMENTED METHOD AND SYSTEM FOR OBTAINING DIGITALLY SIGNED DATA
00: -

A method of obtaining digitally signed data is disclosed. The method comprises sending first data (e_2) from at least one of a plurality of first participants to at least one second participant, wherein the first data is based on second data (e) accessible to at least one said first participant, and the second data is inaccessible to the or each said second participant. A digital signature (s_1) of the first data is received from at least one said second participant, and the digital signature of the first data is processed, by a plurality of the first participants, to provide shares of a digital signature (s) of the second data, wherein the digital signature of said second data is accessible by means of a threshold number of said shares and is inaccessible to less than said threshold number of shares.

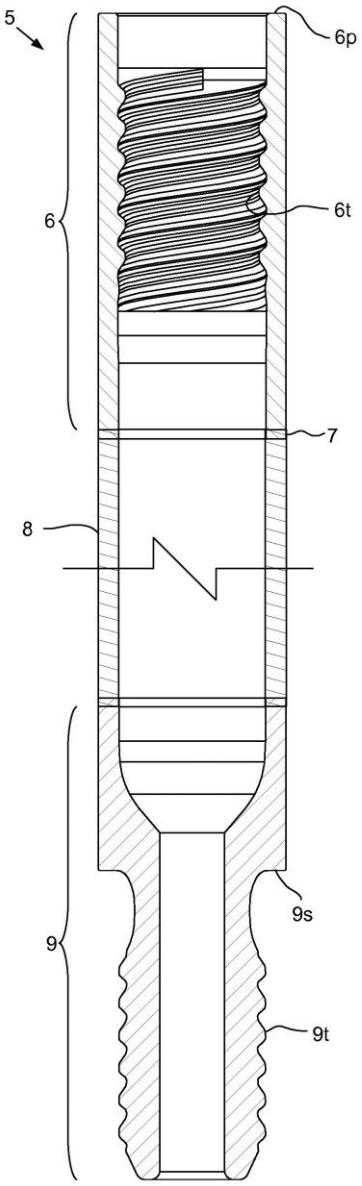


21: 2020/05072. 22: 2020-08-17. 43: 2022-02-11
51: C10L
71: Van Zyl, Steff
72: Van Zyl, Steff
54: FIRE STARTING DEVICE
00: -
The present invention relates to a fire starting device, and more specifically a fire starting device for use with a fire stone or similar wick apparatus. The device comprises a container having a cavity shaped so as to accept such a wick, the cavity further defining an aperture for allowing ingress of flammable fluid to soak the wick, and an aperture for allowing the formation of a flame.



21: 2020/05182. 22: 2020-08-20. 43: 2022-01-10
51: E21B; F16L
71: Sandvik Mining and Construction Tools AB
72: HAMMARGREN, John, NORMAN, Andreas
33: EP(SE) 31: 18160853.0 32: 2018-03-09
54: CONNECTION FOR PERCUSSION DRILLING
00: -

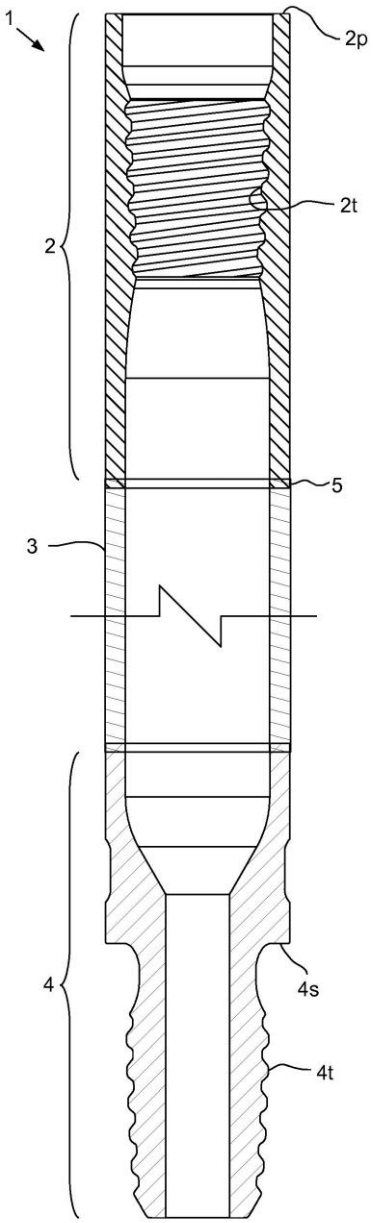
A connection for use in percussion drilling includes a male coupling and a female coupling. Each coupling includes a body and a respective screw thread formed on a respective inner or outer surface of the respective body. Each thread has a thread-form including a crest, a root, a contact flank and a non-contact flank. Each thread-form has a contact flank angle and a non-contact flank angle inclined relative to a respective baseline located at a respective minor or major diameter thereof. Each non-contact flank angle is greater than the respective contact flank angle. The crest of each thread-form is inclined from the respective contact flank to the respective non-contact flank such that an apex of the respective thread-form defining a respective minor or major diameter thereof is located adjacent to the respective non-contact flank.



21: 2020/05190. 22: 2020-08-20. 43: 2022-01-10
51: E21B; F16L
71: Sandvik Mining and Construction Tools AB
72: RINDESKÄR, Andreas
33: EP(SE) 31: 18160858.9 32: 2018-03-09
54: COUPLING FOR CONNECTING DOWNHOLE TUBULARS
00: -

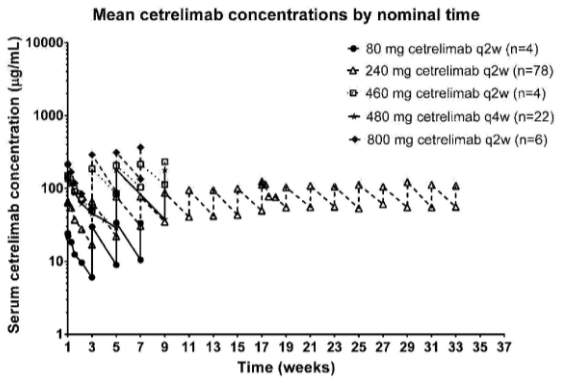
A coupling for connecting downhole tubulars includes: a tubular body; and at least one of: a male screw thread formed on an outer surface of the body, and a female screw thread formed in an inner surface of the body. The at least one thread has a

thread-form including a crest, a root, and a pair of flanks. The crest and the root are each cambered about a respective first and second camber radius. Each camber radius is greater than an outer diameter of the coupling.



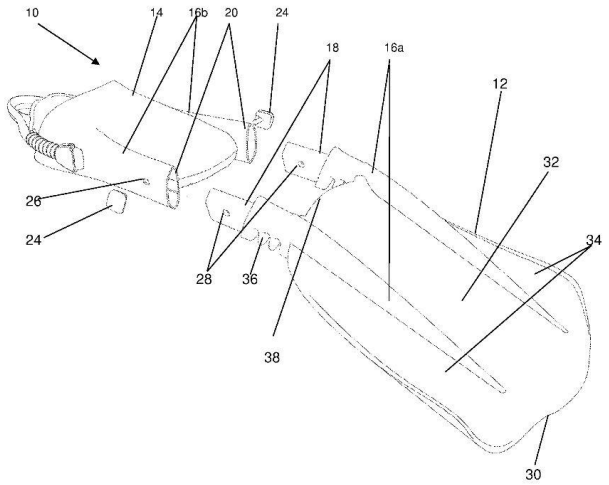
21: 2020/05217. 22: 2020-08-21. 43: 2022-01-10
51: A61K; C12N
71: PROQR THERAPEUTICS II B.V., UNIVERSITY OF ROCHESTER
72: TURUNEN, Janne Juha, VAN SINT FIET, Lenka, BOUDET, Julien, Auguste, Germain, KLEIN, Bart, DA SILVA, Pedro Duarte Morais Fernandes, Arantes, YU, Yi-Tao, ADACHI, Hironori, ZOYSA, Meemanage De
33: US 31: 62/648,648 32: 2018-03-27
54: NUCLEIC ACID MOLECULES FOR PSEUDOURIDYLATION
00: -
The invention relates to nucleic acid molecules for pseudouridylation of a target uridine in a target RNA in a mammalian cell, wherein the nucleic acid molecule comprises a guide region capable of forming a partially double stranded nucleic acid complex with the target RNA comprising the target uridine, wherein the partially double stranded nucleic acid complex is capable of engaging a mammalian pseudouridylation enzyme, wherein the guide region assists in positioning the target uridine in the partially double stranded nucleic acid complex for it to be converted to a pseudouridine by the mammalian pseudouridylation enzyme.

21: 2020/05223. 22: 2020-08-21. 43: 2022-01-20
51: A61K; A61P; C07K
71: Janssen Biotech, Inc.
72: ATTIYEH, Edward F., BAE, Kyounghwa, GREGER, James G., XIE, Hong, MAYER, Christina Lourdes
33: US 31: 62/620,106 32: 2018-01-22
54: METHODS OF TREATING CANCERS WITH ANTAGONISTIC ANTI-PD-1 ANTIBODIES
00: -
The present invention relates to methods of treating cancers with antagonistic anti-PD-1 antibodies, formulations of the antagonistic anti-PD-1 antibodies and drug products of the anti- PD-1 antibodies.

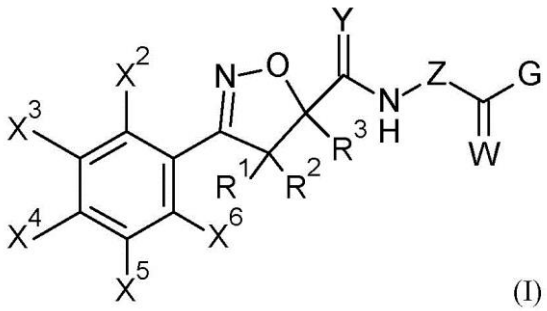


21: 2020/05232. 22: 2020-08-21. 43: 2022-01-20

51: A63B
71: Rhys James COUZYN
72: COUZYN, Rhys James
33: GB 31: 1801154.4 32: 2018-01-24
54: MODULAR FIN WITH COMMON RAIL SYSTEM
00: -
A dive fin, comprising a blade and a foot pocket distinct from one another and releasably connected to another by one or more rails extending between the blade and the foot pocket. The rails extend from either side of the foot pocket and extend parallel to one another at least partway along the length of the blade towards a trailing edge of the blade. Each rail comprises two sections; a first rail section, extending from a leading edge of the blade and terminating in a free end, and a second rail section extending from the foot pocket and terminating in a free end. The free end of one rail section comprises a female recess, and the free end of the other rail section comprises a male extension insertable into the female recess.

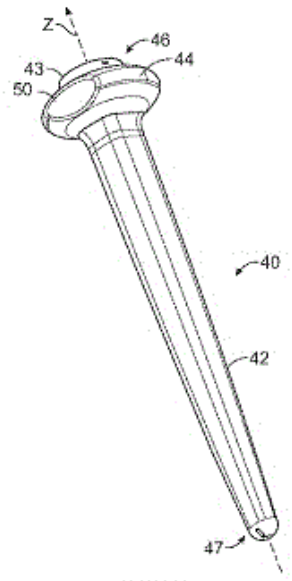


21: 2020/05252. 22: 2020-08-24. 43: 2022-01-20
51: A01N; C07D
71: Bayer Aktiengesellschaft
72: BOJACK, Guido, LAW, Katherine Rose, VAN ALMSICK, Andreas, HAAF, Klaus Bernhard, DIETRICH, Hansjörg, GATZWEILER, Elmar, MACHETTIRA, Anu Bheemaiah, ROSINGER, Christopher Hugh, ASMUS, Elisabeth
33: EP(DE) 31: 18153354.8 32: 2018-01-25
54: HERBICIDALLY ACTIVE 3-PHENYLISOXAZOLINE-5-CARBOXAMIDES OF CYCLOPENTENYL CARBOXYLIC ACID DERIVATIVES
00: -
The invention relates to 3-phenylisoxazoline-5-carboxamides of cyclopentenyl carboxylic acid derivatives of the general formula (I) and their agrochemically acceptable salts (I), and to the use thereof in the field of plant protection.

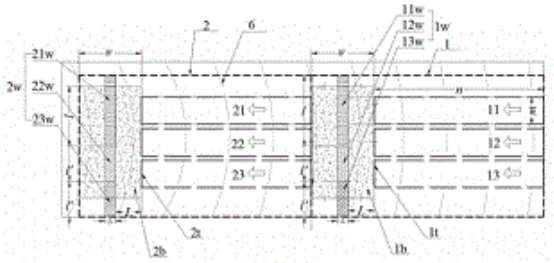


(I)

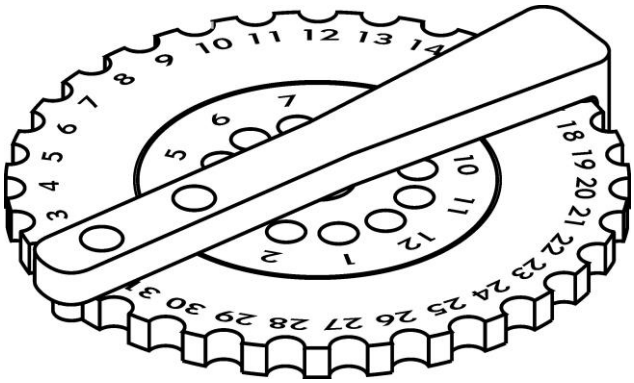
21: 2020/05293. 22: 2020-08-25. 43: 2022-01-10
51: A45D; A46B
71: GUIDE BEAUTY LLC
72: SILVERBERG, TERRI
33: US 31: 62/627,860 32: 2018-02-08
54: COSMETIC APPLICATOR WAND; ASSEMBLY FOR APPLICATION OF COSMETIC COMPRISING AN APPLICATOR WAND AND AN APPLICATOR AND A METHOD FOR APPLYING COSMETIC FORMULATION
00: -
This invention relates to assemblies, components, and methods for application of cosmetic products. For example, a cosmetic applicator wand (40) in the form of an elongated tool including a region for gripping by a user, an enlarged element (44) optionally including a groove (50), where the wand can be coupled to an applicator. The assemblies are designed to be easy and comfortable to use.



21: 2020/05442. 22: 2020-08-31. 43: 2022-01-10
51: E21C
71: CHINA UNIVERSITY OF MINING AND TECHNOLOGY
72: FAN, GANGWEI, ZHANG, DONGSHENG, ZHANG, SHIZHONG, LING, BIN, LI, QIZHEN
33: CN 31: 2019103122412 32: 2019-04-18
54: AQUIFER SEGMENTED GROUTING CURTAIN WATER-PRESERVED MINING METHOD
00: -
The present invention discloses an aquifer segmented grouting curtain water-preserved mining method, including an aquifer and a coal seam. The method includes: a. obtaining basic geological parameters, performing mining engineering design, and determining the direction of underground water flow and the position and the size of a first mining area grouting curtain; b. prefabricating the first mining area grouting curtain in the aquifer above a first protection coal pillar in an upstream direction of the water flow, and then performing normal stoping on a first mining area until stoping is completed; c. prefabricating a second mining area grouting curtain in the aquifer, and then performing normal stoping on a second mining area until stoping is completed; d. realizing elimination of the first mining area grouting curtain by recovering the first protection coal pillar or mining the second mining area; and e. treating a second protection coal pillar 2b and the second mining area grouting curtain 2w in working modes of the steps b, c and d, and doing the rest in such a way until the whole coal seam is completely mined. According to the present invention, water-preserved coal mining is realized by building curtains. Additionally, grouting curtains are automatically eliminated, so that influences caused by long-time cutoff of supply conditions by the curtains on earth surface ecological changes are prevented.

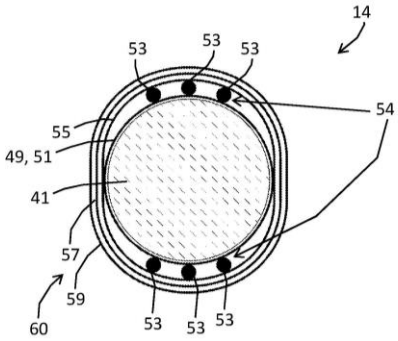


21: 2020/05469. 22: 2020-09-02. 43: 2022-01-20
51: B65D; G09F
71: VILABRIL, Monica De Oliveira
72: VILABRIL, Monica De Oliveira, HARDING, Colin David
54: AGE INDICATOR FOR PERISHABLE GOODS
00: -
An apparatus is disclosed comprising a body having a first face. The first face includes a first timescale having a plurality of markers representing time units on the first timescale and a first pointer movable relative to the first timescale so as to be set to a selected time unit on the first timescale. The first face further includes a second timescale having a plurality of markers representing time units on the second timescale and a second pointer movable relative to the second timescale so as to be set to a selected time unit on the second timescale. The body has a second face opposite the first face provided with a securing mechanism to enable the apparatus to be removably secured to a container. Each of the first and second pointers are removably securable at a set time unit on the first and second timescale respectively.



21: 2020/05470. 22: 2020-09-02. 43: 2022-02-02
51: A61K; C07K; C12N
71: TRANSLATIONAL HEALTH SCIENCE AND TECHNOLOGY INSTITUTE, INTERNATIONAL AIDS VACCINE INITIATIVE, INC., Y.R. G. CENTRE FOR AIDS RESEARCH AND EDUCATION
72: BHATTACHARYA, Jayanta, KUMAR, Rajesh, KUMAR, Vivek, DESHPANDE, Suprit, GANGATHARAN, Murugavel Kailapuri
33: IN 31: 201911036660 32: 2019-09-12
54: ENGINEERED HIV-1 ENVELOPE IMMUNOGEN
00: -
The present application relates to a HIV-1 Indian clade C stabilized, engineered trimeric envelope glycoprotein (1PGE-THIVC SOSIP) having codon-optimized nucleotide sequence that presents near native envelope conformation in cell-free form and its immunogenic composition. The present invention also discloses methods of eliciting the immune response using the engineered protein of the present invention.

21: 2020/05519. 22: 2020-09-04. 43: 2022-01-20
51: B66C
71: Cabin Air Group B.V.
72: VAN DER SCHUIT, Rinze Jan
33: NL 31: 2020693 32: 2018-03-29
54: EXPANDABLE HEAVY EQUIPMENT, AND ELONGATED PULL ELEMENT
00: -
An elongated pull element (14), in particular for an element of an expandable heavy equipment (1) comprises a bundle of load bearing fibres (41) extending along the length of the elongated pull element (14), and stiffening means (54) comprising an exoskeleton for increasing the bending stiffness of the elongated pull element (14), compared to the bending stiffness of the load bearing fibres (41).



21: 2020/05541. 22: 2020-09-07. 43: 2022-01-10
51: A61K; A61Q
71: UNILEVER GLOBAL IP LIMITED
72: ZDRAVKOVA, ANELIYA NIKOLOVA
33: EP 31: 18164560.7 32: 2018-03-28
54: NON-ALUMINIUM ANTIPERSPIRANT COMPOSITIONS
00: -
An antiperspirant composition comprising ethanol, amphiphilic material and volatile silicone, the amphiphilic material being a substance or mixture of substances which forms, upon contact with perspiration, a water-insoluble liquid crystal phase of greater than one dimensional periodicity, wherein: (i) the ratio of amphiphilic material to (ethanol + volatile silicone) is greater than or equal to 1 :9; (ii) the ratio of volatile silicone to (ethanol + amphiphilic material) is from 1 :9 to 1 :1 and wherein (iii) the ratio of ethanol to amphiphilic material is greater than or equal to 7:3.

21: 2020/05561. 22: 2020-09-08. 43: 2022-01-20
51: A21D; C12N
71: DSM IP Assets B.V.
72: PUTSEYS, Joke Anneleen, TEUNISSEN, Aloysius Wilhelmus Rudolphus Hubertus, DE JONG, René Marcel, GODEFROOIJ, Jeroen, STOLZE-LAGERWEIJ, Helma Arina
33: EP(NL) 31: 18165871.7 32: 2018-04-05
54: VARIANT MALTOGENIC ALPHA-AMYLASE
00: -
The present invention relates to a variant polypeptide having maltogenic alpha-amylase activitywherein the polypeptide comprises an amino acid sequence, which, when aligned with an amino acid sequence of SEQ ID NO: 1, comprises an amino acid substitution F188L/I, S200N, and D261G, and optionally a further amino acid substitution

T288P, wherein the amino acid substitutions are determined with reference to SEQ ID NO: 1, and wherein the polypeptide has an amino acid sequence which has at least 70%, 75%, 80%, 85%, 90%, 95%, 96%, 97%, 98%, or at least 99% identity to the amino acid sequence of SEQ ID NO: 1. The invention also relates to a process for the preparation of a dough or a baked product wherein the variant polypeptide is used.

21: 2020/05588. 22: 2020-09-09. 43: 2022-01-20
51: G06F
71: SBV SERVICES (PROPRIETARY) LIMITED
72: MELANE, Hamilton
33: ZA 31: 2019/05808 32: 2019-09-03
54: SYSTEM FOR AND METHOD OF MONITORING ATM OPERATIONAL ACTIVITIES
00: -
A system for monitoring ATM operational activities, the system comprising an input module that is in communication with an order processing system to receive ATM orders; and a routing and scheduling module, which allocates the ATM operational activities to a plurality of users for a particular day and/or in respect of a particular run. The system further includes a monitoring module running a backend software application ('ATM application'), the monitoring module being in communication with the input module to receive, collate and process the ATM orders and required ATM operational activities for each user, the monitoring module being in communication with mobile devices associated with each user, each mobile device running an ATM mobile application to manage the ATM operational activities expected of that user on a particular day and/or in respect of a particular run, the ATM mobile application including an update module to enable the user to update the ATM application substantially in real time.

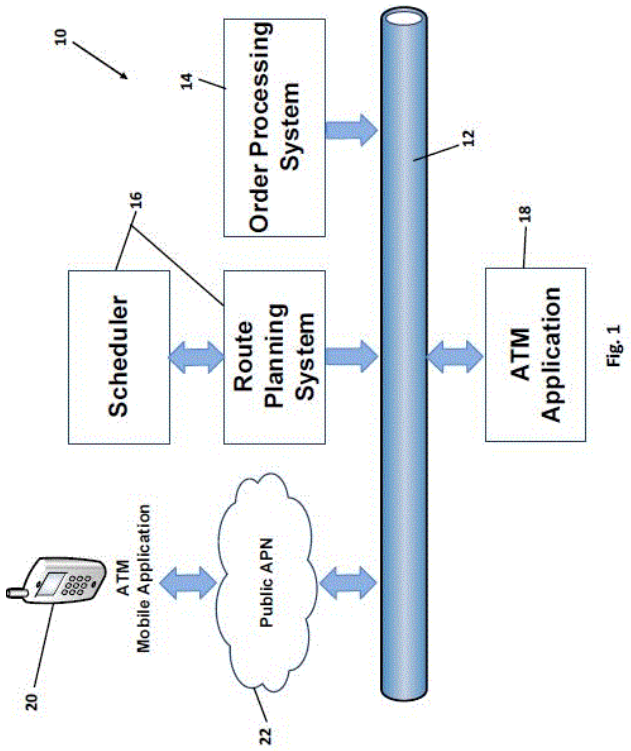
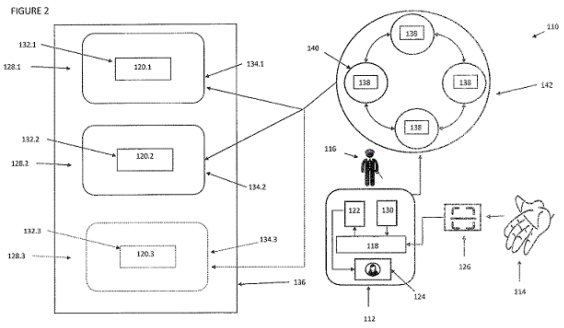


Fig. 1

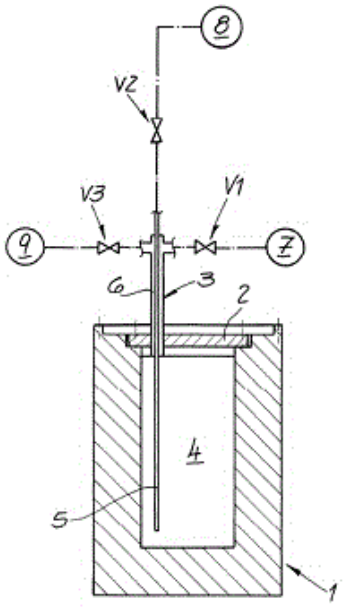
21: 2020/05630. 22: 2020-09-10. 43: 2022-01-20
51: G06F
71: FORD, Randell, James
72: FORD, Randell, James
33: ZA 31: 2017/07688 32: 2017-11-13
54: A SYSTEM FOR IDENTIFYING PERSONS OF INTEREST
00: -
A system (110) for identifying persons of interest which includes a mobile computing device (112), which is configured to obtain biometric data and/or receive input of identification information of a person (114) by a requester (116), a requester software application (118) which is installable on the mobile computing device (112), which application (118) configures the mobile computing device (112) to upload the biometric data and/or identification information of the person (114) to a personal information database (120.1, 120.2, 120.3) for verification thereof and the requester software application (118) further being configured to retrieve or download the verified biometric and/or identification information as well as any other personal information for the person (14) from the personal information database (120.1, 120.2, 120.3)

so as to display it on the mobile computing device (112).



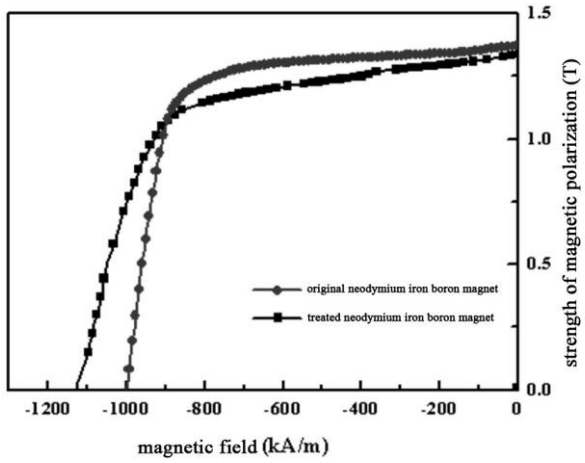
21: 2020/05637. 22: 2020-09-10. 43: 2022-01-10
51: C07C; C07D
71: UNILEVER GLOBAL IP LIMITED
72: BREEDEN, SIMON WILLIAM, CLARK, JAMES HANLEY, FARMER, THOMAS JAMES, MACQUARRIE, DUNCAN JAMES, MCELROY, CON ROBERT, OGUNJOBI, JOSEPH KOLAWOLE, THORNTHWAITE, DAVID WILLIAM
33: EP 31: 18168062.0 32: 2018-04-18
54: PROCESS FOR THE PRODUCTION OF DIALKYL TEREPHTHALATE
00: -
A process for preparing dialkyl terephalate comprising the following steps:- i) providing furan-2,5-dicarboxylate; ii) esterifying the furan-2,5-dicarboxylate with alcohol to form furan-2,5-carboxylic acid dialkyl ester; iii) reacting the furan-2,5-carboxylic acid dialkyl ester with ethylene under Diels Alder conditions, elevated temperature and pressure and in the presence of a catalyst such that dialkyl terephthalate is produced; wherein the Diels-Alder reaction is free from solvent; wherein the catalyst comprises a clay comprising metal ions and having Lewis acidity.

21: 2020/05690. 22: 2020-09-14. 43: 2022-01-27
51: G21F
71: GNS GESELLSCHAFT FÜR NUKLEAR-SERVICE MBH
72: RIRSCHL, CHRISTOPH, DREESEN, KONRAD
33: EP 31: EP19197547.3 32: 2019-09-16
54: METHOD OF DRYING A RADIOACTIVE-WASTE TRANSPORT/STORAGE CONTAINER
00: -
A method of drying transport and/or storage containers for radioactive waste, in particular for spent fuel elements, where the container is first drained or pumped out. Then the container interior is continuously evacuated or maintained subatmospheric, and simultaneously inert gas, preferably helium, is continuously fed into the container interior. The evacuation and/or the introduction of the inert gas or helium is carried out such that the inert gas content or the helium content in the container interior is 50 to 95% by volume, in particular 55 to 90% by volume.



21: 2020/05694. 22: 2020-09-14. 43: 2022-01-27
51: H01F
71: SOUTH CHINA UNIVERSITY OF TECHNOLOGY
72: LIU, Zhongwu, ZENG, Huixin, ZHOU, Qing, YU, Hongya, ZHONG, Xichun
33: CN 31: 201810178869.3 32: 2018-03-05
54: A HIGH-COERCIVITY NEODYMIUM IRON BORON MAGNET AND A PREPARATION METHOD THEREOF
00: -
The invention belongs to the field of permanent magnet materials, and discloses a high-coercivity neodymium iron boron magnet and a preparation method thereof. First prepare a low-melting point non-rare earth alloy with a melting point of 450 to 950C, and then place the surface diffusion medium on the surface of the neodymium iron boron magnet to form a diffusion couple, or magnetron sputter deposit metal oxide film on a neodymium iron boron substrate as the surface diffusion medium, and finally the above-mentioned neodymium iron boron

magnet is subjected to diffusion heat treatment in a vacuum to obtain a neodymium iron boron magnet with high coercivity. The surface diffusion process of the present invention is simple and effective, does not use rare earth alloys or compounds as diffusion media. On the basis of significantly reducing the content of rare earth elements in the neodymium iron boron magnet, it can effectively improve the distribution of the grain boundary phase of the magnet, and significantly increase the coercivity of the magnet.

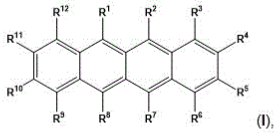


21: 2020/05700. 22: 2020-09-14. 43: 2022-01-10
51: C02F; B01D
71: UNILEVER GLOBAL IP LIMITED
72: RAMAN, SRINIVASA GOPALAN, ROYCHOWDHURY, SUMANA
33: EP 31: 18164910.4 32: 2018-03-29
54: METAL-FREE WATER CLARIFICATION COMPOSITION
00: -

The present invention relates to a composition for clarification of water comprising: (i) 0.1 to 50% by weight of dry matter of anionic polymeric flocculant; (ii) 0.4 to 90% by weight of dry matter of an amphoteric copolymer having a weight-average molar mass from 2000 g/mol to 5,000,000 g/mol, said amphoteric copolymer comprising: (a) at least one anionic monomer selected from the group of ethylenically unsaturated acids, preferably (meth)acrylic acid; and (b) at least one cationic, amphoteric or zwitterionic monomer selected from the group of [N-substituted] (meth)acrylamide compounds comprising at least two quaternary nitrogen atoms; and (iii) 0 to 95% by weight of dry matter of inert filler; wherein the combination of the anionic polymer flocculant, the amphoteric copolymer and the inert filler constitutes at least 50% by weight to at least 70% by weight of the water clarification composition.

21: 2020/05794. 22: 2020-09-18. 43: 2022-01-20
51: C07D; C10L
71: SICPA HOLDING SA
72: ZÜHLKE, Martin, RIEBE, Daniel, BEITZ, Toralf, TILLER, Thomas, LOPEZ GEJO, Juan, LASKAY, Ünige
33: EP(CH) 31: 19213152.2 32: 2019-12-03
54: COMPOUNDS FOR CHEMICALLY MARKING A PETROLEUM HYDROCARBON
00: -

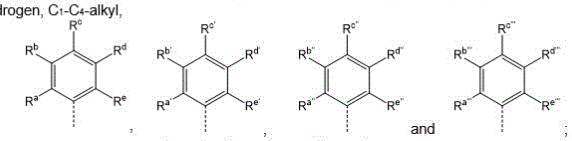
The present invention relates to a use of a compound of general formula (I)



(I),

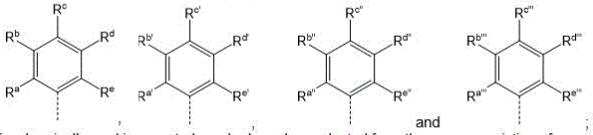
wherein

the residues R^1 – R^{12} are independently of each other selected from the group consisting of hydrogen, C1-C4-alkyl,



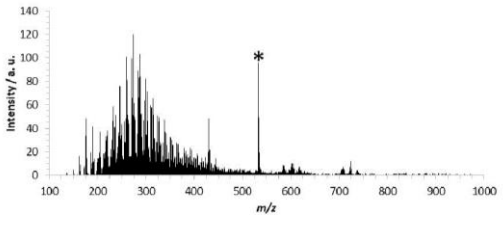
and

and the residues R^a – R^e, $R^{a'}$ – $R^{e'}$, $R^{a''}$ – $R^{e''}$ and $R^{a'''}$ – $R^{e'''}$ are independently of each other selected from the group consisting of hydrogen and C1-C4 alkyl; with the proviso that at least two of the substituents R^1 – R^{12} are selected from:



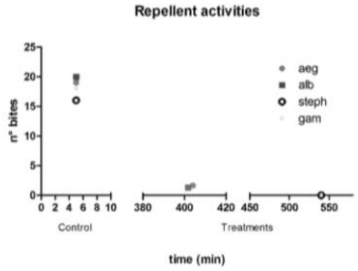
and

for chemically marking a petroleum hydrocarbon selected from the group consisting of gasoline, diesel fuel, kerosene, and jet fuel, to prevent counterfeiting of said petroleum hydrocarbon. The presence and concentration of the chemical marker of general formula (I) in the composition of the petroleum hydrocarbon can be advantageously determined by laser ionization coupled with mass spectrometry or laser ionization coupled with ion mobility spectrometry.



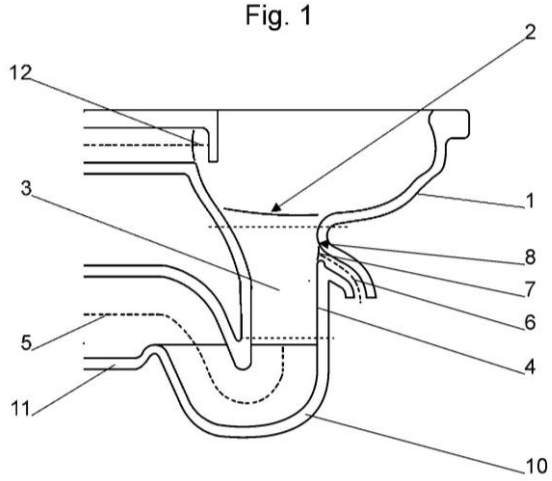
21: 2020/05805. 22: 2020-09-18. 43: 2022-01-20
51: A01N
71: BIOVECBLOK S.R.L., PALERMO, Vincenzo
72: VALZANO, Matteo, SERRAO, Aurelio, DAMIANI, Claudia
33: US 31: 15/926,446 32: 2018-03-20
54: NATURAL MOSQUITO REPELLANT
00: -

An essential oil blend diluted in soybean oil against the bites of Anopheles stephensi, An. gambiae (the main malaria vectors in Asia and Africa, respectively); Aedes aegypti and Ae. albopictus (the main vectors of arboviruses listed above). Repellency tests, appraising the protection time for each species, were performed under laboratory conditions using human volunteers and nulliparous female mosquitoes. The results show that the natural repellent was extraordinarily effective against both Anopheles and Aedes genera.

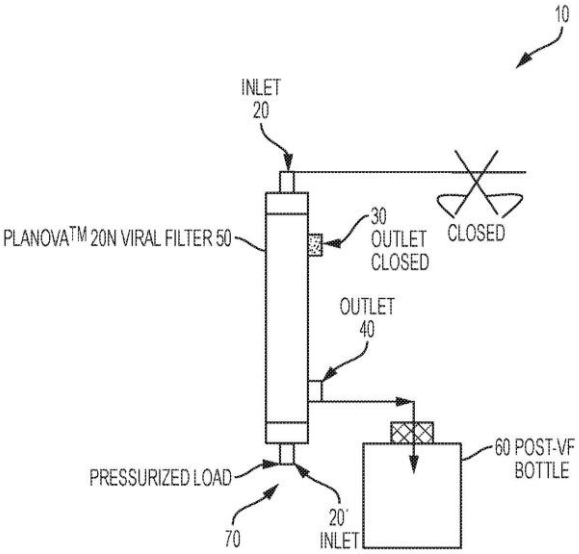


21: 2020/05806. 22: 2020-09-18. 43: 2022-01-20
51: E03D
71: EOOS Design GmbH
72: BERGMANN, Martin, BOHMANN, Gernot, GRUENDL, Harald
33: AT 31: A50227/2018 32: 2018-03-19
54: SEPARATING TOILET
00: -
The invention relates to a separating toilet comprising a pan (1) having a pipe section (3), which is connected in the outflow region (2) and has vertical side walls (4) at least in certain portions, and having a main discharge line (5) connected downstream of the pipe section (3), wherein an odour trap is provided between the pipe section (3) and the main discharge line (5), and wherein at least one separate auxiliary discharge line (6) for separating urine is provided. The inlet opening (7) of the auxiliary discharge line (6) is arranged on a side of the vertical side wall (4) of the pipe section (3) and thus below the pan (1) and above the odour trap.

Fig. 1

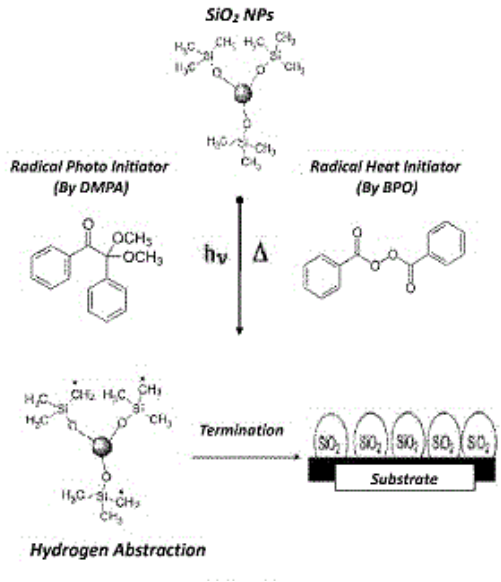


21: 2020/05807. 22: 2020-09-18. 43: 2022-01-20
51: A61L; B01D; C12N
71: Bayer HealthCare, LLC
72: LIU, Shengjiang, WANG, Wensheng, HESSLEIN, Ashley
33: US 31: 62/632,165 32: 2018-02-19
54: MODIFIED FILTER MEMBRANE AND METHOD
00: -
The embodiments provide a modified filter membrane for separating a crude solution of a biological product and a viral contaminant. The filter membrane has a cellulosed based porous surface, and at least one divalent metal ion bound to the cellulose based porous surface of the filter membrane to form a modified filter membrane cellulose based porous surface, wherein the modified cellulose based porous surface separates the crude solution by retaining a viral contaminant greater than 15 nm in diameter while allowing a biological product smaller than 15 nm in diameter to pass through. The embodiments also provide a method of filtering a crude solution of a biological product and a viral contaminant using a modified filter membrane by adding a divalent metal ion to a filter membrane porous surface to form a modified filter membrane porous surface with a pore size in the range of 1 to 15 nm in size, and filtering the crude solution of the biological product and the viral contaminant through the porous surface of the modified filter membrane, wherein the modified filter membrane retains the viral contaminant on the porous surface while allowing the biological product to pass through.



21: 2020/05832. 22: 2020-09-21. 43: 2022-01-20
51: B32B; C05C; C05G; C09D
71: UPL LTD
72: SHIRSAT, Rajan Ramakant, VITHALDAS, Talati Paresh, SHROFF, Jaidev Rajnikant, SHROFF, Vikram Rajnikant
33: IN 31: 201831006799 32: 2018-02-22
54: FERTILIZER COMPOSITIONS
00: -
Disclosed herein is a composition comprising fertilizer particles being coated with at least two layers of superabsorbent polymers such that leachate of nitrogen in the soil is substantially decreased.

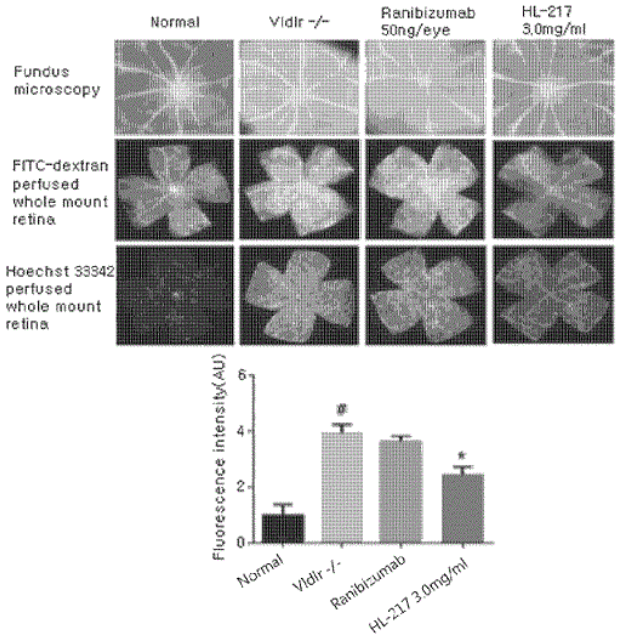
21: 2020/05844. 22: 2020-09-21. 43: 2022-01-10
51: B05D; C08K; C08L; D06M; D21H
71: AZRA SHS TECH INC.
72: DODIUK-KENIG, HANNA, DOTAN, ANA, COHEN, NIV, KENIG, SHMUEL
54: DURABLE SUPERHYDROPHOBIC COATING
00: -
Disclosed is a superhydrophobic coating composition comprising an NP component, and a radical initiator (RI), wherein the NP component comprises NP particles having organic moieties bound to the surface of the NP particles. Disclosed also is a superhydrophobic coating composition further comprising a fluid. Disclosed also is a method for preparing a superhydrophobic (SH) surface, wherein the method comprises: mixing an NP component with at least one RI and possibly with a fluid, thereby providing a coating composition; applying the coating composition onto a substrate (pre -coated or containing oxides) thereby providing a coated substrate; and applying radiation to the coated substrate, thereby providing the SH surface on which at least part of the NP component is covalently bound, directly or indirectly, to the substrate.



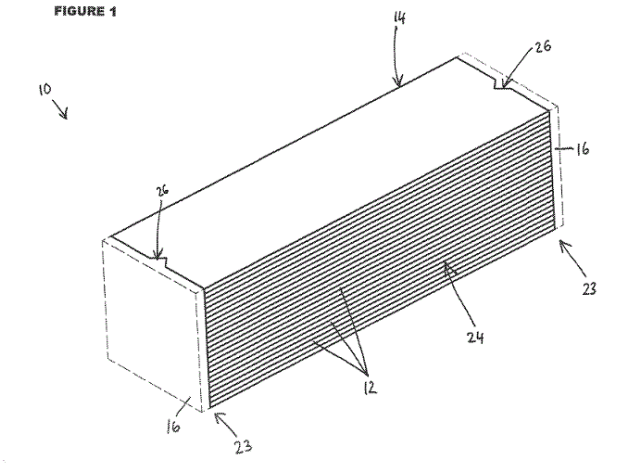
21: 2020/05887. 22: 2020-09-23. 43: 2022-01-20
51: G01N
71: EVONIK OPERATIONS GMBH
72: FLÜGEL, Monika, PELZER, Stefan, THIEMANN, Frank, VAN IMMERSEEL, Filip, DUCATELLE, Richard, GOOSSENS, Evy, DEVREESE, Bart, DEBYSER, Griet
33: EP 31: 18159632.1 32: 2018-03-02
54: IN VITRO METHOD FOR DETECTING INTESTINAL BARRIER FAILURE IN ANIMALS BY DETERMINING OVOTRANSFERRIN
00: -
The present invention pertains to an in vitro method for detecting intestinal barrier failure in animals, the method comprising the following steps: a) collecting intestinal sample material of an individual animal or of an animal population; and b) determining the amount of at least one protein marker contained in said sample material; wherein the at least one protein marker comprises or consists of ovotransferrin or a functional fragment thereof, and wherein an increased amount of said at least one

protein marker contained in said sample versus a reference sample indicates intestinal barrier failure.

21: 2020/05891. 22: 2020-09-23. 43: 2022-01-20
51: A61K A61P
71: HANLIM PHARMACEUTICAL CO. LTD
72: SHIN, Dong-Yeop, KIM, Hu-Seong, LEE, Geun-Hyeog, KIM, Kyung-Joon, CHO, Yun-Seok, O, Mi-Jin, KIM, Mi-Jung
33: KR 31: 10-2018-0024470 32: 2018-02-28
54: EYE DROPS IN FORM OF SOLUTION COMPRISING BENZOPYRAN DERIVATIVE OR PHARMACEUTICALLY ACCEPTABLE SALT THEREOF
00: -
The present invention provides eye drops in the form of a solution comprising: in an aqueous medium, (2R,3R,4S)-6-amino-4-[N-(4-chlorophenyl)-N-(1H-imidazole-2-ylmethyl)amino]-3-hydroxy-2-methyl-2-dimethoxymethyl-3,4-dihydro-2H-1-benzopyran or a pharmaceutically acceptable salt thereof; propylene glycol as a stabilizer; and a pH adjusting agent, wherein the eye drops have a pH of 4.0 to 5.0. The eye drops of the present invention can contain (2R,3R,4S)-6-amino-4-[N-(4-chlorophenyl)-N-(1H-imidazole-2-ylmethyl)amino]-3-hydroxy-2-methyl-2-dimethoxymethyl-3,4-dihydro-2H-1-benzopyran or a pharmaceutically acceptable salt thereof at a high concentration, and also the eye drops have excellent stability. In addition, the medicament for preventing or treating macular degeneration, according to the present invention, can be stored for a long period of time.

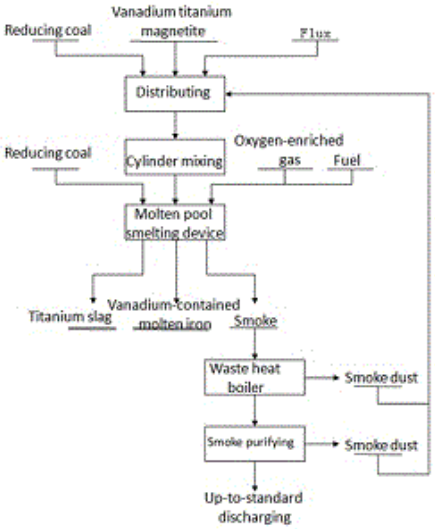


21: 2020/05921. 22: 2020-09-25. 43: 2022-01-20
51: C10L
71: VAN NIEKERK, Garth Malcolm
72: VAN NIEKERK, Garth Malcolm
33: ZA 31: 2017/08096 32: 2017-11-29
54: A FIRELIGHTER
00: -
In accordance with the present invention, there is provided a firelighter (10) which includes a plurality of sheets of paper (12) which are infused, impregnated, doused or coated with flammable material (not shown) and arranged in a stacked relationship so as to form a block (14) and a retaining means in the form of an adhesive (16) for retaining the sheets of paper (12) in the block form.



21: 2020/05923. 22: 2020-09-25. 43: 2022-01-10
51: C21B; F27B
71: CHINA ENFI ENGINEERING CORPORATION
72: LI, DONGBO, LIU, CHENG, LI, MIN, WEI, KEJIAN, RU, HONGSHUN, LI, YUERONG, XU, XIAOFENG, CAO, KEFEI, LI, BING, CHEN, XUEGANG, GUO, YAGUANG
33: CN 31: 201910309060.4 32: 2019-04-17
54: SMELTING METHOD AND SMELTING DEVICE FOR TREATING IRON-BASED POLYMETALLIC ORE IN SHORT PROCESS
00: -

The disclosure provides a smelting method and a smelting device for treating an iron-based polymetallic ore in a short process. The smelting system used in the smelting method comprises a molten pool smelting device. A partition wall is set in a molten pool of the molten pool smelting device, so that the molten pool is divided into a melting area and an electrothermal reducing area, and the bottom of the melting area is communicated with the electrothermal reducing area. The smelting method comprises the following steps: the iron-based polymetallic ore, a fuel, a flux and oxygen-enriched air are conveyed to the melting area, and the step of fusion and partial reduction are performed, to obtain a fused solution; and the fused solution and a reducing agent are conveyed to the electrothermal reducing area, and the step of reduction smelting is performed, to obtain a molten iron with a vanadium element and a titanium slag. On the one hand, an occupied area required in a smelting process is small, a configuration height difference of the molten pool smelting device is reduced, and fund investment may also be reduced; and on the other hand, steps of melt discharge and addition may also be eliminated, and a production working efficiency is improved. The molten pool is used for both fusion and reduction dilution operations, and it is beneficial to separation of the titanium slag and the vanadium-contained molten iron.



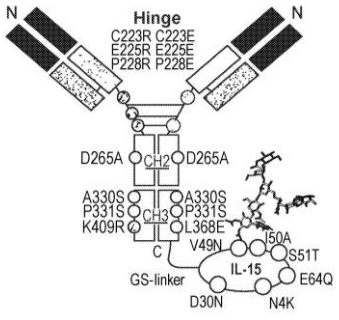
21: 2020/05928. 22: 2020-09-25. 43: 2022-01-20
51: A01N; A01P
71: Bayer Aktiengesellschaft
72: BICKERS, Udo, DITTGEN, Jan, AULER, Thomas, TOSSENS, Herve
33: EP(DE) 31: 18159144.7 32: 2018-02-28
54: METHOD OF REDUCING CROP DAMAGE
00: -

The present invention relates to a method of reducing crop damage by treating the seed of the crop with the safener before sowing. This can be done in addition to the use of crop protection combinations/compositions, in particular herbicide/safener combinations and compositions comprising thereof, which are highly suitable to protect crops from herbicide damage in pre- and post-emergence treatments.

21: 2020/05929. 22: 2020-09-25. 43: 2022-01-20
51: A01N; A01P
71: Bayer Aktiengesellschaft
72: BICKERS, Udo, DITTGEN, Jan, AULER, Thomas, TOSSENS, Herve
33: EP(DE) 31: 18159148.8 32: 2018-02-28
54: METHOD OF REDUCING CROP DAMAGE
00: -

The present invention relates to a method of reducing crop damage by treating the seed of the crop with the safener before sowing. This can be done in addition to the use of crop protection combinations/compositions, in particular herbicide/safener combinations and compositions comprising thereof, which are highly suitable to protect crops from herbicide damage in pre-and post-emergence treatments.

21: 2020/05934. 22: 2020-09-25. 43: 2022-01-10
51: A61K; C07K
71: Pfizer Inc.
72: YEUNG, Yik Andy, FELDMAN, Reid Martin Renny, CHU, Ling Hon Matthew, CHAPARRO RIGGERS, Javier Fernando, DJURETIC, Ivana, LIN, Laura, MOSYAK, Lidia
33: US 31: 62/636,371 32: 2018-02-28
33: US 31: 62/636,362 32: 2018-02-28
54: IL-15 VARIANTS AND USES THEREOF
00: -
The present invention relates to human interleukin 15 (IL-15) variants that have therapeutic and diagnostic use, and methods for making thereof. The present invention also provides fusion proteins comprising a human IL-15 variant. Also provided are methods of stimulating or suppressing immune responses in a mammal, and methods of treating a disorder (e.g., cancer) using the IL-15 variants or the fusion protein of such IL-15 variants.



21: 2020/05935. 22: 2020-09-25. 43: 2022-01-20
51: A01N; A01P
71: Bayer Aktiengesellschaft
72: BICKERS, Udo, DITTGEN, Jan, AULER, Thomas, TOSSENS, Herve
33: EP(DE) 31: 18159146.2 32: 2018-02-28
54: METHOD OF REDUCING CROP DAMAGE
00: -

The present invention relates to a method of reducing crop damage by treating the seed of the crop with the safener before sowing. This can be done in addition to the use of crop protection combinations/compositions, in particular herbicide/safener combinations and compositions comprising thereof, which are highly suitable to protect crops from herbicide damage in pre-and post-emergence treatments.

21: 2020/05936. 22: 2020-09-25. 43: 2022-01-20
51: A01N; A01P
71: Bayer Aktiengesellschaft
72: BICKERS, Udo, DITTGEN, Jan, AULER, Thomas, TOSSENS, Herve
33: EP(DE) 31: 18159140.5 32: 2018-02-28
54: METHOD OF REDUCING CROP DAMAGE
00: -

The present invention relates to a method of reducing crop damage by treating the seed of the crop with the safener before sowing. This can be done in addition to the use of crop protection combinations/compositions, in particular herbicide/safener combinations and compositions comprising thereof, which are highly suitable to protect crops from herbicide damage in pre-and post-emergence treatments.

21: 2020/05938. 22: 2020-09-25. 43: 2022-01-20
51: B60R; G06K
71: Tönnjes ISI Patent Holding GmbH
72: BEENKEN, Björn
33: DE 31: 10 2018 002 585.4 32: 2018-03-28
54: VEHICLE IDENTIFICATION MEANS
00: -
Vehicle identification means are used to identify vehicles by means of a unique identifer. The protection of said means from forgery and tampering is a particularly problematic issue. Known vehicle identification means have readable data carrier on which data for the clear identification of the items is stored and which can be read without contact. Identification means of this type are however very complex and susceptible to malfunctioning. The invention provides an improved vehicle identification means (10) which has as simple a design as possible and which is less susceptible to malfunctioning. For this purpose, an identifying element (11) is associated with at least one NFC

transponder (19), readable without contact, for near-field communication with a data carrier (21) and an antenna (20), at least part of said antenna (20) being arranged in a through-opening (16).

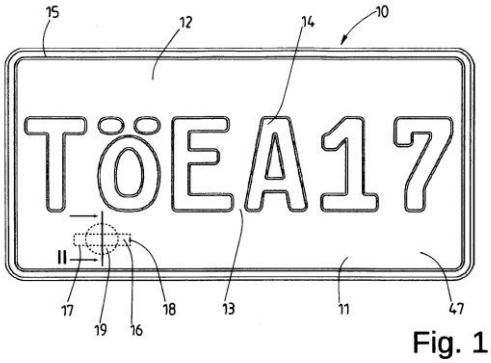
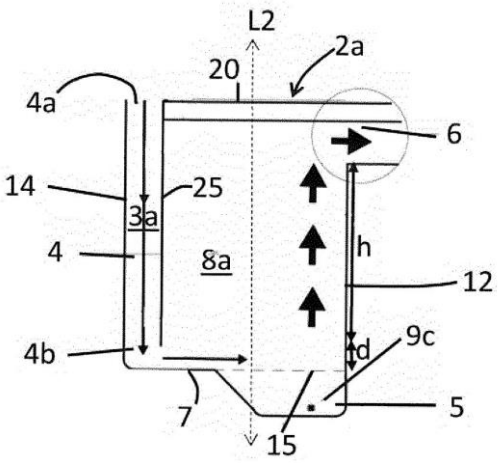


Fig. 1

21: 2020/06002. 22: 2020-09-29. 43: 2022-01-07
51: C07K; C12P
71: Amgen Inc.
72: LEISKE, Daniel R., TRENTALANGE, Michael T.
33: US 31: 62/085,759 32: 2014-12-01
54: PROCESS FOR MANIPULATING THE LEVEL OF GLYCAN CONTENT OF A GLYCOPROTEIN
00: -
The present invention provides a method for manipulating the fucosylated glycan content on a recombinant protein.

21: 2020/06029. 22: 2020-09-29. 43: 2022-01-20
51: B03B
71: LVNDIN O LVNDIN AB
72: LUNDIN, Joakim, LUNDIN, Jonas
33: SE 31: 1850275-7 32: 2018-03-13
54: A SYSTEM AND A METHOD FOR SEPARATING PIECES HAVING A SECOND DENSITY FROM GRANULAR MATERIAL
00: -
The invention relates to a system and method for separating pieces having a second density (9c) from granular material. The system includes a separation tank (2) comprising a first side wall (12) provided with a tank outlet (6), a bottom (7), a pipe (4) defining a channel (3a) for allowing a slurry to enter the tank (2). A pipe outlet (4b) is spaced apart from the tank outlet and arranged vertically below the outlet (6). The separation tank (2) comprises a trap (5) for collecting said pieces. A separation chamber (8a) is arranged in liquid communication with the pipe outlet to allow slurry to enter the separation chamber. The pipe outlet is in a lower third of the separation tank facing the bottom of the tank so that slurry flows vertically through the pipe outlet towards the bottom causing a turbulent flow of the slurry in the tank.



21: 2020/06048. 22: 2020-09-30. 43: 2022-01-20
51: D21C D21H
71: LENZING AKTIENGESELLSCHAFT
72: SILBERMANN, Verena, OPIETNIK, Martina, SCHILD, Gabriele, MÖDERL, Susanne, KÖRBLER, Magdalena
33: EP 31: 18160123.8 32: 2018-03-06
54: CELLULOSE PULP AND SHAPED LYOCELL ARTICLE HAVING A REDUCED CELLULOSE CONTENT
00: -
The present invention describes special cellulose compositions which make it possible to stably produce a lyocell fiber with a reduced cellulose content on a large scale, and to the lyocell fiber thereby obtained.

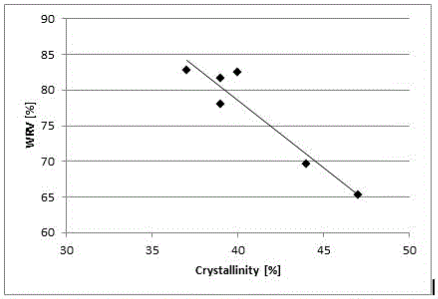
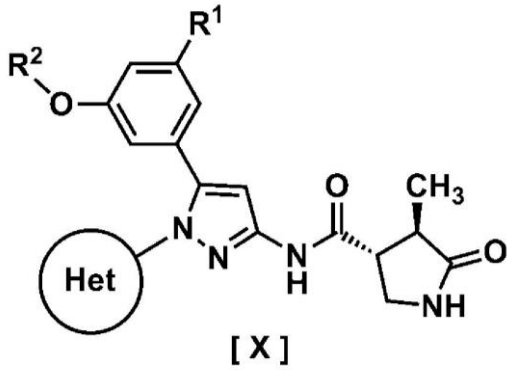


Fig. 1: Development of the water retention capacity via the crystallinity of TENCEL® and new Lyocell fibers

21: 2020/06053. 22: 2020-09-30. 43: 2022-01-20
51: A61K; A61P; C07D

71: Japan Tobacco Inc.
72: MIURA, Tomoya, HIRASHIMA, Shintaro, MANABE, Tomoyuki, IIDA, Tetsuya, SAKURAI, Kentaro
33: JP 31: 2018-072557 32: 2018-04-04
54: HETEROARYL-SUBSTITUTED PYRAZOLE COMPOUND AND MEDICINAL USE THEREOF
00: -

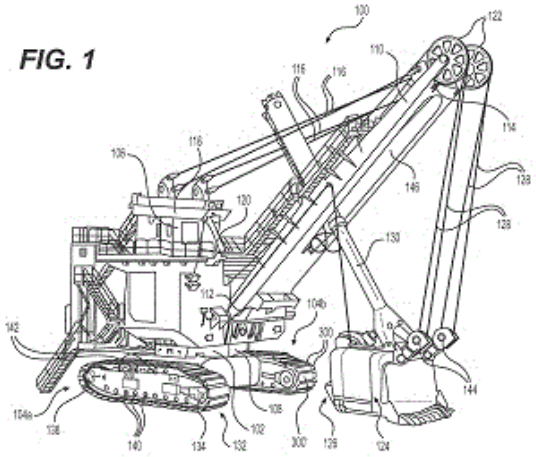
Disclosed are: a heteroaryl-substituted pyrazole compound or a pharmaceutically acceptable salt thereof having SGLT1 inhibitory activity and medicinal usefulness; a medicinal composition comprising same; and medicinal uses of the compound, salt, and composition. Specifically, a compound represented by formula [X] (in the formula, R^1 is hydrogen or halogen, R^2 is C_{1-6} alkyl or halo-C_{1-6}-alkyl, RingHet is a substituted pyridyl or a substitutable pyrazinyl, pyrimidinyl or pyridazinyl) or a pharmaceutically acceptable salt thereof, a medicinal composition comprising same, and medicinal uses of the compound, salt, and composition are provided.



[X]

21: 2020/06232. 22: 2020-10-07. 43: 2022-01-20
51: B62D
71: CATERPILLAR INC.
72: JONES JR., BENJAMIN I
33: US 31: 15/920,752 32: 2018-03-14
54: TRACK PAD GEOMETRY FOR SOFT SURFACES
00: -

A track chain member (300) comprises a shoe member (302) defining a track chain traveling direction (T) and a lateral direction (L) perpendicular to the track chain traveling direction (T), the shoe member (302) further defining a first lateral end (304), a second lateral end (306), and a ground engaging surface (308) spanning from the first lateral end (304) to the second lateral end (306); wherein the shoe member (302) further defines a main central void (330) disposed on the ground engaging surface (308) that is centered along the lateral direction (L) of the shoe member (302) with respect to the first and the second lateral ends (304, 306).



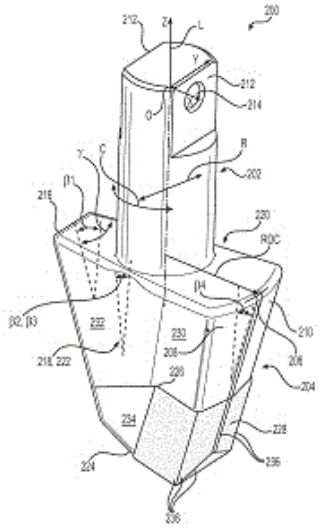
21: 2020/06255. 22: 2020-10-08. 43: 2022-01-10
51: A61K; A61P; C07K; C12N
71: Origincell Therapeutics Co., Ltd.
72: LI, Bohua, WANG, Huajing, HE, Xiaowen
33: CN 31: 201810309302.5 32: 2018-04-09
54: ANTI-PD-L1 ANTIBODY AND USE THEREOF
00: -

Provided are an antibody that binds to the PD-L1 protein or CD137 protein, an antigen-binding fragment or a variant thereof, as well as a bispecific antibody that can bind to both the PD-L1 protein and the CD137 protein. The bispecific antibody has a strong ability to specifically recognize the PD-L1 protein and the CD137 protein, and can enhance T-cell activity. Also provided is the use of the antibody or the antigen-binding fragment or the variant thereof and the bispecific antibody in the prevention and treatment of tumors.

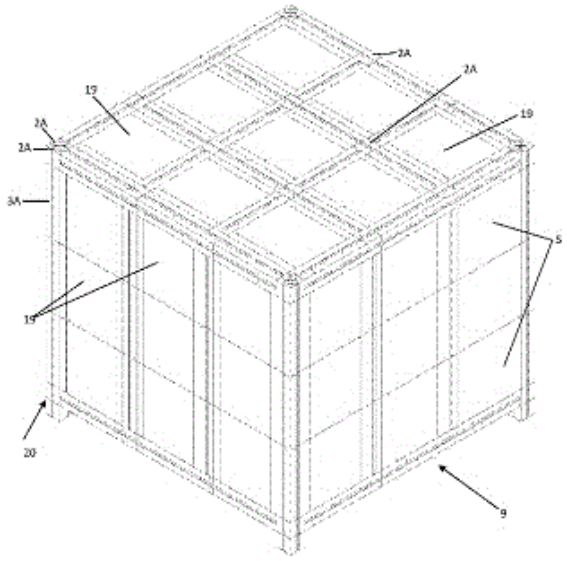
21: 2020/06511. 22: 2020-10-20. 43: 2022-01-10
51: E02F
71: CATERPILLAR INC.
72: PARZYNSKI JR., DAVID B, CONGDON, THOMAS M
33: US 31: 15/952,548 32: 2018-04-13
54: ARCUATE BIT SURFACE AND BLADE ASSEMBLY
00: -

A tool bit (200, 300, 400, 500) comprises a shank portion (202, 302, 402, 502) defining a longitudinal axis (L), and a working portion (204, 304, 404, 504).

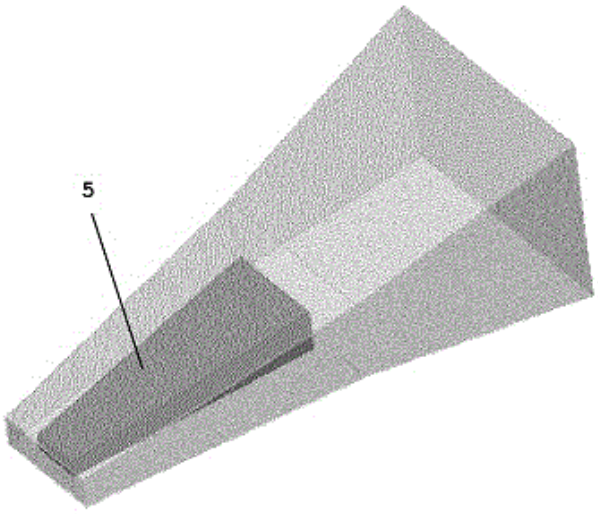
The working portion (204, 304, 404, 504) includes at least a first arcuate surface (206, 306, 406, 506) disposed longitudinally adjacent the shank portion (202, 302, 402, 502).



21: 2020/06516. 22: 2020-10-20. 43: 2022-01-10
51: E04B; E04C
71: UHCS PROPERTY SA
72: USTINOV, IGOR
33: CH 31: 00493/18 32: 2018-04-17
54: CONSTRUCTION SYSTEM FOR A MODULE OF A BUILDING
00: -
The invention proposes a system for constructing a module of a building, comprising core construction elements (1) that are framed by framing construction elements (2A, 2B). The core construction elements (1) each have, in cross-section, a cross comprising two main arms (6) of equal length that intersect at mid-length at a right angle. Each core construction element (1) has a plane of symmetry around axes of the arms. The main arms (6) of the cross have transverse parts (7) at their ends. Each framing construction element (2A, 2B) is formed by four generally triangular partial framing sections (2A, 2B, 2A', 2B') that are assembled around a core element (1). Construction elements forming joining parts (4A, 4B) allow panels (4A, 4B) to be assembled in order to form a module of a building in the form of a rectangular parallelepipedal volume having four corners.



21: 2020/06519. 22: 2020-10-20. 43: 2022-01-10
51: B22F; C22C; B22D; E02F; C04B
71: MAGOTTEAUX INTERNATIONAL S.A.
72: BERTON, GUY
33: EP 31: 18170766.2 32: 2018-05-04
54: COMPOSITE TOOTH WITH FRUSTOCONICAL INSERT
00: -
The present invention discloses a composite tooth for working the ground or rocks, said tooth having a ferrous alloy reinforced at least in part by an insert, said part reinforced by the insert making it possible, after in situ reaction, to obtain an alternating macro/microstructure of concentrated millimetric zones of micrometric globular particles of titanium carbides separated by millimetric zones substantially free of micrometric globular particles of titanium carbides, said concentrated zones of micrometric globular particles of titanium carbides forming a microstructure in which micrometric interstices between said globular particles are also occupied by said ferrous alloy, characterized in that said macro/microstructure generated by the insert is spaced by at least 2 mm, preferably at least 3 mm, from the distal surface of said tooth.



21: 2020/06627. 22: 2020-10-23. 43: 2022-01-10
51: A61P; A61K; C07K
71: CRISPR THERAPEUTICS AG
72: TERRETT, JONATHAN ALEXANDER, KALAITZIDIS, DEMETRIOS, DEQUÉANT, MARY-LEE, PADALIA, ZINKAL SAMIR
33: US 31: 62/670,417 32: 2018-05-11
33: US 31: 62/701,340 32: 2018-07-20
33: US 31: 62/756,643 32: 2018-11-07
33: US 31: 62/773,658 32: 2018-11-30
33: US 31: 62/826,600 32: 2019-03-29
54: METHODS AND COMPOSITIONS FOR TREATING CANCER
00: -
Provided herein, in some embodiments, are methods and compositions (e.g., cell compositions) for the treatment of cancer.

21: 2020/06774. 22: 2020-10-29. 43: 2022-01-10
51: C09K; C23F; E21B
71: FLUID ENERGY GROUP LTD.
72: PURDY, CLAY, WEISSENBERGER, MARKUS
33: CA 31: 3004675 32: 2018-05-11
54: DOWNHOLE METHODS USING ACID COMPOSITIONS COMPRISING CORROSION INHIBITORS
00: -
A method for the fracking or stimulation of a hydrocarbon-bearing formation, said method comprising the steps of: providing a wellbore in need of stimulation; inserting a plug in the wellbore at a predetermined location; inserting a perforating tool and a spearhead or breakdown acid into the wellbore; positioning the tool at said predetermined location; perforating the wellbore with the tool thereby creating a perforated area; allowing the spearhead acid to come into contact with the perforated area for a predetermined period of time sufficient to prepare the formation for fracking or stimulation; removing the tool form the wellbore; and initiating the fracking of the perforated area using a fracking fluid. Also disclosed is a corrosion inhibiting composition for us with the acid composition.

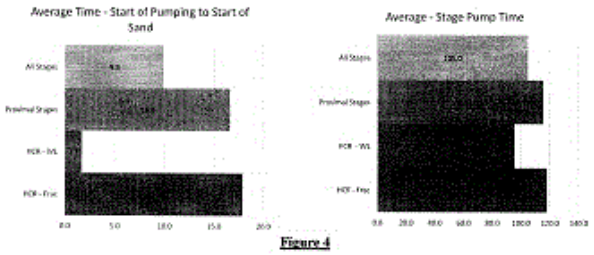
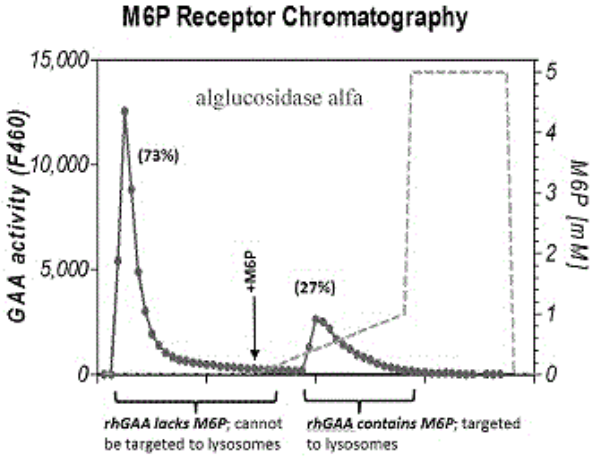


Figure 4

21: 2020/06903. 22: 2020-11-05. 43: 2022-01-10
51: C12N; A61K; A61P; C07K; C12P
71: DAIICHI SANKYO COMPANY, LIMITED, THE UNIVERSITY OF TOKYO
72: MIYAKE, KENSUKE, MURAKAMI, YUSUKE, MOTOI, YUJI, KANNO, ATSUO, SHIMIZU, TOSHIYUKI, OHTO, UMEHARU, SHIMOZATO, TAKAICHI, MANNO, ATSUSHI, KAGARI, TAKASHI, ISHIGURO, JUN, NAKAMURA, KENSUKE, ISOBE, TAKASHI
33: JP 31: 2018-104676 32: 2018-05-31
54: ANTI-HUMAN TLR7 ANTIBODY
00: -
The present invention provides: a pharmaceutical composition containing an antibody which can be bonded specifically to human TLR7 or simian TLR7, cannot be bonded to murine TLR7 or rat TLR7, and has an activity to inhibit a function of human TLR7 or simian TLR7; and others.

21: 2020/06905. 22: 2020-11-05. 43: 2022-01-10
51: C07K; C12N; A61K
71: AMICUS THERAPEUTICS, INC.
72: DO, HUNG, TUSKE, STEVEN, GOTSCHALL, RUSSELL, LIU, CE FENG
33: US 31: 62/664,741 32: 2018-04-30
33: US 31: 62/688,640 32: 2018-06-22
33: US 31: 62/744,068 32: 2018-10-10
54: GENE THERAPY CONSTRUCTS AND METHODS OF USE
00: -

Provided herein are improved gene therapy vectors and methods of use, in some embodiments, comprising sequences for improved expression and cellular targeting of a therapeutic protein.

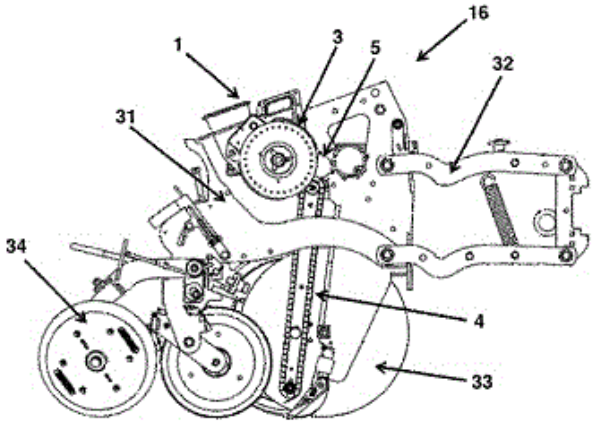


21: 2020/06906. 22: 2020-11-05. 43: 2022-01-10
51: A23D; A21D; A23G
71: BORGES AGRICULTURAL & INDUSTRIAL EDIBLE OILS S.A.U.
72: BENEDÍ SANTAMARIA, CAROLINA CRISTINA, MARTÍN MARTÍN, MARIA DE LA O, GARCÍA BERROCAL, JOSÉ VICENTE, ESTELLES BLAY, PEDRO ANTONIO
33: EP 31: 18382241.0 32: 2018-04-09
54: A FATTY PREPARATION, A PROCESS FOR MAKING SAID FATTY PREPARATION, AND A PRODUCT CONTAINING THE SAME
00: -
The present invention relates to a process for making an anhydrous fatty preparation to be incorporated in a product selected from a bakery product, a personal care product, cosmetics, dermocosmetics, soaps, varnishes, paints or snacks, preferably a bakery product, wherein said fatty preparation does not comprise fats with a saturated fat content higher than 35% by weight, nor trans fats, nor animal-derived products, nor totally or partially hydrogenated oils or fats, nor interesterified or transesterified fats, nor palm or coconut-derived oils or fats. The present invention further relates to a anhydrous fatty preparation and to a bakery product, a personal care product, cosmetics, dermocosmetics, soaps, varnishes, paints or snacks, preferably a bakery product comprising the same.

21: 2020/06907. 22: 2020-11-05. 43: 2022-01-10
51: A23D; A21D; A23L
71: BORGES AGRICULTURAL & INDUSTRIAL EDIBLE OILS S.A.U.
72: BENEDÍ SANTAMARIA, CAROLINA CRISTINA, MARTÍN MARTÍN, MARIA DE LA O, GARCÍA BERROCAL, JOSÉ VICENTE, ESTELLES BLAY, PEDRO ANTONIO
33: EP 31: 18382245.1 32: 2018-04-09
54: A FATTY PREPARATION, A PROCESS FOR MAKING SAID FATTY PREPARATION, AND A PRODUCT CONTAINING THE SAME
00: -
The present invention relates to a process for making a fatty preparation to be incorporated in a food product, wherein said fatty preparation does not comprise fats with a saturated fat content higher than 40% by weight nor trans fats, nor totally or partially hydrogenated oils or fats, nor interesterified fats. The present invention further relates to a fatty preparation and to a food product comprising the same.

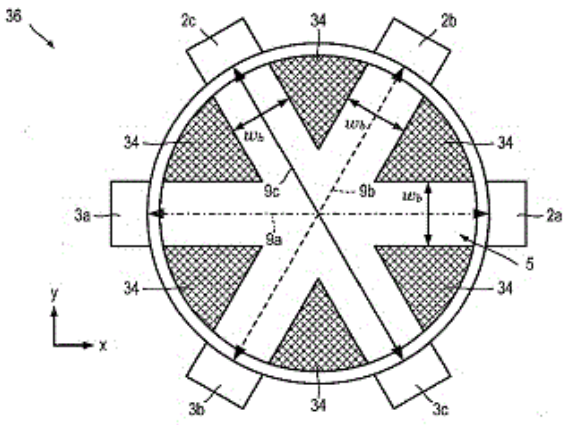
21: 2020/06908. 22: 2020-11-05. 43: 2022-01-10
51: A01C
71: RIBOULEAU MONOSEM
72: GODART, LUC, BEAUNEVEU, PATRICK, BERTHONNEAU, BRUNO
33: EP 31: 18305820.5 32: 2018-06-27
54: ASSEMBLY FOR DISPENSING GRANULAR PRODUCTS
00: -
The present invention concerns an assembly (1) for dispensing granular products to be dispensed to the ground, comprising dispensing means (3) for dispensing said granular products in individualised form, conveying means (4) for conveying said individualised granular products to the ground, transfer means (5) for transferring said individualised granular products from the dispensing means (3) to the conveying means (4), characterised in that the transfer means (5) are synchronised in speed and position with the dispensing means (3) and in that the transfer means (5) capture the granular products in an individualised manner and immobilise them within the transfer means (5) so as to keep each granular product spaced apart from each other by a determined and constant distance, in said transfer means (5) and during the transfer of the granular products to the conveying means (4). The invention also relates to a seeding element (24) and a sowing

machine comprising the dispensing assembly (1) according to the invention, as well as a method for dispensing granular products to the ground using one or more dispensing assemblies (1), seeding element (24) or sowing machine according to the invention.

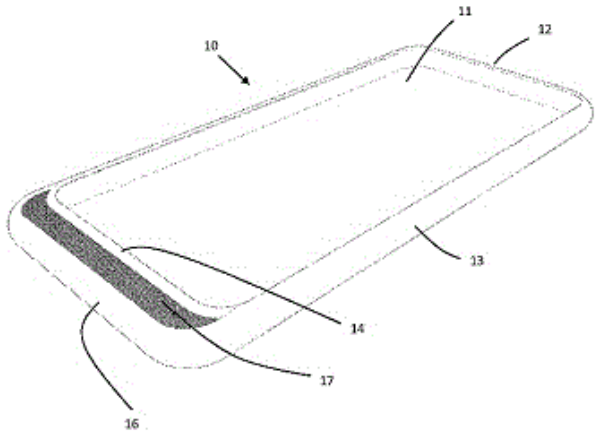


21: 2020/06909. 22: 2020-11-05. 43: 2022-01-10
51: D21C; C12P; C12F; C08B; D21B; C07G
71: PIERSON CAPITAL ENVIRONMENTAL (BEIJING) LIMITED
72: LING, FENG
54: EFFICIENT METHODS AND COMPOSITIONS FOR RECOVERY OF PRODUCTS FROM ORGANIC ACID PRETREATMENT OF PLANT MATERIALS
00: -
Provided are compositions and processes concerning efficient downstream processing of products derived from organic acids pretreatment of plant materials.

21: 2020/06934. 22: 2020-11-06. 43: 2022-01-10
51: G01F
71: SENTEC LTD
72: DAVEY, BEN, PATERSON, CHARLIE
33: GB 31: 1808918.5 32: 2018-05-31
54: ULTRASONIC METER
00: -
An ultrasonic meter (28) for measuring a flow-rate of a fluid is described. The ultrasonic meter (28) includes a flow conduit (5) for the fluid. The flow conduit (5) extends along a first axis (6) between a first opening (7) and a second opening (8). The ultrasonic meter (28) also includes one or more pairs of ultrasonic transducers (2, 3). Each pair of ultrasonic transducers (2, 3) is configured to define a corresponding beam path (9) intersecting the flow conduit (5) within a measurement region (12) of the flow conduit (5). The measurement region (12) spans between a first position (z1) and a second position (z2) spaced apart along the first axis (6). One or more portions of the measurement region (12) which are outside of any of the one or more beam paths (9) correspond to non-sampled volumes (12b). The ultrasonic meter (28) also includes one or more protrusions (34) extending along the first axis (6). At least part of each protrusion (34) is arranged to exclude fluid from at least part of one or more non- sampled volumes (12b).



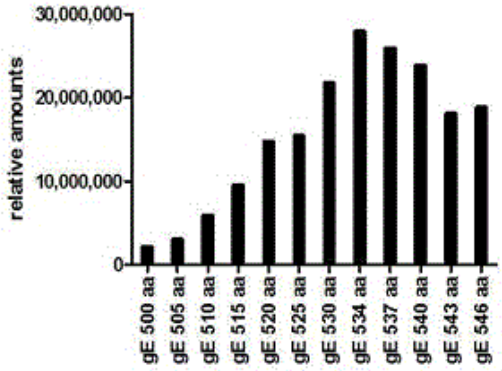
21: 2020/06935. 22: 2020-11-06. 43: 2022-01-10
51: G10K; H04B
71: FURTUNE AS
72: BØHN, MADS
33: NO 31: 20180603 32: 2018-04-27
54: MOBILE PHONE COVER PROVIDING PASSIVE NOISE REDUCTION OF MICROPHONE AUDIO INPUT SIGNALS
00: -
The present disclosure is related to a mobile phone cover providing passive noise reduction of at least one microphone audio input signal, comprising a supporting frame (13). The supporting frame (13) is arranged with an extension element with a compartment (15) facing upwards with a partly open surface on a same side as a display surface of the mobile phone, the compartment (15) is adapted to support a porous body (17) providing the passive noise reduction.



21: 2020/06938. 22: 2020-11-06. 43: 2022-01-10
51: A61K
71: AXCELLA HEALTH INC.
72: HANLON, THOMAS, WOOD, ANDREW M
33: US 31: 62/687,715 32: 2018-06-20
54: COMPOSITIONS FOR THERAPY AND HEALTH CONTAINING AMINO ACIDS WITH BITTER TASTE
00: -
This disclosure provides a dry powder formulation of free amino acids with an acceptable and even good taste profile.

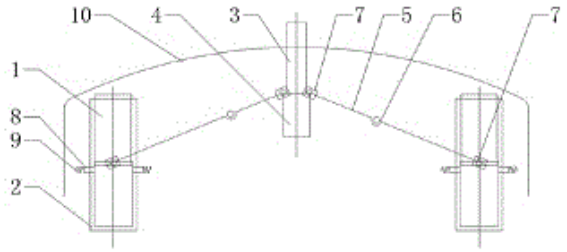
21: 2020/06940. 22: 2020-11-06. 43: 2022-01-10
51: A23L; A23P
71: UNILEVER IP HOLDINGS B.V.
72: BLIJDENSTEIN, THEODORUS BEREND JAN, ARNAUDOV, LUBEN NIKOLAEV, VAN MALSSEN, KEES FREDERIK, STOYANOV, SIMEON DOBREV
33: EP 31: 18180702.5 32: 2018-06-29
54: SHAPED SAVOURY CONCENTRATE AND PROCESS FOR THE PREPARATION THEREOF
00: -
The invention relates to a process of preparing a shaped savoury concentrate having a water activity of less than 0.8 and a total fat content of 10-35 wt.%, said process comprising: a) combining the following ingredients to prepare a powder mixture: -100 parts by weight of edible salt selected from sodium chloride, potassium chloride and combinations thereof, - 2-150 parts by weight of one or more particulate ingredients selected from b) admixing 5-150 parts by weight of a fat component to the powder mixture, wherein the fat component has an N20 of at least 20% and a N35 of less than 30%, wherein on admixing with the powder mixture the fat component has an N20 of at least 10%, to form a paste, c) extruding the paste into shaped savoury concentrate.

21: 2020/06956. 22: 2020-11-09. 43: 2022-01-10
51: C07K; A61K
71: MOGAM INSTITUTE FOR BIOMEDICAL RESEARCH
72: NAM, HYO JUNG, JI, GA YOUNG, KIM, EUNMI
33: KR 31: 10-2018-0058219 32: 2018-05-23
54: ANTIGEN VARIANT OF VARICELLA ZOSTER VIRUS AND USE THEREOF
00: -
The present invention relates to an antigen variant and a use thereof, the antigen variant being a protein, among surface proteins (gE) of the varicella zoster virus, exhibiting a high expression level and high immunogenicity, and thus, when the antigen variant is used as a vaccine composition, the vaccine composition has more excellent safety compared to a live virus vaccine, and the antigen variant exhibits a higher expression level in a host cell compared to other antigens, and thus is useful as a vaccine for preventing or treating chicken pox or herpes zoster caused by the varicella zoster virus.

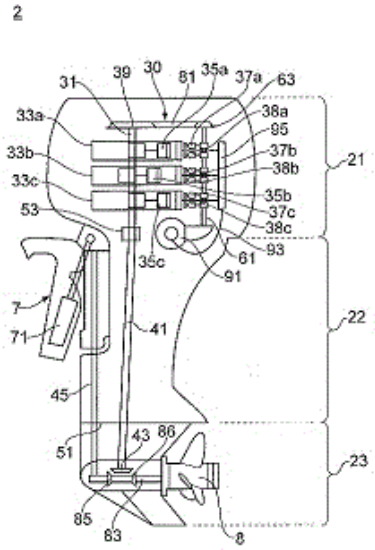


21: 2020/06957. 22: 2020-11-09. 43: 2022-01-10
51: B61F; B61G
71: CRRC ZHUZHOU LOCOMOTIVE CO., LTD.
72: LIU, GUOYUN, JIANG, ZHONGCHENG, WANG, XIANFENG, CHEN, JINGJING, ZHOU, LI, DUAN, HUADONG, YUAN, WENHUI, JIANG, JIXIONG, ZHANG, JUN, ZHANG, BO, LIU, XIAOBO, GUO, BINGBIN, JIANG, DAFA, LI, WANG, LI, DENGKE
33: CN 31: 201810507029.7 32: 2018-05-24
54: RAIL VEHICLE AND COLLISION ENERGY ABSORPTION SYSTEM THEREFOR
00: -

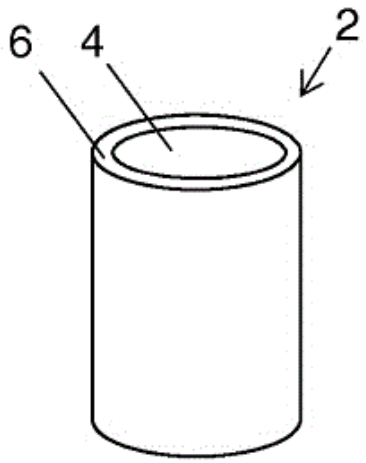
A collision energy absorption system for a rail vehicle, comprising a coupler installed at the front part of a vehicle (10), anticlimbers (1), and a linkage device. The linkage device connects the coupler to each of the anticlimbers. In a normal state, the coupler extends out from the front part of the vehicle and the anticlimbers are positioned in the interior of the vehicle. During a collision, the coupler moves towards the rear of the vehicle, and, by means of the linkage device, the anticlimbers are caused to move towards the front of the vehicle, such that the anticlimbers are able to make contact with the collision object and absorb the energy of the collision in a process of compression. The present collision energy absorption system is both aesthetically pleasing and reduces the aerodynamic drag of the vehicle, and during a collision there is no interruption in impact buffering, reducing the harm of instantaneous impact during collisions and improving safety. A rail vehicle comprising the described collision energy absorption system.



21: 2020/06959. 22: 2020-11-09. 43: 2022-01-10
51: F02B
71: COX POWERTRAIN LIMITED
72: CHILD, MATTHEW GEORGE
33: GB 31: 1807931.9 32: 2018-05-16
54: DRIVE SYSTEM WITH VERTICAL CRANKSHAFT AND CAMSHAFT-DRIVEN FUEL PUMP
00: -
The present invention relates to a drive system for outboard motors. The drive system comprises a combustion engine (30) having a crankshaft (31) adapted to rotate about a substantially vertical axis. The combustion engine further comprises a camshaft (61) extending parallel to the vertical crankshaft (31). A high pressure fuel pump (91) is provided for supplying high pressure fuels to the combustion cylinders (33a to 33c). The high pressure fuel pump (91) is directly driven by the camshaft (61).



21: 2020/06960. 22: 2020-11-09. 43: 2022-01-10
51: G21C
71: WESTINGHOUSE ELECTRIC SWEDEN AB
72: MIDDLEBURGH, SIMON CHARLES, PUIDE, MATTIAS, HALLSTADIUS, LARS, BLAIR, PAUL, LIMBÄCK, MAGNUS
33: EP 31: 18179142.7 32: 2018-06-21
54: FUEL PELLET
00: -
A uranium oxide fuel pellet (2) comprising an inner region (4) and an outer rim region (6) about the inner region (4), and that the fuel pellet (2) is cylindrical and the inner region (4) and outer rim region (6) are coaxial cylindrical regions. The outer rim region (6) has an excess of oxygen in comparison to the inner region (4), wherein high burnup structure (HBS) formation will be suppressed or delayed. Preferably, the excess oxygen is obtained by a chemical treatment by immersing the pellet in hydrogen peroxide (H_2O_2) or potassium permanganate ($KMnO_4$) in solution.



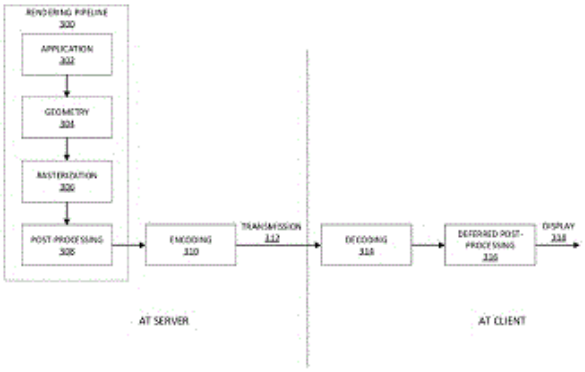
21: 2020/06984. 22: 2020-11-10. 43: 2022-01-10
51: C12N; A61K; A61P
71: ASTELLAS PHARMA INC.
72: MARUI, TAKANORI, UCHIDA, MASAO
33: JP 31: 2018-091963 32: 2018-05-11
54: NUCLEIC ACID FOR TREATING MITE ALLERGY
00: -
[Problem] To provide a nucleic acid expected to be useful for treating mite allergy.[Means to be solved] Provided is a nucleic acid comprising a nucleotide sequence encoding a chimeric protein, wherein the nucleic acid comprises a nucleotide sequence encoding a signal peptide, a nucleotide sequence encoding an intra-organelle stabilizing domain of LAMP, a nucleotide sequence encoding an allergen domain comprising Der p 1, Der p 2, Der p 23, and Der p 7, a nucleotide sequence encoding a transmembrane domain and a nucleotide sequence encoding an endosomal/lysosomal targeting domain of LAMP in this order.

21: 2020/06985. 22: 2020-11-10. 43: 2022-01-10
51: C12N; A61K; A61P
71: ASTELLAS PHARMA INC.
72: MARUI, TAKANORI
33: JP 31: 2018-091989 32: 2018-05-11
54: NUCLEIC ACID FOR TREATING CRUSTACEAN ALLERGY
00: -
[Problem] To provide a nucleic acid expected to be useful for treating crustacean allergy. [Means to be solved] Provided is a nucleic acid comprising a nucleotide sequence encoding a chimeric protein, wherein the nucleic acid comprises a nucleotide sequence encoding a signal peptide, a nucleotide sequence encoding an intra-organelle stabilizing domain of LAMP, a nucleotide sequence encoding an allergen domain comprising Lit v 1, Lit v 4, and Lit v 3, a nucleotide sequence encoding a transmembrane domain and a nucleotide sequence encoding an endosomal/lysosomal targeting domain of LAMP in this order.

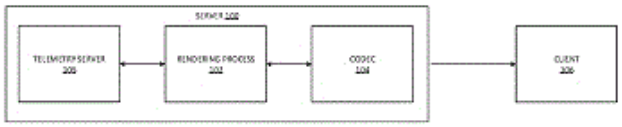
21: 2020/06987. 22: 2020-11-10. 43: 2022-01-10
51: A61K; A61P
71: SYNACT PHARMA APS
72: JONASSEN, THOMAS ENGELBRECHT NORDKILD
33: EP 31: 18179319.1 32: 2018-06-22
54: TREATMENT OF PROTEINURIA
00: -
Provided is a composition comprising a phenyl pyrrole aminoguanidine derivative for use in a method of treating kidney disease, such as nephrotic syndromes.

21: 2020/07042. 22: 2020-11-11. 43: 2022-01-10
51: A61K; C07J
71: DFH THERAPEUTICS, THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES
72: NITZ, THEODORE J, WILD, CARL T, MARTIN, DAVID E, FREED, ERIC O
33: US 31: 62/692,071 32: 2018-06-29
54: TRITERPENE AMINE DERIVATIVES
00: -
The present invention concerns novel pharmaceutically active triterpene amine derivatives, pharmaceutical compositions containing the same, their use as medicaments, and the use of the compounds for the manufacture of specific medicaments. The present invention also concerns a method of treatment involving administration of the triterpene amine compounds. Specifically, the compounds are derivatives of betulinic acid having substitutions at one or more of the C-3, C-28 and C-19 positions as further described herein. The novel compounds are useful as antiretroviral agents. In particular, the novel compounds are useful for the treatment of Human Immunodeficiency Virus-1 (HIV-1).

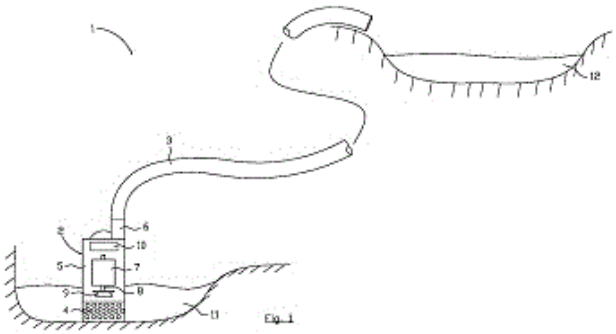
21: 2020/07052. 22: 2020-11-12. 43: 2022-01-10
51: H04N
71: ZENIMAX MEDIA INC.
72: KOPIETZ, MICHAEL
33: US 31: 62/618,498 32: 2018-01-17
33: US 31: 62/488,526 32: 2017-04-21
54: SYSTEMS AND METHODS FOR DEFERRED POST-PROCESSES IN VIDEO ENCODING
00: -
The invention relates to a computer-implemented method and a system for deferring post-processes. Over a network, a server transmits an instruction to a client application to measure client hardware capability and transmits an instruction to a client application to sum a known load of one or more predetermined post-process deferral candidates to evaluate how many post-process deferral candidates are capable of being deferred to client hardware. A post-process deferral list is compiled in reverse order. The server receives the post-process deferral list, skips the list of deferred post-processes during the post-processing phase of a first video frame, and transmits an instruction to a client application to render an image.



21: 2020/07053. 22: 2020-11-12. 43: 2022-01-10
51: H04L; H04N
71: ZENIMAX MEDIA INC.
72: KOPIETZ, MICHAEL
33: US 31: 62/655,901 32: 2018-04-11
33: US 31: 62/488,526 32: 2017-04-21
33: US 31: 62/647,180 32: 2018-03-23
54: SYSTEMS AND METHODS FOR RENDERING & PRE-ENCODED LOAD ESTIMATION BASED ENCODER HINTING
00: -
The invention relates to a method for encoder hinting and to a non-transitory computer-readable medium for hinting an encoder. The method includes monitoring for a predetermined event during a rendering process, generating one or more encoder quality settings for one or more frames based on the predetermined event, reporting encoder settings to a renderer, and transmitting the generated encoder quality settings to an encoder, wherein the generated encoder quality settings hint an encoder. The predetermined event may be one of a message, a calculated result, an outcome or a discretely measurable value that occurs during a runtime rendering process. The predetermined event may be any information that indicates that an encoded frame size will be different from a previously encoded frame's size.



21: 2020/07103. 22: 2020-11-13. 43: 2022-01-10
51: F04D
71: XYLEM EUROPE GMBH
72: WIKSTRÖM, JAN
33: EP 31: 18167714.7 32: 2018-04-17
54: DRAINAGE PUMP ASSEMBLY AND METHOD FOR CONTROLLING A DRAINAGE PUMP
00: -
In a first aspect the invention relates to a method for controlling a drainage pump (2), the drainage pump (2) comprising a drive unit having an electrical motor (7) and a drive shaft (8) and comprising a hydraulic unit having an impeller (9) operatively connected to said electrical motor (7) via said drive shaft (8), said drainage pump (2) being configured to be operated at a variable operational speed [rpm]. The method is characterized by the steps of continuously operating the drainage pump (2) at a positive operational speed, intermittently detecting whether the drainage pump (2) is snoring or not, decreasing the operational speed (OP) of the drainage pump (2) one step every time snoring is detected, and increasing the operational speed (OP)of the drainage pump (2) one step every time snoring is not detected. In a second aspect the invention also relates to a drainage pump assembly.



21: 2020/07104. 22: 2020-11-13. 43: 2022-01-10
51: B02C
71: KABUSHIKI KAISHA EARTHTECHNICA
72: KAJITA, NOBUYUKI, KIJIMA, TAKASHI, KOBAYASHI, JUN
33: JP 31: 2018-097289 32: 2018-05-21
54: GYRATORY CRUSHER AND CONTROL METHOD THEREFOR
00: -
A control method for a gyratory crusher includes the steps of: with at least one of a feeder and a setting adjustment device being set as a manipulation target, measuring a load index that directly or indirectly represents a crushing load during operation of the manipulation target at a manipulated variable, and monitoring that the load index is in a predetermined steady-state range; calculating, when the load index is outside the steady-state range, a new manipulated variable of the manipulation target on the basis of a deviation between a predetermined target value of the load index and a measurement value, by using a predetermined control algorithm; causing the manipulation target to operate so as to correspond to the new manipulated variable; generating a response evaluation index of the load index caused by operation of the manipulation target; and evaluating, on the basis of the response evaluation index, whether or not response is good, and adjusting at least one of control parameters of the control algorithm when the response is not good.

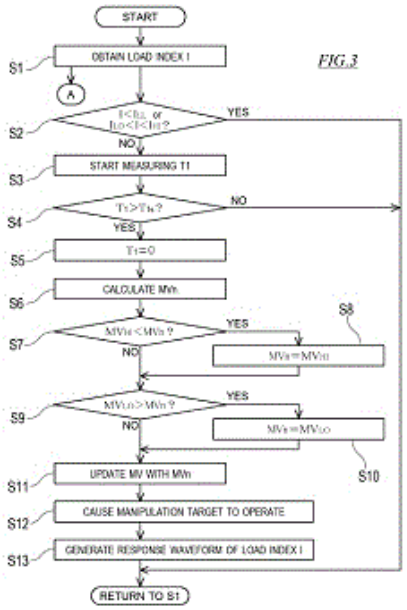
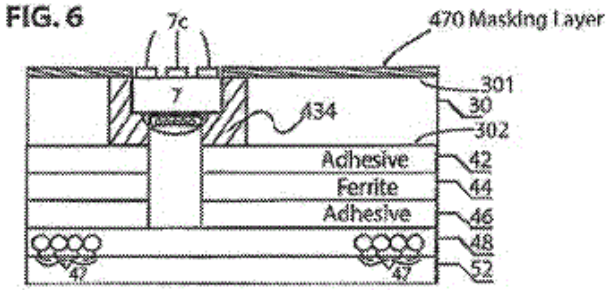
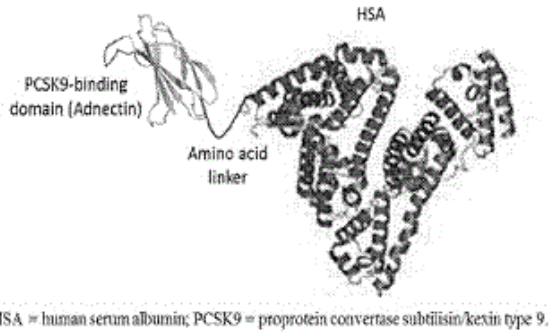


FIG.3

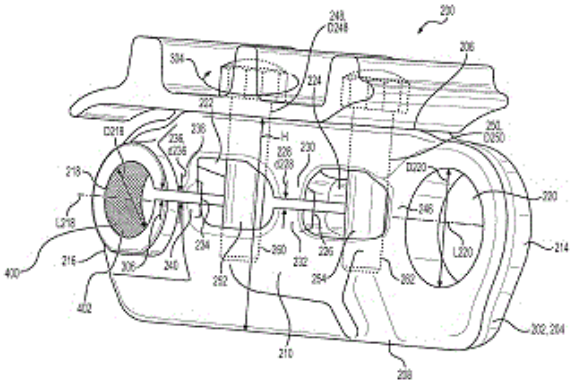
21: 2020/07106. 22: 2020-11-13. 43: 2022-01-10
51: G06K
71: COMPOSECURE, LLC
72: LOWE, ADAM, HERSLOW, JOHN, DASILVA, LUIS, NESTER, BRIAN
33: US 31: 15/976,612 32: 2018-05-10
54: DUAL INTERFACE METAL SMART CARD WITH BOOSTER ANTENNA
00: -
A card having a metal layer and an opening or cut-out region in the metal layer, with a dual-interface integrated circuit (IC) module disposed in the opening or cut-out region. A ferrite layer is disposed below the metal layer and a booster antenna is attached to the ferrite layer. A vertical hole extends beneath the IC module through the ferrite layer. The booster antenna may be physically connected to the IC module or may be configured to inductively couple to the IC module. In some embodiments, the IC may be disposed in or on a non-conductive plug disposed within the opening or cut-out region, or the vertical hole may have a non-conductive lining, or a connector may be disposed between the booster antenna and the IC module in the vertical hole.



21: 2020/07107. 22: 2020-11-13. 43: 2022-01-10
51: A61K; C12N
71: LIB THERAPEUTICS, LLC
72: MITCHELL, TRACY S, MEALEY, RICHARD
33: US 31: 62/672,187 32: 2018-05-16
54: COMPOSITIONS COMPRISING PCSK9-BINDING MOLECULES AND METHODS OF USE
00: -
The present disclosure provides pharmaceutical compositions comprising fibronectin based scaffold domain proteins that bind, for example, proprotein convertase subtilisin kexin-9 (PCSK9).



21: 2020/07188. 22: 2020-11-18. 43: 2022-01-20
51: B62D
71: CATERPILLAR INC.
72: MAGNER, SCOTT H, TRONE, MATTHEW W, WAGLE, MARK R
33: US 31: 15/976,067 32: 2018-05-10
54: UNDERCARRIAGE CLAMPING MASTER TRACK LINK WITH TEXTURED TRACK PIN BORE
00: -
A clamping master track link (202) comprises a body (204) that defines a first bore (218) and a second bore (220), a first aperture (222) disposed between the first bore (218) and the second bore (220), a second aperture (224) disposed between the first aperture (222) and the second bore (220), a first strut (226) with a first gap (228) disposed between the first aperture (222) and the second aperture (224), a second strut (234) with a second gap (236) disposed between the first aperture (222) and the first bore (218), and a bridge (246) disposed between the second aperture (224) and the second bore (220). The first bore defines a cylindrical bore surface (400) that is at least partially textured differently than the rest of the body.



21: 2020/07215. 22: 2020-11-19. 43: 2022-01-20
51: G06T
71: ZENIMAX MEDIA INC.
72: KOPIETZ, MICHAEL
33: US 31: 62/634,464 32: 2018-02-23
33: US 31: 62/644,164 32: 2018-03-16
33: US 31: 62/488,526 32: 2017-04-21
33: US 31: 62/640,945 32: 2018-03-09
54: PLAYER INPUT MOTION COMPENSATION BY ANTICIPATING MOTION VECTORS
00: -
A method and system for caching motion vectors. A server transmits one or more motion vectors and one or more invalidators to a client. The motion vectors and invalidators are configured to be cached at the client. The server further matches a user input to the cached motion vectors or invalidators, and transmits an instruction to a client to apply the matched motion vectors or invalidators. The motion vectors may be pre-generated. The server further determines the user input's suitability for motion compensation. The determination of suitability may analyze input-feedback latency and player sensitivity.

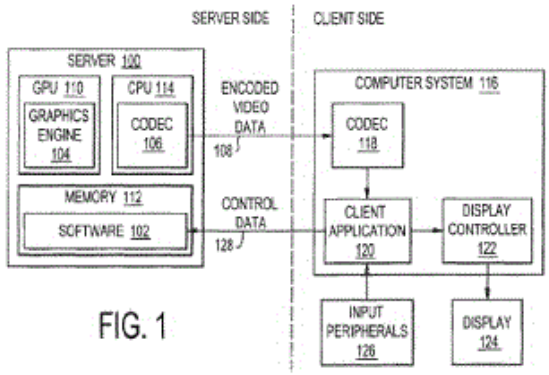


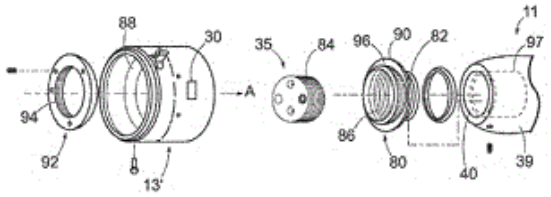
FIG. 1

21: 2020/07218. 22: 2020-11-19. 43: 2022-01-06
51: F42C; F41G
71: KAMAN PRECISION PRODUCTS, INC.
72: MAXWELL, BARRY A
33: US 31: 15/618,512 32: 2017-06-09

54: LASER GUIDED BOMB WITH PROXIMITY SENSOR

00: -

A proximity sensor, guidance kit and method of assembly, for a Laser Guided Bomb (LGB), are disclosed. The proximity sensor includes: electronics configured to be at a front end of a warhead; and at least one sensor separate from and operatively connected to, the electronics, the at least one sensor configured to be connected to a forward adapter that is connected to the front end of the warhead. The at least one sensor is configured to obtain data that is used to determine a height above ground of the LGB. The electronics are configured to compare the determined height above ground to a predefined value. The electronics are configured to generate a detonation signal for the warhead based on the determined height above ground being equal to or less than the predefined value.

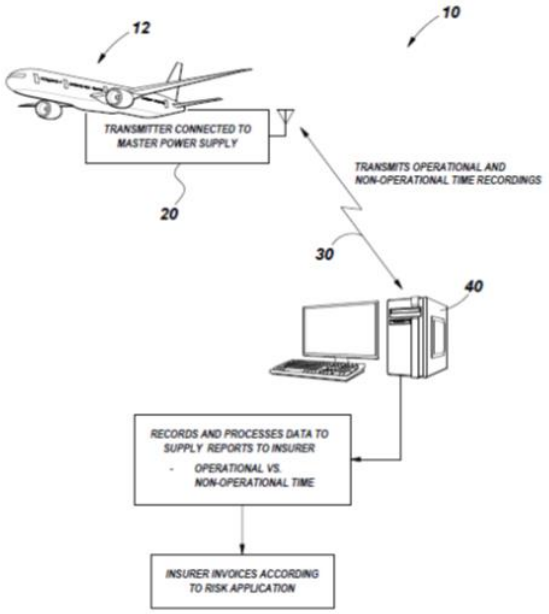


21: 2020/07298. 22: 2020-11-24. 43: 2022-02-02
51: B64D
71: KRUGER, CONRAD HENDRIK
72: KRUGER, CONRAD HENDRIK
33: ZA 31: 2019/07086 32: 2019-10-28

54: AIRCRAFT RECORDING SYSTEM

00: -

The present invention relates to a recording system for aircraft, the system including a transmitter connected to a tamper-proof power supply for transmitting information related to the operational state of the aircraft as output data and a remote receiver for receiving and processing the output data. The invention further relates to a device for implementing such a recording system in an aircraft.



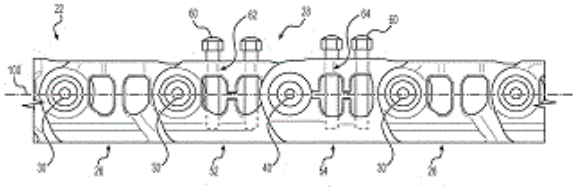
21: 2020/07351. 22: 2020-11-25. 43: 2022-01-20
51: B62D
71: CATERPILLAR INC.
72: TRONE, MATTHEW
33: US 31: 15/983,749 32: 2018-05-18

54: MASTER LINK ASSEMBLY FOR A TRACK CHAIN

00: -

A master link (62) for a track chain (22) is disclosed. The master link may include a link body extending from a first end (63A) to a second end (63B) and a plurality of apertures (66A, 66B, 66C, 66D) extending through the link body. The plurality of apertures may include a first aperture (66A) positioned proximate the first end, a second aperture (66B) unconnected to the first aperture and positioned proximate the second end, and a third aperture (66D) arranged between the first and second apertures. A first gap (76B) may extend between and connect the third and second

apertures. The master link may also include a threaded first fastener (60) that is configured to extend through the link body across the third aperture.



21: 2020/07384. 22: 2020-11-26. 43: 2022-01-18
51: A23K
71: Kalmarna Limited
72: ROSENBERG, Alon, MILSTEIN, Abraham, FIRTH, Ava Marie, VAN DALSEM, Simon, HALPERN, Arie
33: US 31: 62/664,174 32: 2018-04-29
54: COMPOSITIONS AND METHODS FOR NOURISHING MAMMALS
00: -
The present invention discloses palatable oral formulations for hydrating, supporting gut activity, micronutrient supplementation and providing oral carriers for vaccines, antibiotics and food supplements, of inter alia, companion or pet animals.

21: 2020/07534. 22: 2020-12-03. 43: 2022-02-11
51: B61F; B62D
71: TRANSNET SOC LTD
72: MOLOI, VUSIMUZI PATRICK, MAHEGU, PETER TSHEPISO, CARSTENS, MARVIN OSMUND
33: ZA 31: 2018/03859 32: 2018-06-11
54: MULTIPIECE BOGIE
00: -
The invention relates to a multipiece bogie, in particular a fabricated bogie that has a bolster having a first end region and a second opposite end region; a first side frame and a second opposite side frame, each side frame defining a central opening for accommodating and dismountably mounting to a respective end region of the bolster; and a reinforcement arrangement fitted at predetermined locations on at least one of the first side frame, second side frame, and bolster for reinforcing the multipiece bogie so as to, in use, enable a predetermined load of a wagon to be supported by the multipiece bogie. The invention further extends to a bolster that has a mounting arrangement for mounting to a corresponding mounting arrangement of a centre bowl arrangement. The invention further extends to a centre bowl arrangement which is arranged to be removably fitted to the bolster.

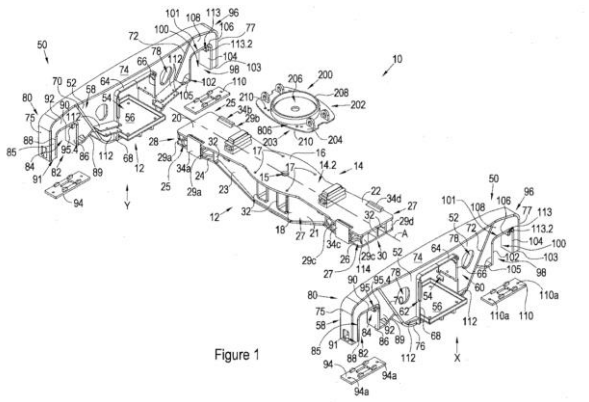


Figure 1

21: 2020/07694. 22: 2020-12-09. 43: 2022-02-04
51: A01D
71: MARCHESAN IMPLEMENTOS E MÁQUINAS AGRÍCOLAS TATU S.A.
72: MARCHESAN, José, Luiz, Alberto
33: BR 31: BR102019026692-9 32: 2019-12-13
54: AGRICULTURAL HARVESTER CONTROL SYSTEM, METHOD OF CONTROLLING AN AGRICULTURAL HARVESTER AND AGRICULTURAL HARVESTER
00: -
The present invention relates to a control system for use in an agricultural harvester, the system comprising a control panel (10) configured to send at least one mode signal (11) to a control means (20) via an user's (100) command (50), the control means (20) being configured to receive the mode signal (11) and generate a set of instructions (30), the set of instructions (30) being a function of the received mode signal (11), the control means (20) being configured to control at least one piece of equipment from a set of equipment (40) of the agricultural harvester depending on the generated set of instructions (30), providing greater reliability, precision and efficiency in its operation and elimination of operational errors caused by the user.

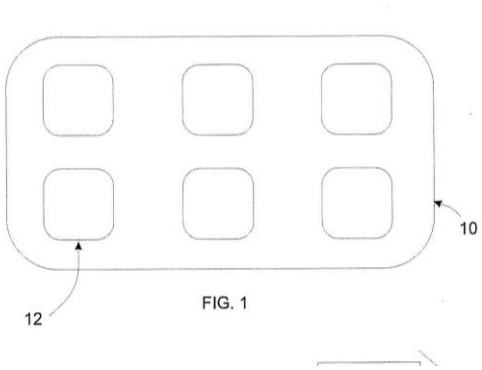
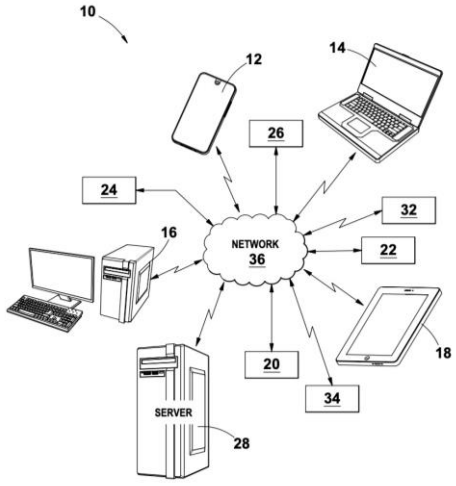


FIG. 1

21: 2020/07695. 22: 2020-12-09. 43: 2022-02-11
51: A01G; G06F; H04L; G06N; G06Q
71: AI EYE INTELLECTUAL PROPERTY (PTY) LTD
72: CHOTU, MITESH, GAJOVISH, SLAVEN
33: ZA 31: 2019/08189 32: 2019-12-10
54: AGRICULTURE SUPPLY CHAIN SYSTEM AND METHOD
00: -
The invention relates to a supply chain method comprising collecting information of a seed and quantity of seed that is or will be planted on a dedicated land on a predefined day, the seed and quantity thereof being associated with a crop that is to be harvested in the future; collecting, information on the ground used for planting the seed; analysing the collected ground information; and reporting materials that need to be added to the ground to ensure proper growth of the crop.



21: 2020/07709. 22: 2020-12-10. 43: 2022-01-10
51: B65D
71: ALPLA WERKE ALWIN LEHNER GMBH & CO. KG
72: MÜLLER, FLORIAN, BÖSCH, KLEMENS
33: CH 31: 00617/18 32: 2018-05-17
54: SPRAY ATTACHMENT FOR DISPENSING LIQUID SUBSTANCES IN THE FORM OF A JET
00: -
A spray attachment for dispensing liquid substances in the form of a jet is described. The spray attachment comprises a cap (2) with an annularly encircling, closed casing (3) with a wall, on the inner side of which the outer side of the first fastening means (32) is integrally formed. The first fastening means are configured to engage in corresponding second fastening means, which may be provided on an outer wall or inner wall of a container neck. At one longitudinal end, the casing is terminated by a top surface, which has a cutout (44). Arranged in the region of the cutout is a receiving part (5) for receiving an insert part. The receiving part has a circumferentially closed conical receiving surface (55). The conical receiving surface is configured to receive a circumferentially closed conical circumferential surface (65), corresponding thereto, of the insert part. The conical receiving surface of the receiving part and the conical circumferential surface of the insert part bound at least one passage duct (7) for the liquid substance when the conical receiving surface and the conical circumferential surface butt against one another. The liquid substance is able to be dispensed through the passage duct (7).

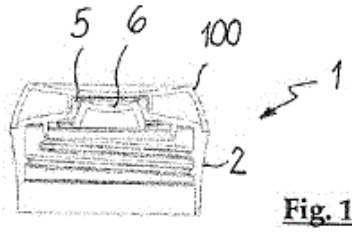


Fig. 10

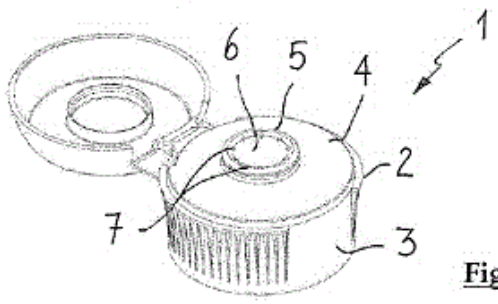


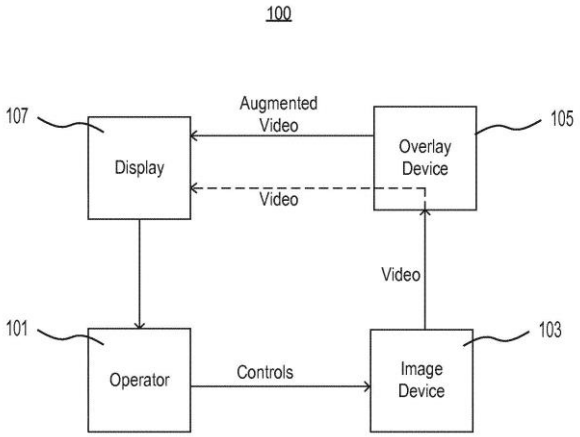
Fig. 11

21: 2020/07710. 22: 2020-12-10. 43: 2022-01-10
51: B01D; C02F
71: COATEX
72: BOUZID, MEHDI, JACQUEMET, CHRISTIAN, MAGNY, BENOÎT, MONGOIN, JACQUES
33: FR 31: 1854989 32: 2018-06-08
54: CONTROLLING THE RHEOLOGY OF A METAL ORE RESIDUE
00: -
The invention concerns a method for preparing an aqueous mineral suspension from an aqueous metal ore residue into which a polymer (P) is introduced having a molecular mass Mw measured by GPC ranging from 2,000 to 20,000 g/mol and prepared by radical polymerisation of at least one anionic monomer (M). The invention also concerns the suspension produced, the Brookfield viscosity of which is lower than 1,800 mPa.s or the yield point of which is lower than 80 Pa.

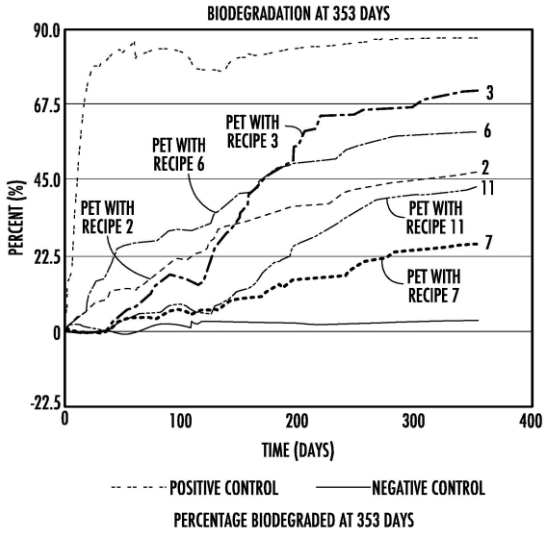
21: 2020/07711. 22: 2020-12-10. 43: 2022-01-10
51: B01D; C02F; B03D; C22B
71: COATEX
72: BOUZID, MEHDI, MAGNY, BENOÎT, MONGOIN, JACQUES
33: FR 31: 1854991 32: 2018-06-08
54: METHOD FOR CONTROLLING THE SEDIMENTATION OF A MINING DERIVATIVE
00: -
The invention relates to a method for controlling the sedimentation of an aqueous mineral suspension of a mining derivative by means of the gravimetric concentration of the aqueous suspension in the presence of a flocculating agent and a polymer (P) which has a GPC-measured molecular mass Mw of between 2000 and 20000 g/mol and is prepared using at least one free radical polymerisation reaction of at least one anionic monomer (M). The invention also relates to the resulting suspension, which has a Brookfield viscosity of less than 1 800 mPa.s or a yield point of less than 80 Pa.

21: 2020/07712. 22: 2020-12-10. 43: 2022-01-10
51: B01D; C02F
71: COATEX
72: BOUZID, MEHDI, JACQUEMET, CHRISTIAN, MAGNY, BENOÎT, MONGOIN, JACQUES
33: FR 31: 18 54993 32: 2018-06-08
54: CONTROLLING THE RHEOLOGY OF A METAL ORE RESIDUE
00: -
The invention relates to a method for preparing an aqueous mineral suspension from an aqueous metal ore residue into which there is introduced a polymer (P) having a molecular weight Mw measured by GPC of from 100,000 to 3.10^6g/mol and prepared by free radical polymerization of at least one anionic monomer (M). The invention also relates to the suspension produced, the Brookfield viscosity of which is greater than 2000 mPa.s or the flow threshold of which is greater than 40 Pa.

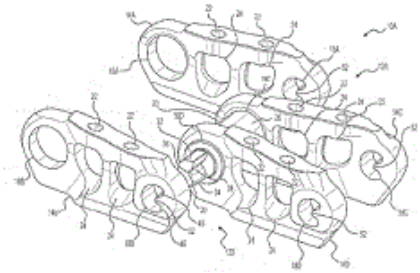
21: 2020/07745. 22: 2020-12-11. 43: 2022-01-10
51: G06K
71: COSMO ARTIFICIAL INTELLIGENCE - AI LIMITED
72: NGO DINH, Nhan, EVANGELISTI, Giulio, NAVARI, Flavio
33: US 31: 16/008,006 32: 2018-06-13
33: EP 31: 18180570.6 32: 2018-06-28
54: SYSTEMS AND METHODS FOR TRAINING GENERATIVE ADVERSARIAL NETWORKS AND USE OF TRAINED GENERATIVE ADVERSARIAL NETWORKS
00: -
The present disclosure relates to computer-implemented systems and methods for training and using generative adversarial networks. In one implementation, a system for training a generative adversarial network may include at least one processor that may provide a first plurality of images including representations of a feature-of-interest and indicators of locations of the feature-of- interest and use the first plurality and indicators to train an object detection network. Further, the processor(s) may provide a second plurality of images including representations of the feature-of-interest, and apply the trained object detection network to the second plurality to produce a plurality of detections of the feature-of- interest. Additionally, the processor(s) may provide manually set verifications of true positives and false positives with respect to the plurality of detections, use the verifications to train a generative adversarial network, and retrain the generative adversarial network using at least one further set of images, further detections, and further manually set verifications.



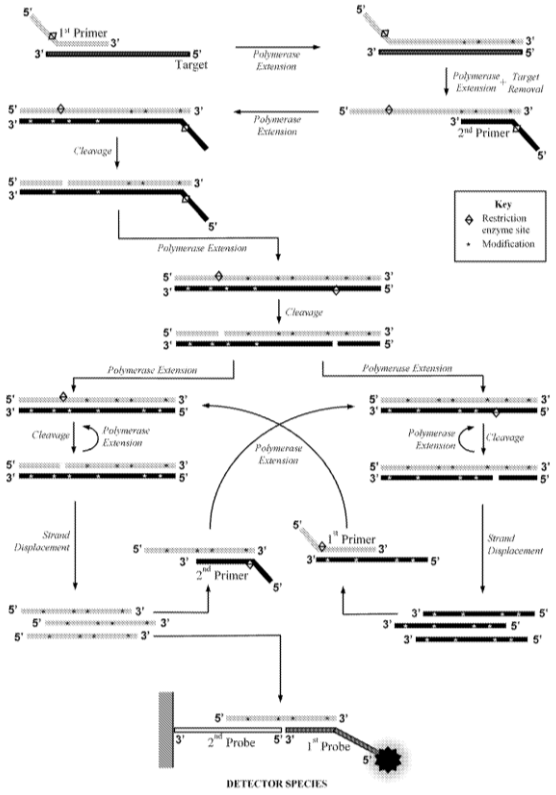
21: 2020/07748. 22: 2020-12-11. 43: 2022-01-10
51: C08J; D01F; D04H
71: INTRINSIC ADVANCED MATERIALS, LLC
72: FERRIS, Andrea, MCINTOSH, Alan, RAO, Sudeep Motupalli, USHER JR, Robert A.
33: US 31: 62/690,227 32: 2018-06-26
33: US 31: 62/690,243 32: 2018-06-26
33: US 31: 16/354,728 32: 2019-03-15
54: BIODEGRADABLE TEXTILES, MASTERBATCHES, AND METHOD OF MAKING BIODEGRADABLE FIBERS
00: -
A masterbatch is disclosed, along with associated methods, and biodegradable filaments, fibers, yarns and fabrics. The masterbatch includes 0.2 to 5 mass% CaCO3, an aliphatic polyester with a repeat unit having from two to six carbons in the chain between ester groups, with the proviso that the 2 to 6 carbons in the chain do not include side chain carbons, and a carrier polymer selected from the group consisting of PET, nylon, other thermoplastic polymers, and combinations thereof



21: 2020/07752. 22: 2020-12-11. 43: 2022-01-10
51: B62D
71: CATERPILLAR INC.
72: GALAT, MICHAEL S, AKINLUA, TEMITOPE O, STEINER, KEVIN L
33: US 31: 15/996,977 32: 2018-06-04
54: TRACK ASSEMBLY FOR A MACHINE
00: -
A track link assembly (10) includes a plurality of link subassemblies (12) including a first link subassembly (12) and a second link subassembly (12). Each link subassembly includes a pair of links (14) coupled together. Each link includes a first aperture (16) and a second aperture (18), and the second aperture of each link is C-shaped. The track link assembly also includes a pin element (20) pivotably coupling each of the first link subassembly and the second link subassembly. The pin element includes a centrally positioned central portion (26) and end portions (28) on opposite sides of the central portion (26). The central portion (26) of the pin element (20) is configured to pass through the first aperture (16) of a first link (14) in each of the first link subassembly (12) and the second link subassembly (12), and the end portions (28) are configured to pass through the second apertures (18) of a second link (14) in each of the first link subassembly (12) and the second link subassembly (12).

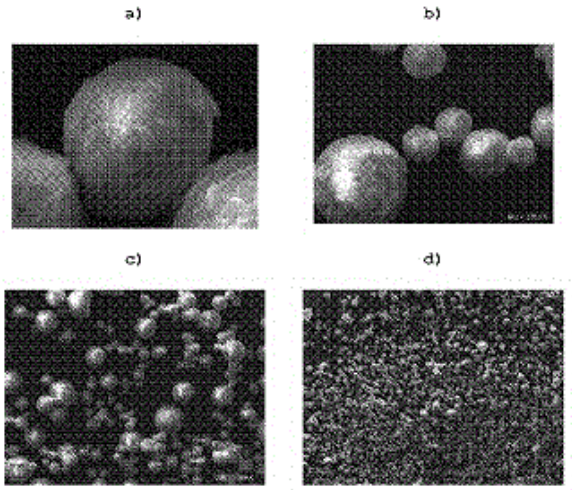


21: 2020/07778. 22: 2020-12-14. 43: 2022-02-11
51: C12Q
71: SENSE BIODETECTION LIMITED
72: LAMBLE, Henry, John, LLOYD, David
33: GB 31: 1812149.1 32: 2018-07-25
54: NUCLEIC ACID DETECTION METHOD
00: -
The present invention relates to methods for the detection of nucleic acids of defined sequence and kits and devices for use in said methods. The methods employ restriction enzymes, polymerase and oligonucleotide primers to produce an amplification product in the presence of a target nucleic acid, which is contacted with oligonucleotide probes to produce a detector product.

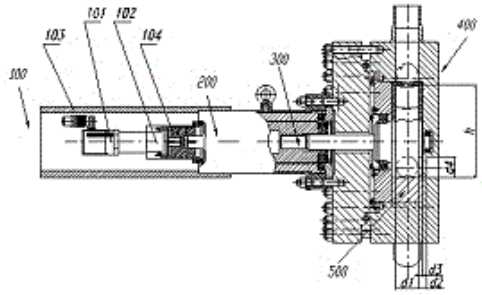


21: 2020/07991. 22: 2020-12-21. 43: 2022-01-18
51: C01G; C08K
71: COPPERPROTEK SPA
72: LAVÍN CARRASCO, JAVIER IGNACIO
54: MICROSTRUCTURED MULTICOMPOSITE COPPER MICROPARTICLE WITH ANTIBACTERIAL AND/OR BIOCIDAL ACTIVITY THAT COMPRISES 5 DIFFERENT TYPES OF COPPER COMPOUNDS
00: -
A copper microparticle with antibacterial and/or biocidal activity, wherein each microparticle has a regular, crystalline and microstructured composition that comprises 5 different copper compounds: Antlerite $Cu_3^{+2}(SO_4)(OH)_4$, Brochantite $Cu_4^{+2}SO_4(OH)_6$, Chalcantite $Cu^{+2}SO_4.5H_2O$, Natrochalcite $NaCu2^{+2}(SO4)_2OH \cdot H_2O$ and Hydrated copper sulfate hydroxide $Cu_3(SO_4)_2(OH)_2$-$4H_2O/2CuSO_4$-$Cu(OH)_2$, with the microparticle having a size of between 5 and 50 µm. A process for preparing copper microparticles with antibacterial and/or biocidal activity. A concentrated polymeric composition (masterbatch) with antibacterial and/or biocidal activity that is incorporated during the extrusion process to molten polymers for forming rigid or flexible products such as fibers, filaments,

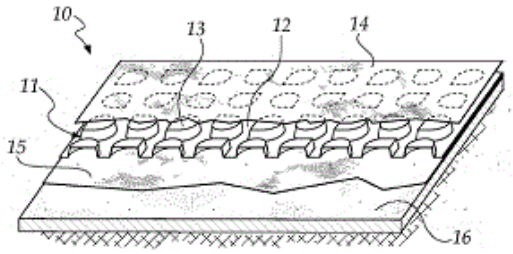
and sheets. A use of a copper microparticle with antibacterial and/or biocidal activity. A use of a concentrated polymeric composition (masterbatch) with antibacterial and/or biocidal activity.



21: 2020/08038. 22: 2020-12-22. 43: 2022-01-10
51: G21C
71: TSINGHUA UNIVERSITY
72: ZHANG, HAIQUAN, NIE, JUNFENG, WANG, XIN, LI, HONGKE, ZHANG, LIGUO, LIU, JIGUO, ZHANG, ZUOYI, DONG, YUJIE
33: CN 31: 201811644039.1 32: 2018-12-30
54: DEVICE FOR DETECTING AND POSITIONING SPHERICAL ELEMENT
00: -
Disclosed is a device for detecting and positioning a spherical element, comprising a pressure-bearing shell (400), an inner member (500), and an execution component (300), wherein the pressure-bearing shell (400) comprises a box (406), and one ball inlet adapter tube (405) and two ball outlet adapter tubes (408a, 408b) respectively arranged on the box (406); the inner member (500) is arranged in a rotor counterbore (404), and the inner member (500) comprises an inner bush ring (501) and a limiting ring (505); and the execution component (300) comprises a rotary plate (305) and two support lugs (304). The device for detecting and positioning a spherical element can implement three functions, i.e. automatic material separation, accurate positioning, and directional delivery of spherical elements, and has a compact structure, is easy to control, and satisfies the requirements of operation reliability and maintainability for long-term intermittent operation in a high-level radioactive environment.



21: 2020/08042. 22: 2020-12-22. 43: 2022-01-10
51: E04F; B32B
71: PROGRESS PROFILES SPA
72: BORDIN, DENNIS
33: IT 31: 102018000005884 32: 2018-05-31
54: COVERING FOR UNDERLAYS OF FLOORING
00: -
A covering (10) for underlays of flooring, characterized in that it comprises: - a membrane (11) with a base (12) from which studs (13) extend which protrude upward with respect to the laying plane, - a draining layer (14) which is joined in an upper region to the membrane (11) at the top of the studs (13), - a layer (15) for anchoring to the underlay of the flooring, joined in a lower region to the membrane (11) at least at the base (12).



21: 2020/08046. 22: 2020-12-22. 43: 2022-01-10
51: B62D
71: CATERPILLAR INC.
72: GALAT, MICHAEL S, AKINLUA, TEMITOPE O
33: US 31: 16/019,117 32: 2018-06-26
54: TRACK ASSEMBLY FOR A MACHINE
00: -
A track link assembly (10) comprises a plurality of link subassemblies (12). Each link subassembly (12) may include a pair of links (14) coupled together.

Each link (14) may include a first aperture (16) and a second aperture (18), and the second aperture (18) of each link (14) may be larger than the first aperture (16). The track link assembly (10) may include a pin element (20) extending through the first aperture (16) of a first link (14) and the second aperture (18) of a second link (14) in each link subassembly (12). The track link assembly (10) may include a bushing element (22) with a central opening (24). The bushing element (22) may surround a portion of the pin element (20) and extend through the second aperture (18) of the second link (14) of each link subassembly (12). The bushing element (22) may include at least one hole (56) configured to couple a track shoe (54) to the bushing element (22).

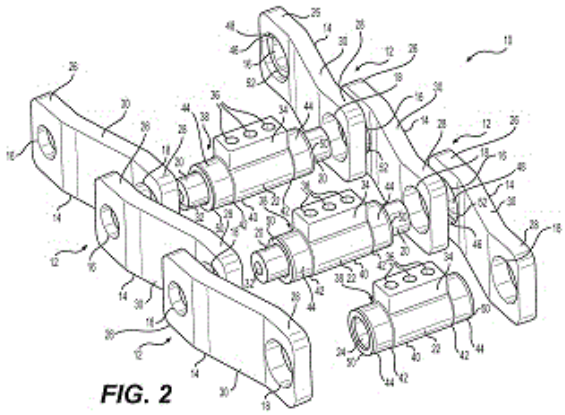


FIG. 2

21: 2020/08056. 22: 2020-12-23. 43: 2022-01-06
51: E04B
71: MRCB INNOVATIONS SDN. BHD.
72: POH, QI PIN, KANG, CHOON BOON, SEOW, SENG WEI
33: SG 31: 10201610152Q 32: 2016-12-02
33: SG 31: 10201707728X 32: 2017-09-19
54: CONNECTION SYSTEM AND METHOD FOR PREFABRICATED VOLUMETRIC CONSTRUCTION MODULES
00: -
The invention provides a prefabricated volumetric construction module having connection mechanism for securing to other similar modules. A prefabricated volumetric construction module includes a self-supporting structure and pairs of corner castings arranged at least at the corners of the structure. During building construction, the modules are assembled and secured together using connection rods and interlocking plates to provide vertical securement between vertically adjoining modules and horizontal securement between horizontally adjoining modules.

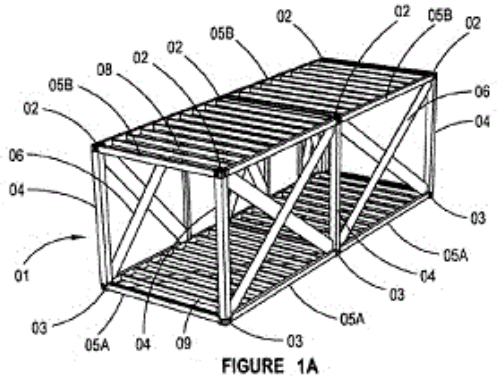
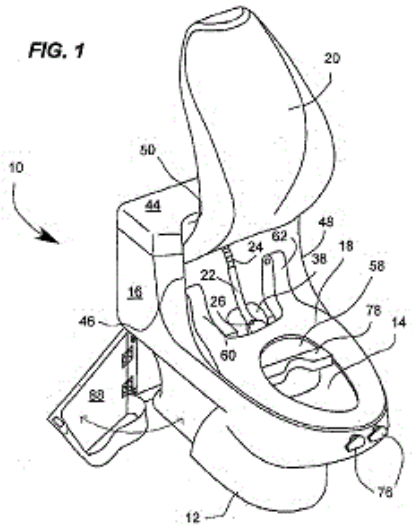


FIGURE 1A

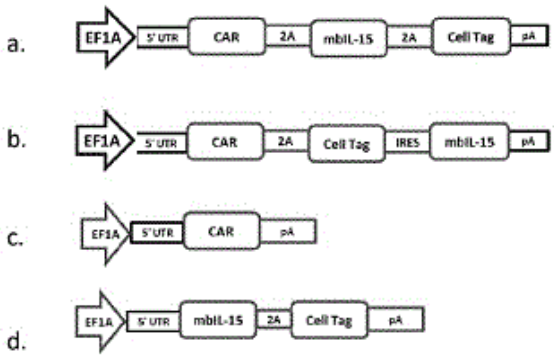
21: 2020/08061. 22: 2020-12-23. 43: 2022-01-10
51: A61K
71: VITALANT
72: DUMONT, LARRY J
33: US 31: 62/678,765 32: 2018-05-31
54: METHODS AND SYSTEMS FOR CRYOPRESERVATION AND RESUSPENSION OF BODY FLUIDS
00: -
The disclosure provides for a container system and method for the cryopreservation and resuspension of a body fluid. The container system may include a cryopreservation container comprising the body fluid in a cryopreservation liquid, a resuspension container comprising a resuspension solution, a connection tube sterilely connecting the cryopreservation container and the resuspension container, and at least one shut-off element actively associated with the connection tube.

21: 2020/08064. 22: 2020-12-23. 43: 2022-01-10
51: E03D; A61H
71: ETHIER, DENIS
72: ETHIER, DENIS
33: GB 31: 1809139.7 32: 2018-06-04
54: TOILET HAVING A BIDET SHOWER
00: -
An improved toilet having a bidet shower is provided. The bidet shower includes a head and a hose. The toilet includes a tank and a generally elongated bowl with a bowl opening. The hose passes from a back side of the tank to a front side of the tank via a passage defined between a cover and a reservoir of the tank. A protective panel removably mounted to

one of the toilet seat and the bowl, the protective panel extending at least in part downwardly in the bowl opening. Advantageously, the seat cover conceals at least a portion of the head of the bidet shower when the toilet seat and the seat cover are in a closed position and the bidet shower is not in use.



21: 2020/08065. 22: 2020-12-23. 43: 2022-01-10
51: C07K; C12N; A61K
71: PRECIGEN, INC.
72: SABZEVARI, HELEN, SHAH, RUTUL R
33: US 31: 62/680,297 32: 2018-06-04
54: MUC16 SPECIFIC CHIMERIC ANTIGEN RECEPTORS AND USES THEREOF
00: -
Provided herein are chimeric antigen receptors (CARs) for cancer therapy, and more particularly, CARs containing a scFv from an anti-MUC16 monoclonal antibody. Provided are immune effector cells containing such CARs, and methods of treating proliferative disorders.



21: 2020/08067. 22: 2020-12-23. 43: 2022-01-10
51: B60B
71: RIMGARD SWEDEN AB
72: IVARSSON, LARS, PETTERSSON, CARL
33: EP 31: PCT/EP2018/064731 32: 2018-06-05
54: WHEEL LOCK WITH CENTRAL EXPANDER
00: -
A main module adapted to be attached to a wheel of a vehicle is disclosed, comprising a centre bolt (3), an expander (4) and a locking mechanism (2, 5, 6). The main module is configured to be fitted with a blocking means (12) configured to cover nuts or bolts of the wheel. The centre bolt (3) is adapted to be connected to the main module (1) by means of a threading such that the axial position of the centre bolt (3), as seen along the axis of rotation of the wheel, can be adjusted by rotating the centre bolt (3) relative the main module (1), and such that the expander expands in a radial direction of the wheel as the axial position of the centre bolt (3) is adjusted. The the expander (4) is thereby allowed to engage with the wheel to secure the module to said wheel.

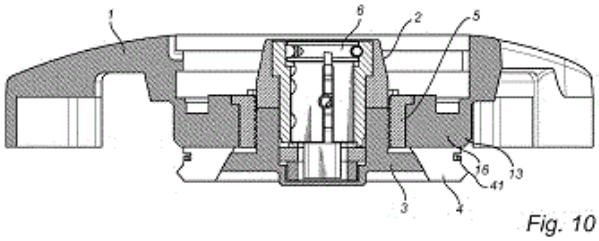
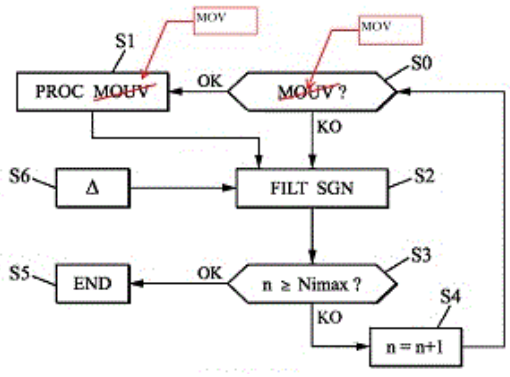


Fig. 10

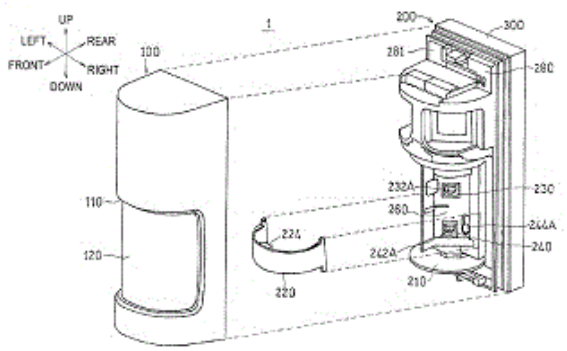
21: 2020/08068. 22: 2020-12-23. 43: 2022-01-10
51: C12Q
71: SHANGHAI TOLO BIOTECHNOLOGY COMPANY LIMITED
72: LI, SHIYUAN, WANG, JIN
33: CN 31: 201810560284.8 32: 2018-06-03
54: USE OF HIGH-TEMPERATURE-RESISTANT CAS PROTEIN, AND METHOD AND REAGENT KIT FOR DETECTING TARGET NUCLEIC ACID MOLECULE
00: -
The present invention provides a use of a high-temperature-resistant Cas protein, and a system and reagent kit for detecting a target nucleic acid molecule; specifically, the present invention provides a reaction system used for detecting a target nucleic acid molecule, said reaction system comprising: a guide RNA, Cas12b (formerly known as C2c1), and

a nucleic acid probe; after a reaction is completed, detection of the nucleic acid is performed. In addition, by means of combining with nucleic acid amplification techniques (such as LAMP and the like), the sensitivity of the described detection method can be significantly improved. The detection system provided by the present invention can be used for rapidly detecting pathogenic microorganisms, gene mutations, single nucleotide polymorphisms, specific target DNA, and the like, and for quantifying nucleic acid samples.

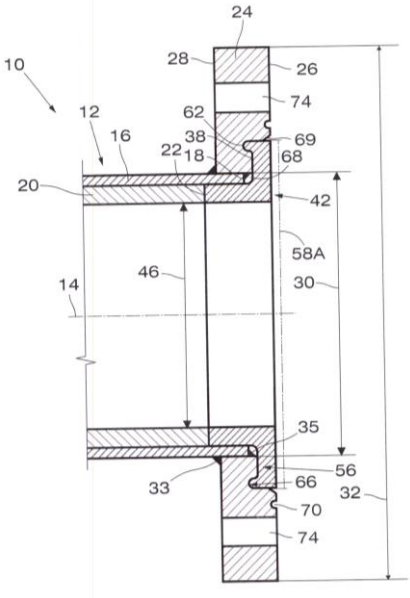
21: 2020/08069. 22: 2020-12-23. 43: 2022-01-10
51: H04N; G06T
71: ÉLECTRICITÉ DE FRANCE
72: PAUL, NICOLAS
33: FR 31: 18 55955 32: 2018-06-29
54: PROCESSING OF IMPULSE NOISE IN A VIDEO SEQUENCE
00: -
The invention relates to a processing of data of a video sequence comprising impulse noise (of "salt and pepper", "snow", or other type), comprising, for the filtering of the noise, the application of a recursive filtering (S2), given by: z(*n*) = z(*n*— 1) + Δ if y(*n*) > z(*n*— 1) z(*n*) = z(*n*— 1) — Δ if y(*n*) < z(*n*— 1) And z(*n*) = z(n — 1) if y(*n*) = z(*n*— 1) where:*y*(*n*) designates an element of the*n*-th image in the succession, not processed by the application of the filtering of the sign, z(*n*- 1) designates an element of position corresponding to*y*(*n*), of the (*n*-1)-th images in the succession and processed by the application of the filtering of the sign, z(*n*) designates an element of position corresponding to*y*(*n*), of the /Same image in the succession and processed by the application of said filtering of the sign, and Δ is a strictly positive coefficient.



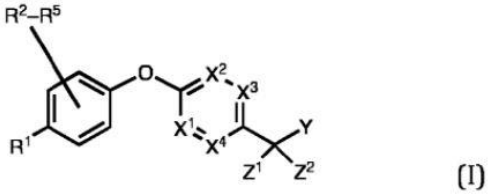
21: 2020/08070. 22: 2020-12-23. 43: 2022-01-10
51: G08B; G01J; G01V
71: OPTEX CO., LTD.
72: IKEDA, HIROYUKI
33: JP 31: 2018-170874 32: 2018-09-12
54: SECURITY SENSOR DEVICE
00: -
Provided is a security sensor device capable of implementing high-place mounting detection and low-place mounting detection by one device and accurately detecting a human body with excluding false detection. The security sensor device includes a plurality of sensor units (230) each of which includes an infrared ray detection element (232A, 232B, 242A, 242B) having a visual field in a predetermined target direction, and which are aligned in a predetermined arrangement direction; a plurality of optical systems (120A1 to 120A3, 120B1 to 120B3) through which detection rays transmit from a corresponding detection area to each infrared ray detection element, and which are aligned in the predetermined arrangement direction; a target object detection circuit (280) into which an output signal is input from each infrared ray detection element and which is configured to output a target object detection signal including a signal indicating detection of a detection target based on each output signal; and a switching unit (K) configured to change a configuration between each of the plurality of sensor units and the plurality of optical systems according to a user operation, so that two detections of low-place mounting detection and high-place mounting detection are respectively performed, the low-place mounting detection in which the security sensor device is mounted at a low place equal to or lower than a predetermined height and human body detection is performed, the high-place mounting detection in which the security sensor device is mounted at a place higher than the predetermined height and human body detection is performed.



21: 2021/00049. 22: 2021-01-05. 43: 2022-01-31
51: F16L
71: SCHOLTZ, Johann
72: SCHOLTZ, Johann, RAS, RYNO
54: PIPE JOINT
00: -
A flanged joint assembly which includes a metallic pipe with a metal flange at an end of the pipe which has a liner stub member in a recess in a face of the flange, and a seal, in a groove in the face, which surrounds the recess.



21: 2021/00421. 22: 2021-01-20. 43: 2022-03-04
51: A61K; C07D; A61P
71: XENIOPRO GMBH
72: Viktoria REINMÜLLER, Roman MARTY, Olivier WAGNIÈRES, Jean-Baptiste GUALTIEROTTI, Verena KÜPPERS
33: EP 31: 18190756.9 32: 2018-08-24
54: AROMATIC MOLECULES FOR USE IN THE TREATMENT OF PATHOLOGICAL CONDITIONS
00: -
The present invention comprises novel aromatic molecules, which can be used in the treatment of pathological conditions, such as cancer, skin diseases, muscle disorders, and immune system-related disorders such as disorders of the haematopoietic system including the haematologic system in human and veterinary medicine.

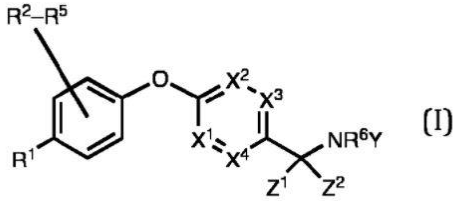


(I)

21: 2021/00436. 22: 2021-01-21. 43: 2022-02-02
51: A61K; C07C; C07D; A61P
71: XENIOPRO GMBH
72: Viktoria REINMÜLLER, Roman MARTY, Olivier WAGNIÈRES, Jean-Baptiste GUALTIEROTTI, Verena KÜPPERS
33: EP 31: 18190774.2 32: 2018-08-24
54: PHENOXY(HETERO)ARYL ETHERS OF ANTIPROLIFERATIVE ACTIVITY
00: -
The present invention comprises novel aromatic molecules, which can be used in the treatment of pathological conditions, such as cancer, skin diseases, muscle disorders, and immune system-related disorders such as disorders of the haematopoietic system including the haematologic system in human and veterinary medicine.

21: 2021/00482. 22: 2021-01-22. 43: 2022-03-04
51: A61K; C07C; C07D; A61P
71: XENIOPRO GMBH
72: Viktoria REINMÜLLER, Roman MARTY, Olivier WAGNIÈRES, Jean-Baptiste GUALTIEROTTI, Verena KÜPPERS
33: EP 31: 18190769.2 32: 2018-08-24
54: AROMATIC MOLECULES FOR USE IN THE TREATMENT OF PATHOLOGICAL CONDITIONS
00: -

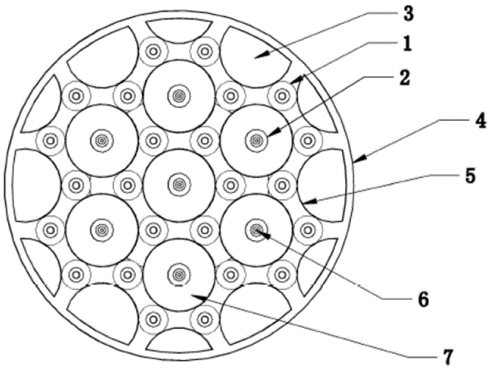
The present invention comprises novel aromatic molecules, which can be used in the treatment of pathological conditions, such as cancer, skin diseases, muscle disorders, and immune system-related disorders such as disorders of the haematopoietic system including the haematologic system in human and veterinary medicine.



(I)

21: 2021/00625. 22: 2021-01-28. 43: 2022-03-14
51: G06Q
71: KRAFT, John
72: KRAFT, John
33: AU 31: 2018901115 32: 2018-04-04
54: A LOW-COST METHOD FOR THE SAFE EXTRACTION, STORAGE, AUDIT AND TRANSFER OF VALUE OF PRECIOUS METAL DEPOSITS
00: -
A system and method of extracting, auditing, and transferring the value of precious metals that are used as a store of value and a medium of exchange. Geophysical, geochemical, geological, drill core, location, and other data is extracted from a naturally occurring precious metal deposit. The amount of precious metal present in the precious metal deposit is determined using the data extracted from the deposit either directly, or via the use of geological, geophysical, mathematical or other models. The amount of precious metal in the precious metal deposit is divided into units. Explicitly the precious metal deposit is not mined nor is the precious metal extracted from the deposit via other physical means. Ideally the precious metal deposit is selected to preclude the possibility of future mining or physical extraction of precious metals by other means. The data extracted from the precious metal deposit together with the determination of the volume of precious metal present, and other models or other data used to determine the amount of precious metal in the deposit, and the number of units created, and any rights or titles issued, are deposited into a secure ledger, such as a distributed ledger, that is made generally available for review and audit at any time. The precious deposit itself is also made generally available for review and audit at any time. Changes in the ownership of the units are recorded in the secure ledger.

21: 2021/00753. 22: 2021-02-03. 43: 2022-03-17
51: F23D; F23G
71: ENERGY RESEARCH INSTITUTE OF SHANDONG ACADEMY OF SCIENCES
72: WANG, Luyuan, SUN, Rongfeng, SUN, Jian, CHENG, Xingxing, WANG, Zhiqiang, GENG, Wenguang, YUAN, Dongling
33: CN 31: 2020100187526 32: 2020-01-08
54: OXIDATION TYPE MICRO-FLAME COMBUSTION DEVICE AND METHOD FOR HIGH-COD SEWAGE TREATMENT
00: -
The present invention discloses an oxidation type micro-flame combustion device and method for high-COD sewage treatment. The device comprises: a hollow shell, which is disc-shaped; combustion-supporting gas channels, which have circular cross sections, are arranged in the middle of the hollow shell, and are parallel to the axis of the hollow shell; a plurality of gas nozzles, which are arranged on the hollow shell, communicated with the inside of the hollow shell, and arranged around the combustion-supporting gas channels, wherein openings of all the gas nozzles are located on the same cross section; flame-stabilizing combustion-supporting gas channels, which have incomplete circular cross sections and are arranged on the circumference of the hollow shell; and sewage atomization channels, which are sleeved inside the combustion-supporting gas channels and arranged coaxially with the combustion-supporting gas channels. The diameters of the gas nozzles and the combustion-supporting gas channels and the flow rate of gas are optimized, the opening positions of the sewage atomization channels are well designed and transformed, thereby coupling low-nitrogen combustion and oxidation of organic matters in sewage. After sewage treatment, COD is less than or equal to 50 mg/ L, the emission concentration of NOx is less than or equal to 30 mg/Nm3, no dioxin is generated, the emission concentration of hydrocarbons is less than or equal to 10 mg/Nm3, and the emission concentration of CO is less than or equal to 50 mg/L.



21: 2021/00874. 22: 2021-02-09. 43: 2022-02-03
51: A23L; A61K
71: RESORCIX LTD.
72: KORCHIA-MAOR, Yehoshua, SINAI, Lior
33: US 31: 62/695,867 32: 2018-07-10
54: COMPOSITION FOR INACTIVATION OF GRAM-POSITIVE BACTERIA AND BACTERIAL SPORES AND METHODS OF MAKING AND USING SAME
00: -
There are provided compositions for inactivation of Gram-positive bacteria and bacterial spores, and methods of making and using such compositions. The compositions may contain 7-alpha-acetoxyhardwickiic acid, crolechinic acid, hardwiekiic acid, kolavenic acid and copalic acid.

21: 2021/01417. 22: 2021-03-02. 43: 2022-02-11
51: H01R
71: MIDDLETON, Stephen Alexander
72: MIDDLETON, Stephen Alexander
54: AN ELECTRICAL CONNECTOR
00: -
An electrical connector including a female receiving portion 12 which is configured to receive and retain a connector portion (not shown) of an electrical plug (not shown) with at least two pins (not shown) complementally therein, to allow electrical communication therebetween, a male connector portion 14 which includes at least two pins 14a, 14b and which is configured to complementally engage the female receiving portion 12 or an electrical socket (not shown) to allow electrical communication therebetween, and an extension portion 16 extending between the female receiving portion 12 and the male connector portion 14 to allow electrical communication therebetween.

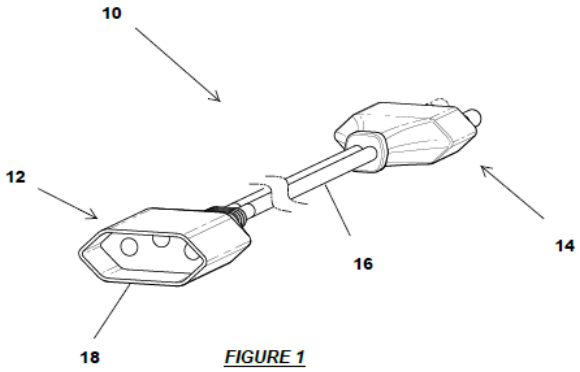


FIGURE 1

21: 2021/01527. 22: 2021-03-05. 43: 2022-01-19
51: C01B
71: William Marsh Rice University
72: TOUR, James Mitchell, LUONG, Duy X., KITTRELL, Wilbur Carter, CHEN, Weiyin
33: US 31: 62/727,510 32: 2018-09-05
54: FLASH JOULE HEATING SYNTHESIS METHOD AND COMPOSITIONS THEREOF
00: -
Methods for the synthesis of graphene, and more particularly the method of synthesizing graphene by flash Joule heating (FJH). Such methods can be used to synthesize turbostratic graphene (including low-defect turbo strati c graphene) in bulk quantities. Such methods can further be used to synthesize composite materials and 2D materials.

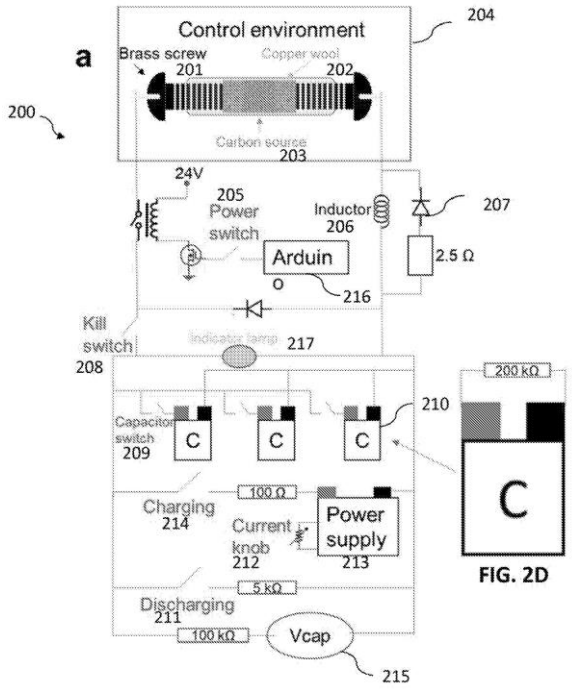
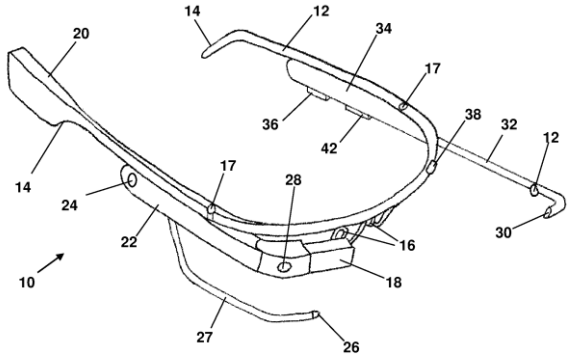
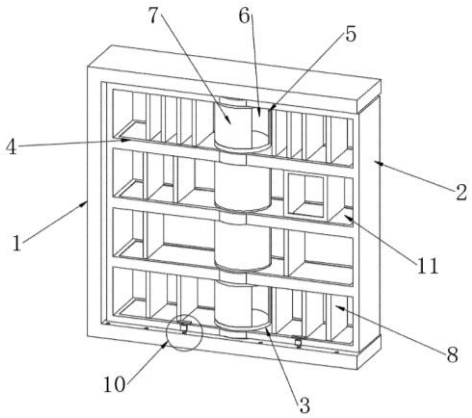


FIG. 2D

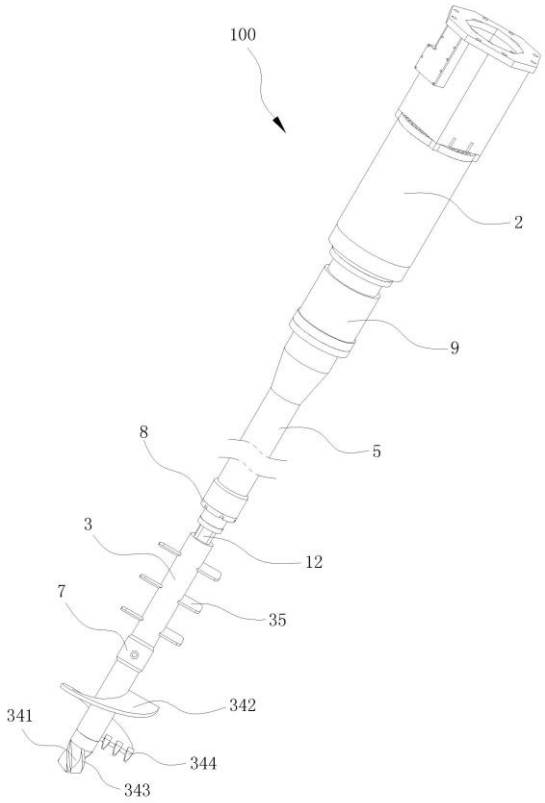
21: 2021/01592. 22: 2021-03-09. 43: 2022-02-11
51: G02B; G03B
71: WILLIAMS, Bryan
72: WILLIAMS, Bryan
33: ZA 31: 2018/05257 32: 2018-08-10
54: EYEWEAR FOR SIMULATING FACE-TO-FACE COMMUNICATION
00: -
Eyewear in the form of smartglasses (10) include a frame (12) a screen (18) supported by the frame (18) and extending in a field of vision an eye of the wearer, a camera (30) and a support element (32). The support element (32) is supported by the frame (12) and supports the camera (30), and is configured to protrude from the frame (12) selectively, so that when the smartglasses (10) are worn and the support element (32) protrudes from the frame (12), the camera (30) is supported at a recording position where the camera (30) is directed to the wearer's face and is spaced from the wearer's face by a sufficient distance to capture a visual recording of the wearer's face.



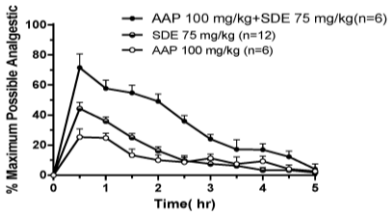
21: 2021/02078. 22: 2021-03-26. 43: 2022-03-09
51: E04B
71: NANTONG VOCATIONAL UNIVERSITY
72: CHEN LIU
33: CN 31: 202020088365.5 32: 2020-01-16
54: COMBINED PARTITION FRAME FOR INTERIOR DESIGN
00: -
Disclosed is a combined partition frame for interior design. The frame comprises a C-shaped frame and a partition frame, central columns are mounted at the central positions of the top and bottom end of the partition frame, the partition frame is rotatably connected with the central columns, and the central columns at the top and bottom end are slidably connected with the inner wall of the C-shaped frame. Through the effects of transverse plates and partition plates, the partition frame can be divided into different spaces, a user can store articles, the partition plates are magnetically connected with magnetic connecting plates through magnetic connecting strips, the positions of the partition plates can be changed according to needs, the sizes of storage spaces can be changed, the partition frame is slidably connected with the C-shaped frame through the central columns, and the partition frame is rotatably connected with the central columns.



21: 2021/02137. 22: 2021-03-30. 43: 2021-12-08
51: E02D; E21B
71: ZHOU, Zhaodi
72: ZHOU, Zhaodi
33: CN 31: 201811010914.0 32: 2018-08-31
54: DRILL BODY
00: -
A drill body, which comprises: a hollow transmission shaft (1); and a hollow drill rod (3) being axially sheathed on the hollow transmission shaft (1) and integrally rotating along with the hollow transmission shaft (1), wherein an upper discharge port (121) and a lower discharge port (122) are formed in the hollow transmission shaft (1) at intervals in an axial direction; the hollow drill rod (3) is provided with an upper nozzle (31) and a lower nozzle (32) at intervals in the axial direction; the hollow drill rod (3) can axially reciprocate relative to the hollow transmission shaft (1), and the lower discharge port (122) is in communication with the lower nozzle (32) when drilling in; and when drilling out, the upper discharge port (121) is in communication with the upper nozzle (31).

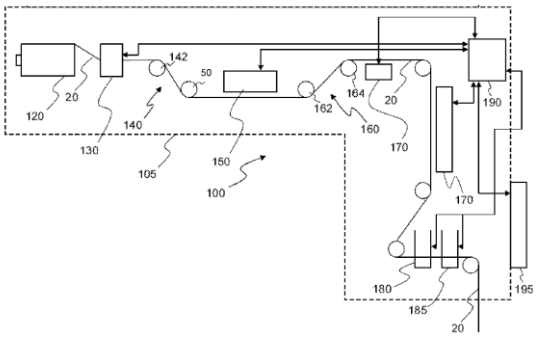


21: 2021/02209. 22: 2021-03-31. 43: 2022-03-09
51: A61K; A61P
71: JACOB BIOTECH LTD
72: HU, Oliver Yoa-Pu, CHEN, Yen-Lun
33: IB 31: PCT/CN2018/103786 32: 2018-09-03
54: PHARMACEUTICAL PREPARATIONS OF SEBACOYL DINALBUPHINE AND ACETAMINOPHEN AND METHODS FOR TREATING PAIN
00: -
The present invention relates to pharmaceutical compositions/combination/kit and methods for treating pain, which provide synergistic analgesic effects and less side effects.



21: 2021/02268. 22: 2021-04-06. 43: 2022-02-02
51: B41J; D04B; D05B; D05C; D06B; D06P
71: COLOREEL GROUP AB

72: EKLIND, Martin, STABERG, Joakim
33: SE 31: 1851096-6 32: 2018-09-15
54: A METHOD FOR IN-LINE TREATMENT OF A THREAD AND A SYSTEM THEREFORE COMPRISING A TREATMENT UNIT AND A THREAD SPEED SENSOR
00: -
A system (10) for in-line treatment of thread (20) for use with a thread consuming device (15) is provided. The system comprises at least one treatment unit (100) being configured to dispense one or more coating substances onto the at least one thread when activated and a thread speed sensor (50) being driven by the motion of the at least one thread (20). A method is further provided.



21: 2021/02269. 22: 2021-04-06. 43: 2022-02-02
51: D03J; D05B; D05C; D06P
71: COLOREEL GROUP AB
72: EKLIND, Martin, STABERG, Joakim
33: SE 31: 1851091-7 32: 2018-09-15
54: A METHOD FOR PROVIDING VISUAL EFFECTS TO A DECORATIVE PATTERN, A CONTROL UNIT AND A SYSTEM FOR IN-LINE TREATMENT OF THREAD
00: -
A method for providing visual effects to a decorative thread pattern, is provided. The method comprises i) determining an object to be produced as such decorative thread pattern, ii) determining a thread arrangement comprising a plurality of consecutive thread portions, each thread portion having a thread portion direction, wherein the entire thread arrangement corresponds to said object to be produced, iii) determining at least one visual effect of said object to be produced, said visual effect being associated with a set of thread portions of said thread arrangement and having a direction being different from at least one thread portion direction of the set of thread portions, and iv) determining a colouring scheme for a specific thread such that the visual effect is obtained when production of the decorative thread pattern, using said thread according to said thread arrangement, is performed. A control unit is also provided.

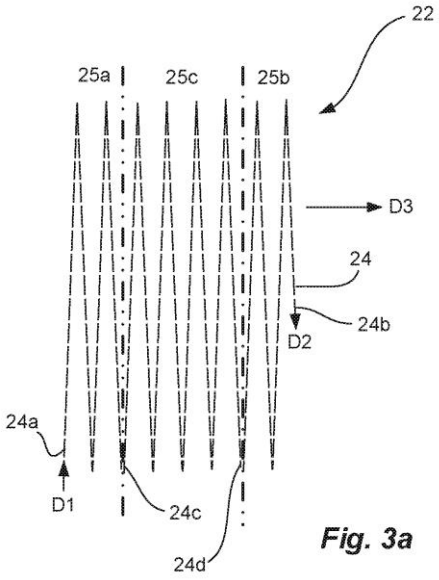


Fig. 3a

21: 2021/02567. 22: 2021-04-19. 43: 2022-03-09
51: B60S
71: XIDIAN UNIVERSITY
72: LI, Changle, WANG, Yunpeng, MAO, Guoqiang, HUI, Yilong, CHEN, Zhiqiang, LIU, Zhen, CHEN, Yuexu
33: CN 31: 202010391089.4 32: 2020-05-11
54: METHOD FOR VEHICLE CLASSIFICATION USING MULTIPLE GEOMAGNETIC SENSORS
00: -
The invention discloses a method for vehicle classification using multiple geomagnetic sensors, which mainly solves the problems of high cost, complex processing process and difficulty in large-scale deployment of the existing vehicle classification methods. The method comprises the following steps: sequentially deploying N geomagnetic sensors on a road side at equal intervals d , each of the geomagnetic sensors respectively collecting magnetic field data around same, respectively transmiting the magnetic field data to a data processing module for storage, and judging whether a vehicle passes over a detection range of the sensors or not according to the data; calculating a time difference obtained when the

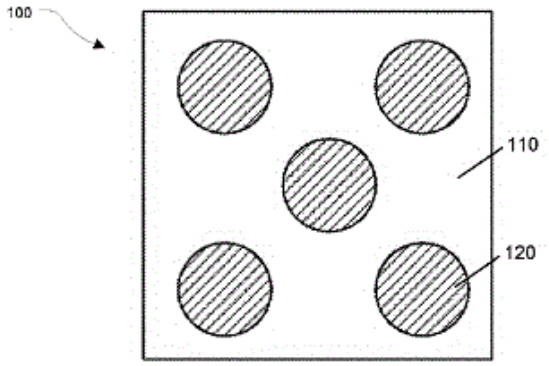
vehicle passes by two adjacent sensors among N sensors, and calculating the vehicle speed and the vehicle magnetic length according to the time difference; setting a vehicle magnetic length double-threshold value and a Z axis magnetic field strength threshold value, acquiring Z axis geomagnetic data and the magnetic length that the vehicle passes by, comparing the Z axis geomagnetic data and the magnetic length that the vehicle passes by with the set threshold value, and acquiring a judged vehicle type result. According to the invention, the vehicle type information of the vehicle passing by can be accurately acquired, the reliability is high, the cost is low, large-scale deployment is easy to realize, and the method can be used for highway intellectualization.

21: 2021/02648. 22: 2021-04-21. 43: 2022-03-17
51: G06F
71: QINGDAO UNIVERSITY OF TECHNOLOGY
72: PANG, Feng, DONG, Haitao, ZHANG, Peng, SUN, Bo, CHAO, Xiaoxiao
33: CN 31: 2019112037989 32: 2019-11-29
54: HISTORICAL CITY PROTECTION AND DEVELOPMENT COOPERATIVE CONTROL SCHEME AIDED DESIGN SYSTEM
00: -
A historical city protection and development cooperative control scheme aided design system is disclosed. The system includes a server and a user terminal. The server establishes a connection with a related department server. City factor data is acquired based on user requirements, and data processing methods for various city factor data and related analysis methods for population change monitoring are packaged in advance. Requirements of a user for areas and data to be researched are received, related city factor data is acquired, and a corresponding data processing method is acquired for processing. The city factor data is matched according to spatial position parameters. Environmental population capacity estimation is performed on an old urban district and a new urban district, respectively. A population overrun time is determined based on an environmental population capacity and population prediction of the old urban district, and a development intensity of the new urban district is estimated based on an environmental population capacity of the new urban district. A protection scheme of the old urban district is designated accordingly, and data obtained in an analysis process may be visualized. According to the present disclosure, the early-stage data preparation and preprocessing workload of a project can be reduced.

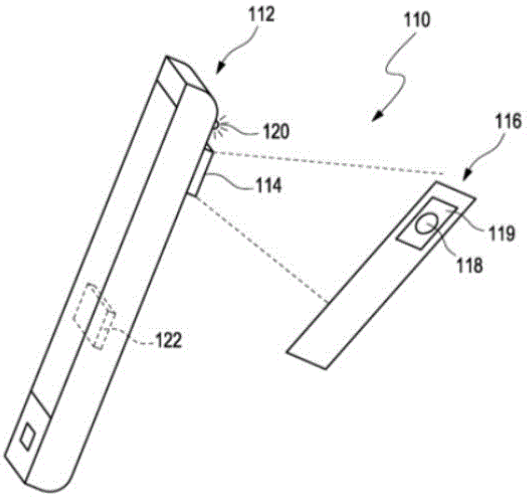
21: 2021/02775. 22: 2021-04-26. 43: 2022-03-04
51: C07D; A61P
71: MACROGENICS, INC., NANOSTRING TECHNNOLOGIES, INC., NOTTINGHAM TRENT UNIVERSITY
72: Jan, Kenneth DAVIDSON, Sara CHURCH, SERGIO RUTELLA
33: US 31: 62/752,659 32: 2018-10-30
33: US 31: 62/769,078 32: 2018-11-19
33: US 31: 62/878,368 32: 2019-07-25
54: BISPECIFIC CD123 X CD3 DIABODIES FOR THE TREATMENT OF HEMATOLOGIC MALIGNANCIES
00: -
The present invention is directed to a method of treating a hematologic malignancy such as acute myeloid leukemia (AML) or myelodysplastic syndrome (MDS), including hematologic malignancies that are refractive to chemotherapeutic and/or hypomethylating agents. The method concerns administering a CD123 x CDS bispecific binding molecule to a patient in an amount effective to stimulate the killing of cells of said hematologic malignancy in said patient. The present invention is additionally directed to the embodiment of such method in which a cellular sample from the patient evidences an expression of one or more target genes that is increased relative to a baseline level of expression of such genes, for example, a baseline level of expression of such genes in a reference population of individuals who are suffering from the hematologic malignancy, or with respect to the level of expression of a reference gene.

21: 2021/02809. 22: 2021-04-28. 43: 2022-01-06
51: B01J
71: STAR SCIENTIFIC LIMITED
72: HEATON, STEVEN JAMES, KIRK, SAMUEL JAMES
33: US 31: 62/549,816 32: 2017-08-24
54: COMPOSITIONS, METHODS, AND APPARATUSES FOR CATALYTIC COMBUSTION
00: -

There is provided a method for heating a heat exchange medium comprising supplying a fuel and oxidizer to a catalyst reactor having a catalytic heating element. The catalytic heating element including hydrogen oxidation catalyst and an oxygen reduction catalyst. Catalytically combusting the fuel mixture on the catalytic surface and transferring the heat generated by the catalytic combustion to a heat exchange medium. The catalyst is adapted for low temperature activation of a hydrogen combustion reaction.



21: 2021/02890. 22: 2021-04-29. 43: 2022-01-18
51: G01N
71: F. Hoffmann-La Roche AG
72: BERG, Max, HAILER, Fredrik, LIMBURG, Bernd
33: EP(CH) 31: 18205002.1 32: 2018-11-07
54: METHODS AND DEVICES FOR PERFORMING AN ANALYTICAL MEASUREMENT
00: -
A method of performing an analytical measurement based on a color formation reaction in an optical test strip (116) by using a mobile device (112) having a camera (114) as well as a computer program including computer-executable instructions for performing the method are disclosed. Further disclosed are a mobile device and a tit for performing an analytical measurement. The method comprises step a): providing an optical test strip (116) having a test field (118) without having a sample applied thereto; step b): capturing at least one first image of at least part of the test field (118) of the optical test strip (116) without having a sample applied thereto by using the camera (114) with at least one image acquisition setting of the camera (114), specifically with a set of acquisition settings of the camera (114); step c): applying a sample, specifically a drop, of bodily fluid to the test field (118) of the optical test strip (116); step d): waiting for a predetermined minimum amount of time; step e); capturing at least one second image of at least part of the test field (118) of the optical test strip (116) having the sample of bodily fluid applied thereto by using the camera (114) with the one or more image acquisition settings of the camera (114), wherein the image acquisition settings of the camera (114) are the same image acquisition settings of the camera (114) as used in step b); and step f): determining an analytical measurement result value by using the first and the second image of the optical test field (118) of the optical test strip (116), specifically by comparing the at least two images.



21: 2021/02903. 22: 2021-04-30. 43: 2022-02-11
51: G08B
71: VENTER, Pieter Daniël
72: VENTER, Pieter Daniël
33: ZA 31: 2020/05710 32: 2020-09-16
54: A SYSTEM AND METHOD FOR PREVENTING AND DETECTING AN EMERGENCY
00: -
The invention relates to an emergency and injury prevention and detection systems and methods. The invention functions to provide a person with a mechanism to protect himself of herself against a potential or actual threat in a manner in which the time necessary to provide the required protection is optimal or optimized.

21: 2021/03035. 22: 2021-05-05. 43: 2022-01-19

51: A61K; C07K; A61P
71: IMMUNOVANT SCIENCES GMBH
72: FONG, Regan, POLASEK, Melissa, COQUERY, Christine
33: US 31: 62/756,472 32: 2018-11-06
54: METHODS OF TREATING GRAVES' OPHTHALMOPATHY USING ANTI-FCRN ANTIBODIES
00: -
The present disclosure relates to compositions, methods, and uses for using an isolated anti-FcRn antibody or an antigen-binding fragment thereof that binds to neonatal Fc receptor (FcRn) to prevent, modulate, or treat Graves' ophthalmopathy.

21: 2021/03055. 22: 2021-05-06. 43: 2022-02-02
51: C12Q
71: LONGHORN VACCINES & DIAGNOSTICS, LLC
72: DAUM, Luke T., FISCHER, Gerald W.
33: US 31: 62/758,173 32: 2018-11-09
33: US 31: 62/773,566 32: 2018-11-30
33: US 31: 62/882,831 32: 2019-08-05
54: RAPID PCR METHODOLOGY
00: -
Disclosed is an enhanced method for rapid and cost-effective analysis of sequences of a microorganism by qPCR. These methods identify allelic variation, SNPs, and genetic mutations of a particular gene such as those responsible for conferring resistance or sensitivity to an antibiotic, chemotherapy, or another chemical compound. By selection of appropriate gene regions, mutation loci that confer resistance to key antibiotics can be identified by qPCR. Additionally, the approach can identify heteroresistant strains, e.g., populations of strains from a sample that contain both mutation and wild-type nucleotides. By selecting appropriate that bind efficiently to the area of mutation can identify resistance conferring mutations. Methods are useful to sequences derived from viral agents, such as influenza virus, bacterial agents, such as tuberculosis bacteria, and cancer cells.

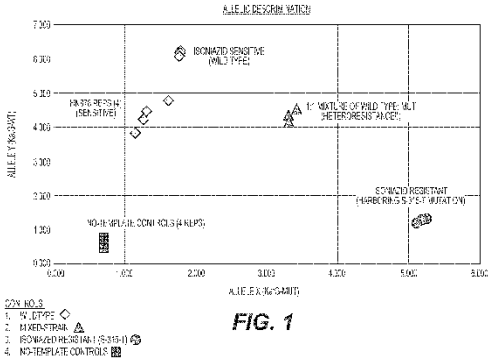


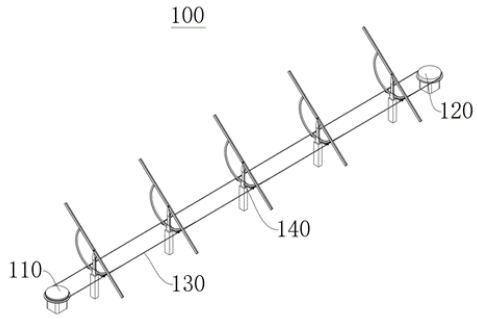
FIG. 1

21: 2021/03154. 22: 2021-05-10. 43: 2022-03-16
51: A61K; A61P
71: SERUM INSTITUTE OF INDIA PRIVATE LTD
72: SHARMA, Inder Jit, KUMAR, Rakesh, KILVANI, Jaganathan Semburakkiannan, DODDAPANENI, Manohar, SHITOLE, Anil Vyankatrao
33: IN 31: 201821038850 32: 2018-10-12
54: COMBINATION VACCINE COMPOSITION COMPRISING REDUCED DOSE INACTIVATED POLIOVIRUS AND METHOD FOR PREPARING THE SAME
00: -
The present disclosure relates to a fully liquid immunogenic composition comprising a combination of antigens/immunogens. The immunogenic composition comprises optimum amount of antigens/immunogens to confer protection against a number of diseases. The composition exhibits improved immunogenicity and stability. A process for preparing the vaccine composition is also disclosed.

21: 2021/03184. 22: 2021-05-11. 43: 2022-02-18
51: A61F; A61K; D06M
71: DILCEM KIMYA VE DENISMANLIK ITH. IHR. SAN. TIC. LTD. STI.
72: UCAR, Dilek
33: WO 31: PCT/TR2018/050753 32: 2018-11-30
54: WOVEN, NONWOVEN, COTTON, NONWOVEN-COTTON BLENDED POLYETHYLENE AND POLIPROPILEN AND POLYSTYRENE MASK, WOUND DRESSING, PANTY, BRA, HANDKERCHIEF, PAD, SCOURING PAD, DISPOSABLE SURGICAL DRESS, DISPOSABLE SHEETS WITH ANTIMICROBIAL PROPERTIES
00: -
This invention was related to elimination of pathogenic micro-organisms on various surfaces,

and air especially hard surfaces where such organisms may stay active for relatively long periods of time, has long been a goal of those charged with woven, nonwoven, cotton, nonwoven- cotton blended, polyethylene and polipropilen and polystyrene blended mask, wound dressing, panty, bra, handkerchief, pad, scouring pad, disposable surgical dress and sheets. For this purpose, a combination polymeric guanidine derivative based on a diamine containing oxyalkylene chains between two amino groups, with the guanidine derivative representing a product of polycondensation between a guanidine acid addition salt and a diamine containing polyoxyalkylene chains between two amino groups, are integrated woven, nonwoven, cotton, polyethylene and polipropilen and polystyrene structure to gain antimicrobial activity.

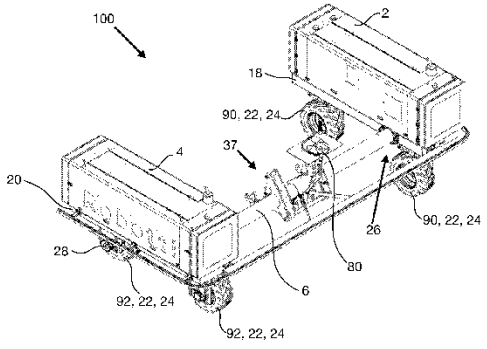
21: 2021/03367. 22: 2021-05-18. 43: 2022-01-19
51: H02S
71: JIANGSU ENEUTRAL NEW ENERGY TECHNOLOGY CO., LTD.
72: SUN, Haitao, LI, Yanglin, YANG, Zhongjun, WANG, Hepeng, YAN, Jianguo
33: CN 31: 201811220221.4 32: 2018-10-19
54: ROPE TRANSMISSION STRUCTURE, SOLAR ENERGY TRACKER AND APPLICATION METHOD THEREOF
00: -
Disclosed are a rope transmission structure, a solar energy tracker and the application method thereof, relating to the technical field of solar power generation. The rope transmission structure (100) comprises a driving wheel (110), a driven wheel (120), a main transmission rope (130) and a plurality of tracking units (140). The main transmission rope (130) is connected end to end, and one end of the main transmission rope (130) is sleeved on the driving wheel (110) and the other end thereof is sleeved on the driven wheel (120). The plurality of tracking units (140) are provided at intervals along a lengthwise direction of the main transmission rope (130). A rotating member (142) is hinged on a mounting bracket (141), and one end of a first branch rope (143) is connected to the rotating member (142) and the other end thereof is connected to the main transmission rope (130). In the rope transmission structure, by using the main transmission rope sleeved outside the driving wheel and the driven wheel as well as the first branch rope connected between the main transmission rope and the rotating member, the length from the driving wheel to the driven wheel is extremely long, and multiple rotating members can be driven to rotate at the same time, thus reducing the construction cost and the maintaining strong practicability.



21: 2021/03405. 22: 2021-05-19. 43: 2022-03-09
51: F16J
71: RIFENG ENTERPRISE (FOSHAN) CO., LTD., RIFENG ENTERPRISE GROUP CO., LTD.
72: DIAO, Zhenbin, LI, Ximin, LIN, Xiyong, CHENG, Jiajia, CHEN, Wenfeng, CAO, Huijian, CHEN, Ali
33: CN 31: 201911124319.4 32: 2019-11-15
54: SEALING STRUCTURE
00: -
The present disclosure relates to the field of sealing technologies and provides a sealing structure. The sealing structure includes an inner pipe, an outer pipe, and a sealing ring, where the outer pipe is detachably sleeved on the inner pipe, a slot for inserting a pipe is formed between an inner wall of the outer pipe and an outer wall of the inner pipe, and the outer wall of the inner pipe is provided with a sealing groove for placing the sealing ring; the sealing ring includes a main body provided with a lip; the sealing groove includes a first sealing groove and a second sealing groove, the first sealing groove and the second sealing groove are stepped, and a depth of the first sealing groove is less than that of the second sealing groove.

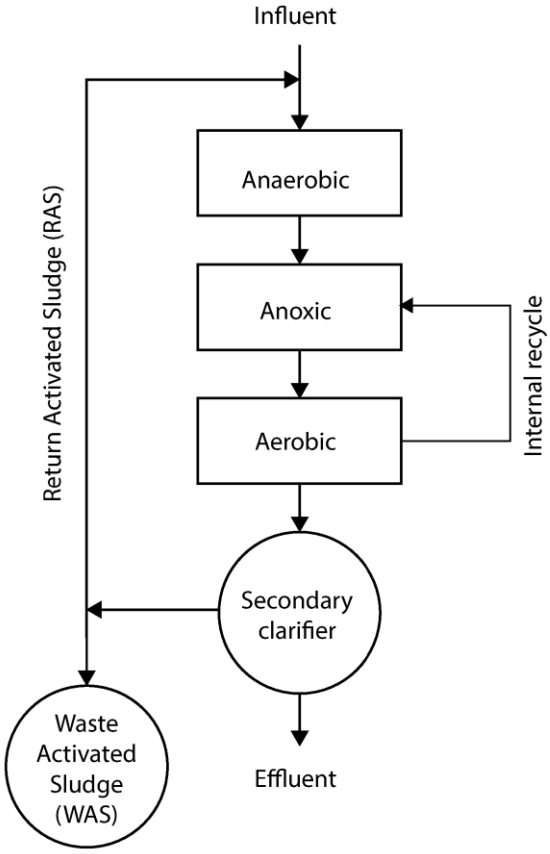
21: 2021/03406. 22: 2021-05-19. 43: 2022-01-19
51: A01B; B62D; G05D
71: AGRO INTELLIGENCE APS
72: GREEN, Ole, JUUL, Jacob Pilegaard, ZNOVA, Liubava, JÆGER, Claus Dühring
33: DK 31: PA 2018 00917 32: 2018-11-27

54: AN AGRICULTURAL WORK VEHICLE
00: -
The invention relates to an agricultural work vehicle (100) for performing an agricultural work operation in an agricultural field, wherein said work vehicle comprises: -a first drive module (2): -a second drive module (4), -a connecting element (6); said connecting element comprises a first axial end (8) and a second axial end (10); -propulsion means (12) for propelling said work vehicle; -steering means (14) for steering said work vehicle; -a control unit (16) for controlling the operation of said work vehicle; wherein said first drive module (2) comprises a first chassis (18); wherein said second drive module (4) comprises a second chassis (20); wherein said first drive module (2) comprises drive means (90) for allowing said first drive module to move over ground, said drive means (90) being suspended on said first chassis (18); wherein said second drive module comprises drive means (92) for allowing said second drive module to move over ground, said drive means (92) being suspended on said second chassis (20); wherein said first axial end (8) of said connecting element (6) is being attached to said first chassis (18); and wherein said second axial end (10) of said connecting element (6) is being connected to said second chassis (20); wherein said work vehicle is comprising pivoting means (26), thereby allowing that the orientation of said first drive module (2) is being able to rotate in relation to the orientation of said second drive module (4), around an axis being essentially parallel to a longitudinal direction of said connecting element (6).



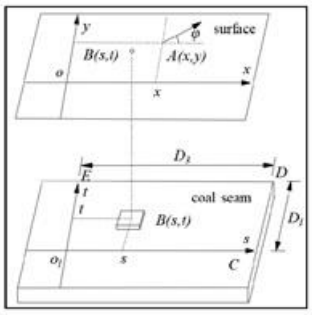
21: 2021/03424. 22: 2021-05-20. 43: 2022-01-19
51: C02F
71: CAMBI TECHNOLOGY AS
72: HOLTE, Hans Rasmus, RINGOOT, Davy P.M.
33: EP 31: 18207649.7 32: 2018-11-21
33: EP 31: 18211017.1 32: 2018-12-07

54: ADVANCED PHOSPHOROUS RECOVERY PROCESS AND PLANT
00: -
A method and plant for recovering phosphate from a biomass material, the biomass material suitably being a waste activated sludge from an upstream wastewater treatment process including a biological P removal process. The method includes an anaerobic digestion stage and steps for recovering independent streams rich in PO4 and Mg, or rich in PO4 and NH4, thereby increasing the amount of P recovered and avoiding struvite formation in the anaerobic digester and accessory equipment thereof, such as pipes.



21: 2021/03540. 22: 2021-05-25. 43: 2022-02-15
51: G06F; G06Q

71: ANHUI UNIVERSITY OF SCIENCE AND TECHNOLOGY
72: WANG, LEI, YU, XUEXIANG, CHI, SHENSHEN, LV, WEICAI, JIANG, CHUANG
33: CN 31: 202010468314.X 32: 2020-05-28
54: MINING SUBSIDENCE PREDICTION METHOD BASED ON IMPROVED BOLTZMANN FUNCTION
00: -
The present invention relates to the technical field of analysis on mining subsidence of a coal mine, and particularly relates to a mining subsidence prediction method based on an improved Boltzmann function. The present invention comprises the following steps: firstly, building a prediction model for a strike main section of a ground subsidence trough based on a Boltzmann function. This includes decomposing an expression of the built prediction model into two-unit subsidence troughs with different important influencing radii to be combined according to a specific proportional coefficient. Secondly, building a movement and deformation prediction model of the ground strike main section, a dip main section and any point of a to-be-detected mining area by using the mining subsidence prediction model based on the improved Boltzmann function. Lastly, calculating parameters related to mining subsidence of the ground subsidence trough in the prediction model in the second step.



21: 2021/03644. 22: 2021-05-27. 43: 2022-01-19
51: A61K
71: Bharat Biotech International Limited
72: ELLA, Krishna Murthy, RAMASAMY, Venkatesan, NAIDU, Mandalapu Gangadhara
33: IN 31: 201841017672 32: 2018-11-10
54: MULTIVALENT GLYCOCONJUGATES IMMUNOGENIC COMPOSITIONS
00: -
Disclosed are multivalent conjugate compositions against Salmonella diseases. A combined vaccine composition of glycol-conjugates in tetravalent, trivalent and bivalent combinations are disclosed in the present invention.

21: 2021/03782. 22: 2021-06-02. 43: 2022-02-03
51: A61K
71: APRAMITHA INNOVATIONS PRIVATE LIMITED
72: SREEDHARALA, Venkata Nookaraju, MANAKKOTE, Ramdas, KALAKOTI, Srikanth
33: IN 31: 201841041818 32: 2018-11-05
54: TERIFLUNOMIDE TOPICAL PHARMACEUTICAL COMPOSITIONS
00: -
The present invention relates to a novel topical pharmaceutical composition of Teriflunomide, comprising teriflunomide or its pharmaceutically acceptable salt in combination with pharmaceutically acceptable excipients, wherein the said composition is effective for use in treatment of pain associated with disorders like inflammation and arthritis. The composition is also useful for relieving the symptoms of pain and arthritis in subjects suffering from autoimmune diseases like multiple sclerosis or rheumatoid arthritis. The said topical composition of teriflunomide is prepared in the form of topical gel, topical cream, topical ointment, topical solution, lotion or topical spray with significantly enhanced permeability and diffusion rate of the drug.

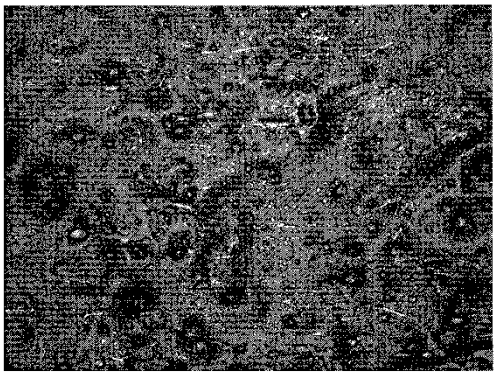


FIGURE 1: PLM images of Teriflunomide Topical Cream at pH 3.1.

21: 2021/03846. 22: 2021-06-04. 43: 2022-01-18
51: A61C
71: HUWAIS IP HOLDING, LLC.
72: HUWAIS, Salah
33: US 31: 62/756,406 32: 2018-11-06
54: AUTOGRAFTING TOOL FOR DEEP REACH APPLICATIONS
00: -
A rotary osteotome for deep reach applications. The body of the osteotome has a tapered end that supports helically spiraling flutes. Substantially

margin-less (without margin) working edges are interleaved between the flutes to provide compaction action when rotated in a non cutting direction. The body also has an elongated cylindrical stopper section. An irrigation conduit passes through the center of the stopper section and emerges at a plurality of outlet orifices that function as independent nozzles for irrigating fluid. The outlet orifices are generally elliptical in shape and spaced around the body to maintain balance. The irrigation conduit has a main trunk that opens to a flow splitter, which in turn divides the flow of irrigating fluid into substantially equal branches. Each branch is angled at an acute trajectory relative to the longitudinal axis, in the direction of said apical end, between about 10° and 45°.

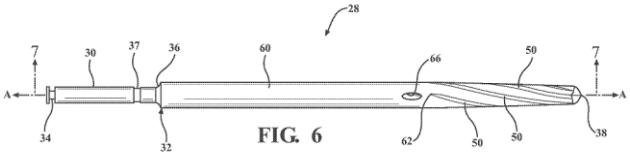


FIG. 6

21: 2021/04001. 22: 2021-06-10. 43: 2022-01-28
51: H01M
71: POWERCELL SWEDEN AB
72: VELÉN, Robin, MUNTHE, STEFAN
33: SE 31: 1930019-3 32: 2019-01-23
54: UNIT FUEL CELL, FUEL CELL STACK AND BIPOLAR PLATE ASSEMBLY
00: -
Disclosed is a Fuel cell stack (1) comprising a plurality of bipolar plates (100) wherein each bipolar plate (100) has at least an anode plate (20) and a cathode plate, and a plurality of membrane electrode assemblies (10) being sandwiched by the bipolar plates (100), wherein each membrane electrode assembly (10) has at least an anode (11) and a cathode (12) which are separated by a membrane (13), wherein the bipolar plates (100) sandwich the membrane electrode assembly (10) in such a way that the anode (11) of the membrane electrode assembly (10) faces the anode plate (20) of a first bipolar plate (100) and the cathode (12) of the same membrane electrode assembly (10) faces the cathode plate (30) of a second bipolar plate (100); and wherein a cell pitch of the fuel cell stack (1) is defined by a distance of two adjacent membrane electrode assemblies (10), wherein at borders of the bipolar plates (100) of the fuel cell stack (1), an overall distance (d) between the anode plate (20) of the first bipolar plate (100) and the cathode plate (30) of the second bipolar plate, which is measured over the sandwiched membrane electrode assembly (10), is equal to the cell pitch of the fuel cell stack (1).

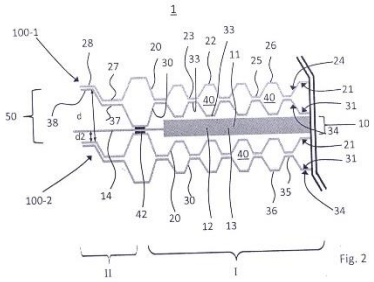
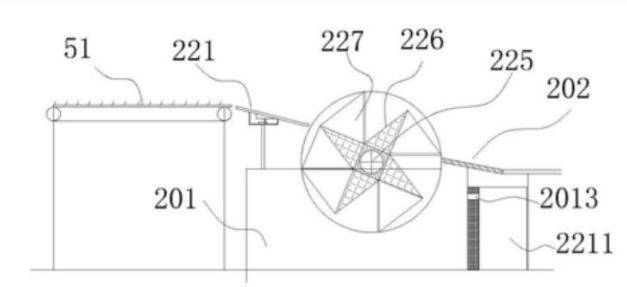


Fig. 2

21: 2021/04233. 22: 2021-06-21. 43: 2022-02-18
51: B07C; B65G
71: ANHUI UNIVERSITY OF SCIENCE AND TECHNOLOGY
72: XIE, Jun, WANG, Chao, ZHU, Jinbo, ZHANG, Yong, YANG, Ke, ZHOU, Wei, ZHU, Hongzheng, GUO, Yongcun
33: CN 31: 202011210133.3 32: 2020-11-03
54: ROTATING WHEEL TYPE COAL AND GANGUE IDENTIFICATION DEVICE
00: -
Provided is a rotary wheel type coal gangue identification device, which comprises a rotary support frame, a circulating water tank, a weighing unit, a liquid level detection device and a processing module; the rotary support frame is provided with a loading unit for loading mineral aggregate, the rotary support frame is used for driving the loading unit to rotate on a vertical plane, and the opening direction of the loading unit is consistent with the rotating direction of the second rotating shaft; in the rotating process of the rotating support frame, the loading unit circularly passes through a water injection area, a material adding area, a volume measuring area and a discharging area which are sequentially arranged on the rotating track of the rotating support frame

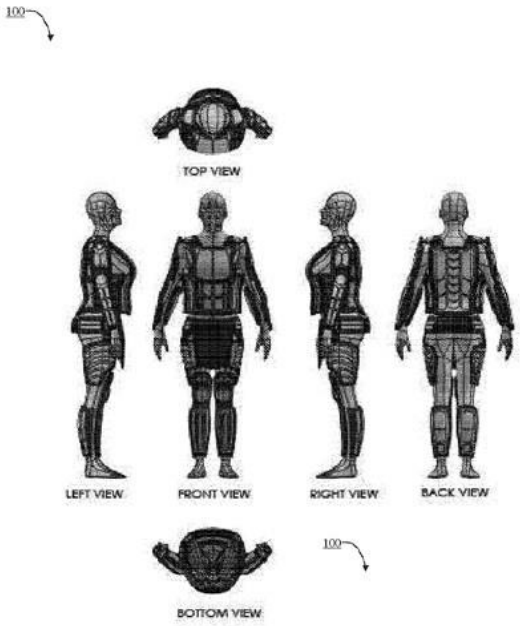


21: 2021/04365. 22: 2021-06-24. 43: 2022-01-28
51: A41D; A62B; F41H
71: CHAIRMAN, DEFENCE RESEARCH AND DEVELOPMENT ORGANISATION (DRDO)
72: RAWAT, Shweta, VARTE, Lalhmunlien Robert, SINGH, Inderjeet, CHAUDHARY, Yashmita, KAKKAR, Deepika, PANJWANI, Usha, KUMAR, Bhuvnesh
33: IN 31: 201811049060 32: 2018-12-26
33: IN 31: 201811049452 32: 2018-12-27
33: IN 31: 201911028442 32: 2019-07-15

54: ADJUSTABLE FULL-BODY PROTECTION GEAR

00: -

A full-body protection gear is disclosed. The protection gear includes a torso protector, an arm protector, and a lower body protector. The torso protector includes a protective vest defining a neck opening, a first arm opening, and a second arm opening. The torso protector includes a front shield, a back shield, a first pair of side shields, a second pair of side shields, a first shoulder shield and a second shoulder shield fixedly disposed on the protective vest. The arm protector includes a first part adapted to cover an upper arm region of a user extending from a shoulder to an elbow, and a second part adapted to be removably coupled with the first part and to cover a lower arm region of the user extending from the elbow to a palm. The lower body protector includes a first part adapted to cover pelvic region and an upper leg region of a user, and a second part removably coupled with the first part in a partial overlapping manner, and adapted to cover lower leg region of the user. The lower leg region is indicative of a region extending from above a knee joint to above an ankle joint of the user.



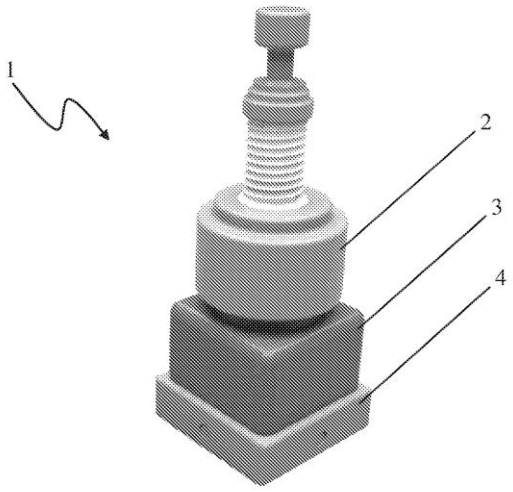
21: 2021/05035. 22: 2021-07-16. 43: 2022-02-01
51: A61K; A61M
71: NORTIC HOLDINGS INC.
72: KOTTAYIL, S. George, KUMAR, Amresh, SUNTHANKAR, Prasanna, KAVURU, Vimal, PATI, Kamalkishore
33: US 31: 62/781,969 32: 2018-12-19

54: THERAPEUTIC COMPOSITION OF INTRANASAL LIDOCAINE

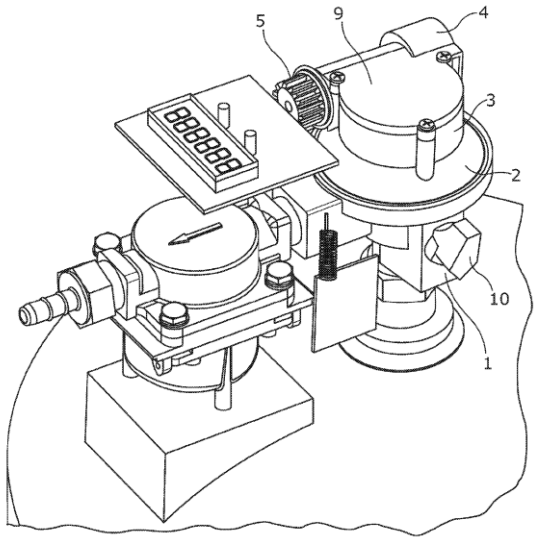
00: -

A nasal spray formulation and a method of using a locally acting sodium channel blocker to treat pain is disclosed, wherein the nasal spray formulation comprises from about 5% to about 30% w/v of a locally active sodium channel blocker, from about 0.25% to about 5% w/v of a buffering agent, and from about 5 to about 99% w/v of a pharmaceutically acceptable carrier for nasal administration. The nasal spray formulation is preferably contained in a mechanical multi- dose pump which sprays a unit dose of the nasal spray formulation with a wide plume and small droplet size, such that the unit dose is administered by actuating the mechanical multi-dose spray pump device and spraying a volume of the nasal spray formulation into each nostril of a human subject. Preferably, the nasal spray formulation does not include a preservative.

21: 2021/05064. 22: 2021-07-19. 43: 2022-02-11
51: G01S
71: MW MATRIX INC.
72: TARASOV, Mark
54: MICROWAVE OSCILLATOR AND MATRIX-TYPE MICROWAVE OSCILLATOR BASED THEREON
00: -
The invention relates to the field of microwave emitting equipment, in particular to microwave oscillators. The proposed variants of an oscillator and a matrix-type microwave oscillator enable to efficiently direct microwave radiation from one or more microwave sources and sum up microwave radiations, thus ensuring high values of efficiency and output power, superior functional capabilities of the device, a high degree of synchronization of radiations emitted by said microwave sources. The microwave oscillator comprises a microwave source and a resonator with a microwave channel made therein. The resonator comprises a box and a base electrically connected to each other, while the microwave channel accommodates a suppressing means for suppressing a back wave. The matrix-type oscillator comprises a plurality of said microwave oscillators electrically connected to each other.



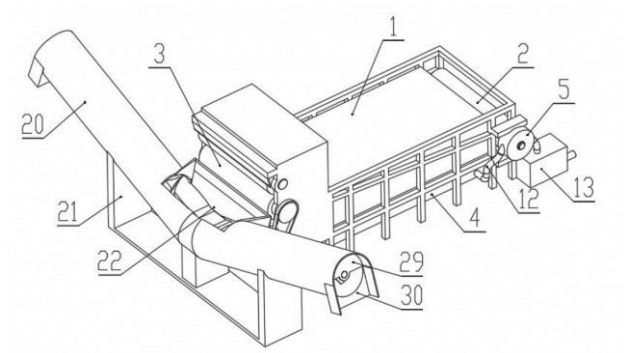
21: 2021/05343. 22: 2021-07-28. 43: 2022-02-08
51: F17C; G01F; G07F
71: CIRCLETECH LIMITED
72: RODRIGUEZ SANCHEZ, Francisco Sebastian
33: US 31: 62/836,158 32: 2019-04-19
54: SYSTEM AND METHOD FOR OPERATING A GAS-POWERED STOVE WITH NETWORK-CONNECTED METERING
00: -
A network-connected flow meter includes a latching structure for securely engaging a tank of a compressed gaseous hydrocarbon. An actuated valve is configured to open and close a flow of gas from the tank. An electronic controller controls the latching structure and the actuated valve upon receiving instructions from an external source. A digital flow meter monitors a rate of flow of the gas from the tank and supplies a flow reading to the electronic controller. A mobile communications radio receives the instructions from the external source and provides the received instructions to the electronic micro controller.



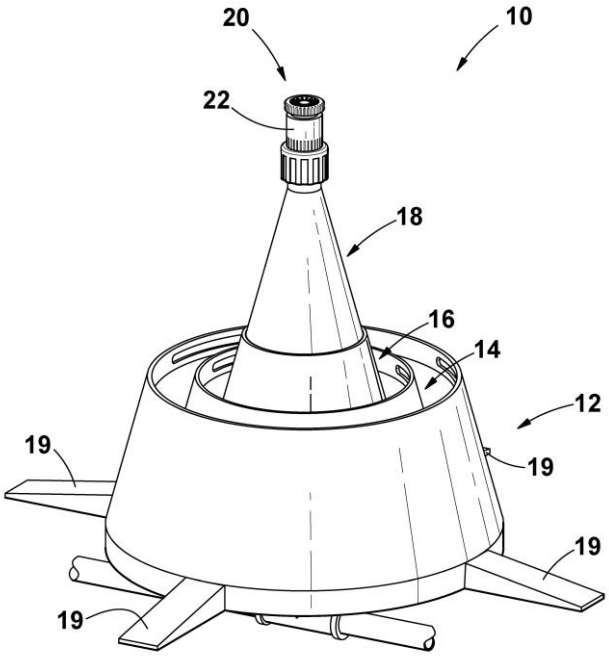
21: 2021/05390. 22: 2021-07-29. 43: 2022-02-03
51: C04B
71: MATERR'UP
72: NEUVILLE, Mathieu
33: EP 31: 18306902.0 32: 2018-12-31
33: FR 31: 1901300 32: 2019-02-08
54: NEW FORMULATION FOR A LOW-CARBON CONSTRUCTION BINDER, METHOD OF PRODUCTION, AND CONSTRUCTION MATERIALS
00: -
The invention relates to a formulation of a low carbon construction binder including, in a dehydrated form, a raw clay matrix and a

deflocculating agent. It also relates to a construction binder, a method of preparing this construction binder, as well as a construction material comprising the construction binder according to the invention.

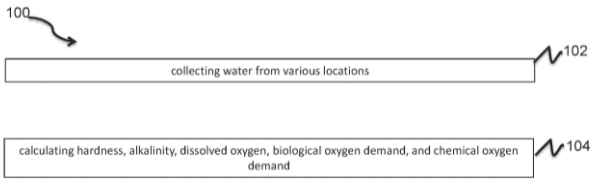
21: 2021/05565. 22: 2021-08-06. 43: 2022-02-11
51: B65D
71: JIANGSU VOCATIONAL AND TECHNICAL COLLEGE OF ARCHITECTURE
72: Qiangqiang CHENG, Zhiqiang ZHAO, LInglei ZHANG, Yu GUO, Xiaoyan NI, Gaoyuan YAN, Bin DU, Lei WANG
33: CN 31: 202011346938.0 32: 2020-11-26
54: BIDIRECTIONALLY-FEEDING SLUDGE SOLIDIFICATION APPARATUS FOR SLUDGE TREATMENT
00: -
The present invention discloses a bidirectionally-feeding sludge solidification apparatus for sludge treatment, the bidirectionally-feeding sludge solidification apparatus including a solidification machine body, where a feed roller shaft is disposed at the rear end of the solidification machine body, a discharge roller shaft is mounted at the front end of the solidification machine body through a bearing, a water receiving tank is fixedly mounted on the lower side of the solidification machine body, a peristaltic pump shell is fixedly mounted on the right side of the rear end of the solidification machine body, the left side wall and the right side wall of the peristaltic pump shell form bearing connection structures with the left end and the right end of a driving shaft correspondingly, the left end of the driving shaft forms a fixed connection structure with the right end of the feed roller shaft, and a fixed disc is disposed on each of the left side and right side of the middle part of the driving shaft. According to the bidirectionally-feeding sludge solidification apparatus for sludge treatment, sludge can be conveniently, rapidly and effectively further solidified, wastewater generated during sludge treatment can be purified, sewage discharge is facilitated, and the treated sludge can be rapidly loaded into a vehicle.



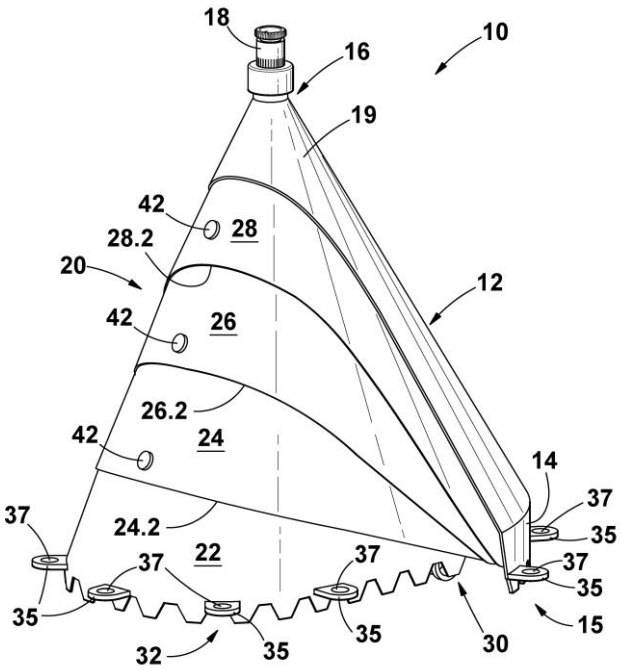
21: 2021/05711. 22: 2021-08-12. 43: 2022-02-11
51: B05B; F16B; F16L
71: UNIVERSITY OF SOUTH AFRICA
72: STOFFBERG, GERRIT HENDRIK
33: ZA 31: 2020/05034 32: 2020-08-14
54: HEIGHT ADJUSTMENT SPRINKLER GUARD
00: -
This invention relates to a height adjustable sprinkler guards 10 with a body comprising discrete first, second, third, and fourth concentric members 12, 14, 16, 18 which are arranged to be slidably displaceable relative to each other to configure the sprinkler guard 10 in a collapsed configuration. An adjustment mechanism allows for a selective, incremental adjustment of the height position of the sprinkler body, to displace the first end relative to the second end. A flexible riser tube is connected to the sprinkler guard 10, and extends between the first and second ends. The sprinkler guard 10 comprises a locking arrangement 30 on adjacent concentric members 12, 14, 16, 18 which are circumferentially spaced, resiliently deformable locking pins or protrusions 32 that are provided at a lower, peripheral outer surface of each concentric member 14, 16, 18 except the first concentric member 12.



21: 2021/05737. 22: 2021-08-04. 43: 2022-03-08
51: G01N
71: KATIYAR, Shaswat, GUPTA, Ajay Kumar, KATIYAR, Praveen, SINGH, Dharam, TIWARI, Gaurav
72: KATIYAR, Shaswat, GUPTA, Ajay Kumar, KATIYAR, Praveen, SINGH, Dharam, TIWARI, Gaurav
54: METHOD TO MONITOR RIVER WATER QUALITY
00: -
The present invention generally relates to a method to monitor water quality comprises collecting water from various locations; and calculating hardness, alkalinity, dissolved oxygen, biological oxygen demand, and chemical oxygen demand. Water quality of river is being monitored at various locations assesd based on the physic-chemical parameters such as TDS, Turbidity, temperature, EC, pH, hardness, Chloride, Alkalinity, Dissolved oxygen (DO), Biological oxygen demand (BOD), Chemical oxygen demand (COD), Nitrate and nitrite.

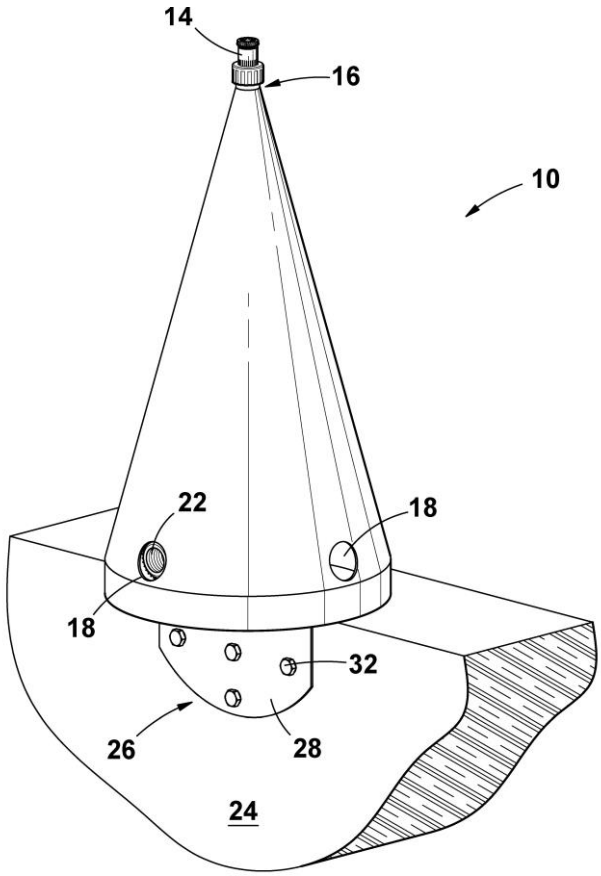


21: 2021/05922. 22: 2021-08-18. 43: 2022-02-11
51: B05B; F16B; F16L
71: UNIVERSITY OF SOUTH AFRICA
72: STOFFBERG, GERRIT HENDRIK
33: ZA 31: 2020/05132 32: 2020-08-19
54: SPRINKLER GUARD
00: -
This invention relates to a sprinkler guard 10. The guard 10 includes a base 14 arranged to be angularly adjusted between a horizontal configuration and an inclined configuration. The guard 10 comprises an apex 16 to which is connected a sprinkler 18. A rigid riser 34 is integrally formed with, and located within the guard 10, and extends between the apex 16 and base 14. One free end 36 of the riser 34 is arranged to be connected to a water source, for example a reticulation system 50. A rear part 20 comprises discrete second base member 22, a first member 24, a second member 26, and a third member 28 that is connected to the upper most rear member 19. The members 22, 24, 26, 28 and the upper most rear member 19, are concentric with one another and arranged angularly or at an incline relative to each other.



21: 2021/06002. 22: 2021-08-20. 43: 2022-02-11
51: A01B
71: INSTITUTE OF CASH CROPS, XINJIANG ACADEMY OF AGRICULTURAL SCIENCES, HEBEI AGRICULTURAL UNIVERSITY
72: TIAN, Liwen, LIU, Liantao, ZHANG, Na, LUO, Honghai, GU, Yuanguo, WANG, Liang, MAYILA, Yusuyin, ZHENG, Feng, LI, Jinfeng, MA, Hui
54: METHOD FOR RAPIDLY CHANGING SALINE-ALKALI DESERTS AROUND OASIS INTO HIGH STANDARD FERTILE FARMLAND
00: -
The present invention provides a method for rapidly changing saline-alkali deserts around an oasis into high standard fertile farmland, and relates to the technical field of desert improvement. The method comprises selecting areas, constructing an irrigation canal and a drainage channel, conducting rough leveling, fine leveling, ultra-deep tillage and sun exposure, irrigating salt-leaching alkali, planting two crops of oil sunflowers and sugar beet with high salt resistance (tolerance) a year, conducting secondary deep tillage and leveling, and irrigating salt-leaching alkali, if the soil salt content is still 8.8-13.8 g/kg at this time, continuing to implement the method of planting two crops of oil sunflower and sugar beet with high salt resistance (tolerance) a year and irrigating salt-leaching alkali until the soil salt content of the cultivated layer is 2.5-8.7 g/kg, and selecting food or cotton crop varieties with relatively high salt resistance (tolerance) to plant.

21: 2021/06079. 22: 2021-08-23. 43: 2022-02-11
51: B05B; F16B; F16L
71: UNIVERSITY OF SOUTH AFRICA
72: STOFFBERG, GERRIT HENDRIK
33: ZA 31: 2020/05239 32: 2020-08-24
54: SPRINKLER GUARD WITH RETROACTIVE RISER INSTALLATION
00: -
The invention relates to sprinkler guard 10 with retroactive riser installation. A body comprises openings 18 located at 90 degrees relative to each other. The body 12 of the sprinkler guard 10 can take any suitable shape, for example, non-conical shape, preferably, rectangular shape, octagon shape. A rigid riser tube 20 is housed within the body 12. The tube 20 has a vertical portion 20.1 and a horizontal portion 20.2 which are connected to each other, thereby defining an L-shaped end. The horizontal portion 20.2 abuts with at least one opening 18 and rotates relative to the body 12 to extend from the at least one opening 18. The tube 20 defines a first end 16 connectable to a sprinkler 14 and a second end 22 connected to a water source. A mounting arrangement mounts the sprinkler guard 10 on a surface, such as a wall or pavement.

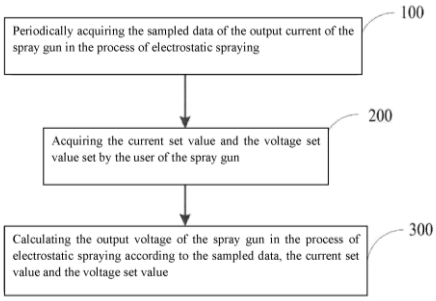


21: 2021/06283. 22: 2021-08-30. 43: 2022-03-09
51: B05B
71: QINGDAO JOBON SCIENCE & TECH DEVELOPMENT CO., LTD.
72: PAN, Pengfei

54: METHOD FOR CONTROLLING VOLTAGE OF ELECTROSTATIC-SPRAYING SPRAY GUN AND SYSTEM THEREOF

00: -

The present disclosure discloses a method for controlling a voltage of an electrostatic-spraying spray gun and a system thereof. The control method comprises: periodically acquiring sampled data of an output current of a spray gun in the process of electrostatic spraying process; acquiring a current set value and a voltage set value set by a user of the spray gun; and calculating an output voltage of the spray gun in the process of electrostatic spraying according to the sampled data, the current set value, and the voltage set value. The sparking phenomenon caused by excessive electrostatic strength of the spray gun is effectively inhibited by controlling the output voltage of the spray gun, and thus the spray gun can work in a state that the sufficient electrostatic current can be generated and an electrostatic sparking phenomenon is not prone to being generated.

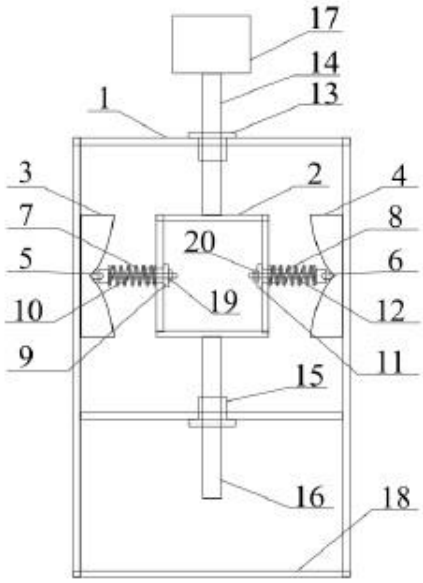


21: 2021/07050. 22: 2021-09-21. 43: 2022-02-11
51: F16F
71: BEIHANG UNIVERSITY, HANGZHOU DETI CIVIL AIR DEFENSE EQUIPMENT CO., LTD.
72: CHENG, Wei, LI, Ming, MEI, Junjie, RAN, Ji, ZHENG, Hexiang, QIAN, Feijie
33: CN 31: 201910716329.0 32: 2019-08-05

54: ZERO-STIFFNESS IMPACT ISOLATION DEVICE

00: -

A zero stiffness impact isolation device includes a shell, a half hourglass shaped boss, a sliding block, a spring, a motion guide assembly, and an inner core Where the motion guide assembly includes a linear bearing fixed to the shell and the inner core and a corresponding sliding rod, and is divided into a transverse guide assembly and a longitudinal guide assembly. The spring is sleeved outside the sliding rod of the transverse motion guide assembly, and two ends of the spring are in contact with the sliding block and the inner core, respectively. When the device suffers from external impact load, the inner core and the separated object carry out a reciprocating motion, the sliding block is extruded by the half hourglass shaped boss to move side to side with respect to the inner core, and the spring provides elastic force to the sliding block in the process.

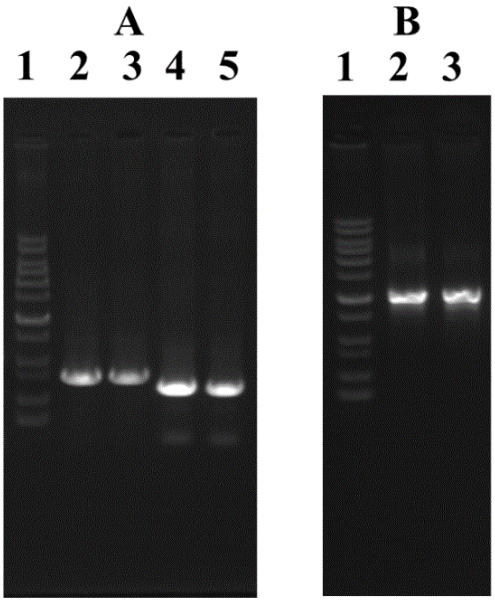


21: 2021/07098. 22: 2021-09-23. 43: 2022-03-07
51: A01N; C12N; C12P; C12R; A01P; C05F; C07D
71: Qilu University of Technology
72: LIU, Kaiquan, LI, Ling, WANG, Ruiming, WANG, Tengfei, LI, Piwu
33: CN 31: 202011024003.0 32: 2020-09-25

54: PSEUDOMONAS CHLORORAPHIS QOHPHZ-8 FOR PRODUCING 1-HYDROXY-PHENAZINE (1-OH-PHZ) AND USE THEREOF

00: -

The present disclosure particularly relates to a Pseudomonas chlororaphis QOHPHZ-8 for producing 1-hydroxy-phenazine (1-OH-PHZ) and use of the Pseudomonas chlororaphis QOHPHZ-8. The present disclosure screens and obtains a strain of Pseudomonas chlororaphis Qlu-1. The strain has a typical gene cluster for synthesis of a phenazine compound, but cannot naturally synthesize and secrete the 1-OH-PHZ. The present disclosure first prepares QOHPHZ-1 by replacing a phzO gene with a phzS gene and obtains an accumulation of the 1-OH-PHZ. In order to further obtain a high-yielding strain of the 1-OH-PHZ, the present disclosure obtains QOHPHZ-8 strain by implementing subsequent optimization of the QOHPHZ-1 strain. The yield of the 1-OH-PHZ per unit time is increased by 28 times, and the QOHPHZ-8 strain is expected to be an engineering strain used in the fields of agricultural production and algae control.

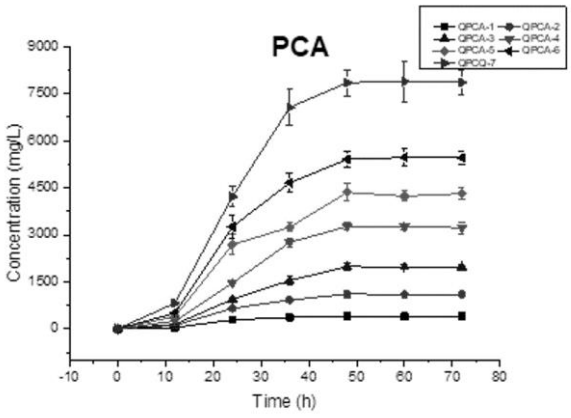


21: 2021/07119. 22: 2021-09-23. 43: 2022-03-07
51: C12N; C12P; C12R
71: Qilu University of Technology
72: LIU, Kaiquan, LI, Ling, WANG, Ruiming, WANG, Tengfei, LI, Piwu
33: CN 31: 202011026544.7 32: 2020-09-25

54: GENETICALLY ENGINEERED STRAIN FOR HIGH PRODUCTION OF PHENAZINE-1-CARBOXYLIC ACID (PCA), AND CONSTRUCTION METHOD AND USE THEREOF

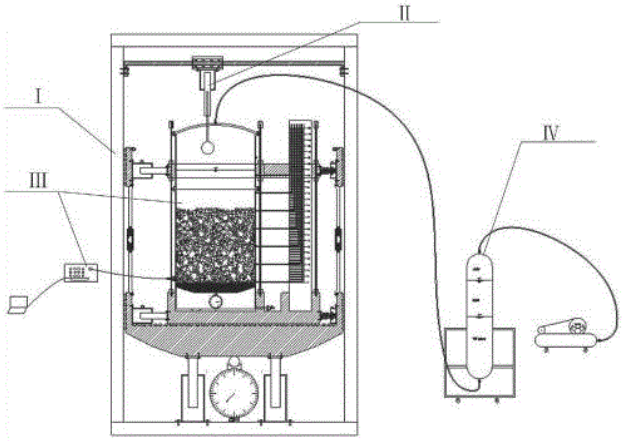
00: -

The present disclosure provides a genetically engineered strain for high production of phenazine-1-carboxylic acid (PCA), and a construction method and use thereof, and belongs to the technical field of genetic engineering. A relatively safe Pseudomonas chlororaphis Qlu-1 is used as a starting strain. A phzO gene, two-component signal transduction system-related genes and regulation genes of a central carbon metabolism pathway are knocked out in a Qlu-1 strain genome through a genetic engineering technology. The corresponding genetically engineered strain is constructed, such that the yield of the PCA can be greatly increased and the strain can be more effectively used for biocontrol. Through an experimental verification, a genetically engineered strain QPCA-7 has an excellent effect, enables the yield of the PCA to reach up to 7,854 mg/L, has a good growth performance and thus has good practical use value.

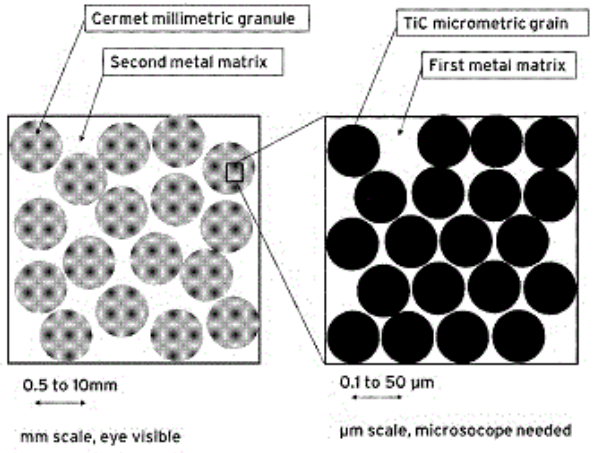


21: 2021/07144. 22: 2021-09-23. 43: 2022-02-03
51: C02F
71: LINGZHI ENVIRONMENTAL PROTECTION CO., LTD, JIANGSU LINGZHI ENVIRONMENTAL PROTECTION CO., LTD, JIANGSU LINGZHI ENVIRONMENTAL PROTECTION EQUIPMENT CO., LTD, LINGZHI ENVIRONMENTAL PROTECTION (LINQUAN) CO., LTD
72: LING, Jianjun, ZHANG, Dong
33: CN 31: 201911123537.6 32: 2019-11-17
54: MOVING BED BIOFILM REACTOR COUPLED AMMOXIDATION INTEGRATED PURIFICATION TANK
00: -
Disclosed is a moving bed biofilm reactor coupled ammoxidation integrated purification tank, the integrated purification tank comprising a horizontal shell, and a water inlet and a water outlet respectively arranged on the horizontal shell, wherein at least two main partition boards arranged on the horizontal shell divide the horizontal shell into at least three cabins, and overflow ports/water passing ports are arranged on the main partition boards such that the cabins are in communication with one another. The integrated purification tank is characterized in that at least one cabin therein is an anaerobic biological filter bed area, at least one cabin is an MBBR area, and at least one cabin is an anaerobic biofilm area; the water inlet is provided in the anaerobic biological filter bed area, the water outlet is provided in the anaerobic biofilm area, and a suspended filler and/or soft filler are/is arranged in the anaerobic biological filter bed area; and an aeration device, an MBBR filler and/or an MBR biofilm device, and a mixed liquid backflow device connected to the anaerobic biological filter bed area are arranged in the MBBR area. The anaerobic biological filter bed area is filled with at least one biological filler to realize a nitrification and denitrification reaction, a short-cut nitrification coupled anaerobic ammonium oxidation reaction, and a short-cut denitrification coupled anaerobic ammonium oxidation reaction.

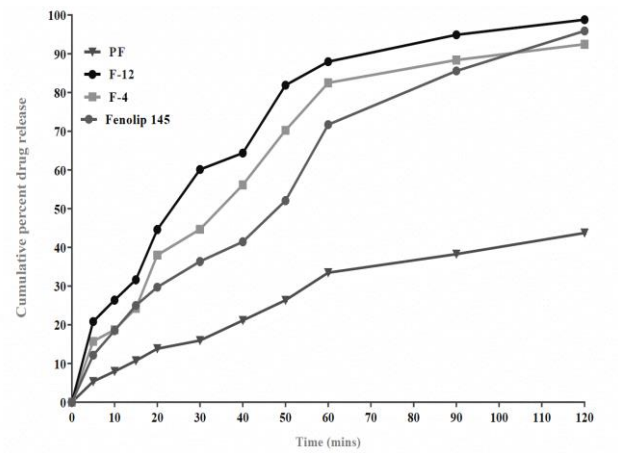
21: 2021/07213. 22: 2021-09-27. 43: 2022-03-07
51: G01N
71: Qingdao University of Technology
72: Xie Libo, Su Lei, Ling Xianchang, Yang Zhongnian, Hong Yong, Jiang Huanzhi, Zhou Linlu, Zhang Anqi
33: CN 31: 202010654925.3 32: 2020-07-09
54: DYNAMIC RESPONSE TEST SYSTEM FOR BENTHAL SANDY SEDIMENT
00: -
The invention belongs to the technical field of indoor tests in civil engineering, and particularly relates to a dynamic response test system for benthal sandy sediments, which comprises an integral excitation system, a local excitation system, a sample chamber, a pressure measurement system and a pressurization system. According to the invention, environmental free water and benthal sandy sediments are taken as research samples together, and three integral vibration excitation test modes, namely vertical vibration, transverse vibration and mixed vibration, and three local vibration excitation test modes, namely wave excitation, blasting excitation and mechanical vibration excitation, are utilized to reveal the mechanism of vibration liquefaction of benthal sandy sediments and obtain the change mechanism of effective stress and pore water pressure of benthal sandy sediments under dynamic load excitation.



21: 2021/07498. 22: 2021-10-05. 43: 2022-01-10
51: B22D; C22C
71: MAGOTTEAUX INTERNATIONAL S.A.
72: DESILES, STÉPHANE, LEPOINT, FRANÇOIS, TAS, BURHAN
33: EP 31: 20166110.5 32: 2020-03-27
54: COMPOSITE WEAR COMPONENT
00: -
The present invention discloses a hierarchical composite wear component comprising a reinforcement in the most exposed part to wear, the reinforcement comprising a three-dimensionally interconnected network of periodically alternating millimetric ceramic-metal composite granules with millimetric interstices, said ceramic-metal composite granules comprising at least 52 vol%, preferably at least 61 vol%, more preferably at least 70 vol% of micrometric particles of titanium carbide embedded in a first metal matrix, the ceramic-metal composite granules having a density of at least 4.8 g/cm³, the three-dimensionally interconnected network of ceramic-metal composite granules with its millimetric interstices being embedded in the second metal matrix, said reinforcement comprising in average at least 23 vol%, more preferably at least 28 vol%, most preferably at least 30 vol% of titanium carbide, the first metal matrix being different from the second metal matrix, the second metal matrix comprising the ferrous cast alloy.

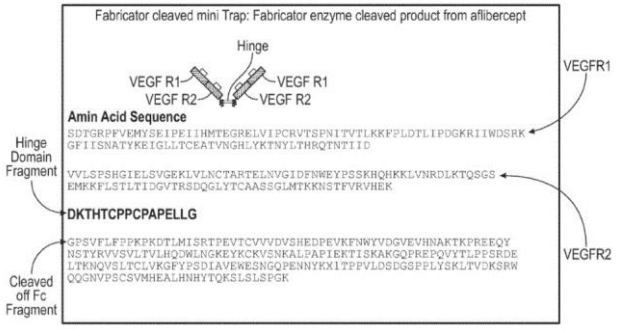


21: 2021/07511. 22: 2021-10-06. 43: 2022-11-27
51: A61K
71: Dr. Srikanth, Dr. Shubhrajit Mantry, Ms. K.P. Saraswathi, Mr. Prashant Chitralu, Mr. Govind Reddy.G, Mr. M R Shivanand, Dr. Y. Anand Kumar
72: Dr. Srikanth, Dr. Shubhrajit Mantry, Ms. K.P. Saraswathi, Mr. Prashant Chitralu, Mr. Govind Reddy.G, Mr. M R Shivanand, Dr. Y. Anand Kumar
54: IN VITRO-IN VIVO EVALUATION OF FENOFIBRATE LOADED SOLID DISPERSIONS TABLETS BY MICRO OVEN IRRADIATION METHOD
00: -
The present invention relates to the improve the solubility and dissolution of fenofibrate by preparing of solid dispersions by co grinding method, kneading method and and Graph Pad Prism V5.0. The best fenofibrate solid dispersion formulations were further developed into direct compressible tablets and evaluated for their precompression and post compression parameters and also comparing with marketed fenofibrate tablet micro oven irradiation method at 1:1 and 1:3 ratios with dextrin, poloxamer 407. The prepared solid dispersions were studied drug content, saturation solubility in solution state, solid state by FTIR and XRD, in vitro dissolution rate, stability studies for the prepared solid dispersions as per ICH guidelines, in vivo pharmacokinetic study. The dissolution parameters were studied by using dissolution software PCP Disso V3.5

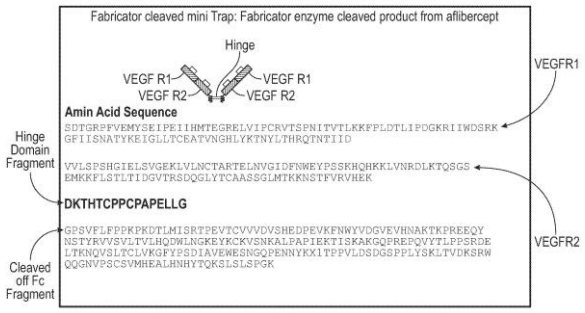


21: 2021/07624. 22: 2021-10-11. 43: 2022-02-10
51: A23L
71: Henan Agricultural University, Hunan Yipin Oriental Biotechnology Co., Ltd.
72: PENG, Wanxi, DENG, Wenyi
33: CN 31: 202110963050.X 32: 2021-08-20
54: PREPARATION METHOD OF HIGHLY ACTIVE FRESH WAXBERRY JUICE
00: -
The present disclosure provides a preparation method of a highly active fresh waxberry juice. The preparation method of a highly active fresh waxberry juice includes the following steps: (1) cleaning: removing dust, bacteria, and pathogens from fresh waxberries by soaking in lye and cleaning with clean water successively; (2) squeezing: treating the waxberries by ultraviolet sterilization, followed by conventional squeezing and separation at room temperature, to obtain fresh waxberry juice; and (3) packaging/storing: successively treating the fresh waxberry juice by radiation sterilization, ultraviolet sterilization, and microwave sterilization, filling the fresh waxberry juice into an opaque bottle, introducing inert gas, sealing a mouth of the bottle, and freezing at 4°C to maintain a highly active fresh waxberry juice before drinking. The preparation method provided by the present disclosure undergoes multiple sterilizations and low temperature inert gas protection to maintain the freshness of the highly active fresh waxberry juice.

21: 2021/07644. 22: 2021-10-11. 43: 2022-02-03
51: C12N
71: REGENERON PHARMACEUTICALS, INC.
72: FRANKLIN, Matthew
33: US 31: 62/944,635 32: 2019-12-06
33: US 31: 63/065,012 32: 2020-08-13
54: ANTI-VEGF PROTEIN COMPOSITIONS AND METHODS FOR PRODUCING THE SAME
00: -
The present disclosure pertains to compositions comprising anti-VEGF proteins and methods for producing such compositions



21: 2021/07646. 22: 2021-10-11. 43: 2022-01-14
51: C07K
71: REGENERON PHARMACEUTICALS, INC.
72: TUSTIAN, Andrew, VARTAK, Ankit, DALY, Thomas, PYLES, Erica, PALACKAL, Nisha
33: US 31: 62/944,635 32: 2019-12-06
33: US 31: 63/065,012 32: 2020-08-13
54: ANTI-VEGF PROTEIN COMPOSITIONS AND METHODS FOR PRODUCING THE SAME
00: -
The present disclosure pertains to compositions comprising anti-VEGF proteins and methods for producing such compositions.

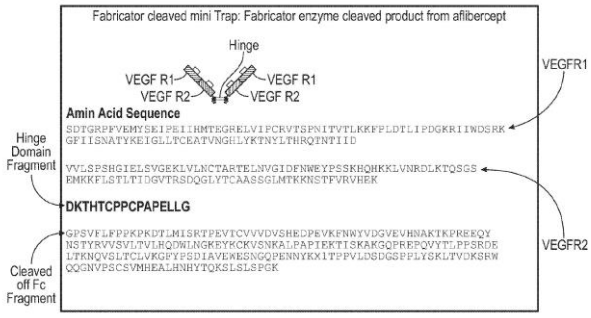


21: 2021/07647. 22: 2021-10-11. 43: 2022-01-14
51: C12N
71: REGENERON PHARMACEUTICALS, INC.
72: LAWRENCE, Shawn, WANG, Shunhai, LI, Ning, JOHNSON, Amy, CASEY, Meghan, MASTROGIACOMO, Jaimie
33: US 31: 62/944,635 32: 2019-12-06
33: US 31: 63/065,012 32: 2020-08-13

54: ANTI-VEGF PROTEIN COMPOSITIONS AND METHODS FOR PRODUCING THE SAME

00: -

The present disclosure pertains to compositions comprising anti-VEGF proteins and methods for producing such compositions.



21: 2021/08119. 22: 2021-10-21. 43: 2022-03-17

51: B23K

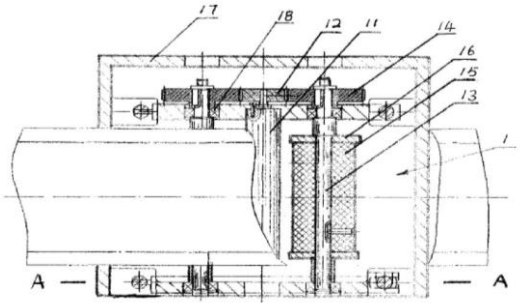
71: BEIJING INSTITUTE OF PETROCHEMICAL TECHNOLOGY

72: CAO Yingyu, XUE Long, LIANG Yajun, HUANG Junfen, ZOU Yong, HUANG Jiqiang

54: FRICTION TRANSMISSION-TYPE WALKING DEVICE OF WELDING ROBOT

00: -

A friction transmission-type walking device of a welding robot mainly comprises a walking mechanism and a track locking mechanism, wherein a servo motor drives front and back friction wheels to run on the plane of guide rails by the meshing transmission of a motor transmission gear and a friction wheel shaft transmission gear, and a connecting rod which is fixedly connected with a locking roller is driven to be radically moved along the track by utilizing the adjustment of a package of a locking bolt B and an internally threaded cylindrical member B, thus realizing the radial fixation of a robot body and providing appropriate friction force between the friction wheels and the guide rails to allow the welding robot to run smoothly. The friction transmission-type walking device is simple and compact in structure, reliable in operation, low in cost, and simple in usage, maintenance and repair.



21: 2021/08287. 22: 2021-10-27. 43: 2022-01-12

51: B65D

71: Heatking Induction Technology(Shiyan)Co.,Ltd.

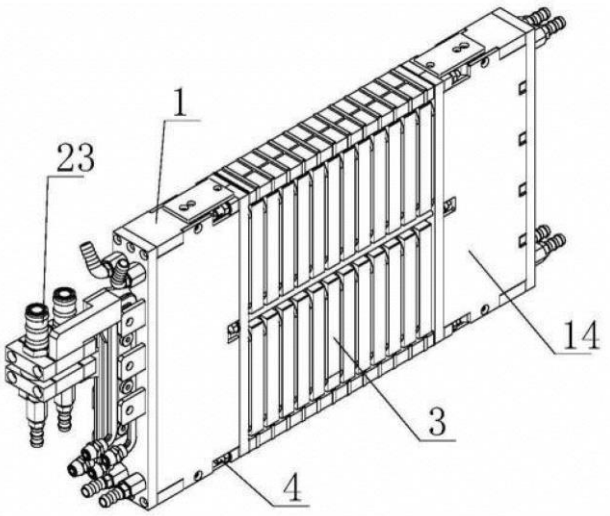
72: Xiangcheng ZHOU, Meihua WAN, Guang FENG

33: CN 31: 202022936444.X 32: 2020-12-10

54: THIN LOW-FREQUENCY QUENCHING TRANSFORMER

00: -

The present invention discloses a thin low-frequency quenching transformer, in a flat and rectangular shape, includes a packaging component, a coil assembly, and a magnetic core assembly. The coil assembly includes a primary coil and a secondary coil; a surface of the primary coil is welded with a plurality of turn ratio adjusting pieces, two of the plurality of turn ratio adjusting pieces are connected to a turn ratio connecting row. An output row at a tail of the secondary coil is provided with a plurality of sets of mounting holes for connecting an output arm.



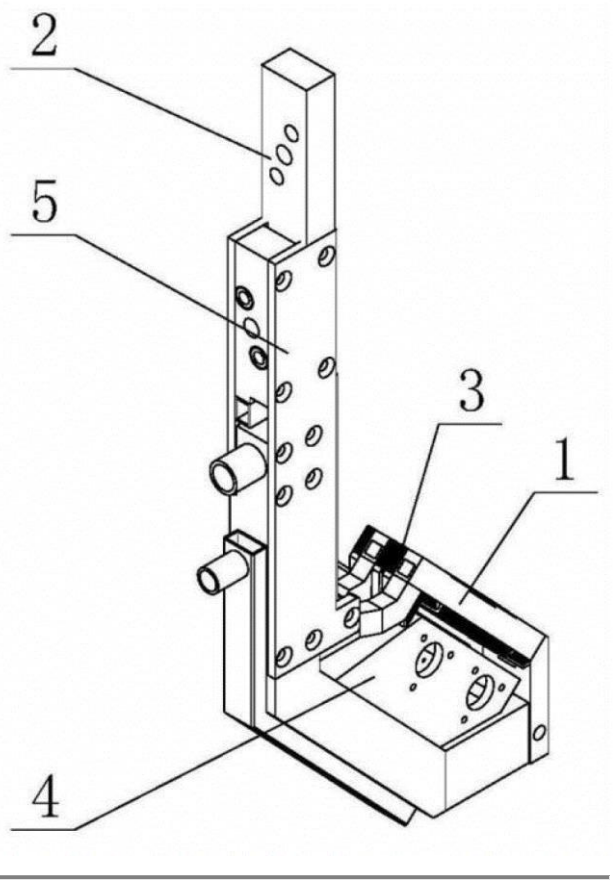
21: 2021/08288. 22: 2021-10-27. 43: 2022-01-12

51: B65D

71: Heatking Induction Technology(Shiyan)Co., Ltd.

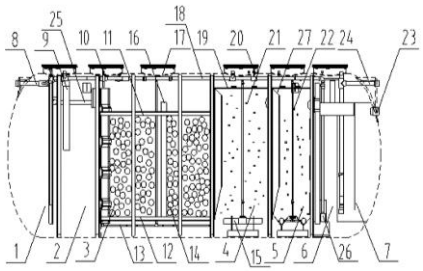
72: Xiangcheng ZHOU, Meihua WAN, Guang FENG

33: CN 31: 202022936456.2 32: 2020-12-10
54: QUENCHING INDUCTOR FOR NO-SOFT-ZONE LARGE RING PIECE AND DEVICE HAVING THE SAME
00: -
The present invention discloses a quenching inductor for the no-soft-zone large ring piece and a device having the quenching inductor, and relates to the technical field of the quenching equipment. The quenching inductor includes a busbar and an effective coil shaped according to a workpiece. The busbar is connected to the effective coil end to end, to form a current loop. The quenching inductor also includes a magnetizer and a sprayer. The effective coil includes a vertical heating section and an inclined non-heating section. An upper end of the vertical heating section is connected to the busbar, and a lower end of the vertical heating section is connected to the high end of the non-heating section through a connecting section. The magnetizer is clamped in the non-heating section of the effective coil. The sprayer is arranged on a side of the effective coil away from the workpiece for cooling the workpiece. The present invention solves the problems of no hardening layer and shallow hardening layer at the beginning and end of the workpiece, and solves the problems of short life of the workpiece due to the uneven depth of the hardening layer during the quenching of the large ring piece.

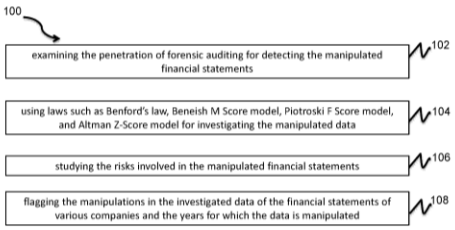


21: 2021/08456. 22: 2021-10-29. 43: 2022-03-16
51: C02F
71: JIANGSU CRRC ENVIRONMENT CO., LTD.
72: MU, Dandan, REN, Liang, GE, Huichao, SUN, Hongqin, ZHANG, Kang, HUA, Ziwen, ZHANG, Lichao
33: CN 31: 202010555017.9 32: 2020-06-17
54: INTEGRATED SEWAGE TREATMENT EQUIPMENT AND SEWAGE TREATMENT METHOD BASED ON A/O-MBBR PROCESS
00: -
The present invention discloses an integrated sewage treatment equipment and sewage treatment method based on an A/O-MBBR process. The integrated sewage treatment equipment includes a clarification tank, an anoxic tank, a primary aerobic tank, a secondary aerobic tank and a sedimentation tank, which are connected in sequence by an overflow structure; a power structure is arranged at the bottom of the sedimentation tank, the power structure is connected with the clarification tank through a return pipe, the return pipe is provided with a phosphorus removal agent inlet and a pipeline mixer, and the pipeline mixer is located at the downstream of the phosphorus removal agent inlet;

an anoxic filler in the anoxic tank is a combined filler, which is composed of a polyurethane filler wrapped with a plastic spherical shell, and a carbon source agent inlet is arranged in a water inlet baffle of the anoxic tank.



21: 2021/08512. 22: 2021-11-02. 43: 2022-03-08
51: G06Q
71: MEHTA, Kamakshi, JHA, Shiv Swaroop, SHUKLA, Vinod Kumar, DUBEY, Suchi, JAIN, Gyanesh, KALYANI, Sushil, MISHRA, Anil Kumar, SHARMA, Monika, SHARMA, Monika, PANDA, Ramesh Chandra
72: MEHTA, Kamakshi, JHA, Shiv Swaroop, SHUKLA, Vinod Kumar, DUBEY, Suchi, JAIN, Gyanesh, KALYANI, Sushil, MISHRA, Anil Kumar, SHARMA, Monika, PANDA, Ramesh Chandra
54: A METHOD FOR INVESTIGATING THE MANIPULATED FINANCIAL STATEMENTS OF AVIATION COMPANY
00: -
The present invention generally relates tomethod for investigating the manipulated financial statements of aviation company.The method comprises examining the penetration of forensic auditing for detecting the manipulated financial statements.The method further comprises using laws such as Benford's law, Beneish M Score model, Piotroski F Score model, and Altman Z-Score model for investigating the manipulated data.The method further comprises studying the risks involved in the manipulated financial statements.Lastly, the method comprises flagging the manipulations in the investigated data of the financial statements of various companies and the years for which the data is manipulated.

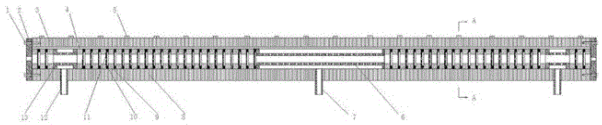


21: 2021/08513. 22: 2021-11-02. 43: 2022-03-17
51: G06F
71: ZHEJIANG UNIVERSITY OF TECHNOLOGY, CHINA JILIANG UNIVERSITY
72: LU, Jiawei, XIAO, Gang, WANG, Qibing, CHENG, Zhenbo, ZHANG, Yuanming, XU, Jun, ZHAO, Wei, ZHENG, Jiahong, LI, Duanni, WANG, Zhipeng, MEI, Hao, FANG, Jingwen
54: A SERVICE MODELING METHOD WITH WORD EMBEDDING AND NON-NEGATIVE MATRIX FACTORIZATION INTEGRATED IN A CLOUD COMPUTING MODE
00: -
The present disclosure relates to a service modeling method with word embedding and non-negative matrix factorization integrated in a cloud computing mode. The method includes: step 1, collecting word frequency information, that is, a word occurrence frequency, of a word in each mashup service, and constructing a document-word frequency relation matrix D; step 2, collecting word co-occurrence information to compute shifted positive pointwise mutual information (SPPMI) matrix information; and step 3, obtaining, on the basis of steps 1 and 2, a word frequency information matrix D and a context SPPMI matrix M of a word in a mashup service document, obtaining a word embedding information matrix by factorizing the matrix M, and further combining the two pieces of information to compute topic information of the service.

21: 2021/08567. 22: 2021-11-03. 43: 2022-02-10
51: A61K
71: Institute of Oceanology of the Chinese Academy of Sciences
72: Wu Ning, Zhang Quanbin, Li Zhi, Wang Jing, Geng Lihua, Yue Yang
54: APPLICATION OF HIGH-SULFATED GALACTOSAN FUCOIDAN DERIVED FROM BROWN ALGAE IN MEDICINES AND HEALTH PRODUCTS FOR PREVENTING AND TREATING PULMONARY FIBROSIS
00: -

The invention discloses the application of a high-sulfated galactosan fucoidan derived from brown algae in medicines and health products for preventing and treating pulmonary fibrosis. The high-sulfated galactosan fucoidan can significantly improve the degree of pulmonary fibrosis, inhibit the excessive proliferation and activation of fibroblasts, and reduce the deposition of extracellular matrix (ECM) in the lungs. The high-sulfated galactosan fucoidan has been verified at the cellular and animal levels to down-regulate the PI3K-AKT pathway and reduce the expression of TGF-Beta, Beta-catenin and COL2A1. The high-sulfated galactosan fucoidan derived from brown algae of the present invention can alleviate pulmonary fibrosis caused by cold-dampness and dampness-heat, inflammation, viral environment and inhalation of PM2.5, protect the structural integrity of the lungs, reduce lung epithelial-mesenchymal transiton (EMT) phenomenon and collagen deposition, and reduce the body's inflammatory response. The high-sulfated galactosan fucoidan derived from brown algae of the present invention has a wide range of applications in medicines, health products and foods for preventing and treating pulmonary fibrosis-related symptoms/diseases.

21: 2021/08569. 22: 2021-11-03. 43: 2022-02-11
51: C08F
71: Shandong University
72: Zhu Anping, Di Chengrui, Lv Jianguo, Qiao Kun, Gao Xueping, Zhang Min, Zhang Ye, Zhu Bo
54: HIGH-TEMPERATURE AND HIGH-PRESSURE PLASTICIZING DEVICE
00: -
The invention discloses a high-temperature and high-pressure plasticizing device, which comprises a high-pressure stainless steel shell, wherein the inside of the high-pressure stainless steel shell is enclosed into a through cavity, end glands are arranged outside the ends of both ends of the through cavity, an air inlet is arranged on the high-pressure stainless steel shell corresponding to the bottom of the middle part of the through cavity, air outlet is arranged on the high-pressure stainless steel shell corresponding to the bottoms of the two ends of the cavity; an air inlet pressure distributor is arranged in the middle part of the through cavity and communicated with the air inlet; two ends of the through cavity are provided with pressure relief air and outlet distributors which are communicated with the air outlet; labyrinth seal assemblies are arranged between the air inlet pressure distributor and the pressure relief and air outlet distributor and between the pressure relief and air outlet distributor and the end glands; and the centers of the labyrinth seal assemblies and the end glands are provided with wire holes. The invention can greatly reduce the airflow impact on the treated chemical fiber tow and reduce the vibration amount. At the same time, it effectively reduces the steam leakage at the pressure relief end and the wire feeding port, meets the pressure guarantee in the cavity, and realizes the distribution gradient of pressure and temperature in the cavity.



21: 2021/08599. 22: 2021-11-04. 43: 2022-01-17
51: C07K
71: Tillotts Pharma AG
72: GUNDE, Tea, MEYER, Sebastian, FURRER, Esther Maria
33: EP(CH) 31: 16160907.8 32: 2016-03-17
54: ANTI-TNFALPHA-ANTIBODIES AND FUNCTIONAL FRAGMENTS THEREOF
00: -
The present invention relates to antibody molecules and functional fragments thereof, capable of binding to tumor necrosis factor alpha (TNFα), to processes for their production, and to their therapeutic uses.

21: 2021/08600. 22: 2021-11-04. 43: 2022-01-14
51: C07K
71: Tillotts Pharma AG
72: GUNDE, Tea, MEYER, Sebastian, FURRER, Esther Maria
33: EP(CH) 31: 16160907.8 32: 2016-03-17
54: ANTI-TNFALPHA-ANTIBODIES AND FUNCTIONAL FRAGMENTS THEREOF
00: -
The present invention relates to antibody molecules and functional fragments thereof, capable of binding to tumor necrosis factor alpha (TNFα), to processes for their production, and to their therapeutic uses.

21: 2021/08601. 22: 2021-11-04. 43: 2022-01-14
51: C07K
71: Tillotts Pharma AG
72: GUNDE, Tea, MEYER, Sebastian, FURRER, Esther Maria

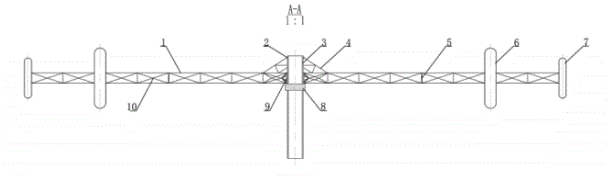
33: EP(CH) 31: 16160907.8 32: 2016-03-17
54: ANTI-TNFALPHA-ANTIBODIES AND FUNCTIONAL FRAGMENTS THEREOF
00: -
The present invention relates to antibody molecules and functional fragments thereof, capable of binding to tumor necrosis factor alpha (TNFα), to processes for their production, and to their therapeutic uses.

21: 2021/08602. 22: 2021-11-04. 43: 2022-01-14
51: C07K
71: Tillotts Pharma AG
72: GUNDE, Tea, MEYER, Sebastian, FURRER, Esther Maria
33: EP(CH) 31: 16160907.8 32: 2016-03-17
54: ANTI-TNFALPHA-ANTIBODIES AND FUNCTIONAL FRAGMENTS THEREOF
00: -
The present invention relates to antibody molecules and functional fragments thereof, capable of binding to tumor necrosis factor alpha (TNFα), to processes for their production, and to their therapeutic uses.

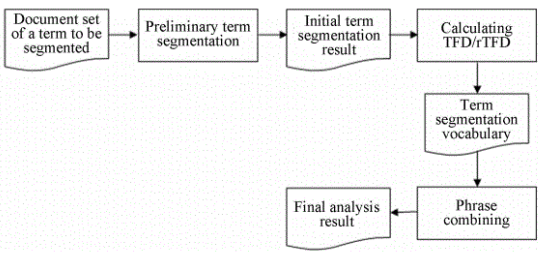
21: 2021/08603. 22: 2021-11-04. 43: 2022-01-17
51: A61K; A61P; C07D
71: Rigel Pharmaceuticals, Inc.
72: MASUDA, Esteban, SHAW, Simon, TAYLOR, Vanessa, BHAMIDIPATI, Somasekhar
33: US 31: 62/666,462 32: 2018-05-03
54: RIP1 INHIBITORY COMPOUNDS AND METHODS FOR MAKING AND USING THE SAME
00: -
Disclosed herein are kinase inhibitory compounds, such as a receptor-interacting protein-1 (RIP1) kinase inhibitor compounds, as well as pharmaceutical compositions and combinations comprising such inhibitory compounds. The disclosed compounds, pharmaceutical compositions, and/or combinations may be used to treat or prevent a kinase-associated disease or condition, particularly a RIP1-associated disease or condition.

21: 2021/08797. 22: 2021-11-09. 43: 2022-02-11
51: C04B
71: Zhengzhou University, Zhengzhou gongtu Construction Engineering Testing Co., Ltd
72: Yuan Chengfang, Feng Hu, Zhao Zhuo, Wang Shibo, Shen Lei, Qi Guofeng, Wang Mengnan, Xiao Wenxi, Wang Meng, Sun Guangxin, Xu Shiwen, Chen Yang
54: BRICK-CONCRETE MIXED RECYCLED COARSE AGGREGATE CONCRETE AND PREPARATION METHOD THEREOF
00: -
The invention discloses a brick-concrete mixed recycled coarse-aggregate concrete and a preparation method thereof. The brick-concrete mixed recycled coarse-aggregate concrete includes the following raw materials by weight: 1 part of water, 2.5 parts of cement, 4.3-4.8 parts of fine aggregate, 0-6.8 parts of waste concrete aggregate, 0-6.1 parts of waste brick aggregate, 0-7.0 parts of natural aggregate; the content of water reducing agent is 0.4 percent-2.5 percent of the total weight of the cementitious material. The preparation method includes crushing and screening, weighing, first mixing and second mixing. The brick-concrete mixed recycled coarse-aggregate concrete of the present invention has excellent working performance, obvious changes in compressive strength, flexural strength and split tensile strength, moreover, the preparation process is simple, the materials are environmentally friendly, the amount of natural aggregates is reduced, the construction waste can be recycled, and the construction is easier.

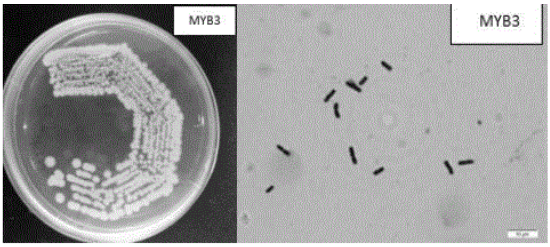
21: 2021/08803. 22: 2021-11-09. 43: 2022-02-11
51: F03D
71: Shaanxi Kerlimar Engineers Co., Ltd.
72: SUN, Ming
54: FLOATING VERTICAL-AXIS WIND TURBINE
00: -
A floating vertical-axis wind turbine which uses a grid architecture design on whole is provided. Each blade is a closed body, the contour of which is designed according to hydrodynamics. During power generation, the blades are perpendicular to the ground. The impeller is provided with three cantilevers which extend from inside to outside to be connected to blades. A triangular grid structure is provided in the middle, and has an inner side connected with a transmission shaft sleeve which is arranged around an outer side of the tower. Bearings are arranged between the transmission shaft sleeve and the tower. When the impeller is rotated to drive the transmission shaft sleeve to rotate, the wind energy collected by the impeller is transmitted to a generator through an outer gear on the transmission shaft sleeve. The blade is of a hollow structure inside and is filled with helium bags.



21: 2021/08804. 22: 2021-11-09. 43: 2022-02-11
51: G06F
71: Qingdao University of Science and Technology
72: YANG, Xinghai, ZANG, Wenjing, SONG, Jiahui, LIU, Zizhao, ZHANG, Yulin
54: UNSUPERVISED LEARNING-BASED DOCUMENT TERM SEGMENTATION METHOD IN FIELD OF IDEOLOGICAL AND POLITICAL EDUCATION AND SYSTEM THEREOF
00: -
The present disclosure discloses an unsupervised learning-based document term segmentation method in the field of ideological and political education and a system thereof, which comprises the steps of: constructing an n-gram language model; receiving the text of the term to be segmented from the document in the field of ideological and political education, segmenting the input text of the term to be segmented by using a Viterbi algorithm and a trained term-level n-gram language model, and outputting an initial term segmentation result; calculating the term frequency deviation TFD of the term formation index of documents in the field; according to the term frequency deviation TFD, calculating the ranked term frequency deviation rTFD; combining the initial term segmentation phrases in the initial term segmentation results by using the calculated ranked term frequency deviation rTFD, realizing the optimization of the term segmentation results, and outputting the final term segmentation results.

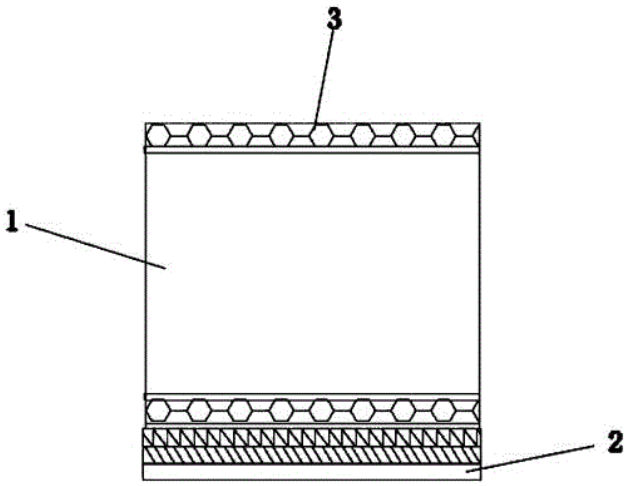


21: 2021/08805. 22: 2021-11-09. 43: 2022-02-09
51: A23K; C12N; C12P; C12R
71: Yanbian University
72: LI, Guangchun, BAI, Bing
54: BACILLUS MEGATERIUM STRAIN MYB3 AND USE THEREOF IN FERMENTED STRAW FEEDSTUFF
00: -
The present disclosure relates to a Bacillus megaterium strain MYB3 and use thereof in fermented straw feedstuff. The B. megaterium strain MYB3 is deposited under accession number CGMCC No. 13429, and has an ability to degrade cellulose and hemicellulose. The B. megaterium strain MYB3 can be added as a microbial inoculant in the production of feedstuff by straw fermentation, while vitamin B12 is simultaneously produced. The present disclosure overcomes a defect that there are few key strains related to the degradation of cellulose and hemicellulose in various starter cultures for microbial silage, and becomes more suitable for the production of the fermented straw feedstuff.



21: 2021/08806. 22: 2021-11-09. 43: 2022-02-11
51: A01K
71: Shihezi University
72: Chen Jing, Li Lun, Yang Chen, Zhang Zhihu, He Wanjie, Meng Hanying
54: INSECT-RAISING DEVICE AND USE METHOD THEREOF
00: -
The invention discloses an insect-raising device and its use method, which comprises an insect-raising cage, wherein the bottom of the insect-raising cage is stacked with oviposition devices, and the oviposition devices are fixed into a whole with the insect-raising cage through rubber bands; the insect-raising cage is a hollow cylindrical fresh-keeping box; nylon gauze nets are bound and fixed at the openings at both ends of the insect-raising cage through rubber bands; the inner cylindrical space of the insect-raising cage is used for raising insects; and cotton leaves are padded in the oviposition

devices. The invention has no harm to the adult, high survival rate and easy observation of the basic biological characteristics and behavior of the adult. The technical scheme of the invention is that the adult is fed with cotton leaves in the device to lay eggs on the cotton leaves and filter paper.



21: 2021/08859. 22: 2021-11-10. 43: 2022-02-11
51: C04B
71: Shandong Mingte Ceramic Material Co., LTD
72: Sun Huayun, Li Mingjing, Zhang Xin, Cai Yankun, Cai Wei, Yin Peiru
54: PREPARATION METHOD OF CORDIERITE CRUCIBLE
00: -
This invention provides preparation method of cordierite crucible, belonging to the field of preparation of silicate crucible. The described cordierite crucible comprises the following materials: 5-40% of talc powder, 10-40% of alumina powder, 5-20% of Cordierite powder, 10-40% of kaolin powder. The preparation method provided by the invention comprises five steps, is scientifically and feasibly applicable, and the prepared crucible has the characteristics of long service life, without slag, eliminating the pollution to customer products, and having stable product quality.

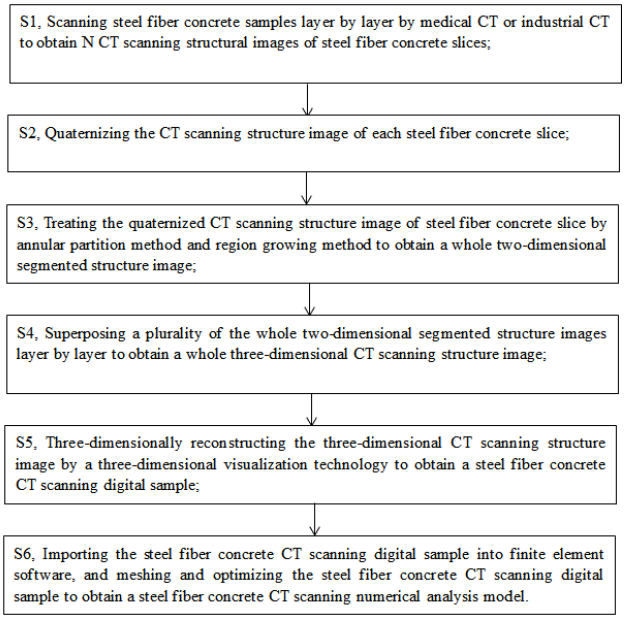
21: 2021/08888. 22: 2021-11-10. 43: 2022-02-11
51: G06F
71: Dr. Namita Mishra, Dr. Anita Sharma, Dr. Rashmi Singel, Dr. Ajay Pratap Singh, Dr. Sayyad Mahejabin Dildar, Dr. Mohammed Abdul Raffey, Dr. Indrajeet Ramdas Bhagat, Dr. Sanjay Bhaskar Kalamkar, Dr. Debjani Banerjee, Dr. Pradip Kumar Mitra, Dr. Sachin Deshmukh, Prof. Ramesh Chandra Panda
72: Dr. Namita Mishra, Dr. Anita Sharma, Dr. Rashmi Singel, Dr. Ajay Pratap Singh, Dr. Sayyad Mahejabin Dildar, Dr. Mohammed Abdul Raffey, Dr. Indrajeet Ramdas Bhagat, Dr. Sanjay Bhaskar Kalamkar, Dr. Debjani Banerjee, Dr. Pradip Kumar Mitra, Dr. Sachin Deshmukh, Prof. Ramesh Chandra Panda
54: A METHOD FOR ANALYZE MUTUAL FUND AND CAUSE OF ITS LOW PENETRATION AMONG INDIVIDUAL INVESTORS
00: -
The present invention relates to a method for analyzing mutual funds. The method for analyzing mutual funds and the cause of its low penetration among individual investors is provided. The method comprises a computer processing module. The computer processing module comprises a memory unit and a processor. The memory unit is configured to store machine-readable instruction. The processor is operatively connected with the memory unit. The processor is configured to the identification of topic and industry; a collection of data, analysis of the collected data; compare the collected data; generate and rank the analyzed and compared data; display the analyzed data to the user for the suggestion. The collection of data includes primary data and secondary data. The present invention provides an effective method to find out supply-side factors responsible for the low penetration of mutual funds among individual investors in cities and rural markets. The present invention provides a method to improve business intelligence in the field of the mutual fund industry.

21: 2021/08918. 22: 2021-11-11. 43: 2022-02-11
51: C04B
71: Shandong Mingte Ceramic Material Co., LTD
72: Sun Huayun, Li Mingjing, Zhang Xin, Cai Yankun, Cai Wei, Yin Peiru
54: PREPARATION METHOD OF HIGH TEMPERATURE CORUNDUM MULLITE CRUCIBLE
00: -
This invention relates to preparation method of high temperature corundum mullite crucible, belonging to silicate crucible preparation field. The crucible comprises the following substances in percentage by mass:10-50% of calcined alumina powder, Kyanite powder 5-20%, 20-40% of kaolin powder, 5-30% of

white corundum particles.The preparation method provided by the invention includes five steps, which is scientifically applicable, and is convenient for industrial production, and the prepared crucible has the characteristics of long service life, high temperature resistance, excellent creep resistance and the like.

21: 2021/08919. 22: 2021-11-11. 43: 2022-02-11
51: A01H
71: Zhejiang Institute of Landscape Plants and Flowers, Hangzhou Landscaping Incorporated
72: SHI, Xiaohua, ZHANG, Junlin, FAN, Jing, MA, Guangying, MAO, Lihui
54: PROPAGATION METHOD OF HELLEBORUS HYBRIDUS
00: -
The present disclosure discloses a propagation method of Helleborus hybridus The propagation method is characterized in that 3-year seedlings of Helleborus hybridus are taken as materials, plant division and bud promotion treatment is carried out through a growth regulator, and discarded rootless single plants in plant division are subjected to cutting propagation, so that the seedling propagation efficiency can be improved.

21: 2021/08920. 22: 2021-11-11. 43: 2022-02-11
51: E04C; G01D
71: China University of Mining and Technology
72: Yao Wenjie, Yang Weihao, Huang Jiahui
54: CONSTRUCTION METHOD OF STEEL FIBER CONCRETE MODEL BASED ON CT SCANNING
00: -
The invention discloses a method for constructing a steel fiber concrete model based on CT scanning, which specifically comprises the following steps: firstly, scanning the steel fiber concrete samples layer by layer by medical CT or industrial CT to obtain N CT scanning structural images of steel fiber concrete slices; then, quaternizing, and obtaining the whole two-dimensional segmented structure image by annular partition method and region growing method, superposing each whole two-dimensional segmented structure image layer by layer to obtain whole three-dimensional CT scanning structure image; finally, three-dimensionally reconstructing the image by three-dimensional visualization technology to obtain digital sample of steel fiber concrete CT scanning, importing the digital sample into the finite element software and meshing and optimizing to obtain the numerical analysis model of steel fiber concrete CT scanning. The invention visually observes the internal structure of the steel fiber concrete material through three-dimensional reconstruction, which realizes the three-dimensional visualization of the steel fiber concrete nondestructive testing.



21: 2021/08923. 22: 2021-11-11. 43: 2022-02-11
51: B01J
71: Qingdao University of Science and Technology
72: Du Yunmei, Hou Zhenfei, Geng Yanling, Li Bin, Zhang Yaping, Wang Lei
54: PREPARATION METHOD OF ZINC OXIDE/ZINC GERMANATE-COPPER NANOCOMPOSITE PHOTOCATALYST AND ITS APPLICATION
00: -
The invention relates to a preparation method of nano-composite photocatalyst and its application in catalytic decomposition of aquatic hydrogen, the catalyst is prepared by using sodium hydroxide with a certain concentration as solvent, and adopting one-step hydrothermal method to obtain photocatalysts with different proportions by adjusting the molar ratio of zinc acetate to germanium oxide, selecting the photocatalytic composite material with the best catalytic activity, and impregnating it with different concentrations of copper ions by adopting wet chemical method, in order to obtain

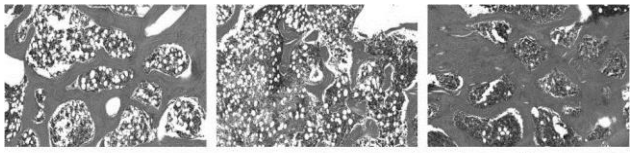
ZnO/Zn2GeO4-Cu nanocomposite photocatalyst. The method is simple, controllable and mild in reaction conditions, and the obtained catalyst has good morphology with low cost and wide photoresponse range. The research on photocatalytic decomposition of aquatic hydrogen with the catalyst has high catalytic activity and high application prospect in the field of photocatalysis.

21: 2021/08924. 22: 2021-11-11. 43: 2022-02-11
51: A61K
71: Luoyang Orthpedic-Traumatological Hospital of Henan Province (Henan Provincial Orthopedic Hospital)
72: Qin Na, Wei Liwei, Zheng Xuxia, Zhang Hong, Li Jitian

54: CHINESE MEDICINAL COMPOSITION FOR PREVENTING AND TREATING OSTEOPOROSIS AND PREPARATION METHOD AND APPLICATION THEREOF

00: -

The invention discloses a traditional Chinese medicine composition for preventing and treating osteoporosis and a preparation method and application thereof. The Chinese medicines comprises the following conponents: extract Radix astragali, Rhizoma atractylodis macrocephalae and Morinda officinalis with ethanol to obtain ethanol extract; extract spina date seed, Radix salviae miltiorrhizae, Semen persicae, Herba taxilli, Chinese date, Fructus lycii, Herba epimedii, and Radix paeoniae alba with water to obtain water extract; mixing the alcohol extract, the water extract and the oyster shell powder; the traditional Chinese medicine composition provided by the invention not only has the function of directly supplementing calcium, but also can regulate intestinal flora, promote the reproduction of Lactobacillus reuteri and segmented filamentous bacteria in intestinal tract, and play the roles of inhibiting osteoclastogenesis, regulating the steady state of osteoblasts and osteoclasts, regulating bone metabolism and weakening bone absorption, thereby effectively playing the roles of improving bone density, promoting bone formation and preventing and treating osteoporosis.

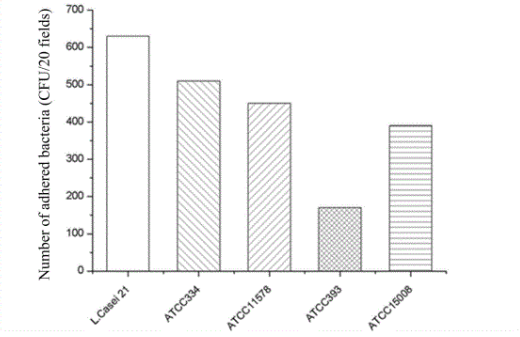


21: 2021/08927. 22: 2021-11-11. 43: 2022-02-11
51: A61K; C12N; C12R; A61P
71: Shandong Zhongke-Jiayi Bioengineering Co., Ltd
72: Yulin PAN, Shufeng SI, Weichao CAO, Cuihua LI, Shicheng PAN, Jianliang HOU, Chuan SUN, Wenhao ZHOU

54: LACTOBACILLUS CASEI (L. CASEI) 21 WITH THERAPEUTIC EFFECT ON DIARRHEA, AND USE THEREOF

00: -

The present disclosure relates to the technical field of microorganisms, and in particular to Lactobacillus casei (L. casei) 21 with a therapeutic effect on diarrhea, and use thereof. The L. casei 21 was deposited in the China General Microbiological Culture Collection Center (CGMCC) located at NO.1 Courtyard, West Beichen Road, Chaoyang District, Beijing on December 14, 2020, with a deposit number of CGMCC NO. 21373. The L. casei 21 can be used to prepare a product for treating diarrhea. After the product prepared from the L. casei 21 of the present disclosure is administered, the bacteria can enter an intestinal tract through a digestive tract to colonize in the intestinal tract, which can inhibit pathogenic bacteria, maintain the balance of environmental floras, improve the symptoms of diarrhea, and reduce the recurrence risk of diarrhea.



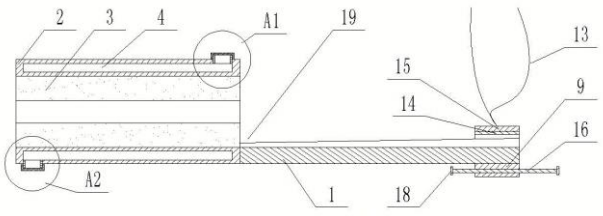
21: 2021/08928. 22: 2021-11-11. 43: 2022-02-11
51: A61H
71: Children's Hospital of Soochow University

72: Yao Feng, Wang Xiaodong, Zhen Yunfang, Zhang Fuyong, Chen Mimi, Zhang Zheng, Su Guanghao, Qiao Yi, Zhu Zhenhua, Yuan Quanwen, Fang Jianfeng, Liu Ya, Li Mengxia, Liang Peirong, Zhu Li, Lin Juanjuan, Hu Xiaoling, Xu Mengting, Shan Binbin, Zhao Kai, Wang Zixuan

54: GRAVITY TRACTION BRACE FOR UPPER LIMBS

00: -

The invention discloses a gravity traction brace for upper limbs, which comprises a positioning plate, one end of the positioning plate is provided with a load cylinder, the other end of the positioning plate is provided with a traction device, the bottom of the end surface of the load cylinder is fixedly connected to the end surface of the positioning plate, and the inner wall of the load cylinder is The first sponge layer is fixedly connected, the wall of the load-bearing cylinder is provided with an annular cavity, the bottom surface of the load-bearing cylinder is provided with a sand hole on the side away from the positioning plate, the sand hole is connected with the annular cavity, and the sand hole is provided with a sand hole. The outer wall of the top of the sand barrel is fixedly connected with the inner wall of the sand hole. The bottom of the sand barrel is provided with a sand end cover. The inner cavity of the sand end cover is connected with the outer wall of the bottom of the sand barrel by threads. The top surface of the load barrel is close to the side of the positioning plate. There is a sand inlet hole which communicates with the annular cavity. The sand inlet hole is provided with a sand inlet barrel. The bottom outer wall of the sand inlet barrel is fixedly connected to the inner wall of the sand inlet hole. The top of the sand inlet barrel is provided with a sand inlet end cap. The peripheral wall of the inner cavity of the end cover and the outer wall of the top of the sand inlet cylinder are connected by threads.



21: 2021/08930. 22: 2021-11-11. 43: 2022-02-11
51: B01J
71: Qingdao University of Science and Technology
72: Du Yunmei, Hou Zhenfei, Geng Yanling, Li Bin, Zhang Yaping, Wang Lei

54: PREPARATION METHOD OF WO3/ZN2GEO4 NON-NOBLE METAL BIMETALLIC OXIDE PHOTOCATALYST, AND ITS APPLICATION.

00: -

This invention relates to preparation method of WO3/Zn2GeO4 non-noble metal bimetallic oxide photocatalyst, and its application, which comprises the following steps: first, using sodium hydroxide as a solvent through a hydrothermal method, to synthesize a metal germanium-based nano-nanorod photocatalyst, next, synthesizing a square tungsten oxide nano material by using hydrochloric acid aqueous solution as a solvent under hydrothermal conditions, and finally, compounding the two materials by adopting a high-temperature solid phase method to obtain the zinc germanate/oxide non-noble metal double metal oxide heterojunction nano photocatalyst. The composite nano photocatalyst prepared by this method of this invention can significantly broaden the light response range, and the formation of heterojunction can accelerate the charge transmission and effectively inhibit the recombination of photo-generated electrons and holes, hence having good catalytic activity for photocatalytic decomposition of water and hydrogen evolution. This invention has the advantages of simple operation, easy regulation, low cost and environmental friendly.

21: 2021/08931. 22: 2021-11-11. 43: 2022-02-11
51: C08G
71: Qingdao University of Science and Technology
72: Du Yunmei, Xiao Zhenyu, Zhang Jiaxin, Li Bin, Zhang Yaping, Wang Lei

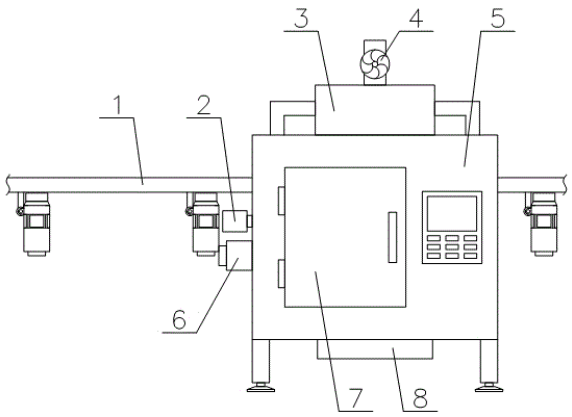
54: PREPARATION METHOD OF BIMETALLIC NANO PHOSPHATE BASED ON METAL-ORGANIC FRAMEWORKS AND ITS APPLICATION

00: -

This invention provides preparation method of bimetallic nano phosphate based on metal-organic frameworks, the bimetallic nano phosphate uses cobalt nitrate and 2-methylimidazole as raw materials to prepare a metal-organic frameworks, and then uses another nitrate, nickel nitrate, to treat the metal-organic frameworks to form layered bimetallic hydroxide on the metal-organic

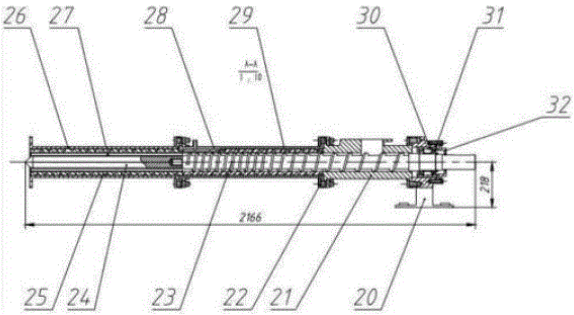
frameworks to maintain the shape of the metal-organic frameworks, in order to realize conformal transformation and obtaining a precursor. According to the invention, phosphate is used to etch the obtained precursor, and the formed hollow core-shell structure increases the specific surface area of the material and has higher capacitance performance. The preparation method of bimetallic nano phosphate based on metal-organic frameworks provided by the invention has the advantages of using cheap and reachable raw materials, and having simple operation, avoiding high energy consumption. The obtained bimetallic nano phosphate has high capacitance performance and can be used for preparing capacitor elements.

21: 2021/08932. 22: 2021-11-11. 43: 2022-02-11
51: A61B; A61J
71: The Fifth People's Hospital of Wuxi
72: Yan Yan
54: AUTOMATIC DISPENSING DEVICE FOR NASOPHARYNGEAL SWABS FOR DETECTING COVID-19
00: -
The invention discloses an automatic dispensing device for nasopharyngeal swabs for detecting COVID-19, which comprises a conveyor belt and a dispensing chamber. At least two clamping devices are arranged on the conveyor belt. The top of the loading room is equipped with an air purification device, the front of the sub-assembly room is equipped with an observation window, the back of the sub-assembly room is equipped with a retrieval window, and the retrieval window is equipped with a sub-assembly device, and the sub-assembly device is connected with a vacuum sample tube; there is a code scanner and an oscillator at the entrance of the sub-assembly room. The invention realizes the pathogen inactivation of biological samples, automatic vortexing and mixing and sub-packaging through the sub-packaging equipment, and improves the efficiency and safety of the separation and sub-packaging of biological samples; the formation of negative pressure and gas circulation reduces the probability of virus spreading and cross-contamination during the packaging process.

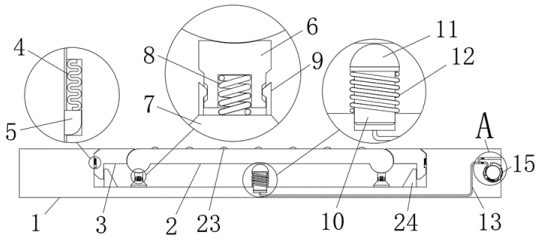


21: 2021/08933. 22: 2021-11-11. 43: 2022-02-11
51: B29C
71: Qingdao University of Science and Technology
72: Wu Junfei, Fu Ping, Yang Mingfei, Bai Yang, Wu Siyang, Zhou Yuting
54: PLANET SCREW EXTRUDER FOR PROCESSING PVC MATERIAL
00: -
This invention provides planet screw extruder for processing PVC material that comprises control section, driving section, feeding section, main machine section and nose section, wherein the main motor is connected with retarder through belt drive, the retarder is connected with the main shaft through coupling, and the upper section of the hopper is connected with its lower section through positioning pin, wherein the arch breaking device is located in the lower section of the hopper. The material enters the conveying section from the feeding barrel, and the screws of the conveying section gradually transport the material to the melting section of the single screw section. The screw pitch of the conveying section and the melting section is gradually shortened. The inner sleeve of the melting section is provided with electric heating device. After the material becomes molten, it enters the planet section, and the main screw rotates, and at the same time, six planet screws revolve around, so that the material is plasticized and mixed. Finally, the material enters the die of the nose section to form the required product shape. The invention has the advantages of simple structure, high plasticizing efficiency, large heat exchange area, good self-cleaning effect, and it has no dead point in the

runner, no decomposition of materials due to retention, and the technology requires low energy consumption and high yield.



21: 2021/09025. 22: 2021-11-15. 43: 2022-01-19
51: G01M
71: Linyi University
72: Jia Chuanyang, Wang Hailong, Liu Keming, Zhang Guibin, Song Xiaoyuan, Sun Xizhen, Yu Xianbin
33: CN 31: 202110013831.2 32: 2021-01-06
54: A TRAFFIC DYNAMIC LOAD DEVICE FOR ROCK-SOIL AND UNDERGROUND ENGINEERING MODEL TEST
00: -
The invention relates to the technical field of traffic dynamic load, in particular to a traffic dynamic load device for rock-soil and underground engineering model test. The device comprises a supporting plateand is a long plate shape, the plate body is provided with a square groove on the surface of the plate, an elastic plate and base plates are arranged in the square groove of the supporting plate, the two ends of the elastic plate are respectively provided with one base plate, the elastic plate is in a shape that the two ends of a square plate are integrally connected with circular cylinders, and each base plate is of an L-shaped plate and one end of the plate body is in a concave arc shape. The structural design of the invention realizes the impact of traffic dynamic load on underground buildings. By exaggerating and amplifying the impact, the vehicle model passes over the elastic plate and causes the elastic plate to deform. The deformation process of the elastic plate causes the piston movement of the air column and triggers a series of control of the transmission. Finally, the staff understands the vibration state of the elastic plate by observing the rotation of the control ring.



21: 2021/09080. 22: 2021-11-15. 43: 2022-02-01
51: C08G; C09J
71: Henan Agricultural University
72: LI, Cheng, PENG, Wanxi, YANG, Yafeng, GE, Shengbo
33: CN 31: 202110961694.5 32: 2021-08-20
54: METHOD FOR PRODUCING FORMALDEHYDE-FREE AND WATER-RESISTANT WOOD-BASED PANEL
00: -
The present disclosure discloses a method for producing a formaldehyde-free and water-resistant wood-based panel, comprising the following steps: modifying MDI adhesive with a baina stone compounded agent, and using the modified MDI adhesive to produce a panel slab according to a conventional production process of a wood-based panel, then drying, cutting and sanding the panel slab, to obtain the formaldehyde-free and water-resistant wood-based panel.

21: 2021/09084. 22: 2021-11-16. 43: 2022-02-18
51: G06F
71: SNODE TECHNOLOGIES (PTY) LTD
72: NAIDOO, Nithendren
54: REAL-TIME THREAT DETECTION FOR ENCRYPTED COMMUNICATIONS
00: -
A system and method for real-time threat detection for encrypted communications are provided. A method includes monitoring a data stream in a network, such as an M2M network, including encrypted message data and non-encrypted metadata associated with the encrypted message data being transmitted between endpoints on the network. The method includes extracting data stream metadata from the data stream including data points extracted from the non-encrypted metadata. The method includes enriching the data stream metadata with contextual data relating to one or more of threat, vulnerability and reputation data points and being obtained from one or more signal

sources to output enriched data. The enriched data is analysed and a risk probability score associated therewith is calculated. An action is initiated in accordance with the risk probability score so as to mitigate a threat present on the network.

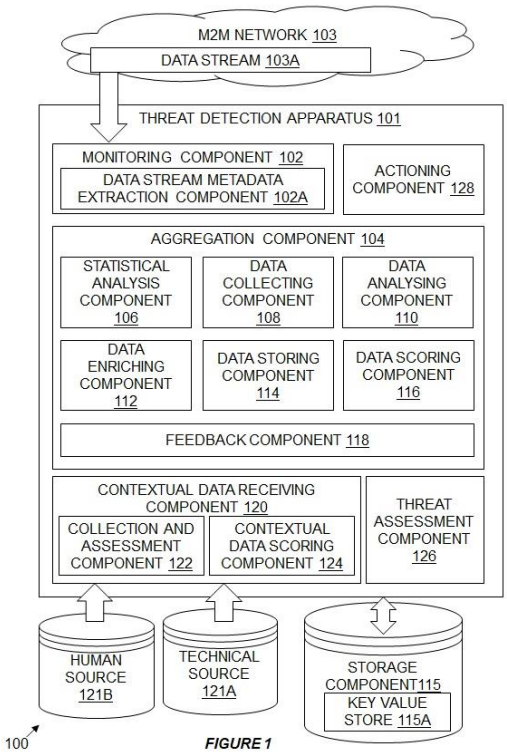
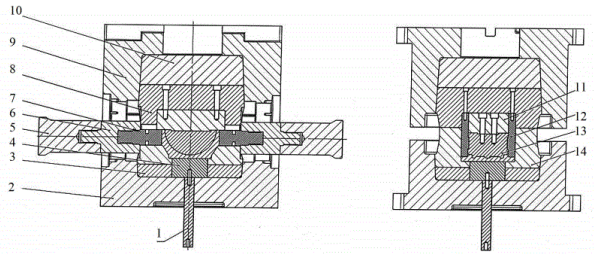


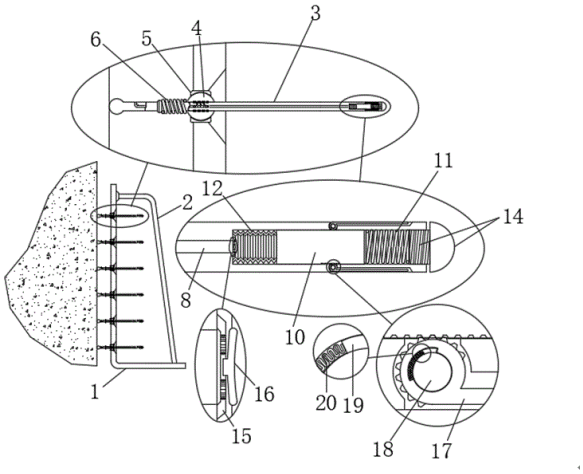
FIGURE 1

21: 2021/09085. 22: 2021-11-16. 43: 2022-01-20
51: B21J; B21K
71: North China University of Science and Technology
72: JI, Hongchao, PEI, Weichi, HUANG, Xiaomin, LONG, Haiyang, LI, Jingsheng, SONG, Changzhe, XU, Shaobin, SONG, Gang, ZHENG, Lei, DONG, Shuliang, JU, Liying
33: CN 31: 202110997196.6 32: 2021-08-27
54: ADAPTER FORGING FORMING DIE
00: -
The present disclosure relates to design of an adapter forging forming die. The die is composed of 14 parts, including a lower ejector rod, a lower die sleeve, a lower die core backing plate, a lower ejector block, a horizontal punch root, a horizontal punch connecting rod, a horizontal punch tip, an upper punch connecting plate, an upper die sleeve, an upper die core backing plate, an upper punch top plate, an upper punch side plate, an upper punch semi-circular table, and a lower die core. In the forging die, a die closing cylinder and a horizontal cylinder are mutually matched to work to complete forging forming of an adapter, and a completed forgeable piece is ejected out by an ejector rod.

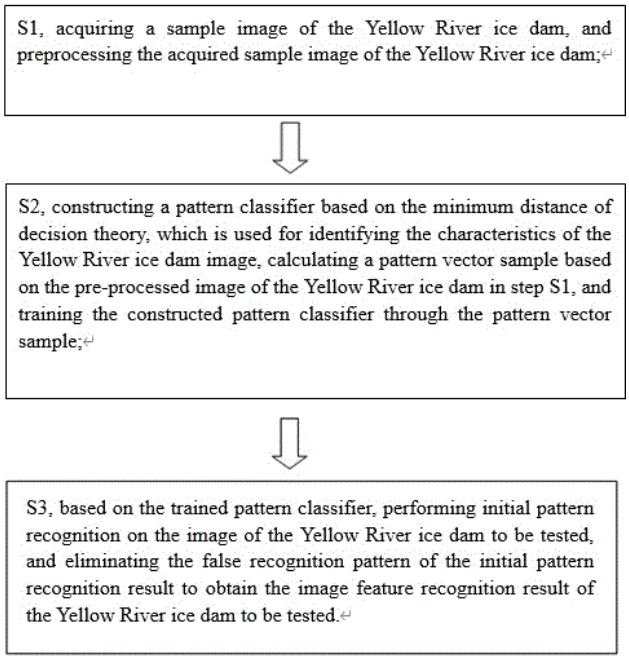


21: 2021/09100. 22: 2021-11-16. 43: 2022-02-11
51: B03B
71: Shandong University of Science & Technology
72: Cui Guangwen, Liu Huijie
54: EFFICIENT DESLIMING SEPARATION PROCESS
00: -
This invention provides efficient desliming separation process, belonging to coal desliming separation process, which comprises the following steps: The raw coal on the well enters the grading desliming screen of the main workshop for wet grading desliming, and the screened fine-grained coal slime of 1mm-5mm enters the water medium cyclone for sorting through the coal slime bucket to obtain overflow and underflow, the overflow enters the grading equipment, and the oversize of the grading equipment enters the centrifuge for dehydration to produce clean coal. The underflow enters a high-frequency sieve for dehydration treatment, and the underflow material and the underflow material of the grading equipment converge and enter a flotation machine for coal slime flotation. The oversize of the high-frequency screen enters the dense medium system together with the oversize of the desliming screen, flotation clean coal is dewatered by filter press and then mixed with centrifugal dewatered clean coal as final clean coal, and centrifugal liquid returns to slime bucket to form closed loop for re-sorting. Flotation tail coal enters tail coal concentrator for concentration and dehydration, and is dehydrated by a filter press to become coal slime, use filter press filtrate and concentrated solution as circulating water.

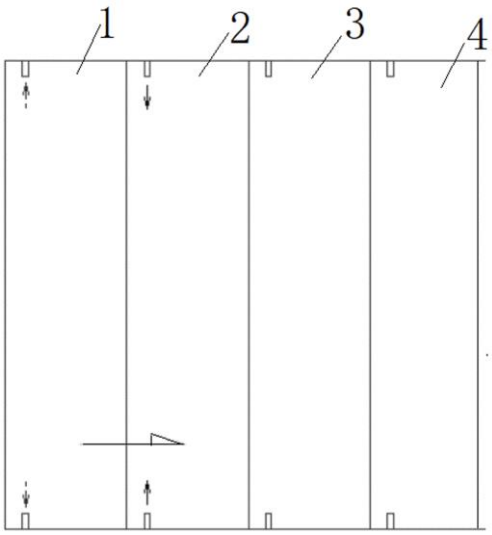
21: 2021/09107. 22: 2021-11-16. 43: 2022-01-20
51: G01N
71: Linyi University
72: Sun Xizhen, Jia Chuanyang, Liu Keming
33: CN 31: 202110053810.3 32: 2021-01-15
54: A PREDICTING AND MONITORING DEVICE OF ROCK CRACK PROPAGATION DIRECTION
00: -
The invention relates to the technical field of rock cracks, in particular to a predicting and monitoring device of rock crack propagation direction. The device comprises an L-shaped plate, one side of the L-shaped plate is fixedly connected with a supporting rod, a plurality of evenly-distributed control rods penetrate through the L-shaped plate, the control rods are movably sleeved with hinge balls, the hinge balls are sleeved with sleeves, the sleeves penetrate through the L-shaped plate and sleeve the L-shaped plate, one end of each hinged ball is in contact with a first spring, and the end, away from the hinged ball, of each first spring is in contact with a clamping ring. According to the structural design, the effect of effectively monitoring the crack condition of a rock is achieved, rotation of the control rods and axial movement of the control rods are caused in the process, therefore, the crack condition of the rock can be rapidly mastered by observing the change of a controller and the position of the end, where the controller is located, of the control rod, and the effect of facilitating observation is achieved by amplifying the crack influence.



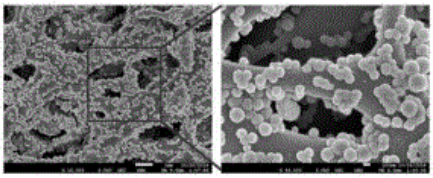
21: 2021/09139. 22: 2021-11-17. 43: 2022-01-20
51: G06T
71: Yellow River Institute of Hydraulic Research
72: Deng Yu, Gao Guoming, Li Shuxia, Tian Zhizong, Su lei, Xu Lukai, Zhang Baosen, Shi Fangxin, Yue Yusu, Zhang Xiaohua, Xie Zhigang, Zeng He, Yu Guoqing, Ma Zipu, Li Chunjiang
54: IMAGE FEATURE RECOGNITION METHOD OF YELLOW RIVER ICE DAM
00: -
The invention discloses an image feature recognition method of the Yellow River ice dam, which comprises the following steps: S1, acquiring a sample image of the Yellow River ice dam, and preprocessing the acquired sample image of the Yellow River ice dam; S2, constructing a pattern classifier based on the minimum distance of decision theory, which is used for identifying the characteristics of the Yellow River ice dam image, calculating a pattern vector sample based on the pre-processed image of the Yellow River ice dam in step S1, and training the constructed pattern classifier through the pattern vector sample; S3, based on the trained pattern classifier, performing initial pattern recognition on the image of the Yellow River ice dam to be tested, and eliminating the false recognition pattern of the initial pattern recognition result to obtain the image feature recognition result of the Yellow River ice dam to be tested. The method effectively ensures the high robustness, stability and instantaneity of the image pattern recognition of the Yellow River Ice Dam, and has strong adaptability.



21: 2021/09167. 22: 2021-11-17. 43: 2022-02-24
51: E21D
71: THE THIRD CONSTRUCTION CO., LTD. OF CTCE GROUP, THE CONSTRUCTION ENGINEERING COMPANY OF CTCE GROUP
72: LIU, Yang, SUN, Hao, WAN, ZHONGZHENG, YU, MING, WANG, Chuanyin, CHAI, Weiling, ZHANG, Bin, YANG, Zhi, ZHANG, TAO, WANG, Anming, AN, Xudong, WANG, Yu, LI, Chao, GAO, Jun
33: CN 31: CN202110143291.X 32: 2021-02-02
54: THIXOTROPIC MUD FOR EARTH PRESSURE BALANCE JACKING PIPE IN ANHYDROUS SAND LAYER, AND PREPARATION METHOD, GROUTING METHOD AND SLURRY REPLACEMENT METHOD THEREOF
00: -
The present invention discloses thixotropic mud for an earth pressure balance jacking pipe in an anhydrous sand layer, and a preparation method, a grouting method and a slurry replacement method thereof. The thixotropic mud includes water, bentonite, soda ash (Na2CO3) and admixture that are mixed and stirred, wherein a weight ratio of water to bentonite to soda ash (Na2CO3) to admixture is (400-450): (75-100): (10-20): (10-20). The thixotropic mud can effectively reduce the jacking force needed in a jacking process of the jacking pipe, effectively control the surface settlement effectively and maintain the stability of soil mass surrounding the jacking pipe. The grouting method and the slurry replacement method can greatly reduce the jacking force during the jacking construction in the anhydrous sand layer, effectively control the surface settlement and maintain the stability of the soil mass surrounding the jacking pipe, and have positive significance in the development of the pipe jacking engineering.

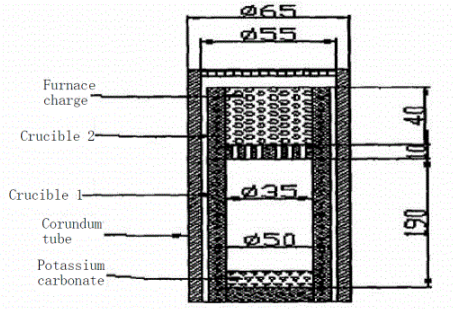


21: 2021/09210. 22: 2021-11-18. 43: 2022-02-11
51: B01D; C02F
71: Qingdao University of Science and Technology
72: GAO, Ailin, YAN, Yehai, JIA, Changchao, FAN, Huiqin, ZHANG, Guangfa, ZHAO, Shuai
54: METHOD FOR PREPARING SUPER-AMPHIPHOBIC POLYSULFONE MEMBRANE
00: -
The present disclosure discloses a method for preparing a super-amphiphobic polysulfone membrane simply and efficiently, and relates to the field of membrane separation. The super-amphiphobic polysulfone membrane prepared by the present disclosure has the salt rejection rate of more than 99.5% and better anti-wettability.

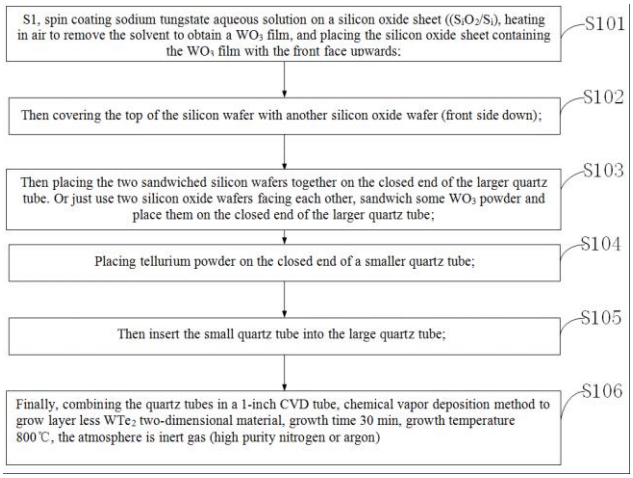


21: 2021/09211. 22: 2021-11-18. 43: 2022-02-11
51: G01N

71: North China University of Science and Technology
72: LIU, Xiaojie, LI, Xin, LIU, Ran, LI, Hongyang, LI, Hongwei, LV, Qing
54: DEVICE FOR DETECTING INFLUENCE OF ALKALI METAL ON REACTIVITY AND POST-REACTION STRENGTH OF COKE
00: -
A device for detecting the influence of an alkali metal on the reactivity and post-reaction strength of coke is used for detecting the influence of alkali metal vapor of a reflow zone of a blast furnace on the reactivity and post-reaction strength of the coke. The technical solution is as follows. A graphite crucible is placed in a center of a furnace body; a silicon-molybdenum bar is arranged outside a corundum tube outside the graphite crucible; the silicon-molybdenum bar is connected with a temperature control device; and a furnace body temperature display and a hearth temperature display are mounted on the furnace body and connected with the temperature control device. The graphite crucible is configured to supply potassium vapor ceaselessly in an experimental process. The invention simulates the influence process of the alkali metal of the reflow zone of the blast furnace on the reactivity and post-reaction strength more real.

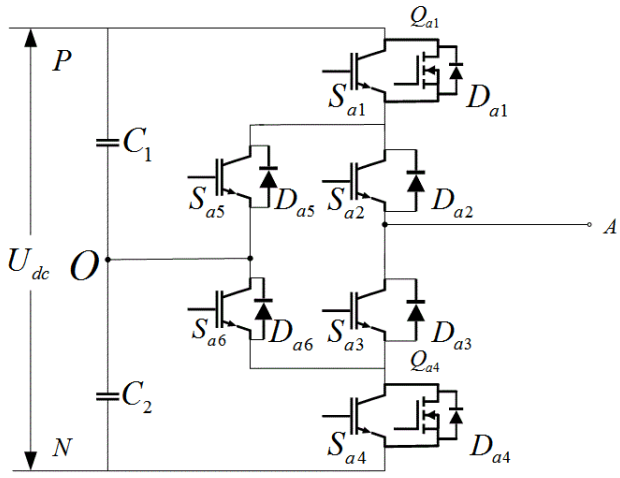


21: 2021/09212. 22: 2021-11-18. 43: 2022-02-11
51: C22C
71: Hubei University of Technology
72: Chen Ying
54: TUNGSTEN TELLURIDE GROWN WITH NEW RAW MATERIAL AND PREPARATION METHOD THEREOF
00: -
The invention belongs to that technical field of non-magnetic semi-metallic materials, and discloses a method for growing tungsten telluride by using new raw materials, which comprises the following steps of: spin coating an aqueous solution of sodium tungstate on a silicon oxide sheet, evaporating the solution in the air to obtain a tungsten oxide film, and placing the silicon wafer containing the tungsten oxide film with the front face upwards; cover another silicon oxide sheet on that silicon chip; placing the two silicon wafers clamped together at the closed end of the large quartz tube; tellurium powder is placed at the closed end of a small quartz tube; insert a small quartz tube into a large quartz tube; the assembled quartz tube is placed in a chemical vapor deposition tube furnace, and the tungsten telluride layered material is vapor grown. The raw material sodium tungstate or tungsten oxide of the invention is low in price, short in growth process and high in repeatability, which effectively overcomes the disadvantages of high energy consumption and long time of the preparation method in the prior art. Moreover, the preparation method of the invention needs simple equipment and has high popularization value.



21: 2021/09214. 22: 2021-11-18. 43: 2022-02-11
51: H02M
71: Harbin Institute of Technology, Shenzhen
72: Ye Jian, Luan Xin
54: OPTIMIZED STRUCTURE AND CONTROL METHOD OF ACTIVE NEUTRAL-POINT-CLAMPED INVERTER BASED ON HYBRID DEVICES
00: -
The invention discloses an optimized structure and control method of active neutral-point-clamped (ANPC) based on hybrid devices. A direct current (DC) access terminal Udc is connected in parallel

with C1 and C2 bus capacitors, and Sa1, Sa2, Sa3 and Sa4 triodes are connected in series between the DC access terminal Udc and the output terminal A, Sa1 and Sa4 triodes are respectively connected in parallel with hybrid devices, Sa5 triode is connected in parallel between Sa1 and Sa2 triodes and C1 and C2 bus capacitors, and Sa6 triode is connected in parallel between Sa3 and Sa4 triode and between C1 and C2 bus capacitors. According to the invention, in the original ANPC circuit, external switching devices are connected in parallel with insulated gate bipolar transistors and semiconductor field effect transistors to form a hybrid device, so that the semiconductor field effect transistor bears the turn-on loss and turn-off loss, and other switching devices in the system can bear the conduction loss, and the problems of loss optimization and unbalanced loss distribution are solved.

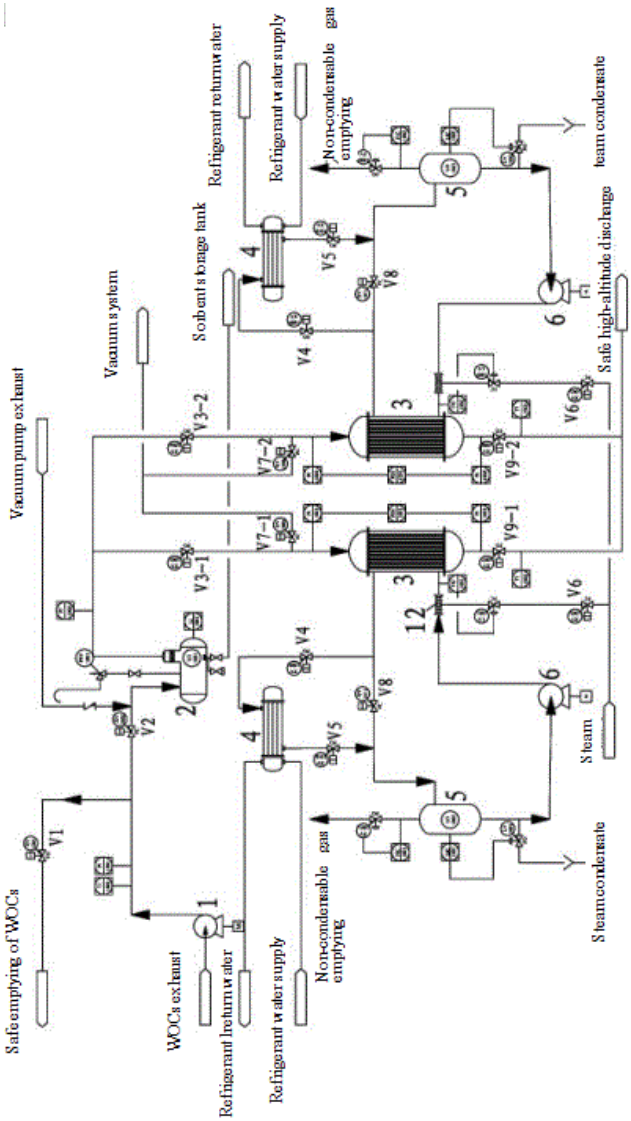


21: 2021/09215. 22: 2021-11-18. 43: 2022-02-14
51: B01D
71: Beijing Institute of Petrochemical Technology
72: Huang Long, Chen Jianhua, Gao Le, Du Songsong, Chang Jin

54: VOLATILE ORGANIC COMPOUND ADSORPTION AND DESORPTION TREATMENT AND RESOURCE RECOVERY DEVICE

00: -

The invention discloses a volatile organic compound adsorption and desorption treatment and resource recovery device, which includes an adsorption and desorption unit, a water circulation unit and a vacuum unit; the adsorption and desorption unit includes an induced draft fan (1), a VOCs waste gas buffer tank (2) and two adsorbers (3), and there are two sets of water circulation units, including cooler (4), circulating water tank (5) and circulating water pump (6) respectively; a steam-water mixer (12) is also connected in series between the outlet of the circulating water pump (6) and the heat exchanger inlet of the adsorber (3), and the air inlets of the two adsorbers (3) are also connected to a vacuum unit. Through the connection of multiple valves, the adsorption and desorption are controlled. Ensure that the temperature of the adsorption bed is maintained at the optimal desorption or desorption temperature. The method of water circulation avoids the phenomenon of excessive local temperature caused by direct heating by steam.



21: 2021/09216. 22: 2021-11-18. 43: 2022-02-11
51: E04C

71: Shandong University, China Railway Development Investment Co., Ltd, China Railway Eighth Bureau Group Kunming Railway Construction Co., Ltd
72: Tang Liru, Wang Guangwei, Wang Peijun, Hu Yunfei, Huang Peng, Xu Xiangyun, Xu Yanjing, Zhang Wenchao, Liu Chang, Li Shuo, Liu Le

54: STEEL MESH SKELETON CONCRETE BEAM AND COLUMN AND ITS STRUCTURAL DESIGN METHOD

00: -

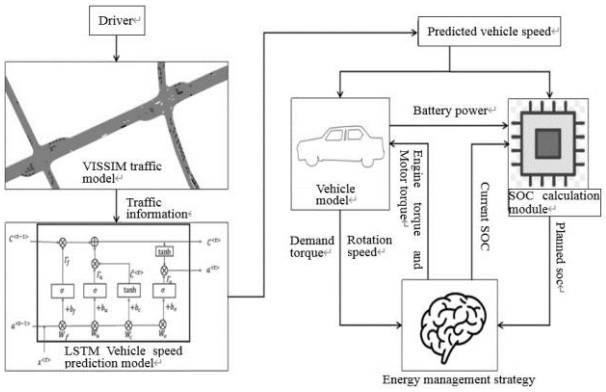
The invention relates to a steel mesh skeleton concrete beam and column and a structural design method thereof, and belongs to the technical field related to civil engineering. Expanded steel mesh skeleton concrete beams and columns mainly include expanded steel mesh skeletons. The expanded steel mesh skeleton has multiple holes. The inner and outer sides of the expanded steel mesh skeleton have concrete; the concrete completely wraps the sides of the expanded steel mesh skeleton to improve the restraint effect on the internal concrete; It can be processed in the factory to shorten the time for component production. In the concrete beam and column provided by the invention, steel pipes with special-shaped holes are used instead of steel bars as the component skeleton, the steel tying process is eliminated, the standardization degree and the integrity of the components in the production of the components are improved, and the large-scale production of the components is beneficial.

21: 2021/09217. 22: 2021-11-18. 43: 2022-02-14
51: G05D
71: Qingdao University of Technology
72: Li Xinguang, Wang Wenchao, Zhang Aiguo, Yuan Jiayu, Zhan Jun

54: METHOD FOR CONSTRUCTING ENERGY MANAGEMENT STRATEGY OF HYBRID ELECTRIC VEHICLE BASED ON INTELLIGENT NETWORK CONNECTION

00: -

The invention relates to a method for constructing an energy management strategy of plug-in hybrid vehicles integrating traffic information, which comprises the following steps: S1, acquiring traffic information based on an intelligent transportation system; S2, constructing the LSTM vehicle speed prediction model of the long-term and short-term memory network, and predicting and verifying it online; S3, respectively building engine, motor, power battery, transmission system and longitudinal dynamic models; S4, according to the result predicted by the model, the global SOC planning is carried out according to the total vehicle speed ratio; S5, constructing an adaptive equivalent factor s(t), establishing the relationship between the adaptive equivalent factor s(t) and the SOC offset delta SOC, and constructing an energy consumption model; and S6, the optimal control quantity Pbat is obtained by solving the Hamilton function built by ECMS. The method makes full use of increasingly abundant traffic data, has small calculation amount, good real-time performance and improves vehicle fuel economy.



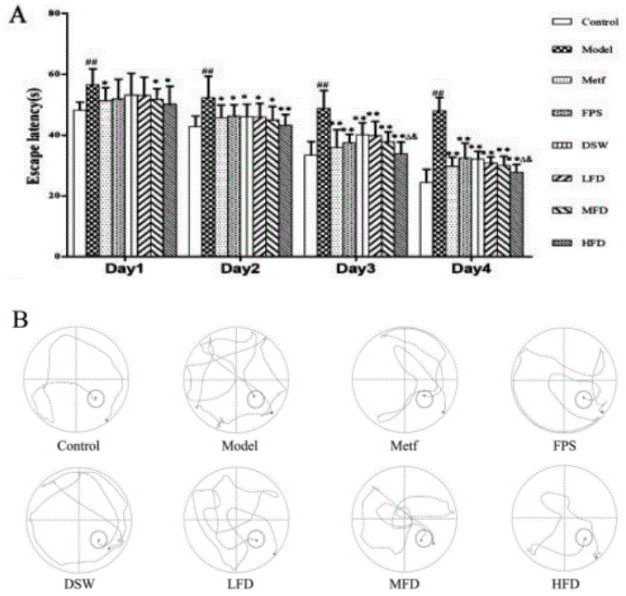
21: 2021/09218. 22: 2021-11-18. 43: 2022-02-14
51: A61K
71: Shandong University of Traditional Chinese Medicine
72: He Shan, Fu Xianjun, Wang Zhenguo, Zhou Honglei

54: APPLICATION OF FUCOIDAN COMBINED WITH DEEP SEA WATER IN PREVENTING AND TREATING DIABETIC COGNITIVE DYSFUNCTION

00: -

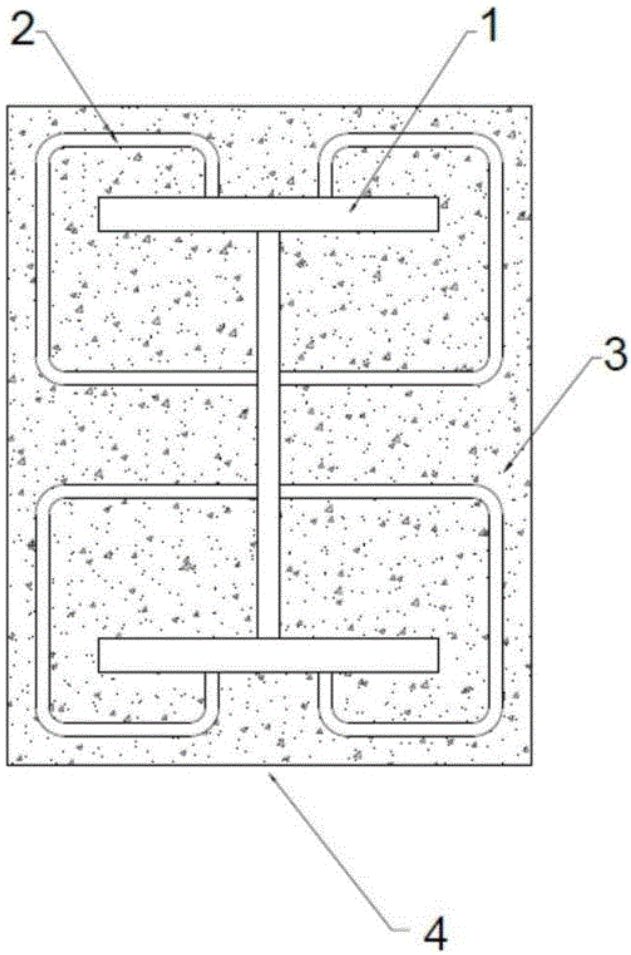
The invention provides a composition for preventing and treating diabetic cognitive dysfunction, which belongs to the field of marine biology technologies. The research results of the present invention show that the combined use of fucoidan and deep sea water has an obvious intervention effect on the cognitive impairment of diabetic rats, and the effect of the combined medicine is better than that of the two when used alone. The results of behavioral experiments showed that the behavioral indicators of each group through the intervention of deep sea water and fucoidan were significantly improved

compared with the model group, it shows that deep sea water and fucoidan can improve the cognitive dysfunction caused by type 2 diabetes, and the combined intervention of deep sea water and fucoidan at high doses has a better effect, the research results of the present invention provide a theoretical basis and new treatment ideas for clinical application.



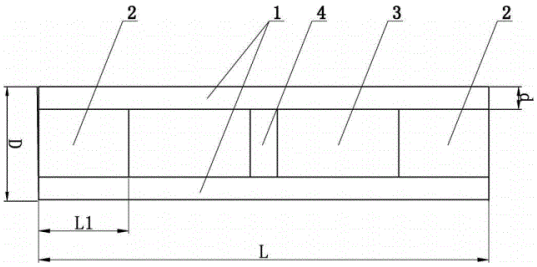
21: 2021/09219. 22: 2021-11-18. 43: 2022-02-14
51: E04C
71: Shandong University, China Railway Development Investment Co., Ltd., China Railway Eighth Bureau Group Kunming Railway Construction Co., Ltd.
72: Jiang Xiaoming, Wang Guangwei, Wang Peijun, Hu Yunfei, Huang Peng, Xu Xiangyun, Xu Yanjing, Liu Mei, Zhang Wenchao, Cheng Tianxi, Bai Yunyan, Liu Jingwang
54: WELDED STIRRUP STEEL FRAME BEAM-COLUMN
00: -

The invention relates to the field of civil engineering structures, in particular to a welded stirrup-steel reinforced concrete member. The welded stirrup-steel reinforced concrete member is a composite structural member formed by welded stirrups on steel frames and pouring concrete, which reduces the shear connectors and longitudinal steel bar of traditional steel reinforced concrete members. Steel-encased concrete increases the structural stiffness and shear capacity, and can significantly improve the seismic performance. The steel framework itself has a certain bearing capacity. It is used to carry the load in the construction stage, and the formwork is hung on the rigid framework, which saves formwork support and is conducive to flow operation. Stirrups in welded stirrup-steel reinforced concrete member, on the one hand, can improve the crack resistance of concrete; on the other hand, it acts as a shear piece, which ensures that the steel and concrete work together, simplifies the construction technology, avoids the binding process of steel grid, shortens the manufacturing time, and is beneficial to the industrial production of components.

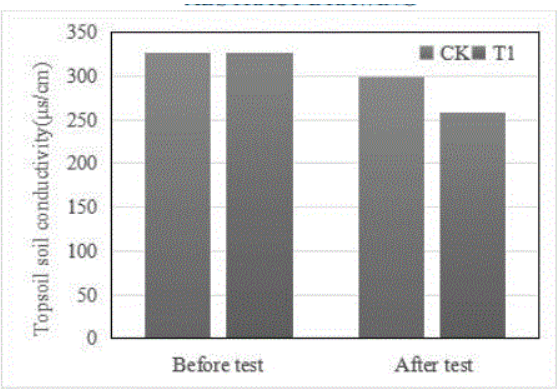


21: 2021/09220. 22: 2021-11-18. 43: 2022-02-11
51: E04B
71: International Center for Bamboo and Rattan
72: LI, Deyue, FEI, Benhua, CHEN, Ruiguo, WANG, Ge, CHEN, Fuming, FU, Meimei, HUO, Changqing, SUN, Fengbo
54: BAMBOO BUILDING COMPONENT
00: -

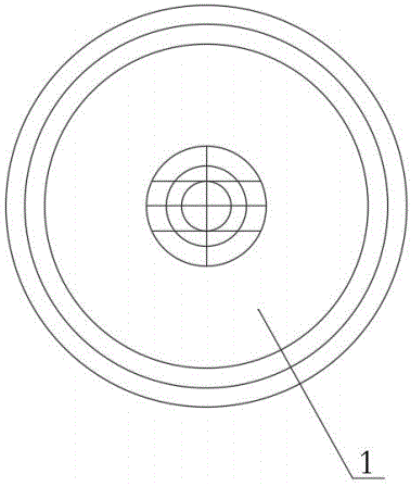
The present disclosure discloses a bamboo building component. The present disclosure is to solve the problems that an existing wall body is high in manufacturing cost, poor in thermal insulation property, complex in process, high in maintenance cost, and the like. Two bamboo boards are arranged in parallel and are fixedly assembled into a whole through two connecting boards, and a cavity is formed between the two bamboo boards and the two connecting boards. The bamboo building component provided by the present disclosure is used for manufacturing a bamboo house; in the bamboo building component, a hollow structure is formed by adopting the two bamboo boards and the two connecting boards, and compared with an existing building component, a large amount of steel and wood is saved, the manufacturing cost of the building component is reduced, and the thermal insulation property is excellent.



21: 2021/09221. 22: 2021-11-18. 43: 2022-02-11
51: A01G
71: Beijing Academy of Agriculture and Forestry Sciences, Ludong University, Qingdao Agricultural University
72: WANG, Xuexia, GUO, Xiaohong, WANG, Jiachen, CHEN, Yanhua, SONG, Ningning
54: METHOD FOR CONTROLLING SUCCESSION CROPPING OBSTACLE OF SOIL IN PROTECTED CULTIVATION
00: -
The present disclosure provides a method for controlling succession cropping obstacles of soil in protected cultivation, and belongs to the technical field of crop cultivation. The present disclosure includes the following steps: planting sorghum during a crop rotation period; 20-40 d later, crushing sorghum straws and returning to field; conducting high-temperature greenhouse closing, and applying a fertilizer and a zeolite powder while spraying an effective microorganisms (EM) rejuvenation solution after the greenhouse closing is completed. The present disclosure is mainly based on sorghum planting and straws returning to field, supplemented by high-temperature greenhouse closing, and combined with application of a soil conditioner and a microbial agent. The present disclosure organically combines physical, chemical and biological methods for controlling protected soil, to quickly reduce salinity of the protected soil, effectively remove soil-borne diseases and improve soil physical and chemical properties.



21: 2021/09222. 22: 2021-11-18. 43: 2022-02-11
51: A44C
71: Wenzhou Treasure Crafts Co., Ltd.
72: YANG, Yi, YANG, Qiyue, YANG, Cairong
54: MULTIFUNCTIONAL BADGE
00: -
A multifunctional badge includes a front shell, a rear shell, a Printed Circuit Board (PCB) circuit component, and a battery. Both the front shell and the rear shell are of circular structures, and are buckled and matched with each other to form a circular cavity for accommodating the PCB circuit component and the battery. The PCB circuit component and the battery are fixedly mounted in the circular cavity. A Wireless Fidelity (WIFI) chip, a Bluetooth communication chip, a Global Positioning System (GPS) chip, a multi-axis motion sensor, and a Global System for Mobile Communications/General Packet Radio Service (GSM/GPRS) communication module are arranged on the PCB circuit component. The PCB circuit component includes two semicircular circuit boards which have inward centers of circles and are distributed symmetrically. The battery is fixedly mounted between the two semicircular circuit boards.



21: 2021/09226. 22: 2021-11-18. 43: 2022-02-11
51: C08J; C08K; C08L; D01D; D01F
71: Shandong University of Technology
72: JIANG, Zhaohui, JIA, Zhao, ZHANG, Zhanqi, GUO, Zengge, QI, Yuanzhang, HOU, Zhifu, WANG, Hui, PU, Congcong, WANG, Qicai, DING, Zuowei

54: METHOD FOR PREPARING PET-BASED GRAPHENE CONDUCTIVE FIBER

00: -

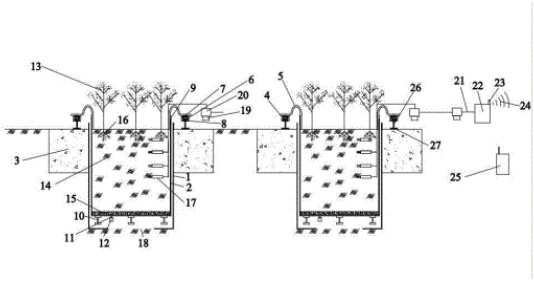
The present disclosure provides a method for preparing a PET-based graphene conductive fiber, comprising: 1) providing a graphene/PET conductive master batch and PET chips with a natural color, wherein water contents of the graphene/PET conductive master batch and the PET chips with a natural color are lower than 30 ppm; 2) carrying out melt blending on the graphene/PET conductive master batch and the PET chips with a natural color by using a dynamic mixer, and feeding a mixture into a twin-screw extruder to obtain a nascent PET-based graphene fiber, wherein the dynamic mixer is a three-dimensional efficient mixer; 3) carrying out drawing and heat setting on the nascent PET-based graphene fiber to obtain a PET-based graphene conductive fiber. The present disclosure further provides a PET-based graphene conductive fiber prepared by the above method and an application thereof.

21: 2021/09227. 22: 2021-11-18. 43: 2022-02-11
51: G01G
71: Ningxia University, Ningxia Institute of Water Conservancy Science
72: XU, Ligang, TANG, Rui, LI, Jinze, TANG, Ying, ZHAO, Aiguo

54: MULTI-CHANNEL PLANT EVAPOTRANSPIRATION REMOTE MONITORING SYSTEM

00: -

The present invention relates to a multi-channel plant evapotranspiration remote monitoring system, characterized in that soil water humidity sensor at different gradients is buried on a container supporting component; the container supporting component is in contact with an S-shaped high-accuracy weighing sensor through a polarization-resistant stainless steel ball; and weight changes of a plurality of containers at different time that are measured by a remote data transmission system are automatically acquired to perform multi-path regular acquisition, so that the water consumptions of plant water transpiration and soil water leakage can be obtained. The present invention has a simple structure, convenient use, high measurement accuracy, and wide application prospect, is favorable for studies of the scientific research departments, is applicable to a meteorological observatory (station), a farmland, a forestry station, and other departments, and is an essential instrument for observing plant transpiration.



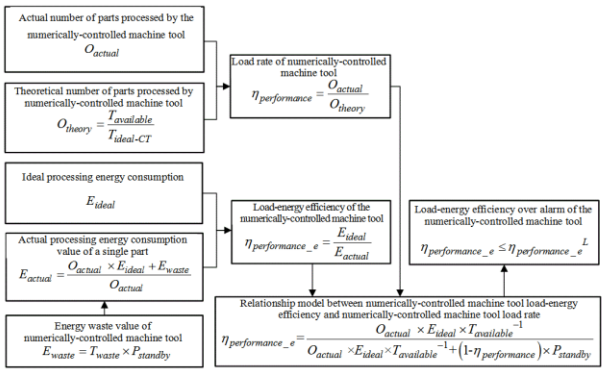
21: 2021/09228. 22: 2021-11-18. 43: 2022-02-14
51: B23Q
71: Shandong University of Science and Technology
72: Jia Shun, Guan Yihao, Wang Shang, Min Xiangpeng, Hou Tianyou, Chen Hong, Zhou Guangfeng, Zhao Jiali, Su Shengshuai, Ma Le, Yang Yang, Zhang Jingyan

54: METHOD FOR EVALUATING AND MONITORING THE LOAD-ENERGY EFFICIENCY OF NUMERICALLY-CONTROLLED MACHINE TOOL FOR ENERGY SAVING AND EMISSION REDUCTION

00: -

The invention discloses an method for evaluating and monitoring the load-energy efficiency of numerically-controlled machine tool for energy

saving and emission reduction. Firstly, the load rate of numerically-controlled machine tool is calculated by obtaining the actual number of machined parts and the theoretical number of machined parts in the evaluation period. Then, by obtaining the time waste value of the numerically-controlled machine tool and the standby power of the machine tool, the energy waste value of the machine tool is calculated. The actual processing energy consumption of single-piece parts is further calculated, and the load-energy efficiency of numerically-controlled machine tool is calculated by combining the ideal processing energy consumption of single-piece parts. Based on the load rate model and load-energy efficiency model of numerically-controlled machine tool obtained above, the relationship model between load-energy efficiency and load rate of numerically-controlled machine tool is constructed. Based on the above evaluation model, the load-energy efficiency of numerically-controlled machine tool is monitored and overrun alarm is given. The method of the invention is scientific in evaluating the load-energy efficiency of numerically-controlled machine tools, and can control the load-energy efficiency within the required range, which is a practical and effective method.



21: 2021/09229. 22: 2021-11-18. 43: 2022-02-14
51: A01B
71: Qingdao Agricultural University, Shandong Chunyi Agricultural Technology Development Co., Ltd
72: Wan Xuejie, Liu Yiguo, Sun Xinling, Zhang Yumei, Che Lin, Lin Zhidong
54: WATER-SAVING AND HIGH-YIELD CULTIVATION METHOD OF DRYLAND WHEAT
00: -
The invention is about a water-saving and high-yield cultivation method of dryland wheat, which relates to a cultivation method of crops. Its cultivation methods: fertilization-tillage-variety selection-flat sowing-group control-use cultivating and suppression to protect soil moisture and prevent drought. According to the invention, the early and deep application of fertilizer is used to increase the root ligation before winter and the ratio of root to shoot, making the root fully absorb the water and nutrients of deep soil; Use flat sowing to increase dryland wheat population and cultivate strong seedlings; Adopt a reasonable group management strategy, and synchronously increase the number of grains per spike and 1000-grain weight on the basis of large population to increase the yield of dryland wheat; It not only reduces the risk of waiting for rain topdressing in the later growth stage of wheat, but also saves labor and effort.

21: 2021/09230. 22: 2021-11-18. 43: 2022-02-11
51: D06M
71: Qingdao University
72: HAO, Longyun, WANG, Rui, FANG, Kuanjun, CAI, Yuqing
54: METHOD FOR IMPROVING CREASE RESISTANCE AND ANTIBACTERIAL PROPERTY OF PURE COTTON FABRIC
00: -
A method for improving crease resistance and antibacterial property of pure cotton fabric, including: (1) heating deionized water to a temperature of 60 degrees Celsius, adding polyethylene glycol 400 at a mass concentration of 0.5-1%, Tween 80 at a mass concentration of 0.5-1%, and hexadecyl trimethyl ammonium bromide at a mass concentration of 0.25-0.5%, then adding propolis at a mass concentration of 0.5-1%, and fully stirring; (2) adding butanetetracarboxylic acid at a mass concentration of 5-10% and sodium hypophosphite at a mass concentration of 3-6%, and fully stirring for dissolution; and (3) immersing to-be-treated cotton fabric therein, immersing the cotton fabric twice, rolling the cotton fabric twice with a liquid carrying rate of 100%, finally drying the fabric at 90 degrees Celsius, and baking the fabric at 180 degrees Celsius for 2 minutes.

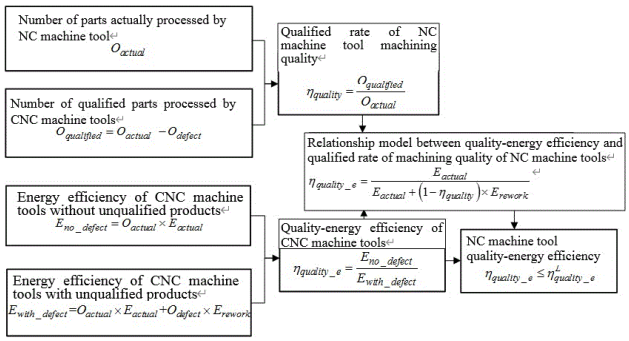
21: 2021/09231. 22: 2021-11-18. 43: 2022-02-14
51: B23Q
71: Shandong University of Science and Technology

72: Jia Shun, Min Xiangpeng, Chen Hong, Hao Jian, Zhang Na, Hou Tianyou, Wang Shang, Yang Yang, Zhang Jingyan, Ma Le, Su Shengshuai

54: METHOD FOR EVALUATING AND MONITORING QUALITY-ENERGY EFFICIENCY OF COMPUTER NUMERICAL CONTROL MACHINE TOOL MACHINING PROCESS

00: -

The invention discloses a method for evaluating and monitoring the quality-energy efficiency of CNC machine (Computer Numerical Control Machine, or also called NC machine) tool machining process for energy saving and emission reduction in manufacturing industry. The method comprises the following steps: firstly, according to the actual number of parts processed by the numerical control machine and the number of qualified parts processed, calculating and obtaining the qualified rate of machining quality of the numerical control machine; Then, by obtaining the energy consumption of the NC machine tool with and without unqualified products in a given period, the quality-energy efficiency of the NC machine tool processing process is calculated. Based on the above-mentioned NC machine tool machining quality qualification rate and quality-energy efficiency, the relationship model between NC machine tool quality-energy efficiency and machining quality qualification rate is constructed. Based on the above evaluation model, the quality-energy efficiency of NC machine tool machining process can be monitored in real time, and overrun alarm and control can be carried out. The method of the invention is scientific in evaluating the quality-energy efficiency of the machining process of the numerical control machine tool, and can control the quality-energy efficiency of the machining process of the numerical control machine tool within the required range, thus being a practical and effective method.



21: 2021/09233. 22: 2021-11-18. 43: 2022-02-09

51: A01K

71: Wenzhou University

72: ZHAO, Min, ZHENG, Xiangyong, ZHANG, Jintao, BEI, Ke, JIN, Zhan, WU, Suqing, FAN, Chunzhen, DAI, Chuanjun, XU, Bentuo, XIAO, Derong, LIU, Renlan, HAN, Wenjuan, TANG, Ye, WANG, Zhiquan, KONG, Hainan

33: CN 31: 202110977640.8 32: 2021-08-24

54: SYSTEM AND METHOD FOR TREATING HUMAN AND LIVESTOCK EXCREMENT

00: -

The present invention relates to a system for treating human and livestock excrement, including: an excrement collection system having a feces collection unit and a urine collection unit; a feces treatment system having a feces dry distillation treatment unit or a feces hydrothermal synthesis treatment unit, for treating feces collected by the feces collection unit to produce biochar; a urine treatment system having a urine pretreatment unit, a constructed wetland unit and a wetland plant dry distillation treatment unit, wherein the urine pretreatment unit is used to treat a urine mixed solution collected by the urine collection unit to produce struvite crystals, the constructed wetland unit is used to purify excess tail water after the treatment of the urine pretreatment unit, and the wetland plant dry distillation unit is used to produce biochar from wetland plants after the tail water is treated, and to treat human and livestock excrement.

21: 2021/09234. 22: 2021-11-18. 43: 2022-02-11

51: A01G

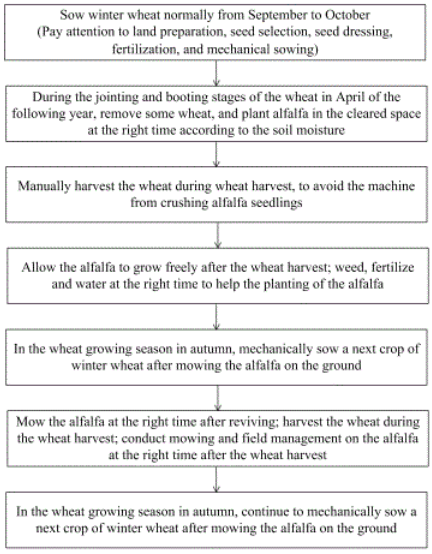
71: MODERN COLLEGE OF HUMANITIES AND SCIENCES OF SHANXI NORMAL UNIVERSITY

72: ZHANG, Xiaohong

54: WHEAT-ALFALFA INTERCROPPING METHOD

00: -

The present disclosure provides a wheat-alfalfa intercropping method. On the basis of the successful planting of alfalfa, the wheat is intercropped in a mechanical sowing manner; after wheat harvest, the alfalfa continues to grow for yield. Compared with a traditional wheat-alfalfa crop rotation technology system, the planting method, through the wheat-alfalfa intercropping, can incessantly take full advantage of biological nitrogen fixation of the alfalfa, and achieve the purposes of co-production, and mutual supplementation and promotion of ration and forage; the original intention of the combination of agriculture and livestock is realized; the planting method solves the problem that because of the rotational cropping of the wheat and the alfalfa during the wheat-alfalfa crop rotation, no food security exists within the growth period of the alfalfa, and no companion and supplementation of the leguminous alfalfa capable of performing biological nitrogen fixation exist within the growth period of the wheat.



21: 2021/09235. 22: 2021-11-18. 43: 2022-02-11
51: G01N
71: Qingdao Agricultural University
72: HAN, Lei

54: ONE-POT NON-ENZYMATIC GLUCOSE COLORIMETRIC DETECTION METHOD BASED ON ENZYME-LIKE NANOMATERIAL

00: -

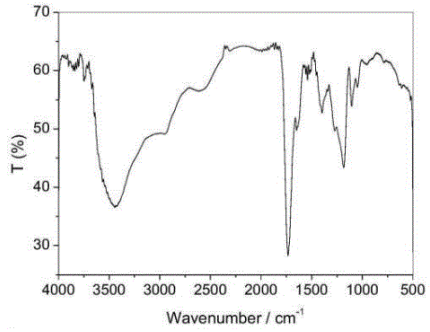
The present disclosure relates to the fields of nanomaterials, catalysis, and analytical chemistry, in particular to a one-pot non-enzymatic glucose colorimetric detection method based on an enzyme-like nanomaterial. In the method, using nanostructural characteristics and properties of functional groups of bovine serum albumin (BSA), a mixture of BSA with manganous ions reacts with sodium hydroxide at room temperature to produce manganese dioxide nanosheets (MnO2 NSs) in the BSA stably. The material has peroxidase-like and glucose oxidase-like activity, and the optimal activity conditions of the both mimetic enzyme activities are similar. Therefore, a novel one-step non-enzymatic glucose colorimetric detection method is established, and the material has a wide application prospect in the fields of analytical chemistry, environmental engineering, and catalysis.

21: 2021/09236. 22: 2021-11-18. 43: 2022-02-11
51: A61K; C08G; A61P
71: JIANGNAN UNIVERSITY
72: SANG, Xinxin, NI, Caihua, ZHANG, Liping
33: CN 31: 202011441639.5 32: 2020-12-08

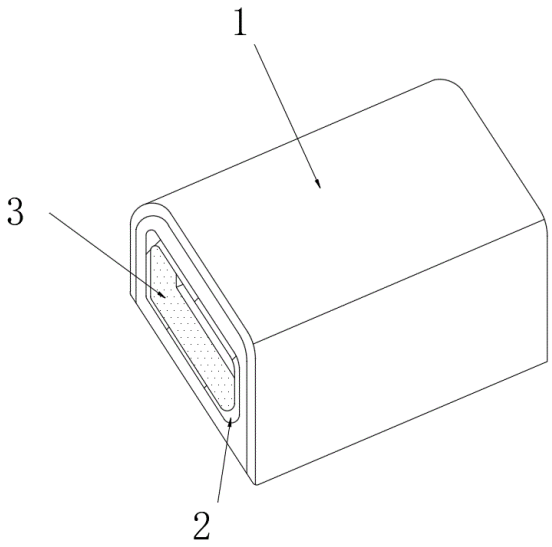
54: MODIFIED CHITOSAN MICROGEL AND PREPARATION METHOD AND USE THEREOF

00: -

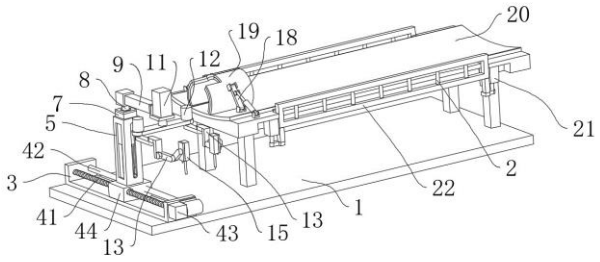
The present disclosure relates to a modified chitosan microgel and a preparation method and use thereof, belongs to the technical field of synthesis for chitosan derivatives. In the present disclosure, the chitosan is modified by a random copolymer of epsilon-caprolactone and 3-hydroxyadipic acid 3, 6-lactone, and negatively-charged carboxyl groups suspended in a side chain of a structural unit of the random copolymer is compounded with positively-charged amino groups in a chitosan molecule to form the modified chitosan microgel. The preparation method is simple, safe, reliable and easily controllable. Moreover, the prepared modified chitosan microgels have desirable stability, high drug loading rate, no cytotoxicity and desirable biocompatibility, and can be used as anticancer drug carriers. In addition, the chitosan and the random copolymer of epsilon-caprolactone and 3-hydroxyadipic acid 3,6-lactone are both biodegradable polymers that are suitable for use in the human body as biological materials.



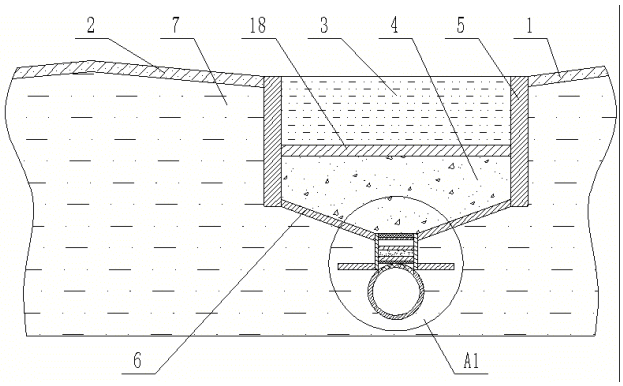
21: 2021/09269. 22: 2021-11-19. 43: 2022-02-14
51: A61B; G01V
71: University of Shanghai for Science and Technology, Shanghai University of Medicine & Health Sciences
72: Huang Qingming
54: NOVEL MAGNETIC RESONANCE RADIO FREQUENCY COIL ASSEMBLY
00: -
The invention belongs to the technical field of magnetic resonance, in particular to a novel magnetic resonance radio frequency coil assembly, which comprises a coil assembly body, wherein a placing cylinder is fixedly arranged on the inner side wall of the coil assembly body, a gasket is bonded and fixed on the upper surface of the placing cylinder, a first fixing plate is fixedly arranged at the middle position of the upper surface of the inner side wall of the placing cylinder, and a second fixing plate is fixedly arranged on one side of the inner side wall of the placing cylinder close to the first fixing plate; two sides of the first fixing plate are respectively provided with a second fixing plate and a third fixing plate, and a partition plate is arranged on the inner upper surface of the placing cylinder. If a patient needs to check his left hand, the first fixing plate is matched with the second fixing plate for placing, and if he needs to check his right hand, the first fixing plate is matched with the third fixing plate for placing. The partition plate is beneficial to separating the five fingers of the patient, and the examination of the left and right hands can be completed through a single coil assembly body, thus reducing the medical equipment expenditure of medical personnel and facilitate the medical personnel.



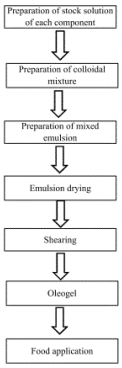
21: 2021/09270. 22: 2021-11-19. 43: 2022-02-14
51: A61B
71: Jiangsu Cancer Hospital
72: Li Yang, Zong Dan
54: ROBOT FOR HEAD AND NECK TUMOR SURGERY
00: -
The invention discloses a robot for head and neck tumor surgery, which is characterized by comprising an installation plate and a bottom plate for installing the installation plate, wherein a moving mechanism is installed on the installation plate, a hollow column is installed on the moving mechanism, a servo hydraulic cylinder is installed in the hollow column, an adjusting column is installed on the output end of the servo hydraulic cylinder, the servo hydraulic cylinder is slidably installed in the hollow column, and a first adjusting mechanism is installed in the hollow column. The first adjusting mechanism is provided with a first servo electric cylinder, the output end of the first servo electric cylinder is provided with an L-shaped plate, and the L-shaped plate is provided with a height component, so that the horizontal angle of the second mechanical arm of the first mechanical arm can be conveniently adjusted by rotating the component, the patient can be operated conveniently by surgical instruments, the position of the protective cover can be conveniently adjusted by the second adjusting mechanism, the patient's head can be conveniently clamped, and the internal condition of the skull can be conveniently known by the visual sensor.



21: 2021/09271. 22: 2021-11-19. 43: 2022-02-14
51: B01D; C02F; E03B
71: Xuzhou University of Technology
72: Tan Xuehong
54: RAINWATER PURIFICATION SYSTEM OF GARDEN ROAD GREENING ISOLATION BELT
00: -
The invention discloses a rainwater purification system of a garden road greening isolation belt, which comprises an isolation belt and sidewalks and lanes on both sides of the isolation belt, wherein the isolation belt comprises a soil layer, the lanes and sidewalks are obliquely arranged, the lowest ends of the lanes and sidewalks are on the same plane as the top surface of the soil layer, a gravel layer is arranged below the soil layer, two sides of the soil layer and the gravel layer are respectively provided with waterproof boards, and one side of the waterproof boards is abutted with the underground soil layers of the lanes and sidewalks. The other side of the waterproof board is abutted against the side of the soil layer and the gravel layer, and two sides of the bottom of the gravel layer are respectively provided with a water collecting plate, both of which are obliquely arranged and have opposite inclinations, the top surfaces of the two water collecting plates are abutted against the bottom of the gravel layer, the bottom surfaces of the two water collecting plates are abutted against the underground soil layer, and a water outlet channel is formed between the two water collecting plates, the bottom of the water outlet channel is provided with a plurality of filter mechanisms which are sequentially communicated from end to end, and the bottom of the filter mechanisms is communicated with urban water pipes.



21: 2021/09274. 22: 2021-11-19. 43: 2022-02-11
51: C09K; E21B
71: Qingdao University of Science and Technology
72: DONG, Xiufang, XIE, Wancui, WANG, Chunyan, QI, Hang, YANG, Xihong, LI, Hongyan, CHE, Hongxia, SONG, Lin
54: METHOD FOR PREPARING PHLOROTANNINS-LOADED OLEOGEL AND APPLICATION THEREOF
00: -
An phlorotannins-load oleogel and applicaiton thereof. The phlorotannins-load oleogel is composed of gelatin, linseed gum polysaccharides, the phlorotannins and animal and plant blend oil. A method for preparing the phlorotannins-load oleogel includes the following steps: dissolving the phlorotannins in 75% of an ethanol solution, dissolving gelatin in deionized water, injecting a phlorotannin ethanol solution into a gelatin aqueous solution for mixing and stirring to form a uniform phlorotannin-gelatin complex for standby use, preparing a linseed gum aqueous solution at the same time, injecting the linseed gum aqueous solution into a phlorotannin-gelatin complex solution for mixing and stirring to form a ternary complex, finally adding animal and plant blend oil composed of soybean oil and fish oil into the formed ternary colloidal mixture, conducting high-speed shearing and emulsification to form a multi-element composite emulsion, and then freeze-drying or drying to obtain edible phlorotannins-load oleogel.

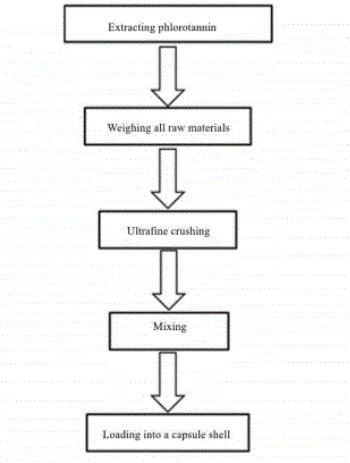


21: 2021/09277. 22: 2021-11-19. 43: 2022-02-11
51: A23L
71: Qingdao University of Science and Technology
72: DONG, Xiufang, XIE, Wancui, WANG, Chunyan, QI, Hang, YANG, Xihong, LI, Hongyan, CHE, Hongxia, SONG, Lin

54: PHLOROTANNIN -RICH CAPSULE WITH EASE-CONSTIPATION ACTION AND PROCESSING TECHNOLOGY THEREOF

00: -

The present disclosure relates to a phlorotannin-rich capsule with ease-constipation action and a processing technology thereof, and belongs to the technical field of health food processing. The phlorotannin-rich capsule with ease-constipation action provided herein comprises the following raw materials in parts by weight: 0.4-0.8 part of self-made phlorotannin extract, 1-5 parts of Nelumbo nucifera Gaertn leaf, 1-5 parts of Crataegus pinnatifida Bunge, 6-10 parts of Aloe vera extract, 1-5 parts of Lonicera japonica Thunb., 6-10 parts of Lycium chinense Miller, 6-10 parts of Ziziphus jujuba Mill. and 0.6-1 part of Panax quiquefolium L. The raw materials are crushed one by one according to the formula amount and mixed, and then the mixed powder is filled into a capsule shell to obtain an phlorotannin-rich capsule with ease-constipation action.

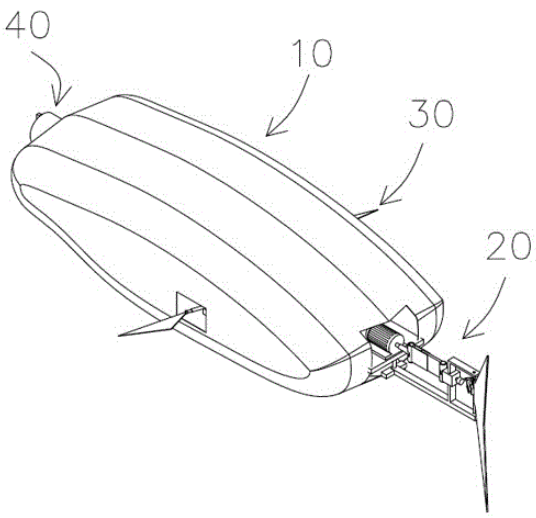


21: 2021/09278. 22: 2021-11-19. 43: 2022-02-14
51: B63C
71: Baicheng Normal University
72: Liu Yingxuan, Wang Gang, Yang Haotian, Zhao Qiang, Liu Zhenguo, Zhang Ying, Ma Yuanyuan, Yang Yulong, Huang Qirun, Xu Chang, Qian Zhongyu

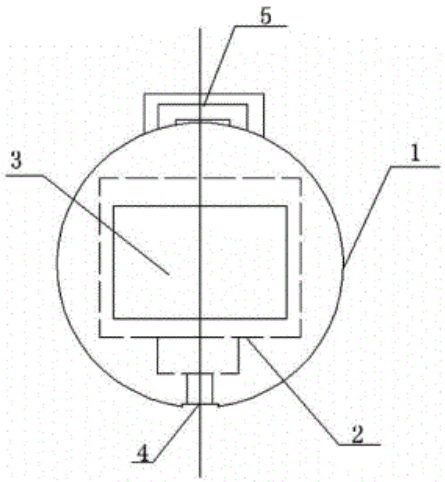
54: ROBOT FISH FOR UNDERWATER DETECTION AND WORKING METHOD THEREOF

00: -

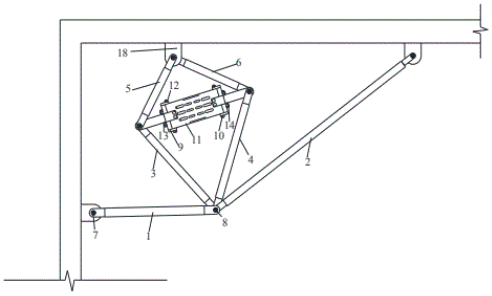
The invention provides a robot fish for underwater detection and a working method thereof, which comprises a fish body, wherein the fish body is provided with a tail structure, a fin structure and a fish mouth structure in turn from the tail to the head position; the fish mouth structure comprises a mounting plate, an accommodating channel, detection heads and a clamping cylinder. Regarding the specific use, the fish tail structure provides power to move, the fish fin structure is used for balance adjustment, image information collection is completed by image acquisition devices such as cameras and the like, and foreign matter grabbing is completed by the fish mouth structure. Specifically, through the telescopic movement of the cylinder, the moving rod drives the two clamping rods to move in position, so that the bending parts are matched with the inclined plane structure of the convex block, so that the two clamping rods are opened and tightened by the spring structure, thereby completing the fixing effect on the object in the process of opening and tightening. Specifically, the object can be fixed at a position between the outer end of the clamping rods and the outer end face of the accommodating channel.



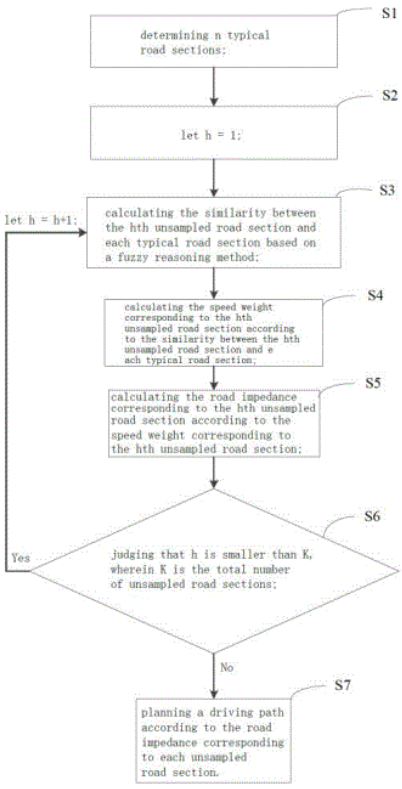
21: 2021/09279. 22: 2021-11-19. 43: 2022-02-11
51: A44C
71: Wenzhou Treasure Crafts Co., Ltd.
72: YANG, Yi, YANG, Qiyue, YANG, Cairong
54: ELECTRONIC MEDAL
00: -
An electronic medal including a display module and an outer shell is disclosed. The display module includes a PLB circuit board and an LED display screen which are connected to each other. The LED display screen is embedded on the surface of the outer shell, the PLB circuit board is located in the outer shell and is provided with a Bluetooth controlled switch for controlling the LED display screen, a ribbon connection port is provided on the upper side face of the outer shell, a USB connection port connected to the PLB circuit board is provided on the lower side face of the outer shell, and the USB connection port is used for inputting data information into the PLB circuit board.



21: 2021/09283. 22: 2021-11-19. 43: 2022-02-11
51: E04B; E04H
71: Beijing University of Technology
72: HE, Haoxiang, LAN, Bingji, WANG, Lihui, CHENG, Shitao
54: COMPOSITE ENERGY CONSUMPTION SYSTEM WITH SECONDARY DISPLACEMENT MAGNIFICATION AND SELF-RESETTING TRIGGER FUNCTIONS
00: -
The present invention discloses a composite energy consumption system with secondary displacement magnification and self-resetting trigger functions and belongs to the technical field of energy dissipation and shock absorption of building structures. The system is mainly composed of a secondary displacement magnification mechanism and a self-resetting trigger damper. The system may magnify displacement between structure layers and load the displacement at two ends of the damper by utilizing characteristics of a displacement magnification device on premise of occupying a small space, so that the self-resetting trigger damper fully deforms and consumes energy. The self-resetting function of the damper is not triggered when a small earthquake occurs, and earthquake energy is dissipated through in-plane plastic deformation of a hollow metal sleeve. However, the self-resetting function of the damper is triggered under the effect of a major earthquake, and residual plastic deformation of the structure is decreased while efficiently consuming the energy.



21: 2021/09285. 22: 2021-11-19. 43: 2022-02-11
51: G01C
71: Hohai University
72: RUI, Xiaoping, LAN, Zeduo
33: CN 31: 202011561630.8 32: 2020-12-25
54: MOUNTAIN ROAD SAFETY PATH PLANNING METHOD AND SYSTEM BASED ON FUZZY RANDOM FOREST ALGORITHM
00: -
The invention provides a mountain road safety path planning method and system based on a fuzzy random forest algorithm, the method comprising determining n typical road sections; let h = 1; calculating the similarity between the hth unsampled road section and each typical road section based on a fuzzy reasoning method; calculating the speed weight corresponding to the hth unsampled road section according to the similarity between the hth unsampled road section and each typical road section; calculating the road impedance corresponding to the hth unsampled road section according to the speed weight corresponding to the hth unsampled road section; until h = K, where K is a total number of unsampled segments; planning a driving path according to the road impedance corresponding to each unsampled road section.



21: 2021/09377. 22: 2021-11-22. 43: 2022-01-21
51: F41B
71: MICHAEL J. GEIER
72: MICHAEL J. GEIER
33: US 31: 62861131 32: 2019-06-13
54: HANDHELD MEASUREMENT, SEARCH AND SAFETY DEVICE
00: -
A handheld measurement, search and safety device that includes a main frame having a handle, an extendable member that slides outwards from the main frame in measured increments, and an interchangeable support brace comprising either a buttstock or arm brace to allow responders to use the extendable member to survey hazardous materials at a distance, or a one-handed configuration used to survey hazard materials in confined areas. The handheld measurement, search and safety device includes a plurality of picatinny rails disposed on both the main frame and extendable member to removably mount a host of different field survey instruments and/or tactical accessories for detecting, locating, identifying, measuring, or sampling hazardous materials including radioactive materials or toxic chemicals.

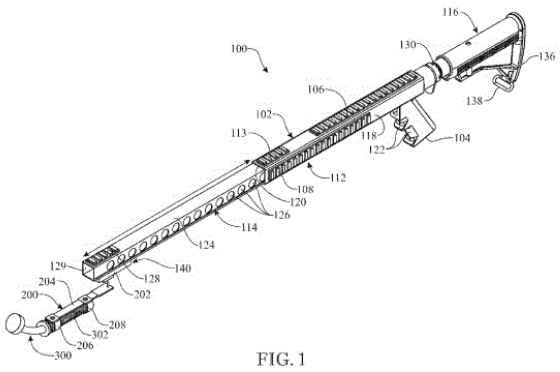
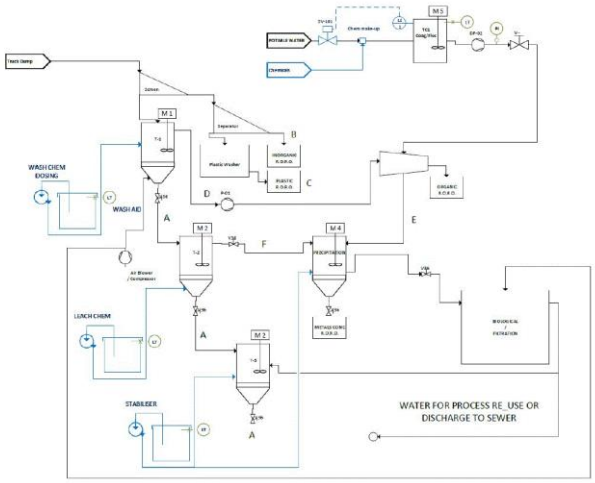


FIG. 1

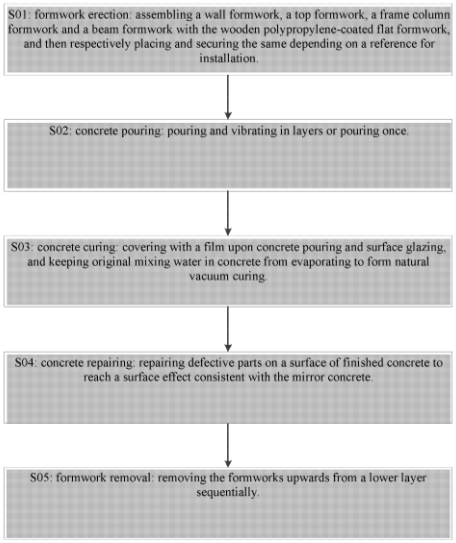
21: 2021/09458. 22: 2021-11-24. 43: 2022-01-18
51: B01D B03B B03C B07B C08J G01N
71: WASTE REFINING SYSTEMS (PTY) LTD
72: SCHOEMAN, Lu, Raubenheimer, SALOMONS, Peter
33: ZA 31: 2021/00187 32: 2021-01-12
54: PROCESSING HAZARDOUS URBAN WASTE WATER
00: -
The invention relates to the treatment of hazardous urban wastewater products and particularly to the removal of heavy metals from toxic waste streams and reclassification of such hazardous urban waste products as non-hazardous waste.



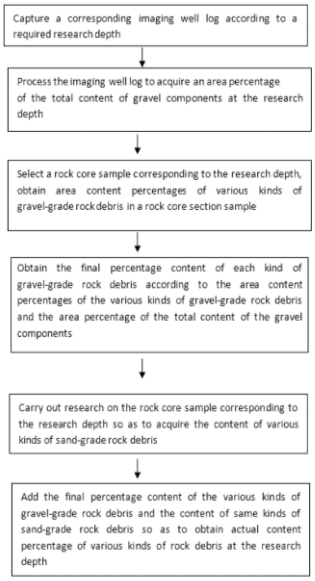
21: 2021/09483. 22: 2021-11-24. 43: 2022-01-10
51: A61K; A61P
71: BEIJING GREAT WORLD LVKANG EDUCATION CONSULTING GROUP CO., LTD
72: XIAO, WEN, LIU, WEI
54: A GREEN COMPOSITION FOR PREVENTING AND TREATING AFRICAN SWINE FEVER
00: -
The present invention pertains to the technical field of veterinary medicine, particularly to a green composition for preventing and treating African swine fever.

21: 2021/09490. 22: 2021-11-24. 43: 2022-01-21
51: E04B
71: NO.3 ENGINEERING COMPANY OF CHINA RAILWAY NO.8 ENGINEERING GROUP CO., LTD., CHINA RAILWAY NO.8 ENGINEERING GROUP CO., LTD.
72: GUO, Xiangwu, ZHAO, Zhi, TANG, Jianhe, XI, Liping, CHEN, Xiaohong, WANG, Zhiyong, GONG, Sikun, ZHANG, Xiongzhao, YU, Huazhong, LIU, Jiayin, ZHOU, Xiaolin, WANG, Zhi, ZHAO, Daiqiang
33: CN 31: 202011327154.3 32: 2020-11-24
54: CONSTRUCTION METHOD FOR MIRROR CONCRETE WITH WOODEN POLYPROPYLENE-COATED FLAT FORMWORK
00: -
The present invention relates to the technical field of concrete construction, specifically to a construction method for mirror concrete with a wooden polypropylene-coated flat formwork. According to the construction method disclosed by the present invention, by virtue of the splicing design for beam and column formworks, the design for concrete mix proportion and improvement of construction technology, the appearance quality of beam and column concrete members is improved; materials are saved, the building weight is reduced, and the

natural attractive effect is added to the buildings; the construction duration is shortened and the construction cost is reduced; and the decoration procedures such as plastering and spraying are omitted, and heaps of building waste is decreased to be favorable for environmental protection.

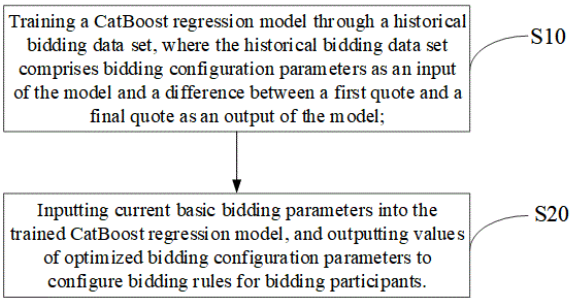


21: 2021/09519. 22: 2021-11-24. 43: 2022-03-16
51: G01N
71: CHINA UNIVERSITY OF PETROLEUM (EAST CHINA)
72: QU, Xiyu, YAO, Xiutian, CHEN, Sirui
33: CN 31: 201910309461.X 32: 2019-04-17
54: METHOD FOR CREATING STATISTICS ON CONTENT OF ROCK DEBRIS IN CONGLOMERATE RESERVOIR
00: -
Disclosed is a method for creating statistics on the content of rock debris in a conglomerate reservoir, which relates to the field of quantitative characterization of reservoir petrology in the study of conglomerate reservoirs. The method comprises the following steps: capturing an imaging well log according to a research depth; processing the imaging well log to acquire an area percentage of the total content of gravel components; selecting a rock core sample, and obtaining area content percentages of various kinds of gravel-grade rock debris in a rock core section sample; obtaining the final percentage content of each kind of gravel-grade rock debris according to the area content percentages of the various kinds of gravel-grade rock debris and the area percentage of the total content of the gravel components; acquiring the content of various kinds of sand-grade rock debris in the rock core sample corresponding to the research depth.

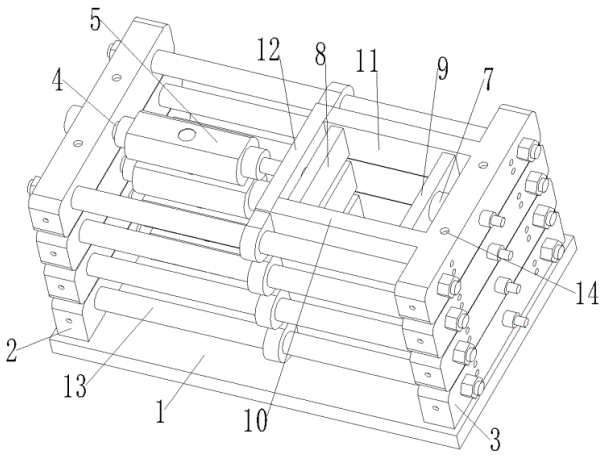


21: 2021/09526. 22: 2021-11-25. 43: 2022-02-09
51: G06Q
71: ANHEUSER-BUSCH INBEV (CHINA) CO., LTD.
72: Manion ZACHARIAH, ZHOU, Rongrong, DING, Xiaomin
33: CN 31: 202110928542.5 32: 2021-08-13
54: COMPUTER-IMPLEMENTED BIDDING METHOD, COMPUTER EQUIPMENT AND STORAGE MEDIUM
00: -
The present invention provides a computer-implemented bidding method, computer equipment and a storage medium. In a specific implementation, the method includes: training a CatBoost regression model through a historical bidding data set, where the historical bidding data set includes bidding configuration parameters as an input of the model and a difference between a first quote and a final quote as an output of the model; and inputting current basic bidding parameters into the trained CatBoost regression model, and outputting values of optimized bidding configuration parameters to configure bidding rules for bidding participants. This implementation can help a purchaser to purchase a

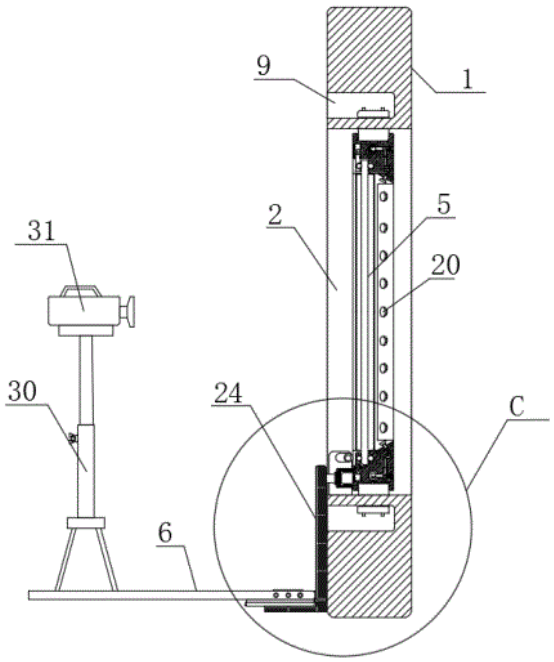
required product at a relatively low price, thereby saving the purchase cost.



21: 2021/09563. 22: 2021-11-25. 43: 2022-01-24
51: E21C
71: Linyi University
72: Wang Hailong, Song Xiaoyuan, Jia Chuanyang, Zhang Guibin, Sun Xizhen, Liu Keming
33: CN 31: 202111323036.X 32: 2021-11-10
54: MEASURING DEVICE FOR SIDE PRESSURE OF CAVED GANGUE IN GOB UNDER LOAD
00: -
The invention discloses a measuring device for lateral pressure of caved gangue in gob under load, including bottom plate, left reacting plate and right reacting plate; left reacting plate is equidistantly provided on one side of bottom plate , right reacting plate is equidistantly provided on the other side, and between the left reacting plate and the right reacting plate is fixedly provided on both sides of bottom plate through positioning pin; device designed by the invention for measuring lateral compressive pressure of caved gangue bearing deformation, it can ensure the accurate measurement of compressive stress on the side wall of experimental device in the process of caved gangue bearing deformation experiment, at the same time, high stability, it is convenient for caved gangue sample to install and disassemble, the height of caved gangue sample can be adjusted by increasing or decreasing the combined number of devices to meet different test requirements.

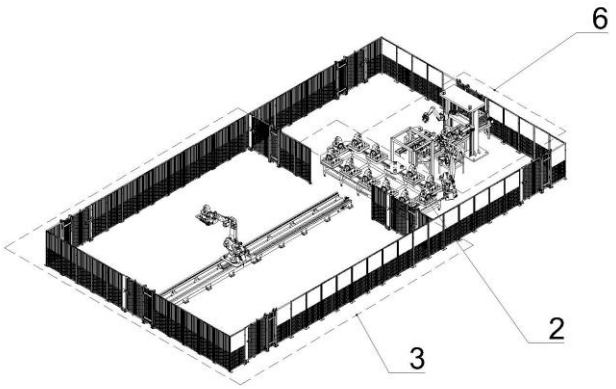


21: 2021/09564. 22: 2021-11-25. 43: 2022-01-31
51: E21C
71: Linyi University
72: Wang Hailong, Sun Xizhen, Jia Chuanyang, Zhang Guibin, Liu Keming, Song Xiaoyuan
33: CN 31: 202111323007.3 32: 2021-11-10
54: MEASURING DEVICE AND METHOD FOR ACCUMULATION CHARACTERISTICS OF CAVED GANGUE IN GOB WITH GOB-SIDE ENTRY RETAINING
00: -
The invention relates to the technical field of mining measurement, in particular to measuring device and method for accumulation characteristics of caved gangue in gob with gob-side entry retaining, including retaining wall, a window is opened through one side of retaining wall, the purpose of rapid assembly in the complex environment of underground coal mine is realized through a fast connection mode of installation box, it has the advantages of simple operation, convenient transportation and wide application range, sealing airbag and clamping airbag is connected through connecting pipe, equipment and observation plate are effectively sealed and fixed limit, and the dust and water mist air in gob are blown while maintaining stable connection under the action of several cleaning nozzle connected with exhaust valve on one side, to avoid poor visibility on one side of observation plate, rapidly installed and connected through L-shaped supporting plate, in the face of the complex terrain in coal mine, determination camera can still be assembled quickly, the purpose of high installation efficiency and accurate measurement results is achieved.

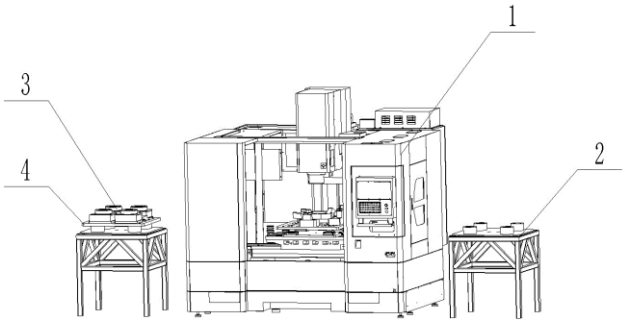


21: 2021/09609. 22: 2021-11-26. 43: 2022-02-24
51: B02C
71: ALANAZI ABDULLAH KHALAF, ABO-DIEF HALA MOHAMED, MOHAMED ASHRAF TALAAT, PANDA RAMESH CHANDRA, PRAMANIK TANAY
72: ALANAZI ABDULLAH KHALAF, ABO-DIEF HALA MOHAMED, MOHAMED ASHRAF TALAAT, PANDA RAMESH CHANDRA, PRAMANIK TANAY
54: AN IOT BASED MOBILE OPERATED SOLAR BALL MILL SYSTEM
00: -
The present invention relates to an IoT-based mobile-operated solar ball mill (102) system (100). The system (100) comprises a ball mill (102), a motor unit (104), a power supply unit, a central processing unit (106), and a positioning unit (112). The ball mill (102) is configured to grind input grinding materials. The motor unit (104) is configured to provide mechanical energy (rotational movement) to the ball mill (102). The power supply unit is configured to supply electrical power to the ball mill (102) and motor unit (104). The ball mill (102), motor unit (104), power supply unit, positioning unit (112) are operationally connected with the central processing unit (106). The system (100) also comprises one or more display units (116). The one or more display units (116) are configured to provide user inference, display real-time functions performed by the ball mill (102) and motor unit (104). The present invention provides the ball mill (102) system (100) that can be remotely monitored and powered by a renewal source of energy.

21: 2021/09610. 22: 2021-11-26. 43: 2022-03-01
51: B65H
71: Qingdao University of Technology, Qingdao Cabos Intelligent Manufacturing Co., Ltd
72: Chen Minkai, Li Changhe, Qin Aiguo, Fan Hanqi, Zhou Zongming, Li Min, Li Junting, Jiang Tao, Zhao Xufeng
54: AUTOMATIC FEEDING DEVICE AND CONVEYING SYSTEM FOR THE ACTION SUPPORT OF TANK TRACK
00: -
The invention relates to the technical field of processing for the action support of tank track, in particular to an automatic feeding device and a conveying system for the action support of tank track, which comprises an annular conveying line, wherein one side of the annular conveying line is provided with a feeding device; the annular conveying line comprises a support frame, the top of which is fixedly connected with a bottom plate, the top surface of which is fixedly connected with an annular guide rail, a plurality of pallets are slidably connected above the annular guide rail, the top of the pallet is detachably connected with a fixture assembly, and the bottom of the pallet is fixedly connected with an annular driving part for moving the pallet; the bottom of the tray is fixedly connected with a tracking trolley, the tracking trolley is slidably connected with the annular guide rail, and the annular driving part is fixedly connected with the tracking trolley. The invention can realize that effective connection of the move bracket from the blank transmission to process output, improve the processing efficiency, and determine the position of the moving bracket in the transportation process.



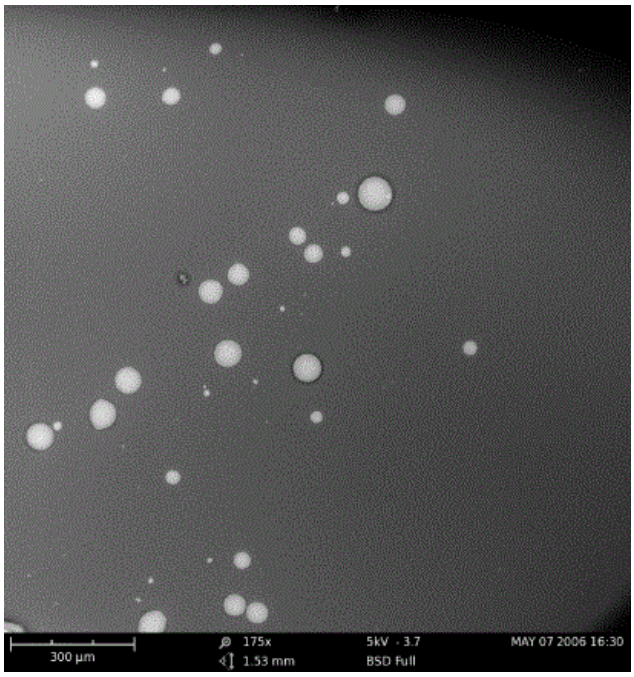
21: 2021/09611. 22: 2021-11-26. 43: 2022-03-01
51: B65H
71: Qingdao University of Technology, Qingdao Cabos Intelligent Manufacturing Co., Ltd
72: Zhang Yanbin, Xu Shuaiqiang, Qin Aiguo, Li Changhe, Fan Hanqi, Li Junting, Jiang Tao, Li Min, Zhou Zongming, Liu Bo, Chen Yun, Yang Yuying
54: PROCESS EQUIPMENT SYSTEM FOR THE ACTION SUPPORT OF TANK TRACK
00: -
The invention discloses a process equipment system for the action support of tank track, which comprises a zero-point positioning system, a workpiece identification system and a clamping device matched with the action support; the clamping device comprises a tooling plate, on which a clamping body and a pressing device for pressing an action bracket are detachably connected, wherein the action bracket is located between the clamping body and the pressing device, and the pressing device abuts against the action bracket. According to the invention, the action supports with different shapes and sizes can be clamped, and the clamping is stable and convenient to operate.



21: 2021/09612. 22: 2021-11-26. 43: 2022-03-01
51: A01H
71: Zhengzhou Fruit Research Institute,CAAS
72: Wang Xinwei, Fang Weichao, Wang Lirong, Zhu Gengrui, Chen Changwen, Cao Ke, Li Yong
54: METHOD FOR PRODUCING CLONAL SEEDLINGS OF PEACH AND ITS ROOTSTOCK
00: -
The invention discloses a method for producing clonal seedlings of peach and its rootstock, which includes technical links such as material propagation, planting, pre-layering management, binding of trunk base, layering, post-layering management, seedling emergence, grading, temporary planting storage and the like. The invention can produce self-rooted seedlings of peach and its rootstock at low cost without depending on facility conditions and material genotype restrictions, and can be used for large-scale production of clonal rootstock.

21: 2021/09613. 22: 2021-11-26. 43: 2022-03-01
51: C06B
71: Nanjing University of Science and Technology, Hubei Institute of Aerospace Chemical Technology
72: Liu Jie, Wu Shixi, He Narenchaogetu, Liu Shishuo, Wang Deqi, Bei Yiying, Chen Ling, Li Fengsheng
54: PREPARATION METHOD OF SPHERICAL AMMONIUM DINITRAMIDE (ADN) AND ITS COMPOSITE OXIDANT
00: -
The invention belongs to the field of oxidants for solid propellants, and provides a preparation method of spherical ammonium dinitramide (ADN) and its composite oxidants. The method comprises the following steps: crystallizing the ADN solution by means of solvent-nonsolvent recrystallization technology, and obtaining spherical ADN with better morphology and controllable particle size by adjusting the technical conditions such as

solvent/nonsolvent type, stirring speed and catalyst. After that, the prepared spherical ADN is coated with AP to obtain the composite oxidant of ADN@AP. Under humid environment, the hygroscopicity of ADN is greatly improved, and its morphology and function could be maintained for a long time, providing better conditions for the application of ADN, and the impact sensitivity is reduced and the safety is improved. The method is simple to operate, low in cost and easy to realize and popularize in industry.

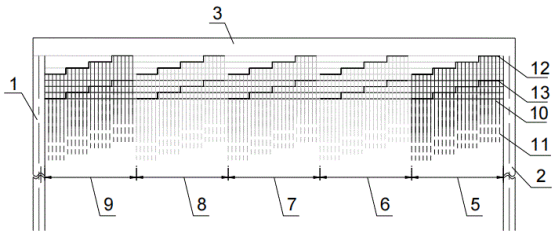


21: 2021/09615. 22: 2021-11-26. 43: 2022-02-11
51: E21F
71: China Coal Technology and Engineering Group Chongqing Research Institute Co., Ltd., Shaanxi Shanmei Hancheng Mining Co., Ltd
72: LIU, Jun, LI, Shengzhou, ZHAO, Junli, LI, Siqian, WANG, Jianli, CHEN, Shaoxiang, YUAN, Benqing, WANG, Zhonghua, LI, Chengcheng, XU, Zunyu, LU, Zhanjin, XU, Junjian, HE, Linpeng, CHEN, Zhiyong, REN, Qihan

54: CONSTRUCTION METHOD FOR PARTIAL BLEEDER OFF HOLES OF STOPE FACE IN CYCLES

00: -

The present invention discloses a construction method for partial bleeder off hole of a stope face in cycles, wherein the working face is divided into a plurality of blocks with equal width along the width direction according to the width of the working face, the construction speed of the partial bleeder off hole of the working face and the advancing speed of the working face, a drilling machine is arranged in each block, and the drilling machine is arranged to construct the partial bleeder off hole from the working face to the front of the working face in a daily overhaul shift. During the implementation of the whole partial discharge measures, the working face does not need to stop the production intentionally to implement the partial discharge outburst prevention measures, so that the safe and efficient production of the working face can be promoted.



21: 2021/09616. 22: 2021-11-26. 43: 2022-03-01
51: A61K
71: Shanxi Agricultural University
72: Liu Huadong

54: PREPARATION METHOD OF DIAGNOSTIC ANTIGEN FOR VIRULENT NEWCASTLE DISEASE INFECTION OF CHICKENS

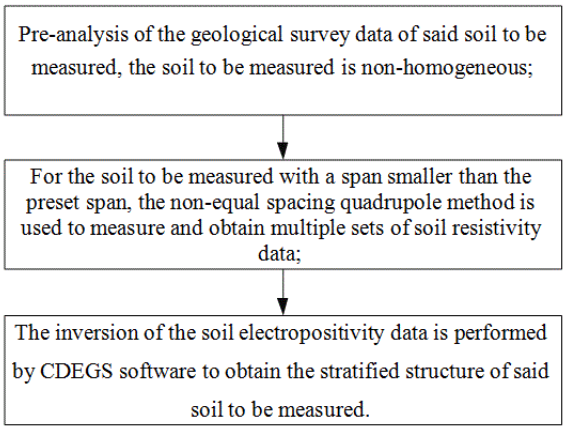
00: -

The invention discloses a method for preparing a diagnostic antigen for virulent Newcastle disease infection of chickens, and belongs to the technical field of veterinary immunology. The preparation method includes the following steps: (1) isolation and identification of NDV virulent strains; (2) preparation of diagnostic antigens: inoculate the isolated and identified virulent NDV strains into chicken embryos for reproduction, harvest the chicken embryo allantoic fluid, and concentrate the chicken embryo allantoic fluid, when the virus titer reaches 28, the NDV virus is inactivated, and the stabilizer is added when the titer is 28 again to obtain the diagnostic antigen; (3) Determination of diagnostic antigen. The invention solves the problems of low accuracy and inconvenience in diagnosis of virulent Newcastle disease infection in chickens, the diagnostic antigen prepared by the invention can be used for rapid diagnosis of virulent Newcastle disease infection in chickens, and can be used for ND epidemiological investigation and

antibody titer detection of chickens before and after immunization, thus providing a strong basis for prevention and control of chicken farms.

21: 2021/09618. 22: 2021-11-26. 43: 2022-03-01
51: C02F
71: Heilongjiang Institute of Construction Technology
72: Bian Xilong, Yu Jingyang, Wang Yuqing, Luo Jiaoying, Wang Hongmei
54: ENERGY-SAVING WATER SUPPLY SYSTEM AND ITS WORKING METHOD
00: -
This invention provides energy-saving water supply system and its working method, belonging to the technical field of energy-saving water supply. The treatment mechanism, the purification mechanism and the sterilization mechanism are sequentially arranged according to the water treatment direction, and the drainage sensor, the water replenishing sensor, the water injection pump and the water replenishing pump are connected with the control system. Domestic sewage is discharged into the treatment pipe, solid waste is filtered by the first filter, granular waste is filtered by the second filter, semi-fluid waste is filtered by the third filter, and adsorbed and purified by the activated carbon layer until the purification tank is mixed with disinfectant. After the drainage sensor senses the water level, The water injection pump discharges that sterilize sewage into the sterilization tank. Disinfected sewage is sterilized in the sterilization tank. When the water replenishing sensor senses that there is no water in the sterilization tank, the water replenishing pump injects water into the sterilization tank through the clean water tank. The invention saves the waste of fresh water and meets the current requirements of energy conservation and environmental protection.

21: 2021/09620. 22: 2021-11-26. 43: 2022-03-02
51: G01N; G01R
71: Hunan Meteorological Disaster Prevention Technology Center (Hunan Lightning Protection Center)
72: Liu Fengjiao, Li Kai, Yang Jiayan, Liu Yueyu, Liu Jinghong, Liu Yanqing, Wang Shaojuan
54: METHOD FOR MEASURING SOIL RESISTIVITY AND METHOD FOR ANALYZING THE LAYERED STRUCTURE OF SOIL
00: -
The invention discloses a method for measuring soil resistivity and a method for analyzing the layered structure of soil. The method for measuring soil resistivity comprises the following steps: for the soil to be measured with a span less than a preset span, a non-equidistant quadrupole method is adopted to measure to obtain multiple groups of soil resistivity data. The method of analyzing the soil layered structure includes: measuring the soil resistivity by the above-mentioned soil resistivity measuring method, and calculating the soil layered structure by the soil layered measuring software. The invention has the advantages of high measurement accuracy, good applicability and the like for sites with small span and uneven soil structure.



21: 2021/09621. 22: 2021-11-26. 43: 2022-02-11
51: B09B
71: Dr. Renuka Sharma, Miss. Shyla, Miss. Prerana Rai, Dr. Shalu, Uma Tomer, Miss. Mamta, Miss. Pushpa, Dr. Mandheer kaur, Dr. Shikha, Tapan Kumar, Dr. Radhika G. Deshmukh, Dr. Sangita Ingole, Prof. Ramesh Chandra Panda
72: Dr. Renuka Sharma, Miss. Shyla, Miss. Prerana Rai, Dr. Shalu, Uma Tomer, Miss. Mamta, Miss. Pushpa, Dr. Mandheer kaur, Dr. Shikha, Tapan Kumar, Dr. Radhika G. Deshmukh, Dr. Sangita Ingole, Prof. Ramesh Chandra Panda
54: A SYSTEM USING AI BASED UNMANNED AERIAL VEHICLE FOR SOLID WASTE MANAGEMENT & ENVIRONMENTAL SENSING
00: -
The present invention relates to a system (100) using AI based unmanned aerial unmanned aerial vehicle for solid waste management & environmental sensing. The system (100) comprises one or more unmanned aerial vehicles (102), a data repository, and one or more display units (118). The one or

more unmanned aerial vehicles (102) are configured to detect information about the area (116) of the solid waste dump. The one or more unmanned aerial vehicles (102) comprises one or more camera units (104), a plurality of sensors (106), a positioning unit (108), and a central processing unit (110). The central processing unit (110) is configured to control, analyze and send the information related to the location and type of solid waste to the one or more display units (118). The one or more display units (118) are operationally connected with the one or more unmanned aerial vehicles (102) and data repository. The one or more display units (118) are configured to provide user inference and display the received information by the unmanned aerial vehicles (102) in real-time.

21: 2021/09623. 22: 2021-11-26. 43: 2022-03-01
51: A01N
71: Qingdao Agricultural University
72: Sun Zhijuan, Zheng Xiaodong, Wang Caihong, Tian Yike, Ma Changqing

54: NOVEL COMPOUND FOR IMPROVING PLANT RESISTANCE TO SOIL ALUMINUM TOXICITY AND PREPARATION METHOD THEREOF

00: -

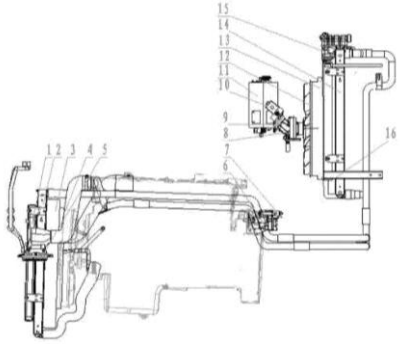
The invention discloses a novel compound for improving plant resistance to soil aluminum toxicity and a preparation method thereof, which relates to the technical field of plant planting, and is a new substance for products with melatonin and strigolactone as effective components in improving the resistance of plants to aluminum stress. According to the novel compound for improving plant resistance to soil aluminum toxicity and the preparation method thereof, the activity of POD and CAT in roots can be obviously increased by the compound with a certain proportion, and the activity of SOD is reduced, so that the root damage of seedlings under aluminum stress is further reduced, that is, under normal growth and aluminum stress, the degree of oxidative damage of plants with the compound of melatonin and strigolactone externally applied is obviously lower than that of plants without the compound. Furthermore, the exogenous application of melatonin and strigolactone compound can effectively eliminate ROS caused by aluminum stress, thus solving the problems of plant root poisoning caused by aluminum ions absorbed by plant roots, causing plant nutrition disorder, poor growth and development, and decline of fruit yield and quality.

21: 2021/09628. 22: 2021-11-26. 43: 2022-03-09
51: F01P
71: BEIBEN TRUCKS GROUP CO., LTD.
72: BAI, Jinwang, PANG, Jianzhong, LIU, Guo, LIU, Chunying, LI, Zhiming, REN, Zhanjiang, WANG, Rong

54: MECHANICAL-HYDRAULIC HYBRID HEAT DISSIPATION SYSTEM

00: -

The present disclosure relates to a mechanical-hydraulic hybrid heat dissipation system, including a main heat dissipation module and an auxiliary heat dissipation module, where the main heat dissipation module includes an air-to-air charge air cooler, a main radiator, a main air director, and a main heat dissipation module fan; the main heat dissipation module fan is installed in an engine wheel train, driven to rotate by an engine to suck air from the front end of the air-to-air charge air cooler, and cooled down through the main radiator and the main air director; the auxiliary heat dissipation module includes an auxiliary heat dissipation module fan, an auxiliary air deflector, an auxiliary radiator, and an expansion water tank; and the auxiliary heat dissipation module fan is connected to the hydraulic motor, and driven to operate by the hydraulic motor to suck air from the rear end of the radiator.

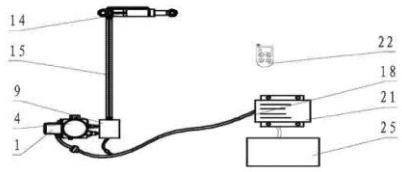


21: 2021/09629. 22: 2021-11-26. 43: 2022-03-09
51: B62D; F15B; G08C
71: BEIBEN TRUCKS GROUP CO., LTD.
72: REN, Zhanjiang, ZHANG, Wenbo, LIU, Yinfeng, SHI, Shengjie, ZHAO, Huiyong, LI, Yuelei, BAI, Jinwang

54: TRUCK CAB REMOTE CONTROL TIPPING DEVICE

00: -

The present disclosure relates to a truck cab remote control tipping device, including a hydraulic tipping system and a hydraulic tipping circuit control system, where the hydraulic tipping system includes an electric tipping pump, an electromagnetic reversing valve, a hydraulic pipeline, and a tipping oil cylinder that are connected in sequence through a hydraulic pipeline; a manual tipping pump and an electric tipping pump are connected in parallel; the hydraulic tipping circuit control system includes an RF signal generator and a controller; the controller is connected to the electric tipping pump and the electromagnetic reversing valve respectively through circuit harnesses; and the RF signal generator is configured to send out a specific electric wave signal, and the controller is configured to receive the specific electric wave signal and control the on and off of the electric tipping pump and the electromagnetic reversing valve.

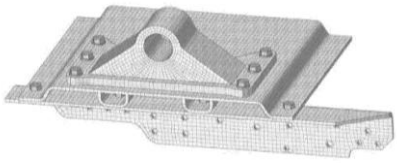


21: 2021/09630. 22: 2021-11-26. 43: 2022-03-09
51: G06F
71: BEIBEN TRUCKS GROUP CO., LTD.
72: CHENG, Ziyuan, HU, Xueliang, CHU, Chuntao, XING, Xing, SU, Xia

54: MODELING CALCULATION METHOD FOR BOLT STRUCTURE

00: -

The present disclosure relates to a modeling calculation method for a bolt structure, including building a finite element model of the bolt structure based on a three-dimensional model of the bolt structure, and creating contact based on the finite element model of the bolt structure; and creating connection based on the finite element model of the bolt structure; applying bolt pretightening force on the finite element model of the bolt structure, calculating the built model, and obtaining a stress value, a contact force value, and a displacement value of a saddle bolt structure. The present disclosure can simultaneously consider the aspects such as bolt solid modeling, bolt pretightening force, friction and contact stress between components, and model convergence, such that the analysis result is more accurate.

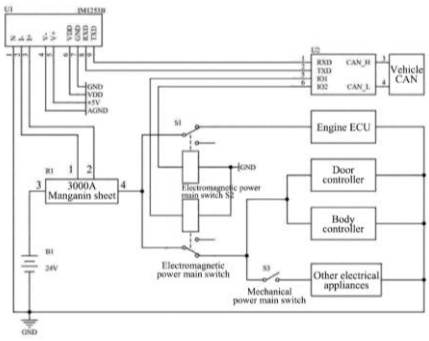


21: 2021/09631. 22: 2021-11-26. 43: 2022-03-09
51: B60R
71: BEIBEN TRUCKS GROUP CO., LTD.
72: ZHAO, Lilong, GUO, Huifen, HAO, Ying, BAI, Ling, LIN, Haifeng, KANG, Le, TIAN, Zhifeng

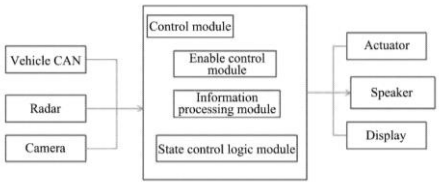
54: COMMERCIAL VEHICLE 24V BATTERY ELECTRIC ENERGY MANAGEMENT DEVICE

00: -

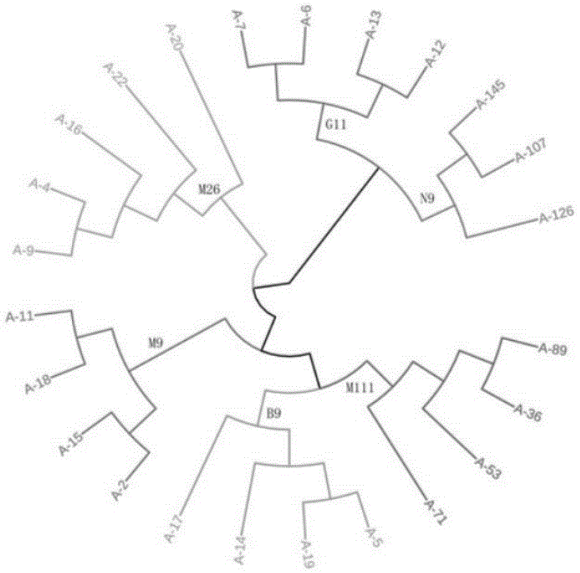
The present disclosure relates to a commercial vehicle 24V battery electric energy management device, mainly consisting of a metering chip U1, an MCU, a manganin sampling resistor R1, an electromagnetic power main switch S1, an electromagnetic power main switch S2, a mechanical main switch S3, and an engine ECU. The metering chip can accurately collect voltage, current, and electric energy consumption data, turn off other electrical equipment other than the engine ECU according to the power consumption, and turn off the power of the engine ECU when necessary to ensure that the battery can provide sufficient power during the next ignition. The intelligent electric energy management of the battery can be realized, so as to provide enough electric energy for vehicle ignition, reduce the number of vehicle breakdowns.



21: 2021/09632. 22: 2021-11-26. 43: 2022-03-09
51: B60W
71: BEIBEN TRUCKS GROUP CO., LTD.
72: GUO, Huifen, LIU, Zhengting, JIA, Zhuorui, LIU, Dawei, MA, Ting, WANG, Lu, DU, Hao
54: AUXILIARY EARLY WARNING DEVICE APPLIED TO HEAVY TRUCK
00: -
The present disclosure relates to an auxiliary early warning device applied to a heavy truck, including a radar, a control module, a video display unit, and an early warning unit, where the control module continuously detects road conditions in front of the vehicle through a camera and the radar, and when there is a potential collision risk, a driver is warned through the early warning unit and the video display unit. According to the present disclosure, current driving situations can be systematically analyzed by detecting the information of road ahead and the information of vehicle ahead, the states of road in front of the vehicle are detected through the camera and the radar, and the driver is warned through an optical, acoustic or tactile signal, which makes the driver feel more convenient and safer during driving, and can also reduce the accident rate.

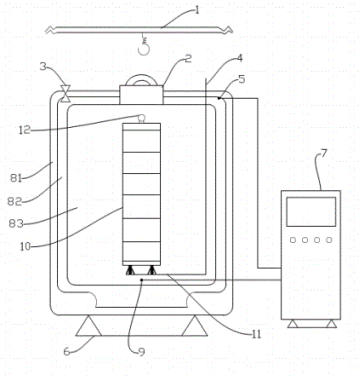


21: 2021/09668. 22: 2021-11-29. 43: 2022-02-24
51: C12Q
71: Weifang University of Science and Technology, Shandong Dafengyuan Agriculture Co., Ltd.
72: Ni Xiumei, Wang Yanjuan, Zhong Xingyu, Lyu Jinfu, Xue Qiqin, Li Meiqin, Liu Xiaoming, Liu Yongguang, Yang Yuanyuan
33: CN 31: 202110536824.0 32: 2021-05-17
54: APPLE ROOTSTOCK SPECIFIC MOLECULAR MARKER, SCREENING METHOD AND THEIR APPLICATIONS
00: -
The invention discloses specific molecular marker loci of six dwarf apple rootstocks and their screening methods and applications, including the following steps: (1) Extract genomic DNA from leaves. (2) Construct the library according to the Super-GBS method of simplified genome sequencing technology, and the library was subjected to sequencing after quality inspection. (3) Filter, screen and verify the sequencing data, to obtain 14096 SNP markers for accurate identification of 6 apple rootstocks. (4) Among the 14096 SNP markers, thousands of groups of SNP markers that can efficiently identify six rootstocks can be combined according to the type of rootstocks that can be distinguished by each locus. (5) Based on these markers, develop two simple, rapid and accurate methods for identifying apple rootstocks of six dwarf varieties, which lays a technical foundation for ensuring accurate identification and control of apple rootstock varieties by scientific research departments, seedling breeding and orchard planting enterprises.



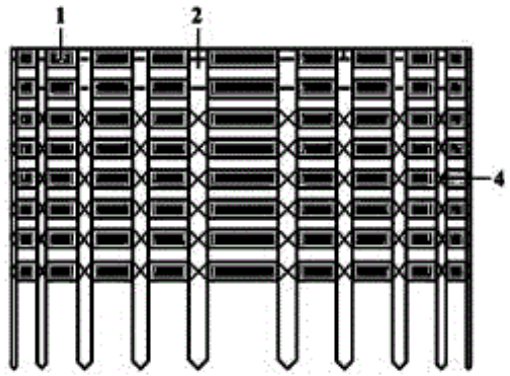
21: 2021/09669. 22: 2021-11-29. 43: 2022-02-24

51: F25D
71: Zhejiang Wanli University
72: YANG, Hua, ZHANG, Hui'en, CAO, Shaoqian, QI, Xiangyang
54: LIFTING TYPE LIQUID NITROGEN REFRIGERATION DEVICE FOR AQUATIC PRODUCTS
00: -
The present invention discloses a lifting type liquid nitrogen refrigeration device for aquatic products, which is implemented by tank storage and liquid nitrogen is used as a cold source, wherein the tank body has a liquid nitrogen barrier layer, so that the temperature in the tank body rapidly decreases, the tank body is kept at a low temperature, reaching below minus 100 degrees centigrade., which is beneficial to maintaining the freshness of the product and better maintaining the quality of the product; in the tank body, a lifting type product case is used to store aquatic products, which is conducive to the overall storage and taking of aquatic products and will not damage other aquatic products in the process of storing and taking products.

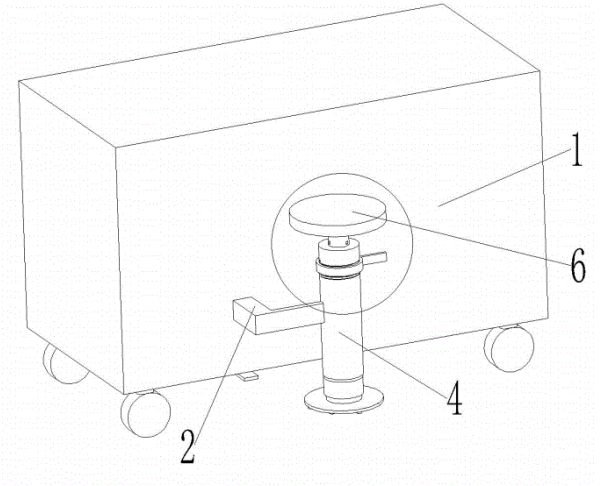


21: 2021/09670. 22: 2021-11-29. 43: 2022-02-14
51: A61K; A61P
71: Linyi University
72: LI, Haigang
54: HYALURONIC ACID MODIFIED HALLOYSITE NANOTUBE/CHITOSAN ENTERIC-COATED MICROSPHERE LOADED WITH PAEONIFLORIN AND PREPARATION METHOD THEREOF
00: -
The present disclosure discloses a hyaluronic acid modified halloysite nanotube/chitosan enteric-coated microsphere loaded with paeoniflorin and a preparation method thereof, and belongs to the technical field of drug carrier materials. The microsphere of the present disclosure is prepared from the following raw materials in parts by weight: 1 part of paeoniflorin, 1.3-2.9 parts of a halloysite nanotube, 0.1-0.4 part of hyaluronic acid, 1.1-3.0 parts of chitosan and 0.6-2 parts of an enteric material. In the present disclosure, the hyaluronic acid is used to modify the halloysite nanotube, and then a paeoniflorin nanosphere is prepared. The overall targetability of the paeoniflorin is improved. The obtained coated microsphere is mediated by a CD44 receptor to achieve specific affinity with an ulcerative colitis mucosa, so as to achieve positioned delivery of a drug to the ulcerative colitis mucosa.

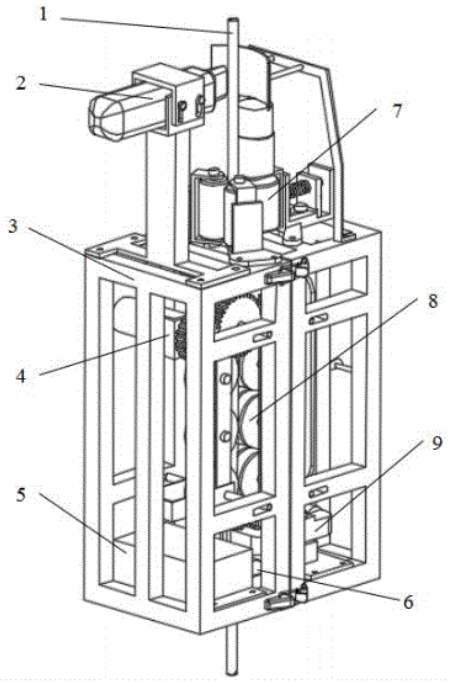
21: 2021/09672. 22: 2021-11-29. 43: 2022-02-14
51: E02D; E04H
71: Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences
72: ZHANG, Mingye, TONG, Shouzheng, ZHANG, Dongjie, QI, Qing, AN, Yu
54: STREAMLINE ECOLOGICAL ISLAND BODY FENCE AND CONSTRUCTION METHOD THEREOF
00: -
The present disclosure relates to a construction method of a streamline ecological island body fence. The construction method comprises the following step: step A, assembling an ecological island body fence: taking two or more bamboo strips to define bamboo rings, fixing the connecting ends of adjacent bamboo strips through iron wires, arranging the multiple bamboo rings up and down, vertically fixing the bamboo rings through multiple fixed piles, and performing crossed binding on the bamboo rings and the fixed piles through the iron wires to obtain a cylindrical fence. The method is clear in principle, easy to implement and low in cost, and the unit cost is about 200 to 400 yuan. The fence can adapt to various complex hydrological environments, after the fence is input into use, the fence does not need to be frequently maintained, and the fence has large popularization and application spaces.



21: 2021/09674. 22: 2021-11-29. 43: 2022-02-24
51: A61G
71: Shanghai Jiading District Center for Disease Control and Prevention
72: Chen Donghua, Liu Feng, Mao Yuhua, Gong Gang, Zhang Dandan
33: CN 31: 202111426396.2 32: 2021-11-27
54: A VACCINATION MOBILE STATION FOR DISEASE PREVENTION AND CONTROL
00: -
The present invention discloses a vaccination mobile station for disease prevention and control, including a mobile station body, a L-type connecting rod, a support barrel, a positioning assembly, a seatboard, and a support auxiliary component, a locking assembly; both sides of the mobile station main body The activity is set to have a L-type connecting rod, and the cooperation between the locking components, the positioning component, the supporting component, the positioning component, and the supportor, the seat board and the support assist component, on the one hand, for frequent moving inoculation workbenses, can Carrying the corresponding seat, facilitates staff and inoculars, thereby providing facility for vaccination work, on the other hand, supporting the auxiliary components and locking components can further increase the stability of the position of the mobile station position position position, to ensure the normal operation of inoculation work, Improve work efficiency.



21: 2021/09676. 22: 2021-11-29. 43: 2022-02-24
51: B08B
71: Zhejiang University of Water Resources and Electric Power
72: FANG, Guisheng, ZHOU, Yuxuan, XU, Zhiwen, CHENG, Yuanqun, ZHENG, Gaoan, ZHOU, Weifeng
54: SLUICE WIRE ROPE CLIMBING AND LASER CLEANING ROBOT
00: -
The present disclosure discloses a sluice wire rope climbing and laser cleaning robot, which comprises a climbing device, a robot frame, a circumferential driving device, a laser cleaning device and a control box. The present disclosure can improve the quality and efficiency of cleaning dirt of the wire rope, and can realize 360-degree cleaning of the wire rope completely.

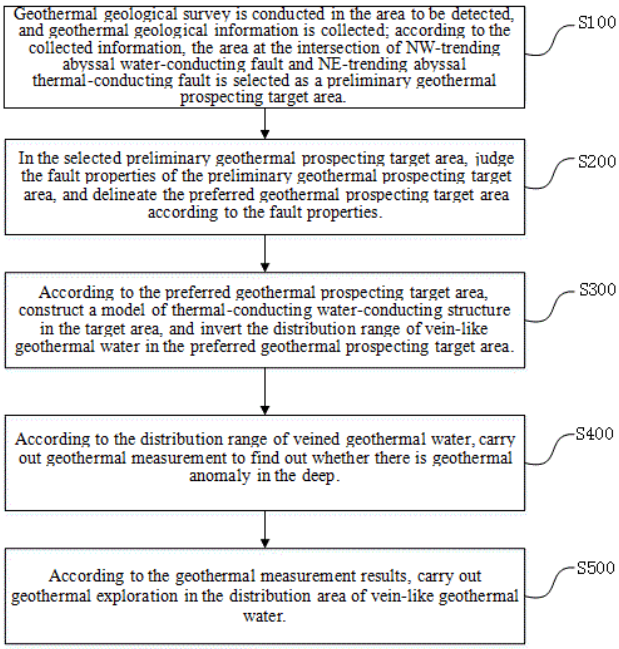


21: 2021/09677. 22: 2021-11-29. 43: 2022-03-01
51: G01V
71: Shandong No.3 Exploration Institute of Geology and Mineral Resources, Shandong Provincial Bureau of Geology and Mineral Resources (SPBGM), 801 Institute of Hydrogeology and Engineering Geology, SPBGM, Dizi New Energy Technology Co. LTD, Shandong Lunan Geological Engineering Survey Institute
72: Kang Fengxin, Shi Meng, Zhao Hui, Zheng Tingting, Sui Haibo, Bai Tong, Zhou Qundao, Wei Shanming, Shi Qipeng, Ma Zhemin

54: EXPLORATION METHOD FOR ENRICHMENT AREA OF GEOTHERMAL WATER IN GRANITE GEOTHERMAL RESERVOIRS

00: -

The invention discloses an exploration method for enrichment area of geothermal water in granite geothermal reservoir, which comprises the following steps: collecting regional geothermal geological information, and delineating a preliminary geothermal prospecting target area based on the regional geothermal geological information; judging the fault properties of the preliminary geothermal prospecting target area; based on the fault properties, delineating the preferred geothermal prospecting target area; based on the preferred geothermal prospecting target area, constructing a target area thermal control water-conducting structure model, and inverting the distribution area of vein-like geothermal water of the preferred geothermal prospecting target area; measuring the ground temperature based on the distribution area of vein-like geothermal water; and based on the geothermal measurement result, performing geothermal exploration in the distribution area of vein-like geothermal water. According to the invention, the granite geothermal reservoir geothermal resources mainly occur in the V-shaped area where two abyssal faults with opposite tendency intersect, and the effective area for the exploration of granite geothermal reservoir geothermal resources is further determined



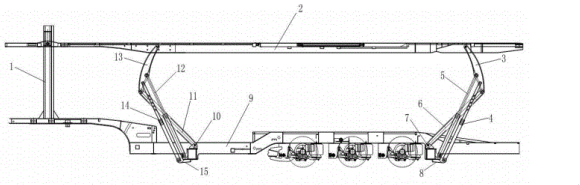
21: 2021/09678. 22: 2021-11-29. 43: 2022-02-11
51: B60P; B66F
71: SHANDONG UNIVERSITY OF SCIENCE AND TECHNOLOGY
72: NIE, Zhifeng

54: MULTIFUNCTIONAL CAR TRANSPORTER WITH MANTIS-ARM-LIKE FRONT AND REAR DOUBLE LIFTING MECHANISMS

00: -

The present invention discloses a multifunctional car transporter with mantis-arm-like front and rear double lifting mechanisms. A front column is connected with an upper platform, the upper platform, a rear lifting small arm, a rear lifting large arm, a rear lifting large arm support, and a lower frame are hinged in sequence, the upper platform, a front lifting small arm, a front lifting large arm, a front lifting large arm support, and the lower frame are

hinged in sequence, a middle part of a web plate of the rear lifting small arm, a rear lifting oil cylinder, a rear lifting oil cylinder support, and the lower frame are hinged in sequence, a middle part of a web plate of the front lifting small arm, a front lifting oil cylinder, a front lifting oil cylinder support, and the lower frame are hinged in sequence.

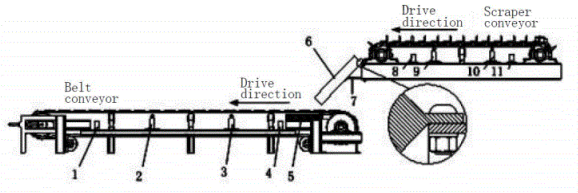


21: 2021/09679. 22: 2021-11-29. 43: 2022-02-24
51: B65G
71: Shandong University of Science and Technology
72: ZHANG, Kun, LI, Yuxia, SUN, Shaoan, HUANG, Liangsong, DU, Mingchao, CHEN, Yumeng, LIU, Zengkai, SUN, Zhengxian

54: RUNNING STATE DETECTION AND JOINT CONTROL DEVICE OF BELT CONVEYOR AND SCRAPER CONVEYOR

00: -

The present invention discloses a running state detection and joint control device of a belt conveyor and a scraper conveyor, comprising a detection module for detecting the operating speeds of two ends of the belt conveyor and the scraper conveyor, and the critical bearing capacity of a conveyor belt; a transitional connection module for reducing the impact of the coal briquette on the belt as it falls from the scraper conveyor to the belt conveyor; an auxiliary adjustment module for adjusting the power of the drive motors of the belt conveyor and the scraper conveyor; and an analysis and control module for analyzing the data detected by the detection module, issuing an alarm to notify maintenance personnel for abnormal data, and sending an instruction to the auxiliary adjustment module to match the operating speeds of the belt conveyor and the scraper conveyor.

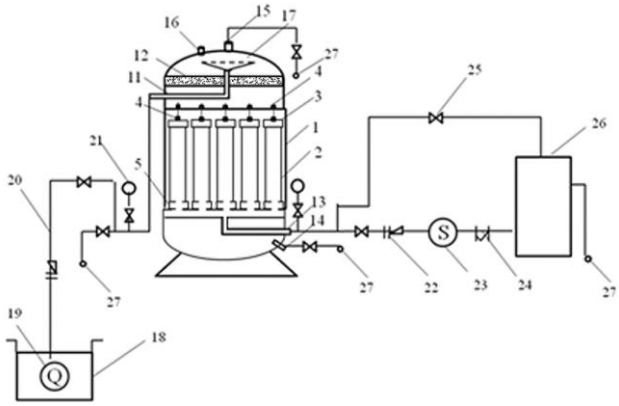


21: 2021/09680. 22: 2021-11-29. 43: 2022-03-02
51: B01D
71: University of Science and Technology Beijing
72: Yuan Zhangfu, Wang Rongyue, Zhang Yangang, Zhao Linfei, Liu Ke, Zhang Han, Shi Chunhong

54: PREPARATION METHOD OF MICROPOROUS MEMBRANES AND FILTER DEVICE FOR STEEL METALLURGICAL SEWAGE

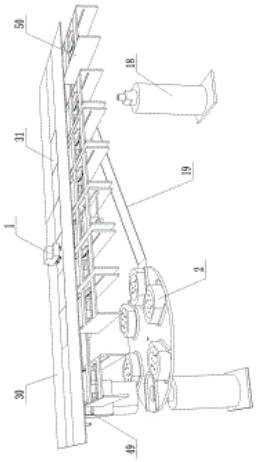
00: -

The invention provides a preparation method of microporous membranes and a filter device for steel metallurgical sewage, belonging to the technical field of sewage treatment. The microporous membranes are prepared from polyethylene, polyvinyl chloride, antioxidant, lubricant, plasticizer and rare earth oxide additive. The device used as filter element includes water collecting tank, circulating sewage pipeline, filter and water producing tank. The filter is connected with the water collecting tank and water producing tank respectively through the circulating sewage pipeline. The circulating sewage pipeline connected with the water collecting tank is provided with check valve and ball valve, and the circulating sewage pipeline connected with the water producing tank is provided with damper, check valve, ball valve, water pump and Y-shaped filter. The filter is equipped with tank body, microporous membranes, oil-absorbing felt chamber, sludge settling tank, sealing cover, sealing ring and clamp. Sewage enters from the outer wall of the microporous membranes, and the filtered purified water flows out from the microporous filter tube. The invention has the advantages of high filtering accuracy, strong oil stain removal ability, simple on-line back operation, low operating cost, long service life of filter tube elements and so on.

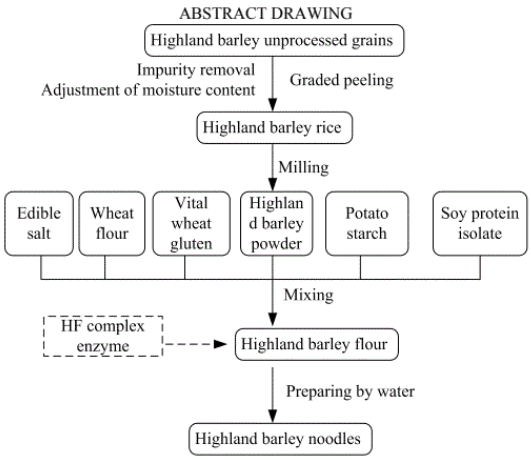


21: 2021/09682. 22: 2021-11-29. 43: 2022-02-14
51: C12N; C12R
71: Jimei University
72: LIN, Mao, FU, Hanqing
54: A PREPARATION AND APPLICATION OF GATHERER TO ENRICH PHAGE FAST AND DIRECTLY
00: -
The present disclosure provides a gatherer to enrich a phage fast and directly. The gatherer includes a ceramic carrier and Vibrio parahaemolyticus carried on the ceramic carrier. By using the gatherer to enrich a phage fast and directly in the present disclosure, a phage of the Vibrio parahaemolyticus in seawater, fresh water and sewage can be quickly enriched, and enrichment efficiency reaches 80%. It is identified that the enriched phage is a Vibrio parahaemolyticus phage.

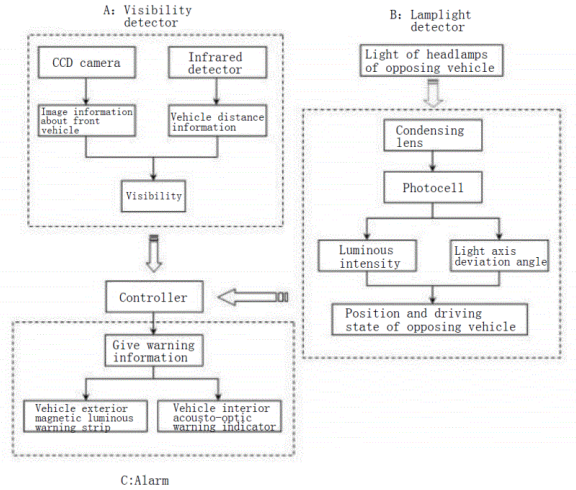
21: 2021/09683. 22: 2021-11-29. 43: 2022-02-11
51: G01M
71: Xiamen University of Technology, Fujian Transportation Planning and Design Institute Co., Ltd.
72: LIN, Li, LIN, Xiaobo, YUAN, Zhiqun, QIN, Zhiqing, ZHENG, Qingsong, CHEN, Xiaojiang, LIAN, Jiangfeng, LV, Hengqing, HU, Lei, HU, Haitao, WANG, Huaifeng, XIA, Dandan, ZHANG, Xiangmin
54: TEST SYSTEM AND METHOD FOR WIND SPEED IN WIND TUNNEL OF BRIDGE AND DYNAMOMETRY OF VEHICLE
00: -
The present invention discloses a test system and method for wind speed in wind tunnel of a bridge and dynamometry of a vehicle, comprising a vehicle model, a wind measuring platform and a dynamometric platform. The wind measuring platform is arranged inside the wind tunnel, the dynamometric platform is arranged inside a bridge model, and the vehicle model is locked on a dynamometric balance. In the present invention, through the cooperation of the wind measuring platform and the dynamometric platform, the wind speed and direction of each lane under each working condition and the corresponding six-component force of the vehicle model can be synchronously collected and tested without interruption, so as to reduce the number of times of adjusting working conditions and equipment for stopping the wind tunnel.



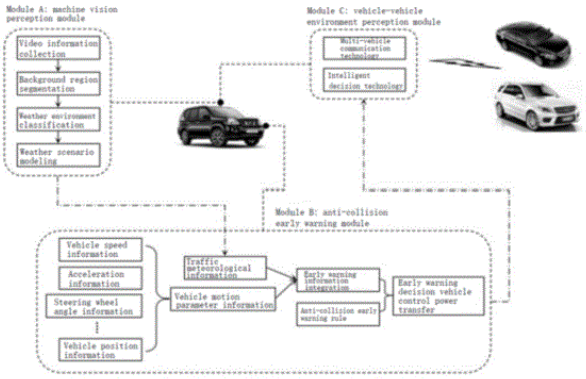
21: 2021/09684. 22: 2021-11-29. 43: 2022-02-14
51: A23L
71: Qinghai Huashi Technology Investment Management Co., Ltd., Qinghai Huashi Highland Barley Biological Technology Development Co., Ltd., Qinghai Zhongcheng Food Testing Co., Ltd.
72: DU, Yan, LIANG, Feng, HAO, Jing, MA, Ping, LIU, Yu, QI, Xingfang, ZHOU, Wenju, FAN, Meixiang, MA, Guilian
54: BETA-GLUCAN-ENRICHED HIGHLAND BARLEY FLOUR
00: -
The present disclosure belongs to the technical field of food processing, and in particular to a beta-glucan-enriched highland barley flour.



21: 2021/09686. 22: 2021-11-29. 43: 2022-02-24
51: B60Q; B60R
71: Shandong University of Science and Technology
72: LIU, Zhaohui, WANG, Junbo, WANG, Chao
54: VEHICLE SAFETY WARNING SYSTEM UNDER LOW VISIBILITY CONDITION
00: -
The invention relates to a vehicle safety warning system under a low visibility condition, including a visibility detector A, a lamplight detector B and a warning indicator C. The module A mainly includes a CCD camera and an infrared detector and is configured to acquire visibility information about the periphery of a vehicle. The module B includes a condensing lens and photocells, acquires headlamp light information about an opposing vehicle, and is configured to judge a driving state of the opposing vehicle and relative position information about the two vehicles. The module C sends a warning signal to remind a driver to pay attention to driving safety according to the information detected by the modules A and B. The invention can play a positive role in a low visibility traffic environment and is high in practicability, flexibility, efficiency and stability.

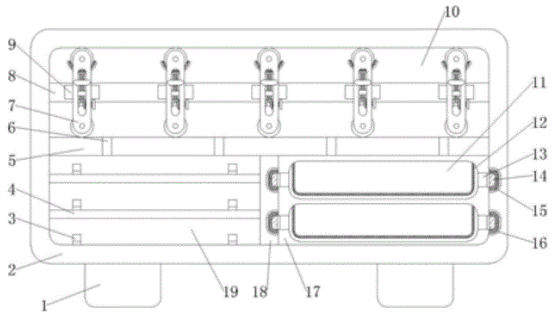


21: 2021/09687. 22: 2021-11-29. 43: 2022-02-14
51: G08G
71: Shandong University of Science and Technology
72: LIU, Zhaohui, LIN, Lifei, WANG, Junbo, WANG, Chao, WANG, Linjie
54: VEHICULAR UNFAVORABLE WEATHER REAL-TIME PERCEPTION AND ANTI-COLLISION EARLY WARNING METHOD
00: -
The present invention relates to a vehicular unfavorable weather real-time perception and anti-collision early warning method, which comprises three modules of a machine vision perception module A, an anti-collision early warning module B and a vehicle-vehicle environment perception module C. The module A employs an embedded type microcomputer system to process video information collected by a vehicular CCD camera and recognize real-time meteorological information of a road section, on which a vehicle drives; the module B integrates vehicle motion parameter information with traffic meteorology information to assess collision hazard information and conduct early warning intervention; and the module C applies a multi-vehicle communication technology and an intelligent decision technology to establish an intra-regional traffic safety system.



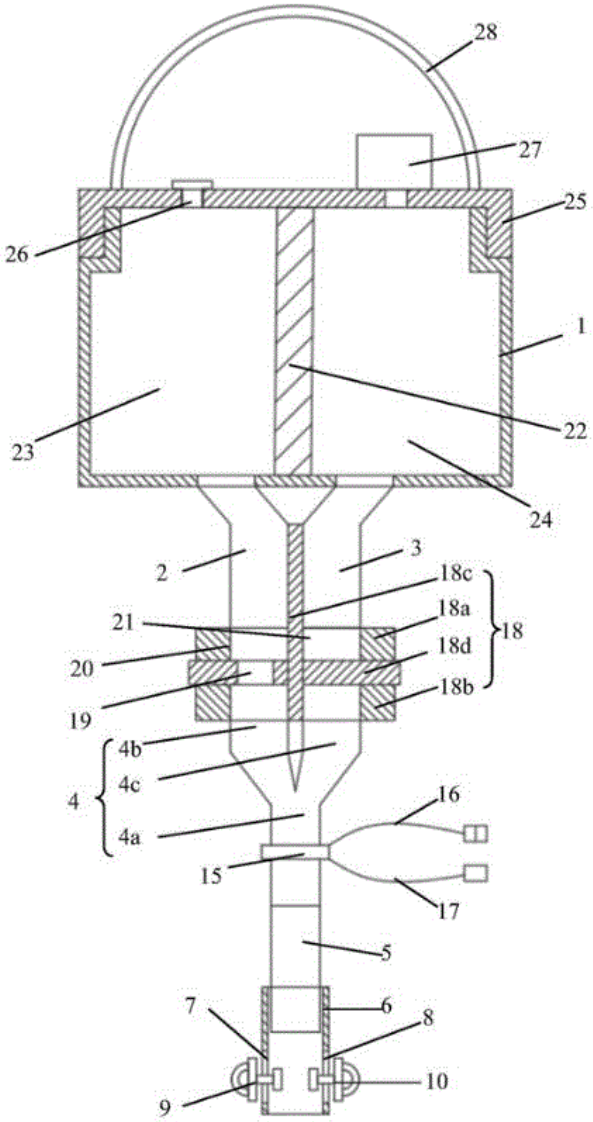
21: 2021/09689. 22: 2021-11-29. 43: 2022-02-24
51: A23F
71: Yunnan Shuangjiang Mengku Tea Co., Ltd.
72: Yuting RONG, Xingliang LI, Haibo YUAN, Fuqiao LIU, Jinjie HUA, Jiafu RONG, Shuangjiang Li
54: PROCESSING METHOD OF HIGH CONTENT GALLIC ACID RIPE PU'ER TEA
00: -
The invention relates to a method for processing high-content gallic acid ripe Pu'er tea. The high-content gallic acid ripe Pu'er tea uses fresh leaves of Yunnan Mengku large-leaf variety with tenderness of 1 bud and 2 leaves to 1 bud and 3 leaves as raw materials. It is prepared by the combined treatment of spreading green and sunlight withering, combined curing, kneading and drying, tidal water treatment, aeration pile, low-temperature drying, autoclaved molding, and fragrance enhancement steps. The ripe Pu'er tea prepared by the present invention has a high content of gallic acid (the dry tea weighs 2.96% 3.88%), and at the same time has a special sweet floral and fruity characteristic, a mellow and soft taste, and can be consumed immediately without aging. Ripe tea products change the current situation that the existing cooked tea is not accepted by young consumers due to the obvious "stale taste" and "dumping taste.

21: 2021/09690. 22: 2021-11-29. 43: 2022-02-24
51: A63B
71: Shandong University of Science and Technology
72: ZHAO, Yanpeng
54: CLASSIFIABLE STORAGE DEVICE FOR SPORTS EQUIPMENT
00: -
The present invention discloses a classifiable storage device for sports equipment, and relates to the technical field of sports equipment. The device includes a placement box. A division plate is arranged at the middle position inside the placement box. In the device, the placement box is divided into a placement cavity I, a placement cavity II, and a placement cavity III by means of the division plate and a supporting plate, so that it is convenient for a user to store sports equipment in different classes; the placement cavity I is divided by a division device into a plurality of small inner cavities for placing ball sports equipment; meanwhile, bow and arrow equipment is placed through the division plate, a placement plate, and a fixed block fixedly connected to a bottom surface of the placement box.



21: 2021/09691. 22: 2021-11-29. 43: 2022-03-02
51: A61B
71: Guang 'an People's Hospital
72: Chen Hua, Wei Ailin, Lan Jianhua, Xiao Qiqiang, Yang Rui, Du Jianhui
54: UROLOGY CLEANING DEVICE
00: -
The invention discloses a urology cleaning device, which comprises a storage box, a flushing tube, a drainage tube, a tee joint and a urinary catheter, wherein the first ends of the flushing tube and the drainage tube are all communicated with the storage box, the tee joint is provided with a flow regulating part, and the second ends of the flushing tube and the drainage tube are all communicated with the urinary catheter through the flow regulating part and the tee joint; a guide tube is sleeved on the outer wall of one end of the urinary catheter away from the tee joint, and the guide tube is provided with a clamping part for clamping male genitalia. According to the invention, the guide tube is arranged to guide and straighten the male genitalia, so that the insertion of the urinary catheter can be faster and more convenient. The opening and closing of the

flushing tube and the drainage tube can be realized by setting the flow regulating part, and the coincidence degree between the flushing tube and the drainage tube is different by rotating the flow regulating plate to adjust the position of the drainage hole, so that the flow of the flushing tube or the drainage tube can be conveniently controlled.

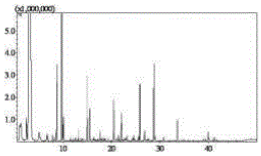


21: 2021/09692. 22: 2021-11-29. 43: 2022-02-11
51: C12P
71: Qingdao University of Science and Technology
72: ZHANG, Yuanyuan, JIANG, Zhuying, LIANG, Shaoxin, WAN, Congcong, WANG, Fanye
54: METHOD FOR SYNTHESIZING 2,3-DIMETHYL-5ALKYLAMINO-1,4-BENZOQUINONE BY TWO-ENZYME ONE-POT METHOD
00: -

The present disclosure relates to a method for synthesizing 2,3-dimethyl-5alkylamino-1,4-benzoquinone by a two-enzyme one-pot method. The yield of the product is increased by about 200% compared with that when catalyzed by a single laccase. The catalytic method has higher selectivity and fewer by-products.

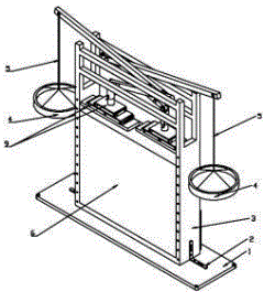
21: 2021/09693. 22: 2021-11-29. 43: 2022-02-11
51: C12G; C12N; C12R
71: TAISHAN UNIVERSITY
72: QIN, Weishuai, ZHANG, Na, ZHANG, Yuexun, WU, Feng, DU, Yuanpeng, ZHAI, Heng
54: WINE YEAST WITH LOW-YIELD HIGHER ALCOHOLS
00: -

The present disclosure relates to a wine yeast with low-yield higher alcohols. A certain amount of isoamyl chloroacetate is added to a plate for cultivating yeasts. The isoamyl chloroacetate is catalyzed by isoamyl acetate hydrolase of the yeast to generate chloroacetic acid, and the chloroacetic acid has a strong inhibitory effect on growth of the yeast. If a mutant strain has a high esterase activity (a higher esterase activity leads to a higher content of the higher alcohols produced by the strains), more chloroacetic acid can be produced by decomposition. Accordingly, the growth of colonies can be extremely poor under inhibition of the chloroacetic acid. In the present disclosure, yeast strains with low-yield higher alcohols can be accurately, conveniently and quickly selected. The selected yeast strain with low-yield higher alcohols can reduce a content of the higher alcohols in the wines by about 10-15% during wine production.



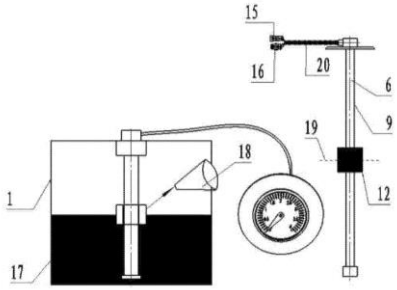
21: 2021/09695. 22: 2021-11-29. 43: 2022-02-24
51: G01N
71: Qingdao University of Science and Technology
72: LI, Jianguang, LI, Jiwei, WANG, Yanchun, SHI, Xiao, SU, Chuanqi, ZOU, Huisong
54: TWO-STAGE LEVER TYPE MECHANICS EXPERIMENTAL DEVICE
00: -

The present disclosure discloses a two-stage lever type mechanics experimental device, including a load-bearing part, a two-stage lever, a pressure head and a frame part. Two trays are respectively placed on the left and right sides of a frame by wire ropes. A primary lever and a secondary lever are fixed to the top of the frame in cooperation with a fixed column. The primary lever and the secondary lever are connected by pin holes, and in order to prevent serious wear, a copper sleeve is placed between the pin holes. The tail of the secondary lever and the pressure head are connected to each other by a ball head, and the pressure head is provided with three levels of conversion pressure plates to make the pressure acting on an experimental model more uniform.



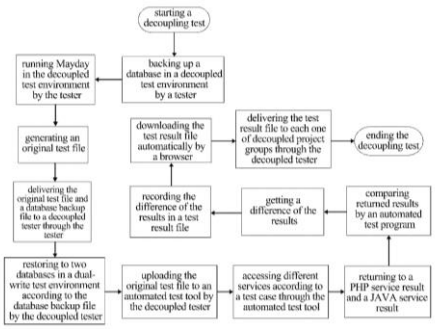
21: 2021/09696. 22: 2021-11-29. 43: 2022-02-11
51: C12N; C12Q; G01N
71: HUNAN INSTITUTE OF ENGINEERING
72: FU, Xin, ZHANG, He, ZHANG, Peirou, YANG, Mei
54: APTAMER RIBOZYME SEQUENCES
00: -
The present disclosure discloses a high-sensitivity detection probe based on sequences of aptamer ribozyme and intermolecular splitting G-quadruplex-hemin DNase self-assembled nanowires, a kit and a preparation method and use thereof. The present disclosure is especially suitable for adenosine triphosphate (ATP) detection. In the present disclosure, an aptamer, a Mg2+-dependent 10-23 ribozyme, hybridization chain reaction and G-quadruplex-hemin DNase enzymatic reaction are combined to gradually amplify detection signals. Therefore, detection sensitivity is greatly improved, reaching a level of pmol/L, which is 3 orders of magnitude higher than a general detection sensitivity level of nmol/L in the existing technology

21: 2021/09701. 22: 2021-11-29. 43: 2022-03-09
51: G01F
71: BEIBEN TRUCKS GROUP CO., LTD.
72: HAN, Lining, GAO, Guiqin, TIAN, Ruijun, LV, Biao, QIAO, Zhixing, SUN, Qi
54: LIQUID LEVEL TRANSMITTER FOR VEHICLE FUEL THEFT PREVENTION
00: -
A liquid level transmitter for vehicle fuel theft prevention, including a PCB board 6, a guide rod 9, a close cover 11, a float 12, and a bottom plug 13. An aluminum cover 5 and a bayonet 7 are interlocked to the upper end connector of the PCB board 6, and the aluminum cover 5 and the bayonet 7 are fixedly connected; and the PCB board 6 is inserted into the guide rod 9, a plurality of electronic tubes on the PCB board 6 are arranged along the axis of the guide rod 9, a guide rod joint 8 is fixed to the upper end of the guide rod 9, the close cover 11 is fixed to the lower end of the bayonet 7, the other ends of the close cover 11 and the guide rod joint 8 are simultaneously fixedly connected to a fuel tank 1.



21: 2021/09702. 22: 2021-11-29. 43: 2022-03-09
51: G01R
71: SHANDONG UNIVERSITY OF SCIENCE AND TECHNOLOGY
72: SHA, Jing, LIU, Yang, YAO, Huichen, CHEN, Shi
54: METHOD FOR DECOUPLING TEST
00: -
A method for decoupling test, including: starting a decoupling test; backing up a database in a decoupled test environment by a tester; running Mayday in the decoupled test environment by the tester; generating an original test file; downloading a test result file automatically by a browser; backing up the original test file and the database; restoring to two databases in a dual-write test environment according to a database backup file; uploading the

original test file to an automated test tool; accessing different services according to a test case through the automated test tool; returning to a PHP service result and a JAVA service result; comparing returned results by an automated test program; getting a difference of the results and recording the difference in a test result file; downloading the test result file automatically by a browser; and delivering the test result file to each one of decoupled project groups.

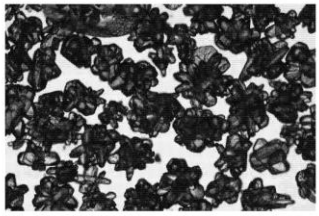


21: 2021/09704. 22: 2021-11-29. 43: 2022-03-09
51: A61K
71: SHANDONG ANALYSIS AND TEST CENTER
72: XUE, Fumin, CAI, Lun, WANG, Yan, CHENG, Yan, DU, Shichao, YU, Shuai

54: METHOD FOR REGULATING CRYSTAL HABIT OF ROPIVACAINE

00: -

The present invention belongs to the field of chemical crystallization technology, and specifically relates to a method for regulating the crystal habit of ropivacaine. The method includes: dissolving ropivacaine and PVP in acetonitrile, followed by heating to continue the dissolution, and then cooling to precipitate the ropivacaine. The crystal habit of ropivacaine is regulated with acetonitrile as a solvent and polyvinyl pyrrolidone, the needle-like commercially available ropivacaine is regulated into short flakes, and the length-diameter ratio of crystals is significantly reduced, which effectively improves the dispersibility of the product, avoids adhesion between the crystals, and improves the fluidity. Small particles and large particles can be prepared by selecting PVP additions of different molecular weights and different concentrations. In addition, the tap density of ropivacaine can also be significantly improved.

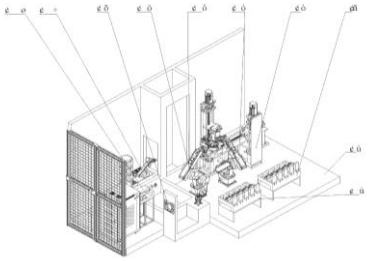


21: 2021/09706. 22: 2021-11-29. 43: 2022-03-09
51: G05B
71: QINGDAO UNIVERSITY OF TECHNOLOGY, SICHUAN FUTURE AEROSPACE INDUSTRY LLC
72: LI, Changhe, ZHANG, Zechen, LIU, Bo, ZHANG, Shun, WANG, Binwei, YAO, Jiazhi, LI, Ang, GAO, Wei, ZHANG, Yu, LU, Bingheng, ZHANG, Yanbin, LIU, Mingzheng
33: CN 31: 202110936936.5 32: 2021-08-16

54: AUTOMATED LSP PROCESS EQUIPMENT SYSTEM FOR AERO-ENGINE BLADE

00: -

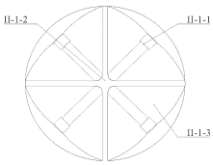
The present invention discloses an automated laser shock peening (LSP) process equipment system for an aero-engine blade, including: a base, where a loading and unloading manipulator, a working manipulator, a reverse engineering mechanism, a coating apparatus, and an LSP apparatus are disposed on the base; the loading and unloading manipulator is configured to grab a blade and place the blade on the reverse engineering mechanism, the reverse engineering mechanism includes a reverse engineering instrument and a controller that are connected to each other, the reverse engineering instrument can generate three-dimensional digital data of the blade, and the controller generates a working path for coating and LSP according to the three-dimensional digital data, and transmits the working path to the working manipulator; and the loading and unloading manipulator places the blade into the pallet, and the working manipulator drives the blade to a corresponding position.



21: 2021/09707. 22: 2021-11-29. 43: 2022-03-09
51: C05G
71: QINGDAO UNIVERSITY OF TECHNOLOGY, HANERGY (QINGDAO) LUBRICATION TECHNOLOGY CO., LTD.
72: LI, Changhe, LU, Yue, ZHOU, Zongming, LIU, Xiaochu, LIU, Mingzheng, WANG, Xiaoming, ZHANG, Xiaowei, SHI, Mingcun, LU, Bingheng
33: CN 31: 202110857191.3 32: 2021-07-28

54: FERTILIZER GRINDING MECHANISM, WATER AND FERTILIZER MIXING DEVICE, AND AQUEOUS FERTILIZER SOLUTION PREPARATION PRODUCTION LINE

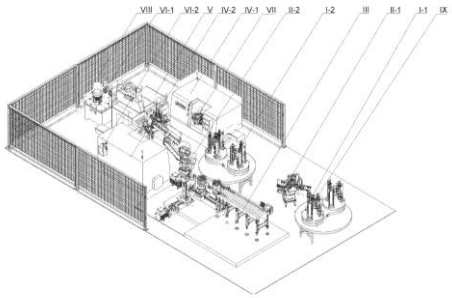
00: -
The present invention relates to a fertilizer grinding mechanism, a water and fertilizer mixing device, and an aqueous fertilizer solution preparation production line. The fertilizer grinding mechanism includes: a fertilizer receiving body, where an edge of the fertilizer receiving body is provided with a vertically arranged first channel; a connecting body, where the connecting body is fixed to a bottom of the fertilizer receiving body and provided with a second channel communicated with the first channel, a bottom of the second channel is communicated with a buffer bin, a pushing block is arranged in the buffer bin, and the pushing block is connected with a drive mechanism for driving the pushing block to move in a radial direction of the connecting body; and an inner grinding block, where the inner grinding block is fixed to a bottom of the connecting body.



21: 2021/09708. 22: 2021-11-29. 43: 2022-03-09
51: B23Q
71: QINGDAO UNIVERSITY OF TECHNOLOGY, HANERGY (QINGDAO) LUBRICATION TECHNOLOGY CO., LTD.
72: LI, Changhe, LIU, Dewei, ZHOU, Zongming, WU, Qidong, LU, Bingheng, LIU, Bo, CHEN, Yun, CAO, Huajun, MAO, Cong
33: CN 31: 202110885730.4 32: 2021-08-03

54: SYSTEM FOR MACHINING AND POSITIONING AUTOMOBILE HUB AND PRODUCTION LINE FOR INTELLIGENT CLEANING AND PRECISION MACHINING

00: -
The present invention discloses a system for machining and positioning an automobile hub and a production line for intelligent cleaning and precision machining. The system includes an upper mounting plate and a lower mounting plate that are connected in an up-down direction and spaced apart by a specific distance. At least three U-shaped blocks are circumferentially fixed on a top surface of the upper mounting plate. An L-shaped support is mounted between every two adjacent U-shaped blocks. A screw-equipped ball head is disposed on the L-shaped support. The L-shaped support is driven by a first driving apparatus to move radially along the upper mounting plate. A slidable chuck is disposed in each U-shaped block. A push rod assembly is connected to a bottom of each chuck. The push rod assembly is driven by a second driving apparatus to move radially along the upper mounting plate together with the chuck.

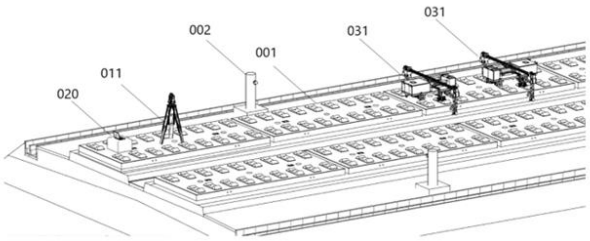


21: 2021/09718. 22: 2021-11-29. 43: 2022-01-27
51: E01B
71: THE FIFTH ENGINEERING CO., LTD OF CHINA TIESIJU CIVIL ENGINEERING GROUP, CHINA TIESIJU CIVIL ENGINEERING GROUP CO., LTD
72: LI, Qiang, WANG, Jialei, ZHAO, Xiaoming, OUYANG, Chuili, WANG, Minggang, LI, Chen, LIU, Peifeng, HUANG, Min
33: CN 31: 202010365254.9 32: 2020-04-30

54: FAST INTELLIGENT FINE-ADJUSTMENT SYSTEM AND FINE-ADJUSTMENT METHOD FOR CRTSⅢ-TYPE TRACK SLAB

00: -

The present invention provides a fast intelligent fine-adjustment system and fine-adjustment method for a CRTSⅢ-type track slab, which can solve the technical problem that an existing track slab fine-adjustment method wastes time and energy and has poor fine-adjustment quality. The fast intelligent fine-adjustment system includes a measurement system and a control system, and further includes an execution system, a wireless transmission system and an information management system. The measurement system is configured to complete automatic acquisition of three-dimensional space coordinates of a track bearing stage of a track slab and simultaneously calculate a deviation from a theoretical value. The control system is configured to control interaction between the measurement system and the execution system. The information management system completes data analysis and management of measurement and fine adjusting, provides required data information for the user terminal in real time, and alarms abnormal data in real time. In the present invention, the fine-adjustment method is constructed by a fine-adjustment robot, each slab takes an average time of 5 minutes, and the work efficiency is three times that of the conventional method. At the same time, the present invention establishes real-time transmission, real-time viewing and abnormal data real-time alarm of fine-adjustment data of the field construction and data between a backend server and a client.

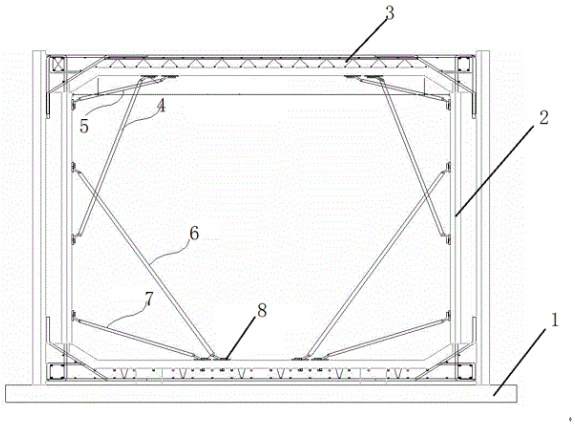


21: 2021/09756. 22: 2021-11-30. 43: 2022-01-25
51: E21D
71: Fuzhou Urban Rural Construction Group Co., Ltd.
72: Zuocai MAO, Qiang HUANG, Yin GU, Bolin YU, Liang ZHANG, Shun YANG, Weichao LIN

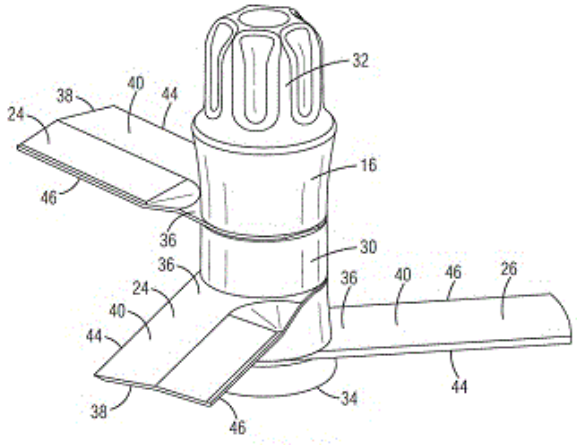
54: INNER SUPPORT OF PIPE GALLERY WITH DOUBLE-SIDED OVERLAP SIDE WALL WITH CONCEALED COLUMN AND INSTALLATION METHOD THEREOF

00: -

The present invention belongs to the technical field of pipe gallery device, an inner support of a pipe gallery with a double-sided overlap side wall with a concealed column and an installation method thereof are provided. The inner support of the pipe gallery with the double-sided overlap side wall with the concealed column comprises a double-sided overlap side wall, an overlap base plate, an overlap top plate, and a diagonal bracing used for connecting the double-sided overlap side wall with the overlap base plate and the double-sided overlap side wall with the overlap top plate, and removable connection seat, and connection seats are provided between the diagonal bracing and the inner and outer walls for connection and fixation. Compared with original pipe gallery support technology, the present invention solves the difficulty in axillary corner construction in the prior art and limitation of the slope of installation site to the construction.



21: 2021/09772. 22: 2021-11-30. 43: 2022-01-25
51: A47J; B26D; B26B
71: DART INDUSTRIES INC.
72: VERBRUGGE, STEVEN J, YE, JUNYU, CARRETTE, JOHAN
33: US 31: 17/153,152 32: 2021-01-20
54: FOOD CHOPPER BLADE COLUMN
00: -
A food chopper blade column for use in a food chopper having a receptacle and cover. The column will be rotated in a cutting direction within the chopper during use, and mounts a plurality of cantilevered blades spaced circumferentially about the column. The upper blades include a leading edge having a single bevel cutting edge on their lower face, as well as trailing edge which is angled downward. The lowermost blade includes a leading edge having a single bevel cutting edge on its upper face, and a flat trailing edge.



21: 2021/09803. 22: 2021-12-01. 43: 2022-01-25
51: B60R; B62D; E05B
71: SMIT, Christian Jacobus, BUYS, Izak Jakobus Johannes
72: SMIT, Christian Jacobus, BUYS, Izak Jakobus Johannes
54: A SPARE WHEEL LOCKING MECHANISM
00: -
This invention relates to a spare wheel locking mechanism 10 for securing an externally mounted spare wheel against theft. The locking mechanism 10 includes an elongate lug bolt 14 which is inserted through a wheel-engaging cap 12 into a receiving formation mounted to a chassis of a vehicle. The formation includes a nut 23 into which a screw-threaded portion of the lug bolt is screwed. The lug bolt 14 is then locked in position through use of a padlock which passing through holes in a seat of the bolt. A secondary cap 12.2 closes over the lug bolt 14. Unauthorised removal of the bolt sounds an alarm by way of a switch 26 disposed proximate the nut which detects a position of the lug bolt. The Applicants believe that the spare wheel locking mechanism bolsters security of existing spare wheel hoist mechanisms thus reducing instances of wheel theft.

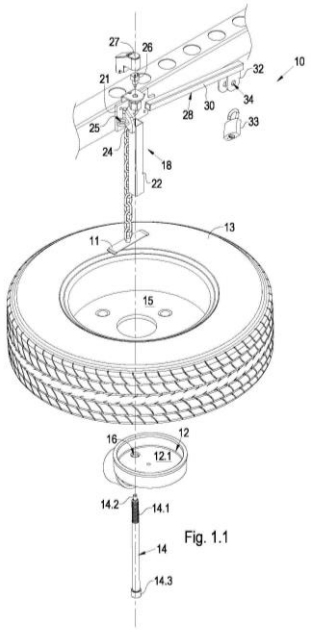


Fig. 1.1

21: 2021/09868. 22: 2021-12-02. 43: 2022-02-02
51: C12M
71: Dr. Pradeep Kumar Singa, Dr. Umesh B. Deshannavar
72: Dr. Pradeep Kumar Singa, Dr. Umesh B. Deshannavar

54: A NOVEL TECHNIQUE TO TREAT PRIORITY MICRO-POLLUTANTS OF A HAZARDOUS WASTE LANDFILL LEACHATE

00: -

The present invention relates to the treatment of micro-pollutants from leachate of hazardous waste landfill using Photo-Fenton process. Main aim of study is to find the efficiency of Photo-Fenton oxidation process in the removal of PAHs and COD from landfill leachate, and investigate its effect on16 PAHs according to their number of aromatic rings. Experiments were designed using central composite design (CCD), a module of response surface methodology (RSM) in the Design-Expert software. pH, Fe2+ concentration, H2O2 concentration, reaction time and UV-Intensity were the five experimental variables which were optimised and modelled successfully. The statistical analysis proved that all the variables have significant effect on the model. The value of R2 (0.94) showed a high realibilty in the estimation of chemical oxygen demand and polycyclic aromatic hydrocarbons removal effeciency.

21: 2021/09926. 22: 2021-12-03. 43: 2022-02-02

51: C08B

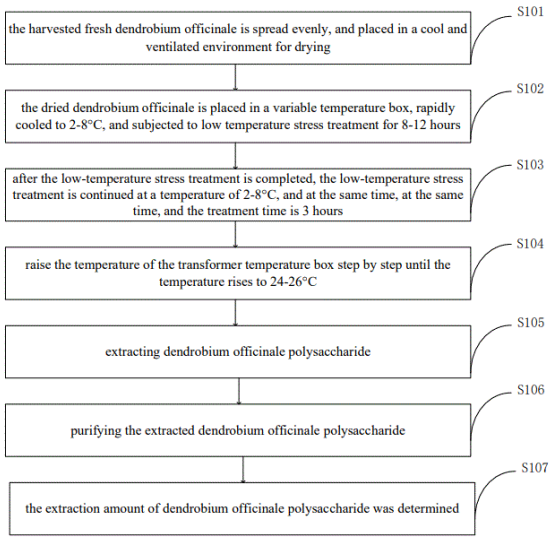
71: Enshi Tujia and Miao Autonomous Prefecture Forestry Academy

72: Shuanglong LI, Daikun WU, Chunyao DUN, Chunlin LI, Beibei CHEN, Wei XIANG, Yong ZENG, Wei CHEN, Weiyi LIU, Chuan ZHANG, Zhaohui XIANG, Junen HU, Ying ZHANG

54: METHOD FOR INCREASING POLYSACCHARIDE EXTRACTION AMOUNT OF DENDROBIUM OFFICINALE UNDER LOW TEMPERATURE STRESS

00: -

The invention belongs to the technical field of processing Dendrobium candidum, and discloses a method for improving the extraction amount of Dendrobium candidum polysaccharides by utilizing the low temperature stress effect. The method for improving the extraction amount of Dendrobium candidum polysaccharides by utilizing the low temperature stress effect comprises the following steps: drying Dendrobium candidum evenly; treating Dendrobium candidum by low temperature stress; decompressing; heating step by step; extracting and purifying the Dendrobium candidum polysaccharides; and determining the extraction amount of Dendrobium candidum polysaccharides. According to the invention, the harvested fresh Dendrobium officinale strips are subjected to the low temperature stress treatment, so that the growth control does not need to be cultivation stage of the Dendrobium officinale, the production cost can be reduced, and the utilization rate of the produced Dendrobium officinale can be realized; the extraction and purification of the Dendrobium officinale polysaccharides are carried out after the low temperature stress treatment of the Dendrobium officinale, so that the extraction amount of the Dendrobium officinale polysaccharides can be increased, and the sufficient extraction of the Dendrobium officinale is realized.



21: 2021/09955. 22: 2021-12-03. 43: 2022-01-13

51: E02D; B01D

71: JIANGNAN UNIVERSITY

72: XIULI, SUN, RUOXUAN, ZHENG, YU, WANG, XUN, JIN

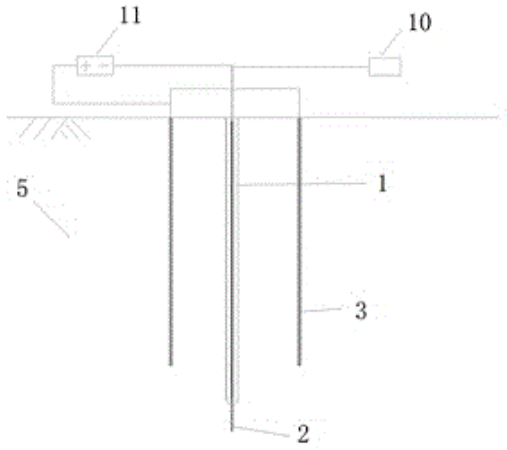
33: CN 31: 202110549412.0 32: 2021-05-20

54: THREE-DIMENSIONAL ELECTROOSMOSIS CONSOLIDATED SOFT SOIL COLLECTION AND DRAINAGE DEVICE AND CONSTRUCTION METHOD THEREFOR

00: -

Disclosed in the present invention are a three-dimensional electroosmosis consolidated soft soil collection and drainage device and a construction method therefor. The device comprises: a vertically arranged water collection well; a cathode tube concentrically arranged in the water collection well and connected to a negative electrode of a power

source; an anode section steels vertically evenly distributed around the water collection well and connected to a positive electrode of the power source in parallel; and a non-conductive sealing member located at the bottom of the water collection well and used for fixing the cathode tube, wherein a water suction device is externally connected to the top of the cathode tube, perforated tube segments evenly distributed on a through-hole are provided at the bottom of the cathode tube, lower portions of the perforated tube segments penetrate through the water collection well and the sealing member and extend into a soil body to be cured, and upper portions of the perforated tube segment remain in the water collection well; and after electrified, the anode section steels form an electroosmosis anode and the perforated tube segments in contact with the soil body form an electroosmosis anode, and the direction of current formed is obliquely downward. The present invention achieves the three-dimensional electroosmosis effect of electroosmosis, and ensures three-dimensional electroosmosis by means of a three-dimensional circuit, thereby achieving the three-dimensional electroosmosis drainage effect and improving the electroosmosis efficiency.



21: 2021/10001. 22: 2021-12-06. 43: 2022-03-15
51: B27M; C08K; E04B; E04F
71: Henan Agricultural University
72: PENG, Wanxi, ZHANG, Zhongfeng, LI, Cheng, YANG, Yafeng, GE, Shengbo
33: CN 31: 202110963381.3 32: 2021-08-20

54: METHOD FOR PREPARING COMPOSITE MATERIAL CAPABLE OF ABSORBING AND DECOMPOSING FORMALDEHYDE AND VOCS

00: -

The present disclosure discloses a method for preparing a composite material capable of absorbing and decomposing formaldehyde and VOCs, including the following steps: (1) preparation of a main agent: stirring PVC, zinc stearate, chlorinated polyethylene, stearic acid, epoxy soybean oil meal, azodicarbonamide, nano zinc oxide, nano titanium dioxide and semicarbazide at a high speed to obtain the main agent; (2) preparation of a blend: stirring the main agent, calcium carbonate powder, titanium dioxide and sodium bicarbonate at a high speed to obtain the blend; and (3) preparation of a foam board: heating the blend for foaming in an extruder, and extruding the foamed blend obtain the composite material. The composite material has an optimal formaldehyde purification affect and formaldehyde purification durability, and could be used alone or used for preparing adhesive modifiers, veneers of wood-based panels and decorative boards.

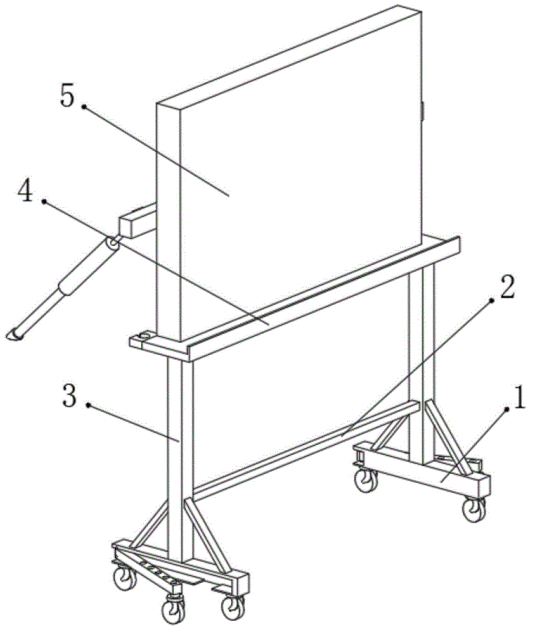
21: 2021/10002. 22: 2021-12-06. 43: 2022-03-15
51: B43L; G09B
71: Zhengzhou University of Aeronautics
72: Wang, Lele, Liao, Xin, Yang, Huaijun

54: A MATH TEACHING BOARD WITH IMPROVED MOVABILITY

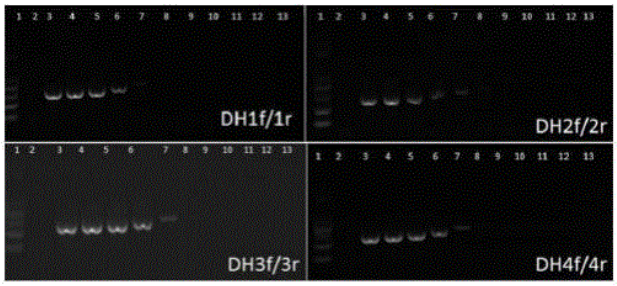
00: -

The present disclosure discloses a math teaching board with improved movability, which includes a balance board and a writing board, the outer wall on one side of the balance board is configured with a storage groove, the inner wall on one side of the storage groove is connected to a center rod through a bolt, the outer wall of the center rod is connected to an elongated board through bearing rotation, the top outer wall of the elongated board is configured with a plurality of limiting grooves distributed by equal distances, and the outer wall on one side of the balance board is configured with a reserved groove, the reserved groove is interconnected to the storage groove, the outer wall on one side of the writing board is connected to a supporting board through a bolt. The device disclosed in the present disclosure provides additional supporting force for

the writing board and ensures enough stability when a teacher is writing and drawing, the triangular structure formed between the telescopic rod, the elongated board and the supporting rod is more stable than the existing devices and can be retractable and folded when it is not being used, thus they will not occupy additional space due to the reasonable structure, the coordinated operation of the trapezoidal supporting board and the S-shaped unloading board can provide supporting force for each part of the writing board and improve the overall stability.

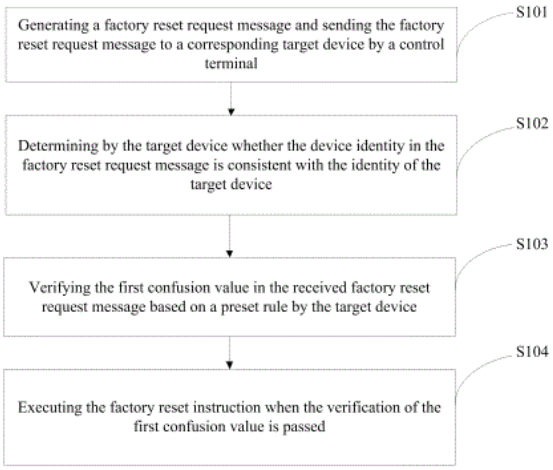


21: 2021/10003. 22: 2021-12-06. 43: 2022-03-15
51: C12N; C12Q
71: Institute of Chinese Herbal Medicines, Hubei Academy of Agricultural Sciences
72: YOU, Jingmao, TANG, Tao, WANG, Fanfan, GUO, Jie, DUAN, Yuanyuan, GUO, Xiaoliang
54: DETECTION PRIMER AND DETECTION METHOD OF SMUT DISEASE-CAUSING PATHOGEN THECAPHORA SCHWARZMANIANA, AND USE THEREOF
00: -
The present disclosure belongs to the field of biotechnology, and particularly relates to a detection primer and a detection method of a smut disease-causing pathogen Thecaphora schwarzmaniana, and use thereof.

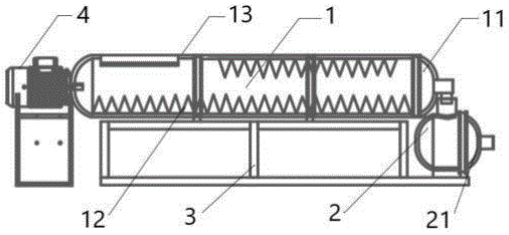


21: 2021/10004. 22: 2021-12-06. 43: 2022-03-15
51: G06F
71: Beijing Institute of Technology
72: MU, Huina, YI, Xiaojian, WEN, Yuquan, CHENG, Li, CUI, Yuhang, MA, Wentao, LIU, Wei, LI, Xiaogang
54: METHOD FOR DETERMINING RELIABILITY OF SYSTEM WITH MULTIPLE WORKING CONDITION ACTING ELEMENTS
00: -
The present invention relates to a method for determining the reliability of a system with multiple working condition acting elements, which improves the accuracy of determining the reliability of the system.

21: 2021/10005. 22: 2021-12-06. 43: 2022-03-15
51: G06F; H04L
71: Linyi University
72: LIU, Mingtao
54: FACTORY RESET METHOD AND DEVICE
00: -
An embodiment of the present disclosure provides a factory reset method and device. The method includes: receiving a factory reset request message from a control terminal by a target device, the factory reset request message includes a factory reset instruction, a device identity and a first confusion value, wherein the first confusion value is obtained by encrypting the factory reset instruction, the device identifier, and the random number by the control terminal based on the preset algorithm and the first preset key; verifying the first confusion value according to the factory reset request message based on a preset rule; executing the factory reset instruction when a verification of the first confusion value is passed.



21: 2021/10006. 22: 2021-12-06. 43: 2022-03-15
51: C05F
71: HEFEI INSTITUTES OF PHYSICAL SCIENCE, CHINESE ACADEMY OF SCIENCES
72: LI, Hualong, LI, Miao, YANG, Xuanjiang, LIU, Xianwang, GUO, Panpan, HU, Zelin, YUE, Xudong, ZHONG, Changyuan, LOU, Yiming, LIU, Xiaomeng, CHEN, Xingyu
33: CN 31: 202110162065.6 32: 2021-02-05
54: MULTIFUNCTIONAL SPLIT HARMLESS TREATMENT DEVICE FOR AGRICULTURAL AND PASTORAL WASTES
00: -
The present disclosure relates to a multifunctional split harmless treatment device for agricultural and pastoral wastes, which comprises a primary biological fermentation tank and a secondary high-temperature sterilization tank, wherein the primary biological fermentation tank and the secondary high-temperature sterilization tank are provided on a support, respectively, the primary biological fermentation tank is a steel roller, the inner wall of the roller is provided with a spiral blade structure, the roller is connected with a transmission mechanism, the roller is driven to rotate by the transmission mechanism, the spiral blade structure is driven to rotate by the rotation of the roller; the secondary high-temperature sterilization tank is provided below the primary biological fermentation tank, and a discharge port of the primary biological fermentation tank is communicated with an inlet of the secondary high-temperature sterilization tank.



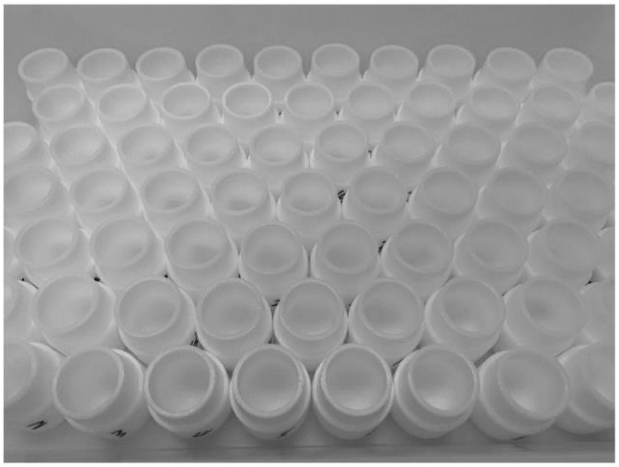
21: 2021/10007. 22: 2021-12-06. 43: 2022-03-15
51: A23L
71: Institute of Cereal and Oil Crops, Hebei Academy of agriculture and forestry Sciences, Guantao County Huayezhuangyuan Black Wheat Industry Co Ltd
72: Meng Yaning, Zhang Yelun, Lan Suque, Li Xingpu, Niu Zhenhua, Lv Liangjie, Wang Qiaqia
54: PURPLE WHEAT BRAN DIETARY FIBER POWDER AND MANUFACTURING METHOD THEREOF
00: -
The present invention discloses a manufacturing method of a purple wheat bran dietary fiber powder. The manufacturing method organically combines the sequential steps of crushing, puffing and grinding of purple wheat bran to produce the purple wheat bran dietary fiber powder in a powder form rather than bran specks. The manufacturing method herein changes the internal fiber structure of bran such that the bran has fine taste, greatly reserves high nutritional value of purple wheat bran in terms of nutrition, especially in the content of protein, trace elements and minerals, so that the ratio of soluble dietary fiber to insoluble fiber is more suitable for absorption and utilization by human bodies; therefore, a high-nutrition purple wheat bran dietary fiber powder widely applicable as food processing materials is manufactured. The fiber powder is applicable to making bread, cookies, various dough foods and the like, and is also directly eatable or directly consumable as drinks after brewing for convenience of daily consumption, and food therapy and health care effects of purple wheat bran can be better exerted.

21: 2021/10008. 22: 2021-12-06. 43: 2022-03-15
51: G01N
71: First Institute of Oceanography, Ministry of Natural Resources
72: ZHU, Aimei, CUI, Jingjing, WANG, Xiaojing, LIU, Jihua

54: METHOD FOR DETERMINING MINOR ELEMENTS AND MAJOR INGREDIENTS IN MARINE SEDIMENTS

00: -

The present invention discloses a method for determining minor elements and major ingredients in marine sediments, and the method comprises the following steps: drying the marine sediments, grinding until a degree of fineness reaches 200 mesh, and obtaining samples; placing the samples into inner liners of closed PTFE digestion vessels, adding sequentially redistilled hydrofluoric acid and redistilled nitric acid, sealing properly, heating, dissolving, cooling and adding redistilled nitric acid and ultrapure water, sealing, heating and extraction, cooling to room temperature, adding redistilled nitric acid to constant volume; and determining minor elements and major ingredients in the sample solution and a blank solution with inductively coupled plasma optical emission spectrometry. In the present invention, a reaction kettle is chosen to dissolve the samples in an enclosed vessel under high temperature and high pressure, in this way, the dissolution is complete, amount of acids used is small, and procedural blank values are less, and after dissolution, the samples become clear and transparent liquid, so a centrifuging step prior to sample measuring can be avoided, and jamming of instruments during the sample measuring is not prone to occur, which is very suitable for dissolution of marine sediments and soil samples. And in the present invention, deviations introduced when pretreating the samples are considered, so the working curve of the solution is plotted to improve accuracy of the method.

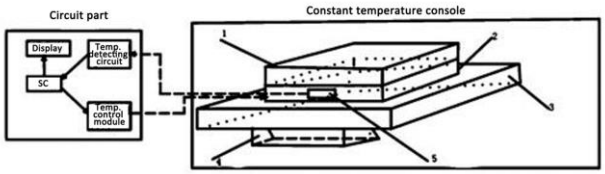


21: 2021/10009. 22: 2021-12-06. 43: 2022-03-15
51: C07K
71: SHANDONG UNIVERSITY OF SCIENCE AND TECHNOLOGY
72: HUAI, Ruituo, ZHU, Haoran, YU, Zhihao, YANG, Junqing, WANG, Hui, YANG, Shuo, SHI, Yong, YAN, Rui, ZHANG, Pingqiu

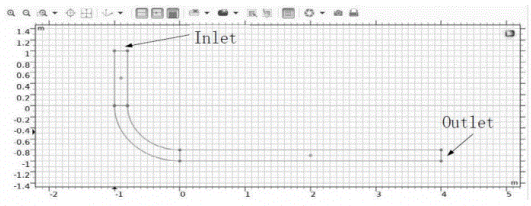
54: EXPERIMENT BENCH FOR INSECT OPERATIONS

00: -

The present invention discloses an experiment bench for insect operations, comprising a temperature adjusting and detecting circuit module, a constant temperature console and an animal fixation device; the temperature adjusting and detecting circuit module controls the temperature to be within a -5C to 30C range and with temperature adjusting precision 0.1C by controlling a semi-conductor chilling plate in the constant temperature console; the heat dissemination device in the constant temperature console controls the temperature to reach the set temperature value promptly by voluntary heat dissemination; the animal fixation device on the constant temperature console fixes and protects the animal and promise smooth proceeding of the animal experiments and the animal free from injury; the present invention is applicable to conduct long term anesthesia and effective fixation of the animal during insect operations; and heating and cooling time for semi-conductors is quite short, so the set temperature can be reached quickly and maintained. In this way, complex operations on insects can be done smoothly and a good application platform is provided for the scientific research personnel.



21: 2021/10010. 22: 2021-12-06. 43: 2022-03-15
51: G06Q
71: North China University of Science and Technology
72: WANG, Chonghao, GAN, Deqing, GONG, Yuhan
33: CN 31: 202111076575.8 32: 2021-09-14
54: CONDITION PREDICTION METHOD FOR FILLING SLURRY PIPELINE TRANSPORTATION AND APPLICATION
00: -
The present invention discloses a condition prediction method for slurry filled pipeline transportation, including: step 1: firstly, building a filled elbow model; then generating a grid based on a streamline flow module and a fluid flowing particle tracking module; finally, setting an initial velocity value and an initial particle trajectory value; step 2: building an orthogonal experiment by three main influence factors: a concentration, a particle size, and a flow velocity, or building an orthogonal experiment by two main influence factors: a concentration and a particle size; inputting all experimental conditions and attribute parameters in the orthogonal experiment into the model built to obtain the simulated settlement velocity corresponding to all the experimental conditions; and step 3: screening the simulated settlement velocities obtained in step 2 to obtain an experimental condition corresponding to a minimum simulated settlement velocity, which is the optimal condition for slurry filled pipeline transportation.



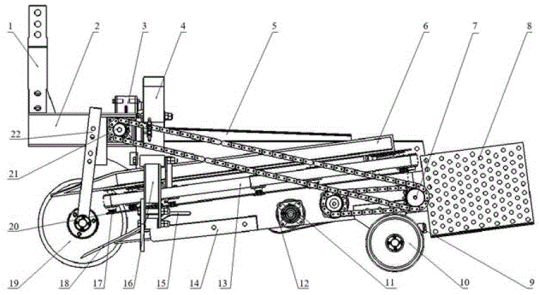
21: 2021/10011. 22: 2021-12-06. 43: 2022-03-15
51: G01N
71: Liaoning Normal University
72: Sun Yue, Li Xiwen, Na Shanshan
54: PREPARATION METHOD OF PHOSPHOLIPASE C SENSOR BASED ON ATRP
00: -
Disclosed a method for preparing a phospholipase C (PLC) sensor based on atom transfer radical polymerization (ATRP), whose working electrode is prepared with a specific ATRP polymerization solution under light conditions with electrode modified with polymethacrylaldehyde, and then silver nanoparticles are effectively introduced into the metal-free visible light-induced ATRP molecular chain for signal amplification of the working electrode of the electrochemical sensor. The prepared electrochemical biosensor is very sensitive in detecting PLC, with a linear detection range of 1-106 mU/L for PLC concentration and a detection limit of 0.1032 mU/L (S/N=3). Compared with previous methods, the method disclosed herein can avoid the interference of false-positive results with advantages of high sensitivity and operability in addition to low background signal and high selectivity as well as cost-effective performance.

21: 2021/10012. 22: 2021-12-06. 43: 2022-03-15
51: A01G
71: Liaoning Institute of Pomology
72: LIU, Weisheng, XU, Ming, ZHANG, Yujun, ZHANG, Qiuping, LIU, Shuo
54: MANAGEMENT METHOD FOR BREEDING SEEDLINGS
00: -
The present disclosure provides a management method for breeding seedlings, including the following steps: 1) planting seedlings densely in double rows in a nursery; 2) conducting winter pruning in a first year after the seedlings are planted, where the winter pruning includes: conducting short-lopping on side branches with a length of (is equal or greater than)5 cm at a 4-12 cm position after defoliation and before germination of the seedlings; 3) in a second year after the seedlings are planted, conducting winter pruning on germinated side branches, where the winter pruning includes: cutting off upright and overlapping side branches, retaining oblique, horizontal and drooping side branches, and continuing to conduct the short-lopping on the side branches with a length of (is equal or greater than)5 cm at the 4-12 cm position; and 4) in each of

following years, conducting the winter pruning only on the side branches the same as step 3).

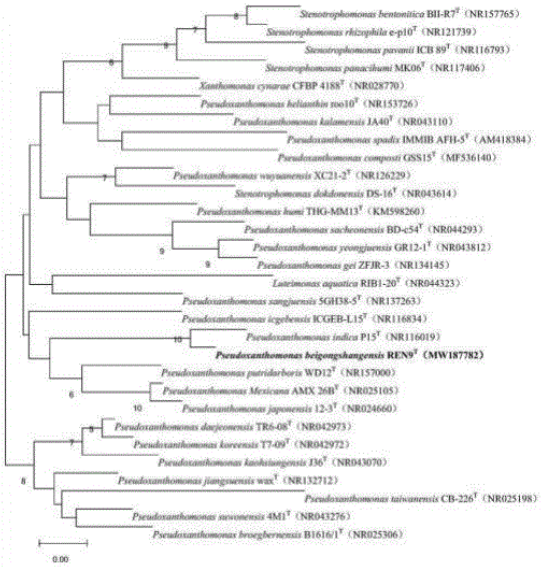
21: 2021/10013. 22: 2021-12-06. 43: 2022-03-15
51: A01C; A01G
71: Liaoning Institute of Pomology
72: LIU, Shuo, LIU, Weisheng, LIU, Youchun, LIU, Ning
54: QUICK GERMINATION METHOD OF HYBRID SEEDS FOR FRUIT TREE
00: -
The present disclosure discloses a quick germination method of hybrid seeds for fruit tree. The quick seedling formation method includes the following steps: after harvesting fruits, removing pulps to obtain shell-less seeds, placing in a culture dish, and adding sterile water at 20-25°C to soak for 24-36 h; and removing seed coats, sterilizing seed coat-free seeds with a 0.08-0.12% potassium permanganate solution for 25-35 sec, washing with the sterile water to obtain dormancy-broken seeds, and placing the dormancy-broken seeds in a container filled with the sterile water for sowing; sowing the dormancy-broken seeds into a water-permeable substrate and placing in an artificial climate room for culture; after 5th to 6th true leaves of seedlings grow, removing the seedlings out from the artificial climate room, culturing at room temperature for 2-3 d while conducting water control, and transplanting to a nutrition pot or field for growth.

21: 2021/10014. 22: 2021-12-06. 43: 2022-03-15
51: A01G
71: Shandong Agricultural University
72: Song Zhanhua, Zhao Bo, Li Fade, Yan Yinfa, Tian Fuyang, Yu Zhenwei, Li Yudao, Chen Xizhuang
33: CN 31: 2021111907563 32: 2021-10-13
54: MULBERRY SAPLING LIFTER
00: -
The present invention relates to a mulberry sapling lifter, comprising a body frame connected with a walking device, and a sapling lifting mechanism, a gripping and conveying mechanism and a soil clearing mechanism which are mounted on the body frame, wherein the soil clearing mechanism comprises a lower connecting rod which is located below the gripping and conveying mechanism and extends along left and right directions, and a driving mechanism which drives the lower connecting rod to perform reciprocating movement along the left and right directions, and the lower connecting rod is fixedly connected with a plurality of soil crushing sticks corresponding to roots of mulberry saplings gripped by the gripping and conveying mechanism. According to present invention, in the process of conveying mulberry saplings, the soil crushing sticks perform reciprocating movement to clear soil attached to the mulberry saplings for the first time, and then rotating roller brushes clear soil for the second time. Soil holes are formed at a collecting box, such that soil entering the collecting box along with the mulberry saplings falls off, thereby greatly improving the soil removal effect. The mulberry sapling lifter has a reasonable structure, can meet the requirement of harvesting mulberry saplings, improves the saplings lifting efficiency and reduces the saplings lifting cost.



21: 2021/10015. 22: 2021-12-06. 43: 2022-03-15
51: C12G; C12N; C12R
71: BEIJING TECHNOLOGY AND BUSINESS UNIVERSITY
72: REN, Qing, XU, Jialiang, SUN, Zhanbin, YAN, Yi, SUN, Leping, XING, Xuan, CHEN, Haiyan, GUO, Liyin
33: CN 31: 202011423248.0 32: 2020-12-08
54: NEW PSEUDOXANTHOMONAS BEIGONGSHANGENSIS STRAIN AND USE THEREOF
00: -
The present disclosure provides a new Pseudoxanthomonas beigongshangensis strain and use thereof. The strain is P. beigongshangensis, deposited at the China General Microbiological Culture Collection Center (CGMCC) with an accession number of CGMCC NO. 19208. It is demonstrated that the present disclosure provides a new P. beigongshangensis strain, which is isolated from pit mud of baijiu, can produce concentrated

flavor substances, and can be used for fermenting and making liquor.

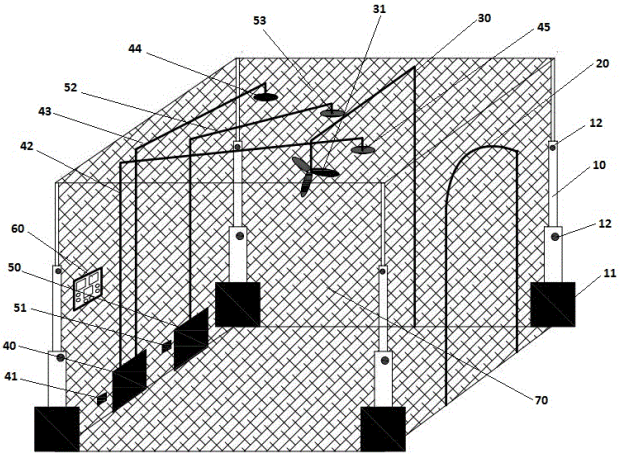


21: 2021/10016. 22: 2021-12-06. 43: 2022-03-15
51: A01H
71: Shandong Institute of Pomology
72: Han Xueping, Xue Xiaomin, Zheng Xitong, Meng Haifeng, Dong Fang

54: POLLINATION ISOLATION NET COVER FOR APRICOT TREES

00: -

The invention relates to a pollination isolation net cover for apricot trees, which comprises a plurality of support rods, wherein the lower part of each support rod is provided with a foot post, and each support rod is provided with two buttons; a fan, the fan is supported on the top of the net cover by a wire conduit; an anther storage tank provided with an anther output pipe a and an anther output pipe b; the other end of the anther output pipe a is provide with a shower a, and the other end of the anther output pipe b is provide with a shower b; a liquid storage tank, on which a liquid output pipe is arranged, and the other end of the liquid output pipe is provided with a water mist nozzle; a control display device which is provided with a plurality of display interfaces and buttons; several screen meshes; and a door. The invention relates to a pollination isolation net cover for apricot trees, which can adjust the height of the net cover according to the height of apricot trees, adjust the humidity and temperature in the net cover at the same time, and control the internal environment of the net cover, so that it is more suitable for the growing environment of apricot trees, improves the fruit quality of apricot trees, is more convenient to use and has a wider application range.

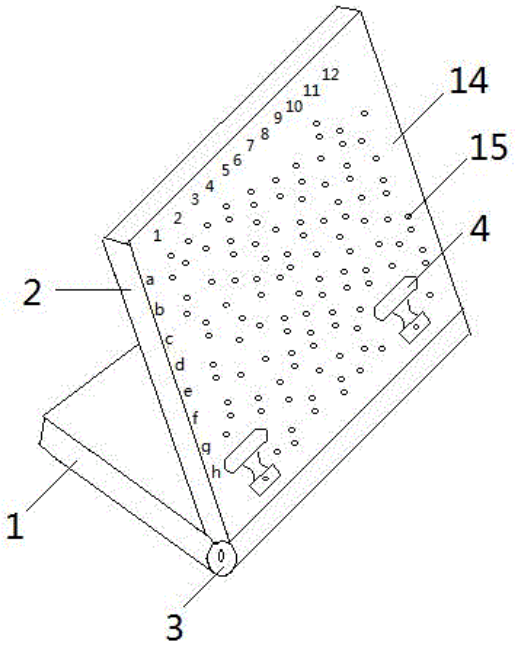


21: 2021/10017. 22: 2021-12-06. 43: 2022-03-15
51: G06K
71: North China University of Technology
72: Xu Hong, Xu Dingjie, Li Tian, Li Shifeng, Cai Wenchen, Gao Xuemin, Mao Na, Jin Fuyu, Li Yaqian

54: TEMPLATE FIXING DEVICE

00: -

The invention discloses a template fixing device, which relates to the technical field of medical research experiments. Comprises a first supporting plate, a second supporting plate, a rotating assembly and a fixing assembly, wherein the first supporting plate is used for placing on a horizontal experimental operating table, the second supporting plate is used for placing a sample plate, one end of the first supporting plate and one end of the second supporting plate are respectively fixedly connected with the rotating assembly, and the first supporting plate and the second supporting plate can be angularly adjusted through the rotating assembly; the fixing assembly is fixedly connected with the second supporting plate; and when the included angle between the second supporting plate and the first supporting plate is acute, the fixing assembly Thereby solving the problem of low efficiency of loading samples on the loading plate during experiments in the prior art.



21: 2021/10018. 22: 2021-12-06. 43: 2022-03-15
51: C08F
71: Yantai Research Institute of Harbin Engineering University
72: Guo Yanhong, Chen Rongrong, Song Chuan
54: IPN DAMPING MATERIAL CONTAINING HINDERED AMINE AND PREPARATION METHOD THEREOF
00: -
The invention provides an IPN damping material containing hindered amine and a preparation method thereof. Comprising polyurethane matrix, vinyl monomer, hindered amine capable of generating hydrogen bond with polar groups in polyurethane matrix and vinyl resin, chain extender and crosslinking agent, wherein the content of hindered amine is 1-50% of the total weight of polyurethane matrix and vinyl resin; the molar ratio of -NCO in polyurethane matrix to -OH of chain extender is 1:0.9; And the mass ratio of polyurethane to vinyl resin is 1:0.5-1.5; the molar ratio of crosslinking agent to chain extender is 1:1-3. The invention has the beneficial effects that the peak value of the damping factor of the damping material is above 0.8, and can reach above 0.2 in a wide range. The preparation process is simple, the price is low, and the soft and hard segments in the molecule can be adjusted.

21: 2021/10019. 22: 2021-12-06. 43: 2022-03-15
51: B01D; C11B
71: Nanjing Institute for Comprehensive Utilization of Wild Plants, China CO-OP, Yili ZiSuLiRen Bio-Technology Co., Ltd
72: HUANG, Xiaode, WANG, Zhuangwei, YANG, Jianxin, CHEN, Bin, ZHAO, Botao, LUO, Weikang, GU, Xiangwen, WU, Jianqiang
33: CN 31: 202110132040.1 32: 2021-01-30
54: LAVENDER ESSENTIAL OIL HOT-AIR DISTILLATION DEVICE
00: -
The present invention discloses a lavender essential oil hot-air distillation device, including a distillation retort, a heater, a condenser, a safety valve, a gas-liquid separator and an airflow pump and characterized in that the heater is fixed to a lower side of a retort body of the distillation retort and communicated with a bottom or lower lateral surface of the distillation retort through a pipeline. The condenser is fixed to a lateral surface of the retort body of the distillation retort, and an upper portion thereof is communicated with a top or upper lateral surface of the distillation retort through a pipeline while a lower portion is communicated with the airflow pump through a pipeline. The safety valve is located on the pipeline between the condenser and the airflow pump. The device is used for hot-air non-aqueous distillation of lavender essential oil.

21: 2021/10020. 22: 2021-12-06. 43: 2022-03-15
51: C12Q
71: Luoyang Orthpedic-Traumatological Hospital of Henan Province (Henan Provincial Orthopedic Hospital)
72: Wang Na, Liu Yuke, Cao Nana, Guo Yunpeng, Xie Yan
54: RAPID DETECTION KIT AND DETECTION METHOD FOR ESCHERICHIA COLI
00: -
The invention discloses a kit and method for rapid detection of Escherichia coli, belonging to the field of microbial detection. The kit comprises primers and PCR reaction solution, wherein the primers are as follows: upstream primer: 5’-atgaataagaatctcatc-3’; downstream primer: 5'-tttcttctcgcagtttcg-3'. The PCR reaction solution includes DNA template, DNA polymerase, 2×reaction buffer, magnesium chloride, dNTPs and ddH2O. Experiments show that the lowest detection limit of the kit for detecting Escherichia coli O157:H7 is 10cfu/mL, and it has no

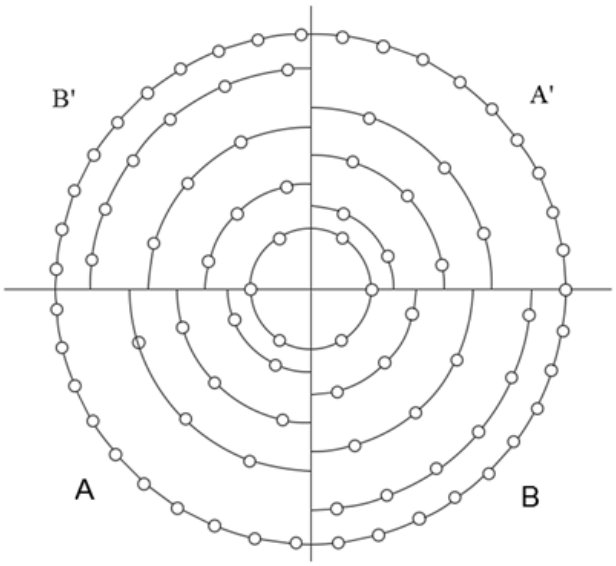
cross with other bacteria, and can specifically detect Escherichia coli O157:H7. The kit disclosed by the invention can achieve the purpose of rapid detection of Escherichia coli O157:H7 with high sensitivity and specificity, and provide new detection means and methods for early detection of Escherichia coli O157:H7.

21: 2021/10021. 22: 2021-12-06. 43: 2022-03-15
51: A23L; A61K; A61P
71: Liaocheng University
72: ZHANG, Ning, ZHANG, Ruiyan, LIU, Chunhong, JIN, Li, YIN, Xiaohan, WANG, Zhengping
54: KETOGENIC DIET (KD) COMPOSITION FOR PREVENTING AND/OR TREATING DEMYELINATING DISEASE, AND PREPARATION METHOD AND USE THEREOF
00: -
The present disclosure provides a ketogenic diet (KD) composition for preventing and/or treating a demyelinating disease, and a preparation method and use thereof.

21: 2021/10023. 22: 2021-12-06. 43: 2022-03-15
51: B09C
71: Qingdao Agricultural University
72: XU, Ying, ZONG, Haiying, LI, Bing
54: RHIZOSPHERE REMEDIATION METHOD OF HIGH-CONCENTRATION PETROLEUM CONTAMINATED SALINE-ALKALI SOIL
00: -
The present disclosure relates to a rhizosphere remediation method of high-concentration petroleum contaminated saline-alkali soil. The method includes: first, mixing soil with crop straws 1-4 times the volume of the soil, and adjusting a carbon-nitrogen ratio of the soil to 10-25; subsequently, plowing and mixing the soil and additives repeatedly, then flatly paving the mixed soil, and adjusting a water content of the soil to 40-60% of a saturated water content; selecting common halophytes as remediation plants; when seedlings grow to 5-7 cm high, thinning the seedlings, and when heights of the seedlings are 10-12 cm, determining the seedlings according to a plant spacing; during plant cultivation, watering the soil every 3-5 days to ensure that the water content of the soil is 40-60% of the saturated water content.

21: 2021/10025. 22: 2021-12-06. 43: 2022-03-09
51: A01G; C05F; C05G
71: QILU UNIVERSITY OF TECHNOLOGY
72: YAN, Wenhui, REN, Xidong, CHEN, Yan, WANG, Chenying, LIU, Xinli
54: FERMENTATION PROCESS FOR REGULATING MORPHOLOGY OF ACTINOMYCETES TO EFFICIENTLY PRODUCE E-POLY-L-LYSINE (E-PL)
00: -
The present disclosure discloses a method for controlling morphology of actinomycetes to increase a yield of e-poly-L-lysine (e-PL), where a certain concentration of solid particles are added during fermentation to significantly increase the yield of the e-PL. The added solid particles have a concentration of 1-40 g/L and a median diameter (D50) of 0.5-30 μm. In the present disclosure, the method can effectively control a size of bacterial spheres, and is easy to implement during the fermentation of the e-PL. The method has an important guiding significance for increasing a fermentation level of industrialized large-scale production for the e-PL.

21: 2021/10028. 22: 2021-12-06. 43: 2022-03-09
51: E21D
71: HENAN POLYTECHNIC UNIVERSITY
72: YU, Jianxin, ZHANG, Xin
54: LOW CASTING AND LOW IMPACT BLASTING METHOD BASED ON HARD ROCK IN DEEP SHAFT
00: -
The present invention relates to a low casting and low impact blasting method based on hard rock in deep shaft. By designing the drilling art of cutting undermines, periphery holes and satellite holes, in particular, by arranging the periphery holes into different areas, the method can effectively lower the height of the upthrown flying stone, reduce shock wave and seismic wave, protect the safety of shaft lining and other facilities inside the shaft and improve the footage of blasting and speed up construction. A large rubber ring is placed over the blasting holes to reduce blasting shock wave.

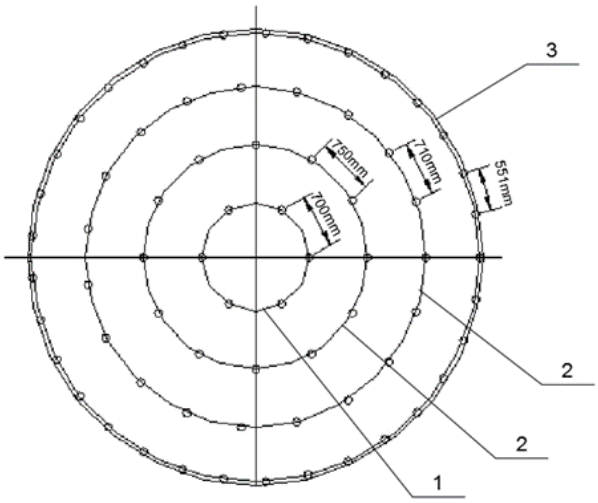


21: 2021/10029. 22: 2021-12-06. 43: 2022-03-09
51: E21D
71: HENAN POLYTECHNIC UNIVERSITY
72: ZHANG, Xin, YU, Jianxin

54: DEEP HOLE STEREO MILLISECOND BLASTING METHOD BASED ON WEAK SURROUNDING ROCK IN DEEP SHAFT

00: -

The invention relates to a deep hole stereo millisecond blasting method based on weak surrounding rock in deep shaft. By improving the construction technology, the cutting undermine effect and smooth blasting quality are improved, the time of bottom clearing is shortened, the footage of each blasting cycle is improved, the construction speed is accelerated and the economic benefit is improved.

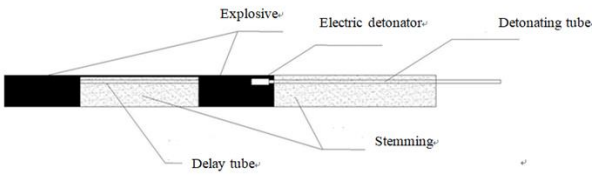


21: 2021/10030. 22: 2021-12-06. 43: 2022-03-09
51: E21D
71: HENAN POLYTECHNIC UNIVERSITY
72: YU, Jianxin, ZHANG, Xin

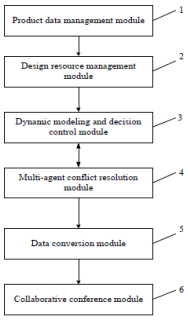
54: DEEP HOLE VIBRATION REDUCTION BLASTING METHOD BASED ON ARTIFICIAL FROZEN SOFT ROCK IN DEEP SHAFT

00: -

The present invention discloses a deep hole vibration reduction blasting method based on artificial frozen soft rock in deep shaft. To overcome the shortcomings of low efficiency, long construction period and high cost caused by the fact that only shallow hole blasting can be used for haft frozen bedrocks under normal circumstances, a bedrock deep hole differential blasting construction method matching a shaft freezing method is provided. In the method, deep holes are drilled at one time, and surrounding holes are charged with explosives section by section to form surrounding hole charging structures to implement differential smooth blasting in the holes, thereby reducing blasting vibration, effectively protecting the safety of a frozen pipe and a frozen wall, improving the drilling and blasting work efficiency, accelerating the construction progress, shortening the construction period, and exerting the mechanization efficiency of equipment.



21: 2021/10031. 22: 2021-12-06. 43: 2022-03-09
51: G06F; H02J
71: QINGDAO UNIVERSITY OF SCIENCE AND TECHNOLOGY, SHANDONG HOTEAM SOFTWARE CO., LTD.
72: QIN, Yuhua, BIAN, Jing, ZHANG, Nuoqing, WANG, Shijie, HE, Susu
54: MULTI-AGENT ONLINE CO-DESIGN INTERACTIVE SYSTEM
00: -
The present disclosure relates to a multi-agent online Co-Design interactive system, including a product data management module, a design resource management module, multiple dynamic modeling and decision control modules, a multi-agent conflict resolution module, a data conversion module, and a collaborative conference module connected in sequence; wherein the product data management module is configured to store and manage product information, the design resource management module is configured to store and manage design resource information, the modeling and decision control modules are configured to model and control a constructed model according to the product information and the design resource information; the multi-agent conflict resolution module is configured to resolve conflicts on multiple models constructed by the dynamic modeling and decision control modules; the data conversion module is configured to convert a model after conflict resolution to obtain a light weighting model.



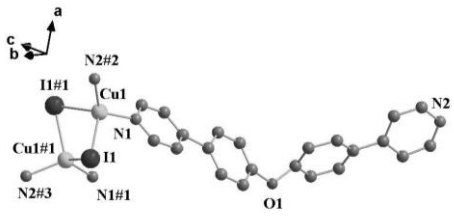
21: 2021/10032. 22: 2021-12-06. 43: 2022-03-09
51: C09D
71: ZHANG, Shihu
72: ZHANG, Shihu, WANG, Chao, LI, Shisheng, WANG, Zhenqiang, ZHANG, Xiaodi, YANG, Huatong, HAO, Dekai
54: WATER-BASED ANTISTATIC LIGHT-CURED COATING AND PREPARATION METHOD THEREOF
00: -
The present disclosure provides a water-based antistatic light-cured coating and a preparation method thereof. By mixing a polypyrrole nanoparticle aqueous solution as a conductive component with a water-based UV light-cured resin, a water-based defoaming agent, a water-based leveling agent and a photoinitiator, the water-based antistatic light-cured coating is prepared. The method is simple and easy to implement. The prepared antistatic light-cured coating does not contain a volatile organic solvent, does not need heating, and is efficient and environmentally friendly. Meanwhile, the conductive component polypyrrole nanoparticles have good dispersibility and stability in a light-cured system, and ideal antistatic performance can be obtained by a small addition amount. The problems that inorganic conductive particles or conductive polymer powder, etc. are not uniformly dispersed in the light-cured system after being added as the conductive filler, are easily agglomerated and separated out and cause obvious increase of the viscosity of the system are solved.

21: 2021/10060. 22: 2021-12-07. 43: 2022-03-17
51: C22C
71: ANHUI UNIVERSITY OF SCIENCE AND TECHNOLOGY
72: SIXIN YANG, JINSONG HU

54: PREPARATION METHOD OF COPPER METAL-ORGANIC COMPLEX BASED ON DIPHENYL ETHER LIGANDS AND APPLICATION THEREOF IN DETECTION OF AL3+ IONS

00: -

The present invention discloses a copper metal-organic complex based on diphenyl ether ligands as well as a preparation method and an application thereof. Thecomplex has a chemical formula of [CuI(BPDPE)]. BPDPE is 4,4-bipyridyl diphenyl ether. The copper metal-organic complex based on diphenyl ether ligands belongs to tetragonal systems, has a space group of I41/a, and includes cell parameters of a=14.6656(16)Å, b=14.6656(16)Å, c=35.307(8)Å, α=90.00°, β=90°, γ=90.00°, V=7594(2)Å3. The preparation method of the copper metal-organic complex based on diphenyl ether ligands provided by the present invention is simple in operation, high in productivity and excellent in reproducibility. The prepared complex is stable in structure at room temperature, can detect aluminum in solutions and can be used for detecting aluminum ions.



21: 2021/10061. 22: 2021-12-07. 43: 2022-03-15

51: G06F

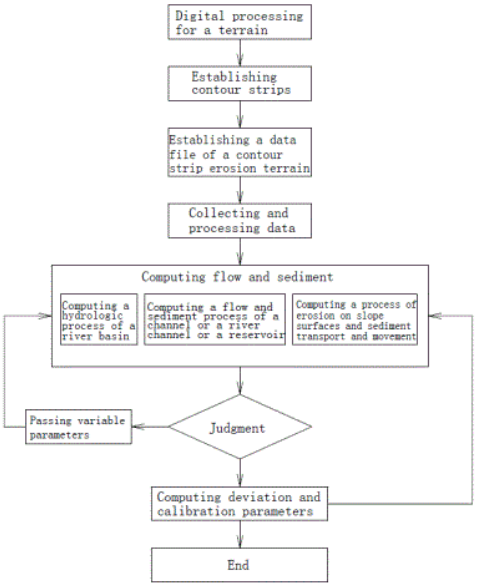
71: China Institute of Water Resources and Hydropower Research, China Three Gorges Corporation

72: GONG, Jiaguo, JIA, Yangwen, ZHAO, Hanqing, WANG, Hao, LIU, Jiajia, WANG, Ying, NIU, Cunwen

54: DISTRIBUTED COUPLED SIMULATION METHOD OF FLOW AND SEDIMENT PROCESS IN RIVER BASIN

00: -

The present invention relates to a distributed coupled simulation method of a flow and sediment process in a river basin.



21: 2021/10062. 22: 2021-12-07. 43: 2022-03-15

51: B21D

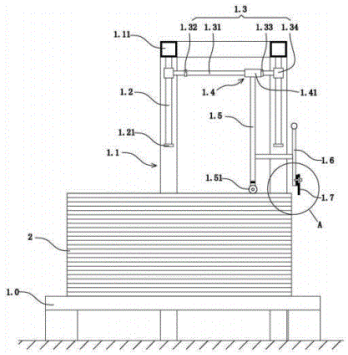
71: Lu'an City Ingenuity Information Technology Co., Ltd.

72: SUN, Chuang

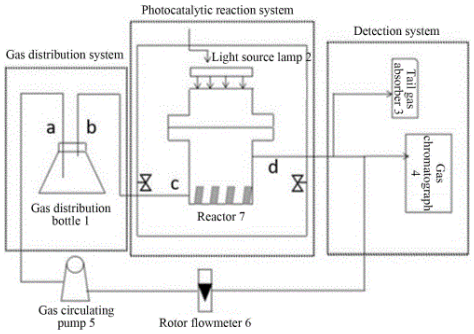
54: AUXILIARY DEVICE FOR FORMING AUTOMOBILE DOOR OUTER PANEL

00: -

The present invention discloses an auxiliary device for forming an automobile door outer panel. The device includes a machine frame, a top frame arranged at the top of the machine frame, a vertical guide rod located below the top frame, a lifting frame capable of lifting and falling along the vertical guide rod, a horizontal guide rod arranged on the lifting frame, a horizontal sliding frame sliding along the horizontal guide rod, a vertical supporting rod located below the horizontal sliding frame, a roller arranged at a lower end of the vertical supporting rod, a hand push frame located on one side of the vertical supporting rod, a connecting rod connecting the vertical supporting rod and the hand push frame, a vertical mounting plate arranged on the hand push frame, and a vertical push plate arranged on the vertical mounting plate.

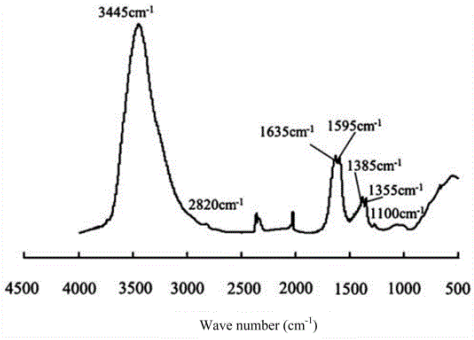


21: 2021/10063. 22: 2021-12-07. 43: 2022-03-15
51: B01D
71: Qingdao Agricultural University
72: CHEN, Qinghua, WU, Shu'na, XIN, Yanjun
54: DEVICE AND METHOD FOR REMOVING VOLATILE ORGANIC COMPOUNDS IN AIR THROUGH PHOTOCATALYSIS
00: -
A device and a method for removing volatile organic compounds in air through photocatalysis are provided. A gas inlet a of a gas distribution bottle is connected with a gas outlet pipe of a reactor through a gas circulation pump and a rotor flowmeter in sequence; a gas outlet b of the gas distribution bottle is connected with the bottom of the reactor of a photocatalytic reaction device; TiO2 photocatalyst loaded on a titanium sheet is uniformly tiled at the bottom of the reactor; a light source lamp is installed at the top of the reactor perpendicular to the bottom of the reactor; a gas outlet d of the reactor is connected with a gas chromatograph after being sampled through the gas outlet pipe of the reactor; and a tail gas absorber is connected to a position, close to the gas outlet.



21: 2021/10064. 22: 2021-12-07. 43: 2022-03-15
51: C12Q
71: Linyi University
72: LIU, Yunguo, HAN, Qingdian, DUAN, Jiayu, KANG, Dacheng, PENG, Shanli, ZHANG, Jie, LEI, Zhiwen, WU, Huanyu, ZHANG, Yanzeng, FENG, Bingsen
54: DROPLET DIGITAL POLYMERASE CHAIN REACTION (DDPCR)-BASED RAPID DETECTION METHOD FOR VIBRIO MIMICUS IN AQUATIC PRODUCT
00: -
The present disclosure provides a droplet digital polymerase chain reaction (ddPCR)-based rapid detection method for Vibrio mimicus in an aquatic product, including the following steps: extracting a genomic DNA of an enrichment broth of an aquatic product sample to be tested and diluting for later use; designing specific primers and a probe using conservative DNA sequences of a Vibrio mimicus genome; and conducting ddPCR amplification and detection on the genomic DNA of the enrichment broth of the aquatic product sample to be tested using the specific primers and the probe. After the PCR amplification, each droplet is detected separately using a droplet analyzer, a droplet with a fluorescence signal is interpreted as 1, and a droplet without the fluorescence signal is interpreted as 0, and a concentration or a copy number of target molecules to be detected is calculated according to the Poisson distribution and a proportion of positive droplets.

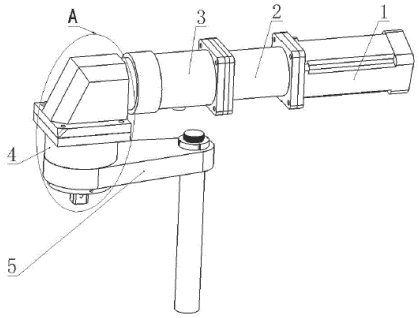
21: 2021/10065. 22: 2021-12-07. 43: 2022-03-15
51: C05G
71: Qingdao Agricultural University
72: SONG, Xiangyun, WANG, Rui, YU, Guiling, LIU, Xinwei, ZHANG, Xiaoguang, CUI, Dejie
54: CHARCOAL-BASED COMPOUND FERTILIZER DEDICATED FOR COTTON FIELDS IN SALINE SOIL AREAS AND PREPARATION METHOD THEREOF
00: -
The present disclosure discloses a charcoal-based compound fertilizer dedicated for cotton fields in saline soil areas and a preparation method thereof.



21: 2021/10066. 22: 2021-12-07. 43: 2022-03-15
51: C04B
71: Beijing Wenshui Jiangyuan Coating Technology Co., Ltd
72: TENG, Junwei, QIN, Dandan
54: WATER-BASED COMPOSITE ADHESIVE FOR LOST FOAM COATING AND PREPARATION METHOD THEREOF AND LOST FOAM COATING
00: -
The present disclosure belongs to the technical field of lost foam casting and provides a water-based composite adhesive for lost foam coating, comprising the following components in percentage by weight: 20-30% of water-soluble phenolic resin, 20-40% of silica sol, 5-15% of bentonite, 5-10% of sodium carboxymethyl cellulose, and 30-50% of water. According to the present disclosure , the water-soluble phenolic resin has good adhesion strength, which is beneficial to ensure the smearing property and low-temperature strength of lost foam coating ; the silica sol has good heat resistance, which is beneficial to improve the high-temperature strength of lost foam coating, and through combination with the bentonite and the sodium carboxymethyl cellulose, an adhesive that can improve the high-temperature strength and smearing property of lost foam coating is obtained.

21: 2021/10067. 22: 2021-12-07. 43: 2022-03-15
51: A01G; A23L; C12G; C12J
71: Qinghai Huashi Technology Investment Management Co., Ltd., Qinghai Huashi Highland Barley Biological Technology Development Co., Ltd., Qinghai Zhongcheng Food Testing Co., Ltd.
72: DU, Yan, LIANG, Feng, MA, Ping, HAO, Jing, ZHOU, Wenju, LIU, Yu, TU, Zhaoxin, ZHANG, Chengping, TAN, Youjin, YANG, Jing
54: REINFORCED HIGHLAND BARLEY RED YEAST RICE FOR LOWERING BLOOD PRESSURE, BLOOD LIPID AND BLOOD GLUCOSE AND PREPARATION METHOD THEREOF
00: -
The present disclosure relates to the technical field of food processing, and more particularly to reinforced highland barley red yeast rice for lowering blood pressure, blood lipid and blood glucose and a preparation method thereof. Germinated highland barley is obtained in a manner of dual stress of constant temperature and vacuuming, the germinated highland barley is compounded with quinoa flour, then highland barley-quinoa compounded red yeast rice in which lovastatin, gamma-aminobutyric acid and beta-glucan are integrally enriched is obtained through a fermentation process of red yeast rice, and the content of open-loop lovastatin is high.

21: 2021/10069. 22: 2021-12-07. 43: 2022-03-15
51: B23P
71: Qingdao University of Technology
72: ZHAO, Juan, XING, Jinbao, WANG, Yiran, WANG, Zheng, TAN, Menghua, ZHAO, Na, LIU, Songnian
54: SPECIAL TIGHTENING MECHANISM AND DETECTION CONTROL SYSTEM OF HIGH-SPEED TRAIN BRAKE DISCS
00: -
The present disclosure discloses a special tightening mechanism and detection control system of high-speed train brake discs. The special tightening mechanism and detection and control system includes a mechanical mechanism, a measuring assembly and a control assembly. The mechanical mechanism and measuring assembly includes a brushless DC motor, a reducer, a torque sensor, an output shaft and a counterforce arm connected in sequence; the output shaft includes a transmission shaft, a first bearing , a second bearing, a bevel gear, a third bearing, a planetary gear, a fourth bearing and a tightening head connected in sequence, and a housing is arranged outside the output shaft; the control assembly includes a main control unit, and a STM32F103ZET6 processor with the highest configuration in a STM32F103 series is selected.

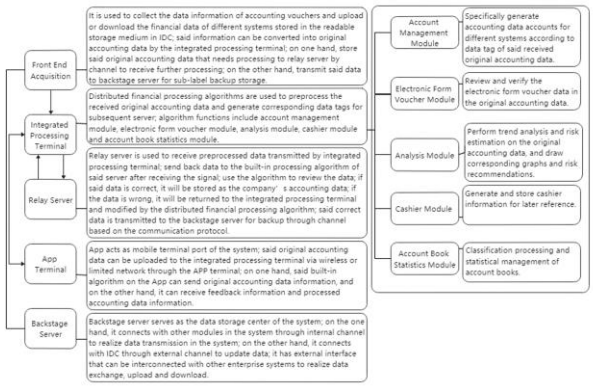


21: 2021/10070. 22: 2021-12-07. 43: 2022-03-15
51: B01J; C25B
71: Qingdao University of Science and Technology
72: WANG, Debao, HU, Zhiguo, CHEN, Yi, SONG, Caixia, WANG, Zhenyu
33: CN 31: 202110288303.8 32: 2021-03-18
54: NIFE-LDHS ULTRATHIN NANOSHEET ASSEMBLY WITH NITROGEN-DOPED CARBON QUANTUM DOTS EMBEDDED AND PREPARATION METHOD
00: -
The present disclosure discloses a simple one-step ionothermal synergistic pyrolysis method to synthesize a NiFe-LDHs ultrathin nanosheet assembly with nitrogen-doped carbon quantum dots embedded. Nickel chloride hexahydrate, ferric trichloride hexahydrate, urea and a small amount of water form a quaternary deep-eutectic solvent to serve as a unique precursor, wherein the urea serves as an alkali source and a bidentate ligand, a relatively stable metal-urea deep-eutectic solvent is formed through an M-O bond, then the morphology of a product can be regulated and controlled, and the urea also serves as a precursor of the nitrogen-doped carbon quantum dots. The quaternary deep-eutectic solvent is subjected to one-step ionothermal synergistic pyrolysis reaction to obtain the NiFe-LDHs ultrathin nanosheet assembly with the nitrogen-doped carbon quantum dots embedded. The prepared assembly serves as an electrode material and shows excellent OER performance under large current in alkaline electroly.

21: 2021/10071. 22: 2021-12-07. 43: 2022-03-15
51: G06K
71: Department of Neurosurgery, Central Theater General Hospital of PLA
72: Song Jian, Liu Min, Lin Pan, Wang Zaigui, Ding Huichao, Xie Tianhao, Sun Ronghui
54: EMOTIONAL REGULATION TRAINING SYSTEM AND METHOD BASED ON NEURAL FEEDBACK TECHNOLOGY
00: -
The invention relates to an emotion regulation training system and method based on neural feedback technology, which comprises an EEG signal acquisition and preprocessing module, an EEG network connection phase coherence calculation module, a brain network index feature calculation module, a feature classification module and a neural feedback interface module. The method comprises the following steps: constructing an emotional stimulation paradigm and collecting EEG nerve signals; preprocessing EEG neural signals; constructing brain function network; obtaining the index characteristics of brain function network; sending the index features of brain function network to the feature classifier for classification, and the classification prediction results are obtained based on the random forest algorithm. The random forest algorithm classifier is used to identify the brain states of different emotional stimulation states, and the prediction results are presented to the testee through the PC. According to the invention, by combining the neural feedback technology with the neural plasticity of the brain, the emotion regulation and emotion control abilities of military combatants can be effectively trained.

21: 2021/10072. 22: 2021-12-07. 43: 2022-03-15
51: G06F
71: Guangxi University of Finance and Economics
72: Xiong Fangjun
54: A CROSS-INDUSTRY ACCOUNTING DATA PROCESSING METHOD AND SYSTEM
00: -
Disclosed is a cross-industry accounting data processing method and system, comprising steps as follow: 1) data information of accounting voucher is collected by front end acquisition; 2) preprocess the received original accounting data through the integrated processing terminal and generate corresponding data tag; 3) said preprocessed data is sent to the relay server through the channel for centralized processing; 4) provide App for mobile processing; 5) user obtains the data processing result through the backstage server and realizes the organic connection with other enterprise systems;

compared with the prior art, this invention has the advantages that said design, connection mode and working principle of the system functional modules are reasonable; said functions are complete; data accounting process from the collection, processing to the final integrated display in the existing field is realized; data accounting process is greatly reduced; cumbersomeness brought by the traditional method get reduced thus reduces the workload of related staff; said system has good applicability and is easy to promote.



21: 2021/10073. 22: 2021-12-07. 43: 2022-03-15
51: A01N
71: Qingdao Agriculture University
72: Xiang Dan, Wu Yafen, Liang Bin, Liu Qing, Li Huan, Li Min, Li Lin, Huang Yudan, Zhu Xiaoxue
54: BACILLUS SUBTILIS KCKB1 WITH BIOCONTROL FUNCTION, BIOCONTROL AGENT AND APPLICATION THEREOF
00: -
The invention belongs to the technical field of microorganisms, and particularly relates to a Bacillus subtilis KCKB1 with biocontrol function, a biocontrol agent and application thereof. Bacillus subtilis KCKB1 provided by the invention can prevent and control soil-borne diseases, has good disease resistance effect, can also enhance the ability of plants to absorb nitrogen in soil and promote plant growth. Embodiment results show that Bacillus subtilis KCKB1 has more than 60% control effects on tomato neck rot, tomato fusarium wilt, tomato gray mold, sweet potato black spot and sweet potato vine cutting.

21: 2021/10074. 22: 2021-12-07. 43: 2022-03-15
51: E04H
71: YanShan University
72: Feng Xi, Zhuang Xupin
54: BUS PLATFORM
00: -
The invention provides a bus platform, which comprises a bottom plate, a back wall and a top plate, wherein the bottom plate is horizontally arranged on the ground, a back wall is vertically arranged on one side of the bottom plate away from the road, a top plate is horizontally arranged on one side of the back wall away from the bottom plate, the top plate and the bottom plate are arranged on the same side of the back wall, and the top plate and the bottom plate are arranged in parallel, and the area limited by the bottom plate, the bottom plate and the back wall constitutes a semi-open waiting area; the inner side of the top plate is provided with an LED lighting lamp, and the top plate is internally provided with a first battery pack which is electrically connected with the LED lighting lamp; the bottom plate is internally provided with a second battery pack, breathing light is laid on the free edges of the top plate, the bottom plate and the back wall, and the second battery pack is electrically connected with the breathing light; a transparent touch display is installed on the back wall, and the transparent touch display is electrically connected with the first battery pack and/or the second battery pack. The bus platform provided by the invention can realize the illumination of the waiting area according to the weather change.

21: 2021/10075. 22: 2021-12-07. 43: 2022-03-15
51: C04B
71: Zhengzhou University of Aeronautics
72: Chen Dongxia, Li Mingyu, Yu Zhanjun, Wang Xianli

54: OXIDE-BASED THERMAL INSULATION CERAMIC COMPOSITE MATERIAL AND PREPARATION METHOD THEREOF

00: -

The invention discloses an oxide-based thermal insulation ceramic composite material and a preparation method thereof, belonging to the technical field of composite materials. Y2O3-ZrO2 is mainly used as matrix, doped with rare earth oxides Gd2O3 and Yb2O3, solidified and dried to obtain ceramic green body, and then sintered to obtain oxide-based thermal insulation ceramic composite material. This method can effectively reduce the thermal conductivity of composite materials, thus improving the heat insulation effect.

21: 2021/10076. 22: 2021-12-07. 43: 2022-03-15

51: C08F

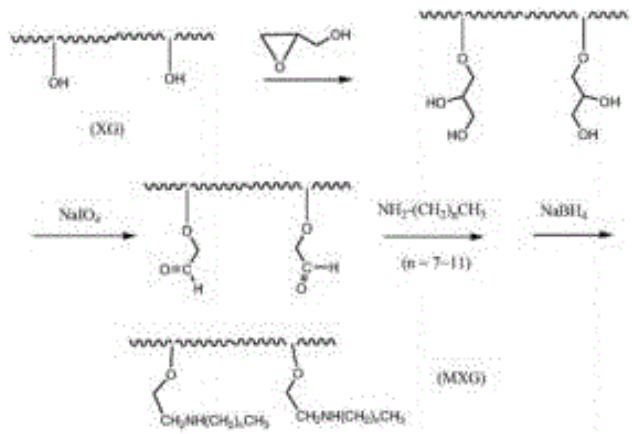
71: Jiangnan University

72: Zhang Liping, Ni Caihua, Liu Ren

54: MODIFIED XANTHAN GUM AND PREPARATION METHOD AND APPLICATION THEREOF

00: -

The invention relates to a modified xanthan gum and its preparation method and application. The modified xanthan gum of the present invention comprises the following steps: firstly, reacting xanthan gum with glycidyl ether to obtain hydroxylated xanthan gum solution, then adding sodium periodate solution into the hydroxylated xanthan gum solution for dark reaction to prepare aldehyde xanthan gum, and finally reacting the aldehyde xanthan gum with alkylamine and sodium borohydride in turn to obtain modified xanthan gum. The preparation method of modified xanthan gum of the invention is simple and safe, and overcomes the problems of immiscible reactants and difficult reaction during hydrophobic modification of xanthan gum in the past. In addition, the modified xanthan gum has obvious slow-release effect on hydrophobic drugs, and with the increase of hydrophobic components in the modified product, the slow-release effect is enhanced, and it can be used as a drug carrier.



21: 2021/10078. 22: 2021-12-07. 43: 2022-03-15

51: A01G

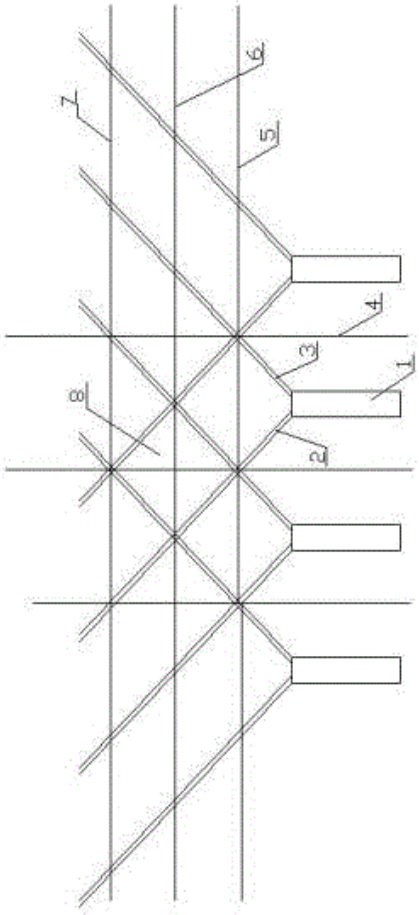
71: Shandong Institute of Pomology

72: Wei Shuwei, Wang Shaomin, Dong Ran

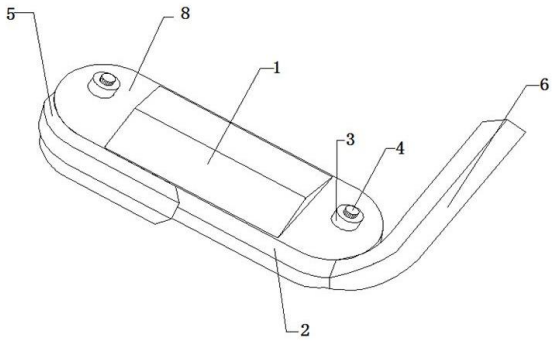
54: VERTICAL PLANE GRIDDING TREE SHAPE AND SHAPING METHOD FOR PEAR TREE PLANTATION AND APPLICATION THEREOF

00: -

The invention relates to a vertical plane gridding tree shape and shaping method for a pear tree plantation and application thereof. The method comprises a pear tree trunk with a central trunk, a first main trunk and a second main trunk, wherein the first main trunk and the second main trunk are connected in an overlapping way, and thus form a vertical surface of fruit hanging in grid distribution, which is beneficial to the mechanized management of pear trees such as pesticide spraying, picking and pollination, and improves the management effect of pear orchards.

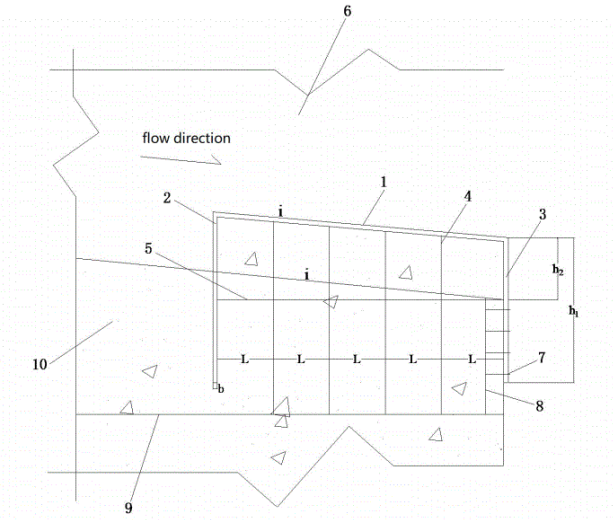


21: 2021/10080. 22: 2021-12-07. 43: 2022-03-17
51: G02B
71: YANTAI CHANGHONG PLASTIC CO., LTD
72: YOU, Yingchun, WANG, Honggang
54: WIDE-ANGLE REFLEX REFLECTOR
00: -
Disclosed is a wide-angle reflex reflector, comprising an inclined reflection mirror, a mirror frame base, rotating shafts, shaft knobs, a left-end and a right-end side foldable reflector and a double-sided adhesive sticker. A cuboid groove is formed in the top of the mirror frame base; the inclined reflection mirror is fixedly arranged in the cuboid groove; a positive reflection mirror is arranged at the top end of each of the two ends of the mirror frame base; and a cylindrical groove is formed in each positive reflection mirror. Through adoption of the inclined reflection mirror and the positive reflection mirrors, the reflection range of the reflector is enlarged, some dead angles of reflection are avoided, and safety is increased; through arrangement of the foldable reflectors, they can be folded on the mirror frame base; the foldable reflectors can be unfolded for reflecting light from the sides, to warn vehicles.

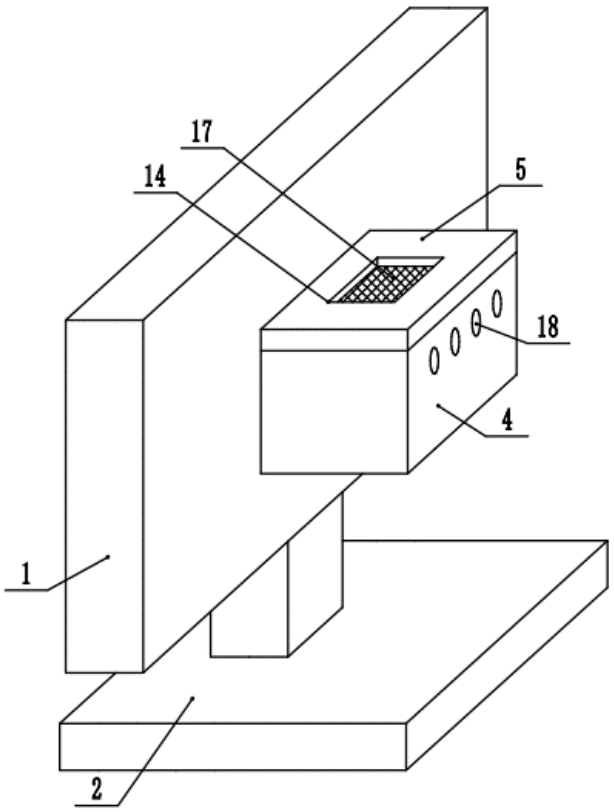


21: 2021/10081. 22: 2021-12-07. 43: 2022-03-15
51: E02B
71: Linyi University
72: Yu Xianbin, Li Wei, Zhang Guibin, Jia Chuanyang, Wang Hailong, Song Xiaoyuan
54: AN ANTI-ABRASION FACILITIES AND CONSTRUCTION METHOD AT THE BOTTOM OF DISCHARGE HOLE OF DEBRIS FLOW RETAINING DAM
00: -
The invention discloses an anti-abrasion facility and construction method at the bottom of the discharge hole of debris flow retaining dam, belonging to the technical field of debris flow prevention and control, including the main structure of the dam, a discharge hole is arranged above the main structure of the dam, a anti-scour steel plate is arranged at the inclined end of the main structure of the dam, a leading edge of the anti-scour steel plate is arranged at the end of the anti-scour steel plate near the middle of the main structure of the dam, a trailing edge of the anti-scour steel plate is arranged at the end of the anti-scour steel plate near the side of the main structure of the dam, and a number of transverse reinforcements embedded in the main structure of the dam are arranged at the lower end of the anti-scour steel plate. The invention uses the self-energy dissipation technology of stone grinding stone and stone bumping stone to avoid the direct contact between debris flow and the bottom of the discharge hole of the sand retaining dam, so as to protect the bottom of the discharge hole of the sand retaining dam from being scoured and eroded by debris flow. It not only has the advantages of small

engineering quantity, low construction cost, but also avoids large engineering maintenance cost.



21: 2021/10083. 22: 2021-12-07. 43: 2022-03-09
51: H04W
71: QINGDAO AGRICULTURAL UNIVERSITY
72: DONG, Lirong
54: HYBRID BROADCASTING DEVICE BASED ON DATA BROADCASTING TECHNOLOGY
00: -
The present invention discloses a hybrid broadcasting device based on data broadcasting technology, which relates to the technical field of broadcasting device, including a digital TV, a base and a set-top box. The base is fixedly connected to the bottom of the digital TV and the back of the digital TV is provided with a storage mechanism. The storage mechanism includes a storage component, a heat dissipation component and a dust-proof component. The set-top box is located above the interior of the storage component, the heat dissipation component is arranged on the storage component, and the dust-proof component is arranged on the heat dissipation component. The invention can improve the aesthetics of the set-top box and digital TV during use, make the set-top box reasonably stored, which is conducive to the service life of the set-top box, and can effectively prevent the dust from invading the set-top box.



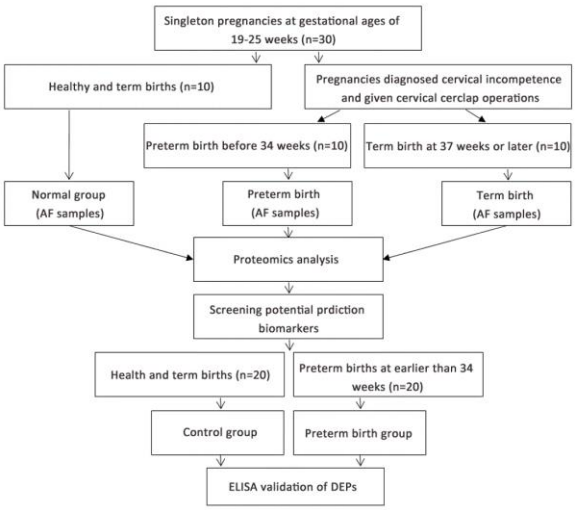
21: 2021/10128. 22: 2021-12-08. 43: 2022-03-07
51: A23K
71: INSTITUTE OF ANIMAL HUSBANDRY, HEILONGJIANG ACADEMY OF AGRICULTURAL SCIENCES
72: LI, Manyu, ZHAO, Xiuhua, LIU, Guojun
54: PREPARATION METHOD OF ANTIBIOTIC-FREE ENVIRONMENTAL-FRIENDLY FERMENTED FEED
00: -
Disclosed is an antibiotic-free environmental-friendly fermented feed for gooses and a preparation method thereof comprising the steps: mixing a feed with a microbial agent; adjusting moisture and putting a mixture in a fermenting vat, a pot or a plastic bucket to be compacted for fermentation; keeping an airtight anaerobic state; performing fermentation for 5-15 days; using fermented feed as required. A fermentation apparatus for feed fermentation comprises a fermentation tank and a sealed pressurizing cover arranged in an upper portion of the fermentation tank which is internally provided with a group of looseners, upper portions of the looseners are fixed to a connecting wire, the looseners are of three-dimensional double cross structures, and a bottom of the fermentation tank is

provided with a filter screen and an exhaust pipe. The present invention is used for preparing a maize straw feed.

21: 2021/10129. 22: 2021-12-08. 43: 2022-03-17
51: A23K
71: INSTITUTE OF ANIMAL HUSBANDRY, HEILONGJIANG ACADEMY OF AGRICULTURAL SCIENCES,
72: LI, Manyu, ZHAO, Xiuhua, LIU, Guojun
54: FEEDING METHOD FOR ANTIBIOTIC-FREE BROILERS
00: -
The present invention relates to a feeding method for antibiotic-free broilers. The method of the present invention comprises: drinking water treatment: adding an EM microbial agent into broiler feeding drinking water supply at a volume ratio of 1: 1000; feed adding treatment: adding a Chinese herbal medicine composite powder into a feed, wherein a weight ratio of the feed to the Chinese herbal medicine composite powder is 1000: 4 to 100: 1, and a formula of the Chinese herbal medicine composite powder comprises liquorice, snapdragon, leonurus, ephedra, dandelion, fructus quisqualis, fructus forsythiae, radix angelicae, areca seed, semen lepidii, purslane, pulsatilla chiensis, twig, honeysuckle flower, perilla leaf, pinellia ternate, wreath goldenrod, isatis root, polygonum baldschuancium, herba violae, asarum, hawthorn, medicated leaven, malt, divaricate saposhnikovia root, radix bupleuri and astragalus membranaceus; and fecal treatment: spraying the EM microbial agent with a concentration of 5: 1000 to the feces.

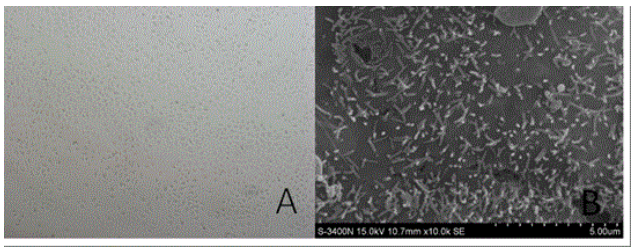
21: 2021/10184. 22: 2021-12-09. 43: 2022-03-07
51: A23L
71: INSTITUTE OF ANIMAL HUSBANDRY, HEILONGJIANG ACADEMY OF AGRICULTURAL SCIENCES
72: FUGANG PENG, JINYAN SUN, ZHENHUA JIN, XIUHUA ZHAO, ZHONGQIU LI, SHAN YUE, GUOJUN LIU, YAUNLIANG ZHANG
54: COMPOUND PROBIOTICS FEED ADDITIVE FOR GOSLINGS
00: -
The present invention provides a compound probiotics feed additive for goslings and belongs to the technical field of feed additives. The compound probiotics feed additive for goslings comprises the following raw materials for preparation: a compound probiotics preparation, molasses, sodium glutamate, urea and water. The compound probiotics preparation comprises the following components: bacillus subtilis, lactobacillus acidophilus, enterococcus faecalis, saccharomycetes and glucose. The effective viable count in the compound probiotics feed additive for goslings of the present invention is 1*1010-1*1011 cfu/g, the compound probiotics feed additive for goslings has a strong adaptability to environment and can be stored (for more than 12 months) under an anaerobic condition and be survival and be kept stable, so that it is suitable for being applied to feeds for goslings.

21: 2021/10199. 22: 2021-12-09. 43: 2022-02-15
51: C12Q
71: Maternal and Child Health Care Hospital of Shandong Province, Shandong University
72: ZHANG, Meihua, LI, Anna, WANG, Xietong, FANG, Zhenya
33: CN 31: 202111046761.7 32: 2021-09-06
54: SCREENING METHOD OF MARKERS FOR PREDICTION OF PRETERM DELIVERY, PRETERM DELIVERY TEST KIT AND USE THEREOF
00: -
The present invention discloses a screening method of markers for prediction of preterm delivery, preterm delivery test kit and use thereof, which relates to the technical field of genetic engineering. The potential markers for preterm delivery are SERPIN A1 and IGFBP-4. The present invention further provides a preterm delivery test kit. In the present invention differentially expressed proteins in AFs of the preterm birth pregnancies (cervical factors excluded) and the term birth normal control pregnancies were acquired by LC-MS methods. Bioinformatics analyses show that, 44 differentially expressed proteins and 9 main pathways may participate in occurrence of preterm delivery. Subsequent ELISA detection validates that, the SERPIN-A1 and the IGFBP-4 are significantly related to preterm delivery, and a new train of think and route for precautions and mechanism clarification of preterm delivery is provided.



21: 2021/10242. 22: 2021-12-10. 43: 2022-03-16
51: G01C
71: Zhejiang University of Water Resources and Electric Power
72: Nie Hui, Huang Saihua, Liu Yao, Chai Wenwei, Zhang Qiyu, Xie Huawei
54: IMPROVED DEVICE FOR REAL-TIME MONITORING COASTAL EROSION
00: -
The invention discloses an improved device for real-time monitoring coastal erosion, which comprises a monitoring device main body, wherein the monitoring device main body comprises a shell, a first containing cavity on the shell and a filter screen fixed on the top of the shell, and the filter screen is matched with the first containing cavity. The filter screen is arranged obliquely, and the left side of which is provided with a support plate which is welded and fixed on the shell, and the left side of the support plate is fixedly connected with a rectangular box with an opening on the right side. The rectangular box is internally provided with an inclined cross rod, the right end of which extends out of the rectangular box, the support plate is fixedly sleeved on the cross rod, the cross rod is positioned above and parallel to the filter screen, and the right side of the cross rod is provided with a rectangular groove. The device has reasonable design, and is convenient to automatically scrape away the sand and impurities accumulated on the top of the filter screen to the right at regular time, achieves the purpose of scraping away and dredging the accumulated sand and impurities, avoids the influence of a large amount of sand and impurities on measurement, and is beneficial to use.

21: 2021/10244. 22: 2021-12-10. 43: 2022-03-16
51: A61K
71: Institute of Chinese Materia Medica; China Academy of Chinese Medical Sciences
72: Liu Ting, Yang Yifei, Zhang Haijing, Hui Lianqiang, Li Chun, Hao Ran, Cao Chunyu
54: EARLY DETECTION METHOD OF TRADITIONAL CHINESE MEDICINE NEPHROTOXICITY BASED ON HK-2 MONOLAYER POLAR CELL MODEL CULTURED BY TRANSWELL
00: -
The invention discloses an early detection method of traditional Chinese medicine nephrotoxicity based on HK-2 monolayer polar cell model cultured by transwell. In this method, HK-2 cells are cultured on PCF membrane with aperture of 0.4 micron to form a complete cell monolayer; the changes of morphology, secretion, reabsorption, excretion and other physiological functions of human proximal tubular epithelial cells caused by total anthraquinone of rhubarb and its main components emodin, tripterygium glycosides and triptolide are comprehensively detected, and the toxic intensity and dose of kidney injury caused by anthraquinone of rhubarb, tripterygium glycosides and triptolide are clarified, so as to guide clinical rational drug use and provide theoretical basis for developing high-efficiency and low-toxicity traditional Chinese medicine preparations.



21: 2021/10245. 22: 2021-12-10. 43: 2022-03-16
51: A61K
71: Beijing Sunlon Livestock Development Co., Ltd
72: Guo Gang, Zhang Haibo, Shen Yueyu, Li Minghua, Sun Dexiao, Yu Changping, Zhang Junchang
54: COMPOSITION FOR TREATING POSTPARTUM METABOLIC DISEASES OF

DAIRY COWS, AND PREPARATION METHOD AND APPLICATION THEREOF

00: -

The disclosure provides a composition for treating postpartum metabolic diseases of dairy cows, and a preparation method and application thereof. The disclosed composition for treating postpartum metabolic diseases of dairy cows comprises the following components in parts by mass: 400-500 parts of calcium propionate, 100-150 parts of potassium chloride, 100-150 parts of magnesium sulfate, 80-100 parts of sodium chloride, 10-20 parts of digestive enzyme, 10-20 parts of gastric motility factors and 10-20 parts of powerful analgesic oral agents. Through the research of infusion bag and its application, a composition that can meet the demand of dairy cows for ionic salts and reduce the incidence of postpartum metabolic diseases is provided in the present disclosure, which can improve the production performance of dairy cows and bring great economic benefits to the farm.

21: 2021/10246. 22: 2021-12-10. 43: 2022-03-16

51: A01F

71: Sichuan Agricultural University

72: Lv Xiaorong, Tang Peng, Lv Xiaolian, Fu Xiaodong

54: COMB-BRUSH SWINGING TYPE BEAN POD REMOVAL DEVICE

00: -

The invention discloses a comb-brush swinging type bean pod removal device, which is characterized in that: a pod removal mechanism is arranged below a stalk clamping conveyor chain, and bean stalks are vertically clamped in the clamping conveyor chain and guided into the pod removal mechanism along with the clamping conveyor chain to realize pod removal; the structure of the pod removal mechanism is as follows: front end connecting plates and tail connecting plates are respectively arranged on both sides of the front end and the tail end of the stalk clamping conveyor chain and fixedly connected to the frame of the bean pod removal machine, and a group of bearing seats matched back and forth are respectively arranged between the front end connecting plates and the tail connecting plates and fixedly connected to the frame of the bean pod removal machine; a pod removal mechanism arranged below the stalk clamping conveyor chain is installed on the mating bearing seats; the front end of the transmission shaft arranged on the pod removal mechanism is provided with a drive sprocket, and the rotation of the drive sprocket drives the pod removal mechanism to swing left and right to realize pod removal. The invention can effectively improve the pod removal efficiency, improve the net removal rate and reduce the damage rate of pod removal.

21: 2021/10247. 22: 2021-12-10. 43: 2022-03-16

51: C12Q

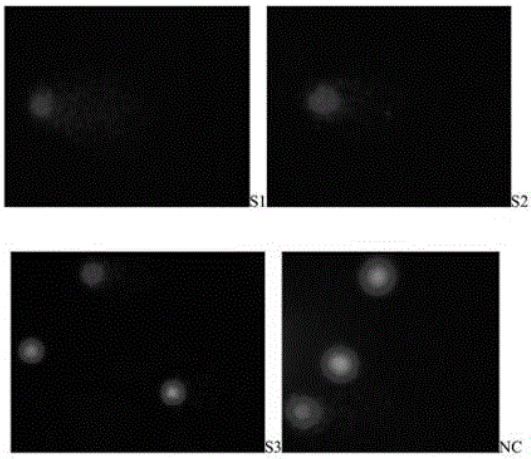
71: First Institute of Oceanography, Ministry of Natural Resources of China, Guangdong Laboratory Animals Monitoring Institute

72: Cui Zhisong, Zhao Xilong, Li Shujun, Lin Zhongting, Li Jianjun, Gao Wei

54: METHOD FOR DETECTING GENETIC TOXICITY OF OIL-BASED DRILL CUTTINGS

00: -

The invention provides a method for detecting the genetic toxicity of oil-based drill cuttings, which is characterized by comprising: step 1) leaching oil-based drill cuttings samples with artificial seawater to obtain leaching solution; step 2) placing the living body of the tested species in the leaching solution for exposure feeding; step 3) collecting exposed and raised tested species, and detecting the degree of cell DNA damage of tested species; and step 4) determining the genetic toxicity of oil-based drilling cuttings. The invention provides a reliable, accurate, simple and convenient genotoxicity detection method with high reference value. This method is applied to the environmental biological effect assessment of oil-based drilling cuttings, which can effectively warn the ecological risks in the daily oil production process and control the pollutant treatment and discharge to meet the standards.

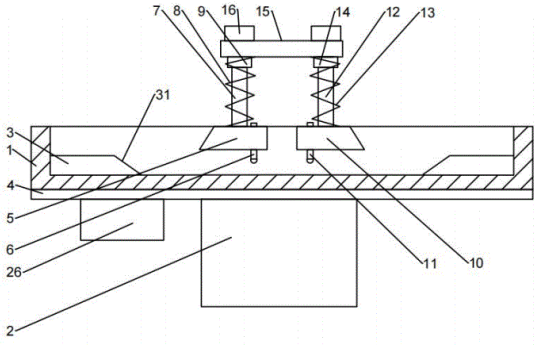


21: 2021/10248. 22: 2021-12-10. 43: 2022-03-16
51: E03C
71: Hebei University of Engineering, China International Engineering Consulting Corporation, Hohai University
72: Ma Jing, Wang Haichao, Luan Qinghua, He Lixin, Gao Haoyue, Huo Yunchao, Li Bin, Li Huayue, Wang Ziyuan
54: PUSH-TYPE WATER-SAVING FAUCET
00: -
The utility model relates to a push-type water-saving faucet, in which a water outlet pipe and a water inlet pipe are communicated through a first water outlet hole or a second water outlet hole, a pawl is mechanically connected with a push device and a rotating shift disc, and the rotating shift disc is vertically provided with a damping working surface. The damping surface is connected with the first screw structure or the second screw structure with the rotation of the rotating shift disc, the first torsion spring is connected with the first screw structure, and the second torsion spring is connected with the second screw structure; the first torsion spring is also connected with the first water baffle, and the second torsion spring is also connected with the second water baffle. A first limiting groove and a second limiting groove are correspondingly arranged on both sides of the faucet body, the first torsion spring is arranged in the first limiting groove, and the second torsion spring is arranged in the second limiting groove; the elastic coefficients of the first torsion spring and the second torsion spring are different. In addition, the utility model utilizes the rotating shift disc to change the water outlet duration, thus avoiding the waste of water resources.

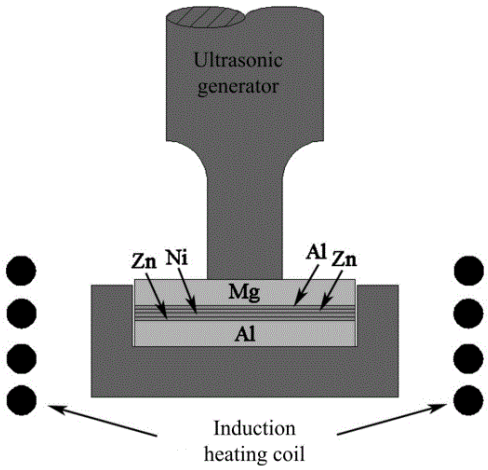
21: 2021/10249. 22: 2021-12-10. 43: 2022-03-16
51: A61K
71: Jinzhou Medical University
72: Wang Jingjing
54: PREPARATION OF TOTAL FLAVONOIDS FROM PHYSALIS PUBESCENS WITH HIGH ANTIOXIDANT ACTIVITY
00: -
The invention provides an antioxidant activity tracking-ultrasonic assisted extraction and purification method of total flavonoids from Physalis pubescens. A certain amount of dried Physalis pubescens fruit powder is added with 60-95 percent ethanol solution according to the ratio of 1:30-1:70(g/mL), soaked in ultrasonic-assisted extraction at 100-140W, extracted at 40-60 degree Celsius for 20-50min, and then vacuum concentrated at 50-70 degree Celsius. The concentrated solution was frozen in an ultra-low temperature refrigerator at -80 degree Celsius and then lyophilized. The freeze-dry product is crude flavone of Physalis pubescens. The yield of flavonoids increased from 21.5148mg/g by solvent extraction to over 32.57 mg/g. AB-8 resin is used to fill the chromatographic column, 30-80 percent ethanol is used to dissolve the sample, the concentration of the sample solution is 1-5mg/mL, the sample loading rate is 1-5mL/min, and the sample loading volume is 1-2BV. Firstly, water is used to elute the column volume of 2-5BV to remove impurities, and then 20-100 percent ethanol solution is used to elute the column volume of 3-6BV, and the elution rate is 1-2 mL/min. After collecting the filtrate, concentrating under rotating vacuum at 50-70 degree Celsius to obtain the refined flavone of Physalis pubescens. Purified by this method for 1-3 times, its purity increased from 9.27 percent to 40.02-65.3 percent. Flavonoids from Physalis pubescens prepared by this method have reducing power, scavenging ability of anion, hydroxyl radical and DPPH radical, which are higher than crude flavonoids and Vc after purification, and can be used for research and development of medicine, health products, food and cosmetics. The method for extracting and purifying flavonoids is rapid, efficient and convenient, and retains its oxidation resistance to the greatest extent, which provides a basis for

industrial production of flavonoids from Physalis pubescens, and has certain practical significance.

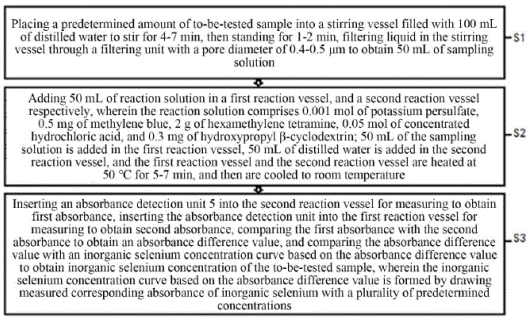
21: 2021/10250. 22: 2021-12-10. 43: 2022-03-16
51: B28B; B33Y
71: Dongguan University of Technology
72: XIAO, Chuang, CHEN, Shenggui, TANG, Jianlin, WANG, Chengyun, LI, Nan, MA, Hongwei, LU, Bingheng
54: PHOTOCURING CERAMIC 3D PRINTING MATERIAL SPREADING DEVICE AND USING METHOD THEREOF
00: -
A photocuring ceramic 3D printing material spreading device and a using method thereof are provided. The photocuring ceramic 3D printing material spreading device comprises a trough, a moving mechanism, and a driving mechanism; four strip-shaped wedge blocks with the same structure are connected to the bottom in the trough, and each strip-shaped wedge block is provided with an inclined plane. The printing accuracy can be improved by the photocuring ceramic 3D printing material spreading device provided by the present disclosure.



21: 2021/10251. 22: 2021-12-10. 43: 2022-03-16
51: B23K
71: QINGDAO UNIVERSITY OF TECHNOLOGY
72: LI, Yinan, ZHOU, Taoshuai, PENG, Zilong, LI, Jie, YU, Zijing, YANG, Chengfei
54: ULTRASONIC-ASSISTED TRANSIENT LIQUID PHASE BONDING METHOD FOR HIGH-STRENGTH CORROSION-RESISTANT MG/AL JOINT
00: -
The present disclosure relates to an ultrasonic-assisted transient liquid phase bonding method for a high-strength corrosion-resistant Mg/Al joint.

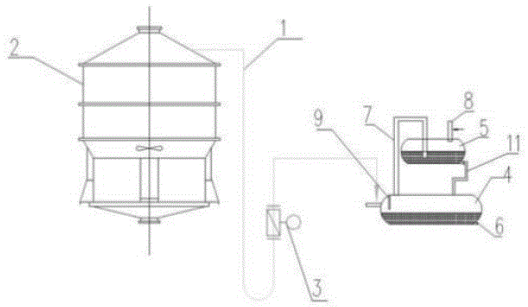


21: 2021/10252. 22: 2021-12-10. 43: 2022-03-16
51: G01N
71: Qingdao Agricultural University
72: TIAN, Xia, SHI, Yanxi, ZHENG, Qingzhu
54: DETECTION METHOD AND DETECTION EQUIPMENT OF INORGANIC SELENIUM
00: -
A detection method and detection equipment of organic selenium are provided.



21: 2021/10253. 22: 2021-12-10. 43: 2022-03-16
51: G01F; C13B
71: Mengla Mengpeng Sugar Industry Co., Ltd.
72: HUANG, Zhenjun, YANG, Wanming
33: CN 31: 202110043060.1 32: 2021-01-13
54: STEAM FLOW DETECTION SYSTEM OF AUTOMATIC SUGAR BOILING CONTROL SYSTEM
00: -
The present invention relates to a steam flow detection system of an automatic sugar boiling control system, comprising a sugar boiling and crystallization tank and a steam condensate device. The steam condensate down-discharge pipe is a U-shaped pipe, and an electromagnetic flowmeter is

disposed on an upright section of the U-shaped pipe and connected to an external display and a control device. In the present invention, the electromagnetic flowmeter is disposed on the steam condensate down-discharge pipe at a steam drum outlet of the crystallization tank to detect real-time flow of the steam condensate. According to the pressure conditions of the field pipes, requirements for drainage flux of steam condensate of the 30m3 sugar boiling and crystallization tank, and normal detection flow rate range of the electromagnetic flowmeter, the steam condensate pipe with a caliber of 80 mm is selected as an electromagnetic flowmeter installation pipe.

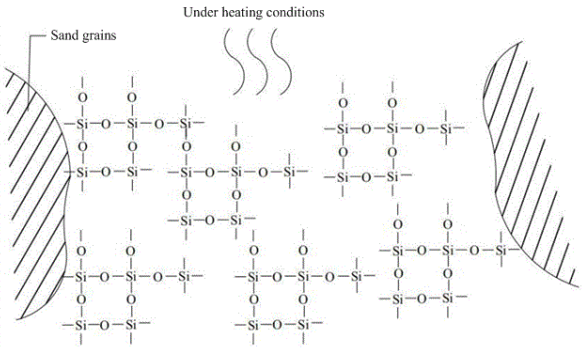


21: 2021/10254. 22: 2021-12-10. 43: 2022-03-16
51: B22C
71: Shenyang University of Technology
72: LIU, Weihua, XIN, Fanghai, SONG, Lai, LI, Yingmin

54: ADDITIVE FOR CORE MAKING OF COMPOSITE HARDENED WATER GLASS SAND AND USE THEREOF

00: -

The present disclosure relates to an additive for core making of composite hardened water glass sand.

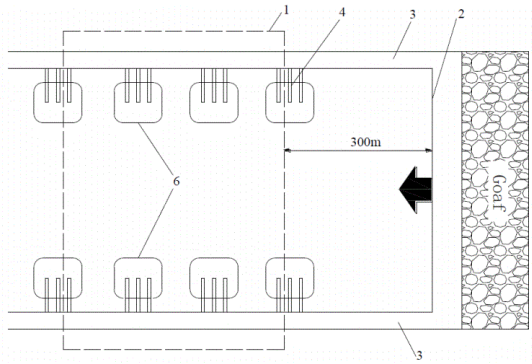


21: 2021/10255. 22: 2021-12-10. 43: 2022-03-16
51: E21B; E21C
71: SHANXI INSTITUTE OF TECHNOLOGY
72: WEI, Hui, LI, Xiaoxing, PAN, Liyou, WANG, Kai, LI, Quanzhong, LI, Jianguo, SHI, Dezhi, ZHANG, Feng, QIN, Dongdong, GAO, Feng

54: METHOD FOR PREVENTING AND CONTROLLING ROCK BURST IN COAL AREA UNDER THREE-DIMENSIONAL COAL PILLARS

00: -

The present invention discloses a method for preventing and controlling rock burst in a coal area under three-dimensional coal pillars, and relates to the technical field of coal mining. By arranging a plurality of blast borehole groups at intervals on a mining surface coal wall, a high-level impact energy generated by the three-dimensional coal pillars is dissipated by means of high-strength blasting to form several low-energy block areas so as to release an accumulated elastic energy to a great extent, and these low-energy block areas block off and eliminate a high stress and a high energy, thereby reducing a rock burst risk in the three-dimensional coal pillar area and realizing the control of a high-level impact energy.



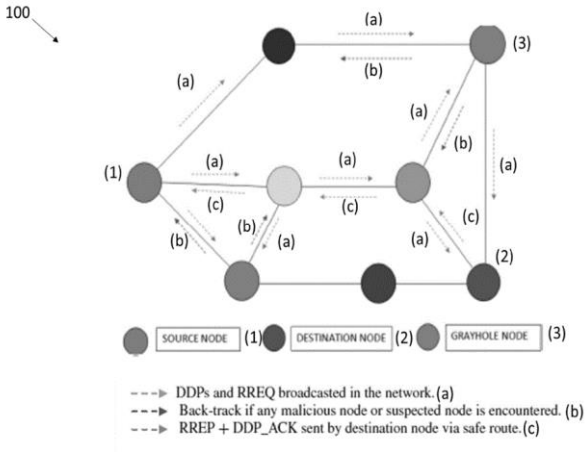
21: 2021/10308. 22: 2021-12-13. 43: 2022-02-07

51: H04L
71: Mr. Abhishek Bajpai, Mr. Naveen Kumar Tiwari, Mr. Gaurish Joshi, Mr. Shashank Yadav, Dr. Manish Khare, Dr. Indra Prakash Mishra, Dr. Neeraj Kumar Tiwari, Dr. Amitabha Yadav, Mr. Ashish Kumar Singh
72: Mr. Abhishek Bajpai, Mr. Naveen Kumar Tiwari, Mr. Gaurish Joshi, Mr. Shashank Yadav, Dr. Manish Khare, Dr. Indra Prakash Mishra, Dr. Neeraj Kumar Tiwari, Dr. Amitabha Yadav, Mr. Ashish Kumar Singh

54: AN EFFECTIVE METHOD FOR DETECTING AND PREVENTING MALICIOUS NODE FOR COLLABORATIVE GRAYHOLE THREATS IN MOBILE AD-HOC NETWORKS

00: -

The present invention relates to a method (100) to detect and prevent collaborative gray hole attacks by the malicious node in MANET. The method (100) comprises a destination sequence number (DSN); a dummy data packet (DDP); a packet drop ratio (PDR); route request (RREQ); node_id: identification number; flag variable of each node & a processor. the method (100) detects the malicious node in the route discovery phase as such, the route discovery phase involves sending RREQ along with lightweight dummy data packets (DDP). As DDP propagates from one node to other successive nodes then each transmitting node has the responsibility of monitoring its successive node. The method (100) allows the data packets to travel through only such nodes that are legitimate and avoids the packets to travel through malicious nodes. The method (100) is highly effective in detecting Grayhole nodes.

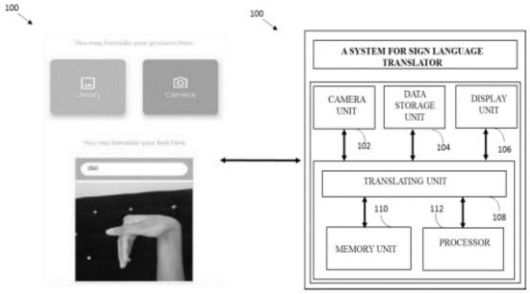


21: 2021/10309. 22: 2021-12-13. 43: 2022-02-04
51: G06F
71: MANIPAL UNIVERSITY JAIPUR
72: Ms. Neha V Sharma, Ms. Kavita, Mr. Rahul Saxena, Ms. Apoorva Parashar, Dr. Devi Prasad Sharma, Dr. Bhavna Saini, Dr. Neerja Vyas, Dr. Anju Yadav, Mr. Virender Dehru, Ms. Anubha Parashar, Ms. Falguni Sharma, Dr. Gaurav Aggarwal, Ms. Mihika Nigam

54: SIGN LANGUAGE TRANSLATOR

00: -

The present invention relates to a system (100) for a sign language translator. The system (100) comprises a camera unit (102), a data storage unit (104), a translating unit, and a display unit. The camera unit (102) is configured to capture gesture images or text. The data storage unit (104) is configured to store standards sign language images and standard sign language image word information. The translating unit (108) is configured to translate captured gesture images into text or audio language or captured text into sign language images. The translating unit (108) is operationally connected with the camera unit (102) and data storage unit (104). The translating unit (108) comprises a memory unit (110) and a processor (112). The display unit (106) is configured to provide user inference and display to the user in real-time. The present invention provides a system (100) to build a machine learning model able to classify which letter of the American Sign Language is being signed, given an image of a signing hand.

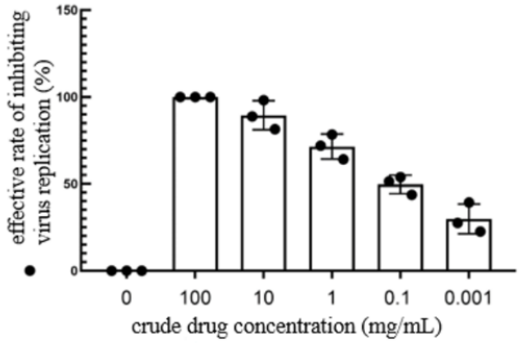


21: 2021/10332. 22: 2021-12-13. 43: 2022-02-11
51: A61K; A61P
71: BEIJING HOSPITAL OF TRADITIONAL CHINESE MEDICINE
72: GUO, Yuhong, LIU, Qingquan, XU, Xiaolong, FAN, Huahao, TONG, Yigang

54: COMPOSITION FOR TREATING CORONAVIRUS INFECTION

00: -

The present disclosure provides a composition for treating coronavirus infection. In the present disclosure, a strain of coronavirus has been isolated and cultivated from pangolin and named as xCoV, which has been preserved in the General Microbiology Center of the China Microbial Culture Collection Management Committee, the preservation number is CGMCC NO.19295, the preservation date is February 14, 2020, and taxonomic naming: Coronavirus. The virus has 92 % homology with the S protein of 2019-nCoV, is safe and can be used for drug screening and evaluation of 2019-nCoV virus, vaccine screening and evaluation, and preparation of attenuated and inactivated vaccines. In the present disclosure, xCoV is used as a model to screen out traditional Chinese medicine compounds with an inhibitory effect on xCoV infection, which provides new directions and ideas for the treatment of 2019-nCoV.



21: 2021/10333. 22: 2021-12-13. 43: 2022-02-04
51: A61K
71: Dr. Prashant Kumar Gupta, Dr. Rashmi Sahu, Dr. Trapti Agrawal, Dr. Atul Babu Varshney, Dr. Chandradeo Narayan, Dr. Gyanendra Singh Baghel, Dr. Awanish Kumar
72: Dr. Prashant Kumar Gupta, Dr. Rashmi Sahu, Dr. Trapti Agrawal, Dr. Atul Babu Varshney, Dr. Chandradeo Narayan, Dr. Gyanendra Singh Baghel, Dr. Awanish Kumar

54: CLINICAL EFFICACY OF MEDHYA RASAYANA COMBINATION IN MILD TO MODERATE I.Q. DEFICIT CHILDREN

00: -

The present invention relates to the attempt to explore possibilities the integrated/synergistic effect of Medhya Rasayana through clinical studies. Clinical efficacy of combination of Medhya Rasayana was performed in mild to moderate I.Q. deficit children (age group 6-14years). Social behavior like hyperactivity, lack of attention, and anxiety can be improved to therapeutically significant levels Vigyan, Krodha, Shoka, Harsha, and Bhaya were confounding factors while all the patients showed improvement ranging from 50 to 75%. Intelligence Co-efficient (IQ) is important marker of overall brain development. We used Seguin form board test for IQ and mean I.Q. was 52±10.8 which raised up to 61.2±14 after treatment [observed an increase in average I.Q. ($p < 0.001$)]. Results showed that the Medhya Rasayana if given collectively could produce better and synergistic results than administration of single Medhya herb alone.

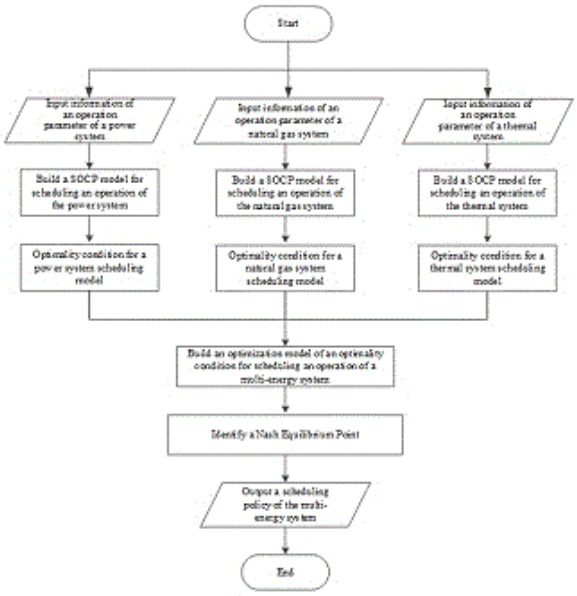
21: 2021/10354. 22: 2021-12-13. 43: 2022-01-20
51: G06Q
71: NARI TECHNOLOGY CO., LTD., HOHAI UNIVERSITY
72: TENG, XIANLIANG, DU, GANG, WU, SHIQIANG, CHEN, SHENG, WEI, ZHINONG, SUN, GUOQIANG, ZANG, HAIXIANG, WANG, WENXUE
33: CN 31: 201910451417.2 32: 2019-05-28

54: OPERATION SCHEDULING METHOD FOR MULTIPLE ENERGY SYSTEMS

00: -

Disclosed is an operation scheduling method for multiple energy systems, comprising: separately constructing a power system operation scheduling model, a natural gas system operation scheduling model, and a thermodynamic system operation scheduling model in the multiple energy systems; separately solving the optimality conditions of a power system scheduling model, a natural gas system scheduling model, and a thermodynamic system scheduling model; constructing an operation scheduling objective optimization function of the multiple energy systems, and using the solved optimality conditions as constraints; solving the objective optimization function, and obtaining the Nash equilibrium point of a non-cooperative game of the multiple energy systems; and separately performing operation scheduling on a power system, a natural gas system, and a thermodynamic system

in the multiple energy systems according to a scheduling policy corresponding to the Nash equilibrium point. The present invention can realize optimal operation scheduling.

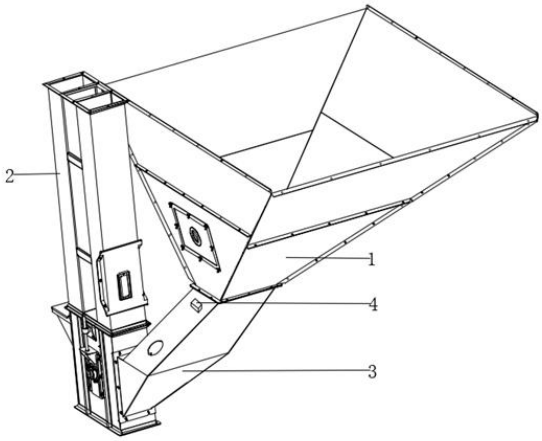


21: 2021/10359. 22: 2021-12-13. 43: 2022-02-15
51: F26B
71: ANHUI CHENYU MACHINERY TECHNOLOGY CO, LTD
72: DUAN, Xianwu, YANG, Jian, ZHU, Huangfu, PAN, Wenchao, WU, Yunsheng
33: CN 31: 202010718562.5 32: 2020-07-23

54: GRAIN DISCHARGING HOPPER AND GRAIN DRIER WITH THE SAID GRAIN DISCHARGING HOPPER

00: -

The present invention discloses a grain discharging hopper and a grain drier with the said grain discharging hopper. The grain discharging hopper comprises an inclined pipe for conveying materials, an expandable or contractible airbag layer is arranged inside the inclined pipe, an inflatable or deflatable auxiliary cavity is formed between the inclined pipe and the airbag layer, and the surface of the inclined pipe is provided with an air control unit for inflating or deflating the auxiliary cavity to expand or contract the airbag layer. With the expansion or contraction of the airbag layer, materials in the inclined pipe are pushed to flow downwards, preventing the materials from being blocked.



21: 2021/10359. 22: 2021-12-13. 43: 2022-02-15
51: F26B
71: ANHUI CHENYU MACHINERY TECHNOLOGY CO, LTD
72: DUAN, Xianwu, YANG, Jian, ZHU, Huangfu, PAN, Wenchao, WU, Yunsheng
33: CN 31: 202010718562.5 32: 2020-07-23

54: GRAIN DISCHARGING HOPPER AND GRAIN DRIER WITH THE SAID GRAIN DISCHARGING HOPPER

00: -

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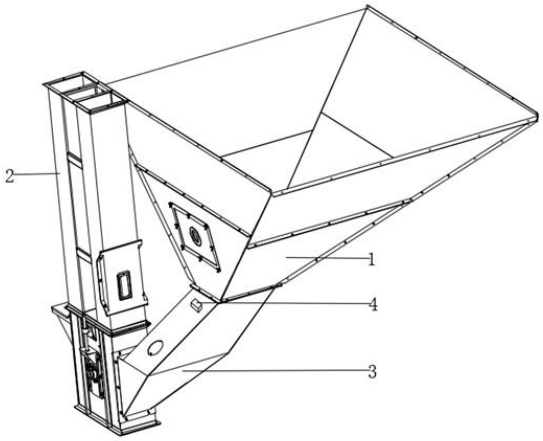
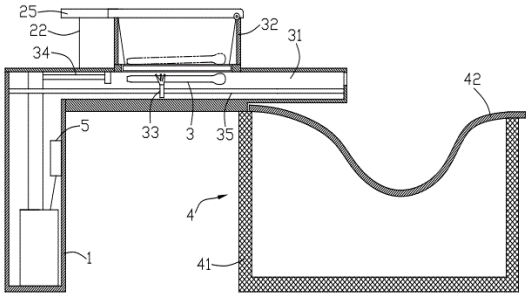
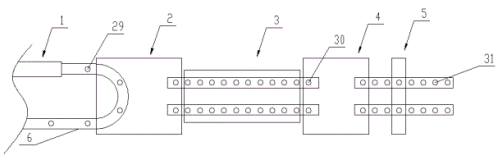


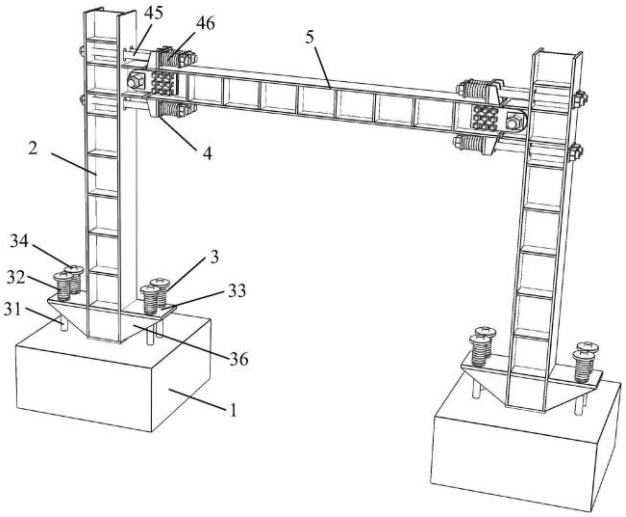
21: 2021/10390. 22: 2021-12-14. 43: 2022-02-15
51: A61M
71: Nanhua Hospital Affiliated to University of South China
72: Jiemei TANG, Jianshu LI, Yusheng LI, Haixia ZHANG, Yaqin ZHOU, Lan LI, Guang OUYANG
33: CN 31: 202110925950.5 32: 2021-08-12
54: DUAL-CHANNEL AUTOMATIC INJECTION DEVICE
00: -
The invention relates to a vaccination device, in particular to a double-channel automatic injection device, which comprises a base, wherein an injection channel and a cotton swab channel are arranged on the base, wherein a vaccine box and a push mechanism are arranged on the injection channel, wherein a cotton swab box and a manipulator are arranged on the cotton swab channel. The manipulator grabs the cotton swab in the cotton swab box along the cotton swab channel and sterilizes the inoculation area of the arm, and the pushing mechanism pushes the vaccine needle in the vaccine box out along the injection channel and automatically injects the vaccine into the inoculation area. The invention swab channel is set up, can use of robots will be its first swab on the arm of the inoculated area for automatic disinfection, and then through the channel to the vaccine injection, and the vaccine inoculation area are automatic injection, so as to realize the integration of the automatic disinfection and vaccination, greatly improving the efficiency of vaccination, reduce the workload of medical staff.



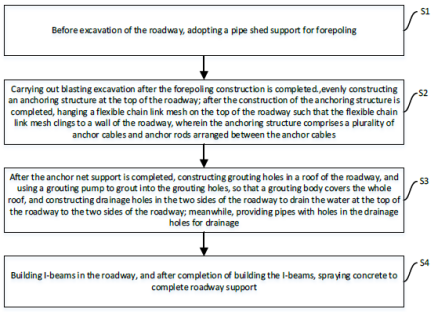
21: 2021/10391. 22: 2021-12-14. 43: 2022-02-15
51: C12M
71: Hunan-tech New Medical Systems CO., Ltd.
72: Jun PENG, Xunkai PENG, Qi ZHANG, Zhenhua LI
33: CN 31: 202111327445.7 32: 2021-11-10
54: AUTOMATIC DRYING AND LAMINATING DEVICE FOR CELL AND BACTERIAL SPECIMENS
00: -
Specimens of the present invention provides a cell, bacteria, automatic drying film devices, including the moving parts of lined the second transition, the first transition parts and drying parts, components and parts, compressor operating components including circular conveyor, moving parts including circular conveyor, drying parts including wind drying chamber and transmission parts, transmission parts runs for cup body placed the placement of groove, One end of the transmission component is under the first connecting frame, and the other end of the transmission component is under the second transition component; The drying air chamber is located between the first transition component and the second transition component; The pressing part includes the cutting pressing part and the slide moving part. The slide moving part forms the slide groove with the slide, and the slide groove moves with the slide moving part. The cutting pressing part is used for the pressing and cutting of the slide surface placement, realizing the three steps of cup taking, drying and sticking.



21: 2021/10398. 22: 2021-12-14. 43: 2022-03-01
51: E04B; G01N
71: HAINAN UNIVERSITY
72: CHEN, YUN, CHEN, CHAO
54: SELF-RESETTING ROCKING STEEL FRAME STRUCTURE AND METHOD FOR CONSTRUCTING SAME
00: -
A self-resetting rocking steel frame structure is disclosed and includes: a base member, a steel column, a column foot joint structure, a beam end joint structure and a middle beam. The base member and steel column are respectively provided with two. The steel column is vertically arranged at the top of the base member. The column foot joint structure includes a column foot high-strength anchor rod, column foot disc spring and cantilever plate. The cantilever plate is fixed on two sides of the steel column near the bottom. The high-strength anchor rod of the column foot is fixedly connected to the top of the base member through the cantilever plate. The column foot disc spring is sleeved on the column foot high-strength anchor rod on the side of the cantilever plate away from the base member. The middle beam is transversely arranged and fixed between two of the steel columns.

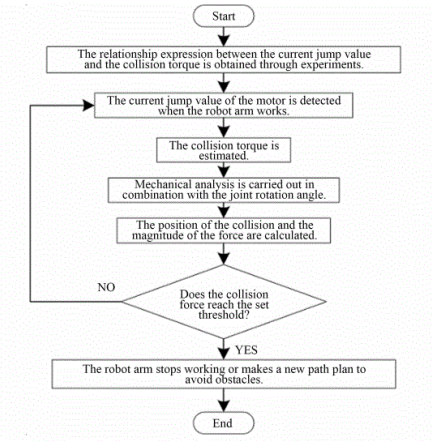


21: 2021/10404. 22: 2021-12-14. 43: 2022-01-17
51: F01N
71: TIBET JULONG COPPER CO., LTD., UNIVERSITY OF SCIENCE AND TECHNOLOGY BEIJING
72: LIU, Xianpei, WANG, Zhiyong, WU, Jianhui, CHEN, Lei, CHEN, Caixian, WANG, Yongwei, HAN, Chengbin, CAO, Shuai, QIN, Shiwen, LI, Jiajian, HUANG, Zhiqiang, SHA, Xianwu
33: CN 31: 202111445460.1 32: 2021-11-30
54: METHOD FOR SUPPORTING EXTREMELY BROKEN AND SUPER-LARGE CROSS-SECTION ROADWAY IN HIGH ALTITUDE PERMAFROST LAYER
00: -
The present application discloses a method for supporting an extremely broken and super-large cross-section roadway in a high altitude permafrost layer, which comprises the following steps: before roadway excavation, adopting a pipe shed support for forepoling; after excavation, evenly constructing anchor cables and anchor rods at the top of the roadway; after the construction is completed, hanging a flexible chain link mesh on the top of the roadway, and clinging the flexible chain link mesh to a wall of the roadway; after the anchor net support is completed, constructing grouting holes in a roof of the roadway, and using a grouting pump to grout into the grouting holes, so that a grouting body covers the whole roof, and constructing drainage holes in the two sides of the roadway to drain the water at the top of the roadway to the two sides of the roadway.



21: 2021/10455. 22: 2021-12-15. 43: 2022-02-04
51: A01D; B25J
71: Northwest A and F University
72: SHI, Yinggang, LIU, Li, ZHANG, Wei, QIAO, Xin, YANG, Tian, LI, Kai, CUI, Yongjie
54: COLLISION DETECTION METHOD FOR PICKING ROBOT ARM
00: -
The present disclosure relates to a collision detection method for a picking robot arm, comprising

the following steps: step 1, acquiring the relationship expression between the current jump value of each joint motor and the collision torque of each corresponding joint through experiments when the robot arm is collided; step 2, when the robot arm is picking, estimating the real-time collision torque of each joint using the obtained relationship expression by monitoring the angular displacement and the current jump value of each joint motor; step 3: through the mechanical analysis and calculation of each joint of the robot arm, obtaining the magnitude and position of the collision force, and realizing the collision detection.

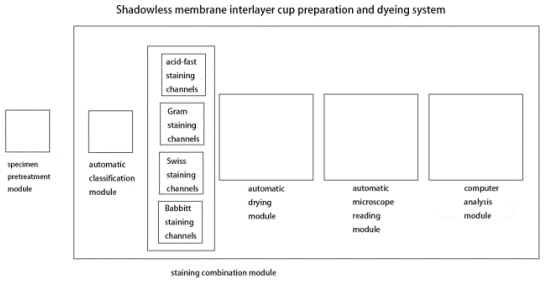


21: 2021/10463. 22: 2021-12-15. 43: 2022-02-04
51: G01N
71: Hunan-tech New Medical Systems CO., Ltd.
72: Jun PENG, Xunkai PENG, Zhenhua LI
33: CN 31: 2021113570643 32: 2021-11-16

54: METHOD AND SYSTEM OF SHADOWLESS MEMBRANE INTERLAYER CUP PREPARATION AND STAINING FOR CELL AND BACTERIA DETECTION

00: -

The invention discloses a kind of used for cells, and bacteria detection shadowless membrane laminated glass production dyeing method and system, a kind of used for cells, and bacteria detection shadowless membrane laminated glass production dyeing system includes a sample pretreatment module, automatic classification module, dyeing combination module, automatic drying June film module, automatic reading microscope module, computer analysis module and the data transmission module, The pathological specimens need to be pre-processed manually according to the detection requirements, and then the shadowless membrane interlayer cups with bar codes are put into the specimen waiting room. The classification waiting module will automatically put shadowless membrane interlayer cups with different pathological specimens into different staining channels, and the staining process will be carried out by the staining combination module. Then the slide specimens are transmitted to the microscope automatic film reading module through the patch channel for observation, taking photos and obtaining image data. The computer analysis module obtains the analysis structure according to the image data and saves and collates it to the computer terminal.

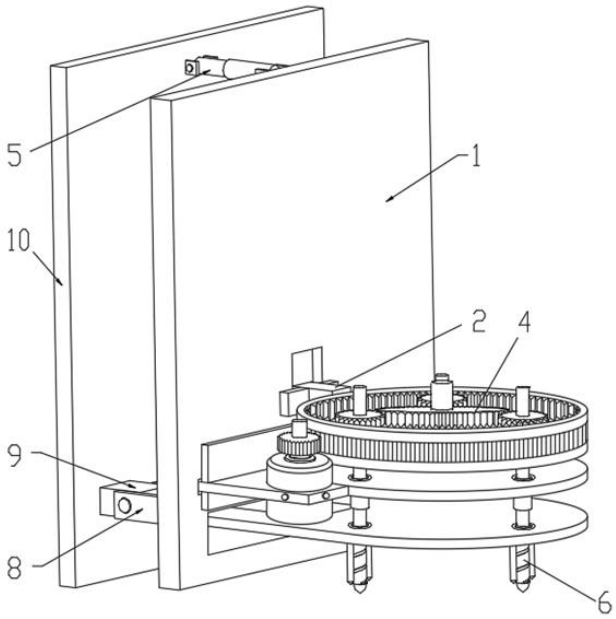


21: 2021/10528. 22: 2021-12-17. 43: 2022-03-17
51: E02D
71: ANHUI JIANZHU UNIVERSITY
72: SHI, GUODONG, WAN, DONGLIN, LI, DAHUA, MENG, FANYI, WANG, XINCHENG, LIN, WENYU

54: NOVEL DETACHABLE SUPPORTING DEVICE

00: -

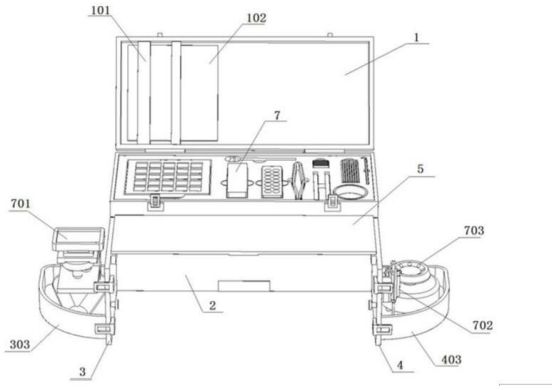
The present invention discloses a novel detachable supporting device, which belongs to the technical fields of side slope engineering, prevention and reduction of disasters and building construction. The novel detachable supporting device comprises: a plate body; a bolt mechanism arranged on the side surface of the plate body; a connecting body movably connected at the position near the bottom of the side surface of the plate body by the bolt mechanism; a planet gear device fixed at the other end of the connecting body; and drill rod structures fixed at the bottom of the planet gear device. Three drill rod bodies are driven to rotate by the planet gear device, so as to drive the overall supporting device to move downwards. Six inserted rods are driven underground, and the overall supporting device is fixed. A first drill rod and two second drill rods are spirally driven underground.



21: 2021/10529. 22: 2021-12-17. 43: 2022-03-17
51: G01N
71: ANIMAL HUSBANDRY AND VETERINARY BRANCH, HEILONGJIANG ACADEMY OF AGRICULTURAL SCIENCES
72: LU, Lingyan, WANG, Likun, JIN, Zhenhua, ZHANG, Zhufeng, XU, Man, LIU, Huishu, QIU, Jinghui, ZHANG, Bei, TONG, Guizhi, HAI, Long, HUANG, Xinyu, GUO, Lihong, HAO, Caihong, LIU, Jiayu, ZHANG, Ying, LIU, Junchao, SUN, Lei, LIU, Yufeng

54: TEST BOX FOR DETECTING BRUCELLA AND FAECAL EGGS

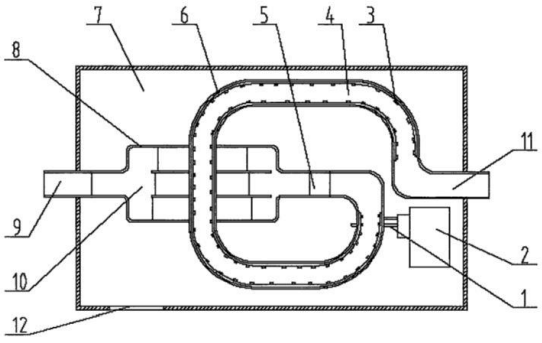
00: -
Disclosed is a test box for detecting Brucella and faecal eggs. The test box comprises a cover, a body, an operating console at the front end of the body, a foam frame arranged in the body and test instruments are placed in the frame; a handle is arranged at the top of the cover; a lock for locking the cover is arranged at the front end of the body, wherein a bandage containing a manual is arranged in the cover; tool grooves containing test tools are formed in the top of the frame; a utensil groove containing test utensils are formed in each of the sides of the bottom of the frame; a rectangular hollow area is formed in each of the sides of the body; the instrument storage device used for sealing the rectangular hollow areas are arranged at the hollow areas in both sides of the body;



21: 2021/10530. 22: 2021-12-17. 43: 2022-03-17
51: A61D
71: ANIMAL HUSBANDRY AND VETERINARY BRANCH, HEILONGJIANG ACADEMY OF AGRICULTURAL SCIENCES
72: LU, Lingyan, JIN, Zhenhua, WANG, Likun, XIAO, Yongwei, LIU, Huishu, XU, Man, QIU, Jinghui, ZHANG, Bei, ZHANG, Guohua, LI, Ye, ZHANG, Ying, XUE, Zhanmei, LV, Siwen, LIU, Junchao, SUN, Lei, LIU, Yufeng

54: MEDICATED BATHROOM FOR PREVENTING AND TREATING SHEEP PARASITOSIS

00: -
The present invention comprises: a medicated bath channel arranged in a room and a spiral drying channel having an inlet and outlet with the same height; the medicated bath channel comprises a medicated bath channel inlet, a medicated bath cavity and a medicated bath channel outlet; sloping ground is laid respectively between the medicated bath channel inlet and the medicated bath cavity and between the medicated bath channel outlet and the medicated bath cavity; the interior of the medicated bath cavity is divided into three medicated bath cavities with different depths by two parallel partition walls; two walls inside the spiral drying channel are fixed with a vent pipe by screws; the vent pipe is provided with a plurality of air outlets (3); and the vent pipe is connected with a hot air pump through an air inlet pipe.



21: 2021/10557. 22: 2021-12-17. 43: 2022-03-11
51: A23K
71: ZHOUSHAN FISHERIES RESEARCH INSTITUTE OF ZHEJIANG
72: YIN, Xiaolong, LI, Weiye, XU, Zhijin, MA, Xuebin, CHEN, Shuang, ZHANG, Xia

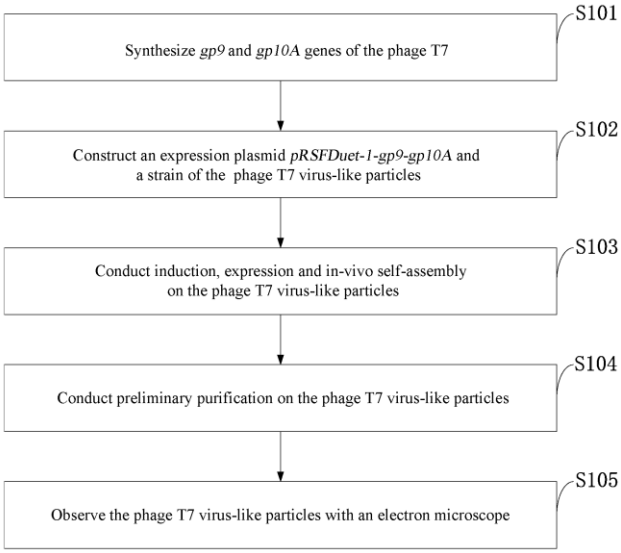
54: MARINE FUNGUS FERMENTED EXTRACT AND USE THEREOF AS ANTI-SENILE DEMENTIA DRUG

00: -
The present disclosure provides a feed additive for improving meat quality of sea Lateolabrax japonicus, a breeding feed and an application thereof, and relates to the technical field of aquaculture. The feed additive of the present disclosure comprises the following components in parts by weight: 10-20 parts of vitamin E, 30-50 parts of linoleic acid, 0.3-1 part of organic chromium, 20-50 parts of a microbial growth enzyme and 10-30 parts of a cortex eucommiae extract. The aquaculture feed of the present disclosure comprises the feed additive and basic feed. By utilizing the aquaculture feed containing the feed additive of the present disclosure to feed the sea Lateolabrax japonicus, the nutritional requirements for Lateolabrax japonicus culture can be met; and meanwhile, the crude protein, DNA and EPA contents are increased and the crude fat and ash contents are decreased, significantly improving the quality and taste of the sea Lateolabrax japonicus.

21: 2021/10558. 22: 2021-12-17. 43: 2022-03-10
51: C12N
71: SICHUAN UNIVERSITY
72: TANG, Tian, YANG, Jiaxue, WANG, Chuan, ZHU, Yalan, FANG, Chubin

54: SELF-ASSEMBLY METHOD OF T7 PHAGE VIRUS-LIKE PARTICLES BASED ON SINGLE PLASMID

00: -
The present invention belongs to the technical field of self-assembly of virus-like particles (VLPs), and discloses a self-assembly method of phage T7 virus-like particles based on a single plasmid. The self-assembly method includes: constructing an expression plasmid pRSFDuet-1-gp9-gp10A, transferring the expression plasmid into Escherichia coli BL21 (DE3), and then conducting induction, expression, in-vivo self-assembly and preliminary purification to obtain the phage T7 virus-like particles, wherein the expression plasmid pRSFDuet-1-gp9-gp10A contains a phage T7 capsid protein encoding gene gp10A and a phage T7 scaffold protein encoding gene gp9. The present invention provides a new strategy for preparing the phage T7 virus-like particles. A foundation is laid for subsequent construction of vector vaccines or targeted drugs based on the phage T7 virus-like particles.

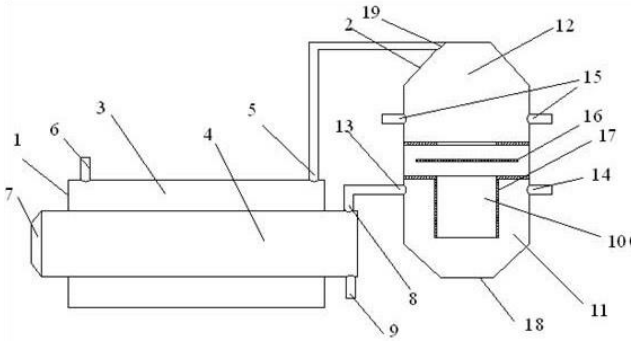


21: 2021/10559. 22: 2021-12-17. 43: 2022-03-11
51: C09C
71: QINGDAO UNIVERSITY OF TECHNOLOGY
72: LUO, Siyi, ZUO, Zongliang, REN, Dongdong

54: METHOD AND DEVICE FOR PRODUCING LOW-ASH CARBON BLACK THROUGH PYROLYSIS OF WASTE TIRES

00: -
The present invention provides a method and device for producing low-ash low-sulfur carbon black through pyrolysis of waste tires, to produce a carbon

black product with an ash content less than 1% and a sulfur content less than 0.1%. According to technical solutions, an oil-containing fuel gas generated through pyrolysis of tires is subjected to secondary pyrolysis, hydrogen is introduced in the pyrolysis process to remove sulfur in the carbon black, and then production of the low-ash low-sulfur carbon black is achieved. The carbon black preparation device mainly comprises a tire pyrolysis chamber and an oil-gas carbonization chamber, wherein the tire pyrolysis chamber includes an outer-layer heating area and an inner-layer tire pyrolysis area; the oil-gas carbonization chamber is internally provided with a gas-solid separation device, an oil carbonization area is arranged at the lower part of a baffle plate, and a fuel gas combustion area is arranged at the upper part. Since gaseous oil generated through pyrolysis of tires is subjected to direct pyrolysis carbonization without condensation, and a tire pyrolysis fuel gas is directly adopted for heating of oil carbonization, the desulfurization process is achieved while the carbon black is prepared, the whole flow is compact in process, the heat efficiency is high, and the carbon black product is high in quality.

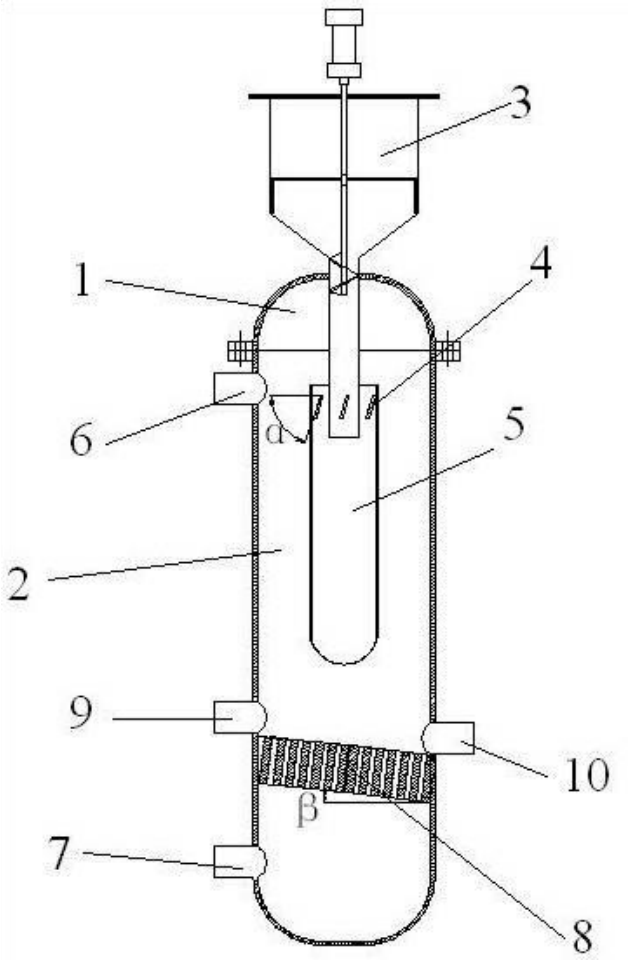


21: 2021/10560. 22: 2021-12-17. 43: 2022-03-11
51: C21B
71: QINGDAO UNIVERSITY OF TECHNOLOGY
72: LUO, Siyi, ZUO, Zongliang, REN, Dongdong

54: DIRECT REDUCTION IRONMAKING DEVICE AND METHOD BASED ON BIOMASS PYROLYSIS TAR

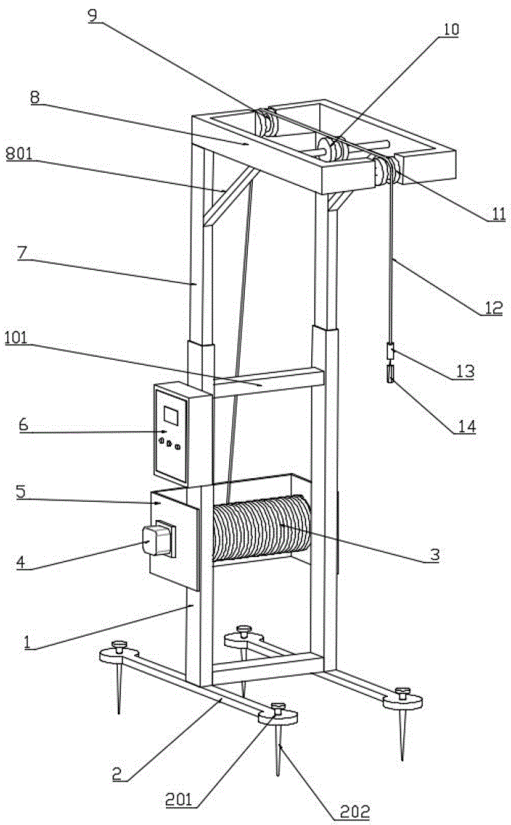
00: -

The present invention provides a direct reduction ironmaking device and method based on biomass. The device comprises a biomass pyrolysis zone and an iron ore reduction zone, wherein a biomass feeder is arranged at the top of the biomass pyrolysis zone, a discharge tube of the biomass feeder is connected with a pyrolysis basket through a baffle plate; a gas inlet, a gas outlet, a ceramic net, an iron powder feeding hole and an iron powder discharge hole are arranged in the iron ore reduction zone, and a resistance wire is arranged on the outer surface of the iron ore reduction zone. The method comprises iron ore powder preheating dehydration pore formation, deposition of gaseous biomass tar on the surface of the porous iron ore powder, and tar cracking and iron ore reduction. According to the present invention, the biomass pyrolysis tar is adopted to replace coal and natural gas to carry out direct reduction ironmaking, then the investment is low, the cost is low, the production efficiency is high, the quality of obtained products is high, and dependence of the ironmaking industry on fossil energy can be freed. Environment pollution can be alleviated while the quality of the direct reduced iron product is improved, and technical and equipment problems of the green ironmaking industry are substantially solved.



21: 2021/10614. 22: 2021-12-17. 43: 2022-03-11
51: C02F
71: SHANDONG CHENZHANG BIOTECHNOLOGY CO., LTD., SHANDONG ZHUORAN BIOTECHNOLOGY CO., LTD., JINAN HANGCHEN BIOTECHNOLOGY CO., LTD.
72: ZHAO, Chen, LI, Kunlun, ZHAO, Lin, LI, Baojun, YUE, Qiulin, SU, Le
33: CN 31: 202011415559.2 32: 2020-12-07
54: APPLICATION OF STAPHYLOCOCCUS NEPALENSIS IN DEGRADING RESIDUAL SUGAR IN ORGANIC WASTEWATER OF FERMENTATION INDUSTRY
00: -
The present invention belongs to the technical field of microbial treatment of organic wastewater from fermentation industry, and specifically relates to an application of Staphylococcus nepalensis in degrading residual sugar in organic wastewater of fermentation industry. The Staphylococcus nepalensis is named Staphylococcus nepalensisA-A10-1, was deposited in China Center for Type Culture Collection on 16 September 2020, the deposit number is CCTCC NO: M 2020505. The application of the Staphylococcus nepalensis provided by the invention in rapidly degrading residual sugar in wastewater under a high salt environment, especially when said residual sugars are residual sugars from organic acid and/or amino acid fermentation production wastewater, is the focus of protection provided by the present invention. The strain of the present invention has excellent high salt tolerance, and the use of this strain to treat specific high salt fermentation production wastewater has significant advantages such as low operating cost, low consumption, high efficiency, high adaptability, more stable operation, and easy operation and management.

21: 2021/10645. 22: 2021-12-20. 43: 2022-03-14
51: G01F
71: Inner Mongolia University of Technology
72: MI, Wentian, LI, Xuehua, LUO, Yuhang, YE, Xiangfei, ZHANG, Penghao, WANG, SHENGNING
54: A GROUNDWATER LEVEL OBSERVER FOR HYDROGEOLOGICAL EXPLORATION
00: -
The invention relates to the technical field of hydrogeological exploration, in particular to a groundwater level observer for hydrogeological exploration, comprising a base, a frame is vertically arranged on the upper part of the base, a telescopic frame is arranged on the other end of the frame away from the base, and a support frame is fixed on the upper part of the telescopic frame, the upper part of the support frame is provided with a first pulley, a second pulley and a third pulley, a shield is installed near the middle of the frame body of the frame, a drum is arranged between the plates on both sides of the shield, the central shaft of the drum is connected with the shaft of the drive motor arranged on the side wall of the shield, a measuring rope is wound on the outer peripheral surface of the drum, and the free end of the measuring rope passes through the first pulley, the second pulley and the third pulley in sequence, the end of the measuring rope is provided with a water level detector, and the lower part of the water level detector is connected with a heavy hammer.

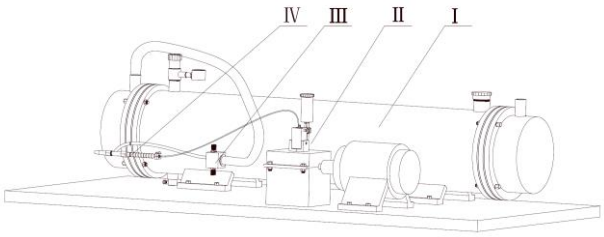


21: 2021/10663. 22: 2021-12-20. 43: 2022-03-11
51: B24B
71: QINGDAO UNIVERSITY OF TECHNOLOGY, HANERGY (QINGDAO) LUBRICATION TECHNOLOGY CO., LTD.
72: JIANG, Zhiyong, LI, Changhe, ZHOU, Zongming, LIU, Guotao, ZHANG, Yanbin

54: HEAT EXCHANGER REFRIGERATION LOW TEMPERATURE COOLING NANO FLUID MINIMUM QUANTITY LUBRICATION SUPPLY SYSTEM AND METHOD

00: -

The invention discloses a heat exchanger refrigeration low temperature cooling nano fluid minimum quantity lubrication supply system and method. The system comprises a low-temperature gas generation device, a nano fluid minimum quantity lubrication supply system, a gas distribution control valve and an external mixing atomization nozzle, wherein the nano fluid minimum quantity lubrication supply system changes the nano fluid into pulse droplets. The nano particle jet is formed by spraying from the external mixing atomization nozzle through the oil pipeline. The flow of the low-temperature gas generated by the low-temperature gas generation device is adjusted by the gas distribution control valve to make the low-temperature gas act on the outside of the external mixing atomization nozzle, so as to realize the atomization of the sprayed nano particle jet by the low-temperature gas. The invention has all the advantages of minimum quantity lubrication technology, stronger cooling performance and excellent tribological characteristics, effectively solves grinding burns, improves workpiece surface quality, and realizes low-carbon green cleaner production with high efficiency, low consumption, environment-friendly and resource saving, which is of great significance.



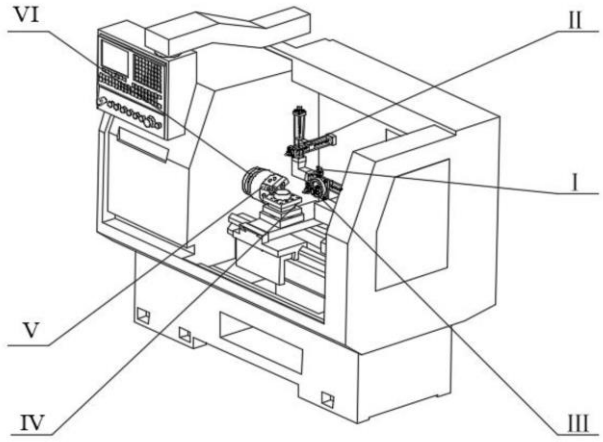
21: 2021/10664. 22: 2021-12-20. 43: 2022-03-11
51: B24B
71: QINGDAO UNIVERSITY OF TECHNOLOGY, NINGBO SANHAN ALLOY MATERIAL CO., LTD.
72: WU, Xifeng, LI, Changhe, HONG, Huaping, ZHAO, Xufeng

54: MINIMUM QUANTITY LUBRICATION INTELLIGENT FOLLOW-UP MACHINE TOOL WITH A WORKPIECE AS THE MAIN MOVEMENT AND WORKING METHOD

00: -

The invention relates to a micro-lubrication intelligent follow-up machine tool with a workpiece as the main movement and a working method, including a bed. The bed is provided with a two-axis linkage mechanism. The two-axis linkage mechanism is connected with the tool through a tool changer. The bed is also equipped with a power system, which is connected to the workpiece chuck and can drive the rotation of the workpiece chuck. A three-axis linkage mechanism installed on the bed is provided on one side of the cutting tool, and the three-axis linkage mechanism is connected with the nozzle angle adjustment mechanism. The nozzle angle adjustment mechanism is connected with the nozzle and is used to adjust the spray angle of the nozzle.

The nozzle is connected with the liquid supply mechanism, and the nozzle angle adjustment mechanism is also provided with a camera mechanism. The machine tool adopting the invention has high cutting fluid utilization rate and good lubrication and cooling effect.

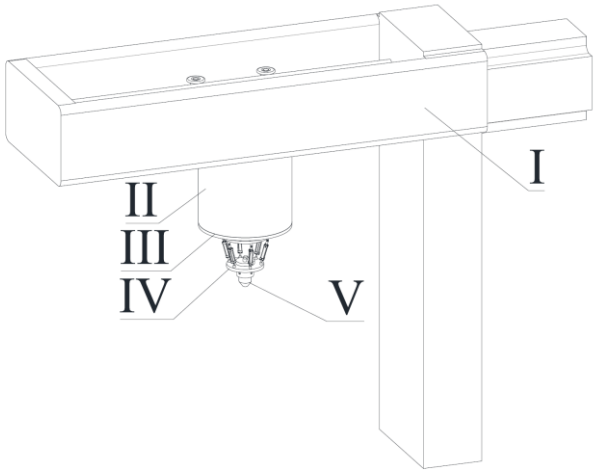


21: 2021/10665. 22: 2021-12-20. 43: 2022-03-11
51: B23B
71: QINGDAO UNIVERSITY OF TECHNOLOGY, SHANGHAI JINZHAO ENERGY SAVING TECHNOLOGY CO., LTD.
72: YANG, Min, KONG, Ming, ZHANG, Naiqing, LI, Changhe

54: MIMIMUM QUANTITY LUBRICATION INTELLIGENT SPRAYER-HEAD SYSTEM OF CNC HORIZONTAL LATHE BASED ON SIX-AXIS PARALLEL PLATFORM

00: -

The invention discloses a minimum quantity lubrication intelligent spray-head system for a numerical control horizontal lathe based on a six-axis linkage platform. The horizontal moving part is connected with the longitudinal telescopic part to provide the power required for the lateral movement of the longitudinal telescopic part, so that the longitudinal telescopic part can move horizontally; A rotating part is provided in the longitudinal telescopic part to allow the rotating part to move longitudinally; the rotating part is connected to a six-axis linkage platform, and the rotating part drives the six-axis linkage platform to rotate, and the six-axis linkage platform is provided with a spray-head; The spray-head is provided with detection equipment, and the movement of the lateral moving part, the longitudinal telescopic part, the rotating part and the six-axis linkage platform is adjusted according to the temperature data detected by the detecting equipment to realize the continuous tracking and spraying of the horizontal lathe processing by the spray-head.



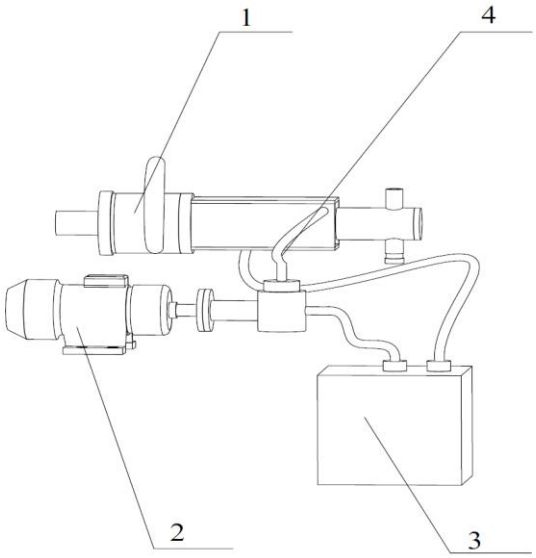
21: 2021/10666. 22: 2021-12-20. 43: 2022-03-11
51: B04C
71: QINGDAO UNIVERSITY OF TECHNOLOGY, SICHUAN FUTURE AEROSPACE INDUSTRY LLC
72: WANG, Leyi, LI, Changhe, LIU, Bo, LIU, Mingzheng, ZHANG, Yanbin

54: LIQUID NITROGEN CIRCULATING COOLING VORTEX PIPE HIGH EFFICIENCY REFRIGERATION SYSTEM

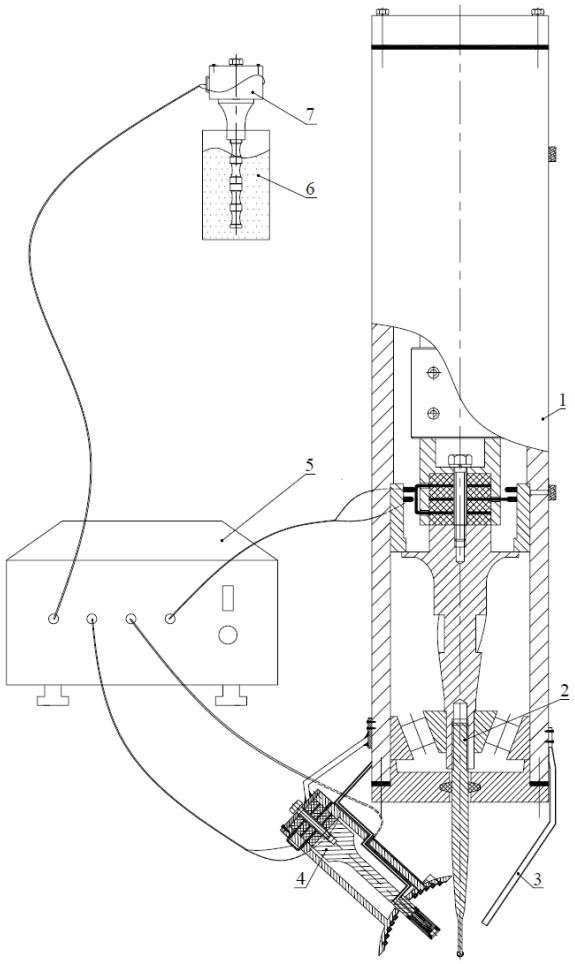
00: -

he invention discloses a liquid nitrogen circulating cooling vortex pipe high efficiency refrigeration system, which solves the problems of low heat dissipation rate and refrigeration efficiency in vortex pipe refrigeration technology, it uses liquid nitrogen circulation to cool the vortex pipe heat pipe, so that effectively improve the heat dissipation rate and refrigeration efficiency of vortex pipe. The technical scheme is as follows: including a vortex pipe refrigeration system and a liquid nitrogen cooling system, the vortex pipe refrigeration system comprises a intake sleeve with a nozzle, one end of the intake sleeve is sleeved with a cold end pipe and sealed by a sealing sleeve, the other end is sleeved with a hot end pipe and sealed by a sealing gasket, the cold end pipe, the intake sleeve and the hot end pipe form a vortex chamber; a rectifier is arranged inside one end of the hot end pipe away from the intake sleeve; the liquid nitrogen refrigeration system comprises a vortex liquid nitrogen cooling pipe

wound outside the hot end pipe, and the vortex liquid nitrogen cooling pipe circularly transmits liquid nitrogen to cool the hot end pipe.

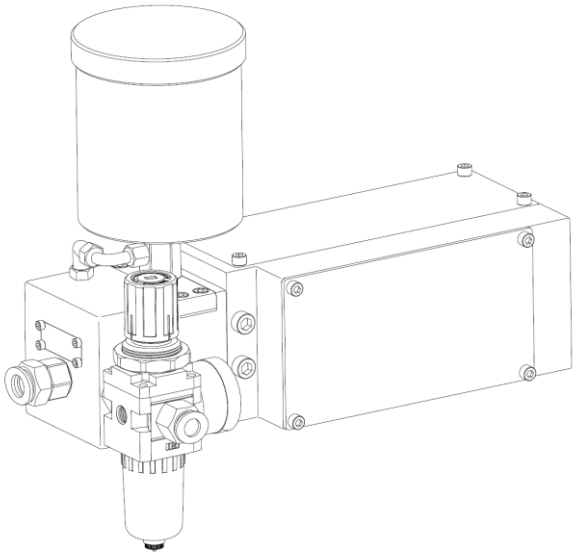


21: 2021/10667. 22: 2021-12-20. 43: 2022-03-11
51: A61B
71: QINGDAO UNIVERSITY OF TECHNOLOGY, HANERGY (QINGDAO) LUBRICATION TECHNOLOGY CO., LTD.
72: YANG, Min, MA, Hao, LI, Changhe, ZHOU, Zongming
54: HAND HELD NEUROSURGICAL ROTARY ULTRASONIC LONGITUDINAL TORSIONAL RESONANCE WATER CATCHING GRINDING DEVICE AND METHOD
00: -
The invention discloses a hand-held neurosurgical rotary ultrasonic longitudinal torsional resonance water catching grinding device, which solves the problems of large volume and difficult operation of skull base tumor removal device in the prior art, and has high grinding efficiency and cooling effect. The scheme is as follows: a hand-held neurosurgical rotary ultrasonic longitudinal torsional resonance water catching grinding device includes a spindle, which is arranged in the motorized spindle shell, a rotor winding is arranged around the outer circumference of the spindle, a stator winding corresponding to the rotor winding is arranged in the motorized spindle shell, and the electronic winding can be powered on to drive the spindle to rotate. The spindle of the water catching abrasive tool for grinding biological bone is connected with the spindle through an ultrasonic vibration mechanism. Driven by the spindle and the ultrasonic vibration mechanism, the water catching abrasive tool realizes longitudinal vibration and rotary movement, and the surface of the water catching abrasive tool is provided with a micro convex body.



21: 2021/10669. 22: 2021-12-20. 43: 2022-03-11
51: B23Q
71: QINGDAO UNIVERSITY OF TECHNOLOGY, SHANGHAI JINZHAO ENERGY SAVING TECHNOLOGY CO., LTD.
72: CUI, Xin, LI, Changhe, ZHANG, Yanbin, ZHANG, Naiqing
54: A PRECISION LUBRICATION PUMP FOR CONTINUOUS SUPPLY OF LUBRICANT BY CRANK LINK MECHANISM
00: -
The invention discloses a precision lubrication pump for continuous supply of lubricant by crank link mechanism, comprising: pump system, gas source

processor, drive system, oil cup and water pump. The gas source processor is connected to the pump system through a two-way joint, and the oil cup is connected to the pump system through an oil cup joint. The water pump which is connected to the pump system through a hose is installed in the drive box of the drive system. The drive system is connected to the pump system by a crank link mechanism. The drive system and the water pump are driven by stepper motor I and stepper motor II respectively. The invention is driven by a stepper motor and a crank link mechanism, changes the oil supply flow by changing the motor speed, improves the cooling and lubrication effect of the processing zone and the surface quality of the workpiece, and provides equipment support for automatic control and intelligent control.

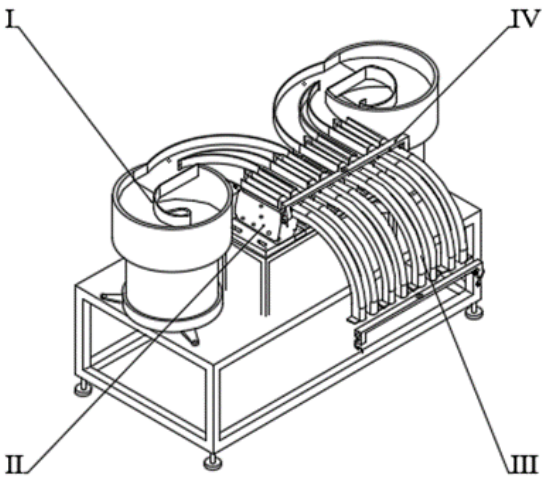


21: 2021/10670. 22: 2021-12-20. 43: 2022-03-11
51: A23N
71: QINGDAO UNIVERSITY OF TECHNOLOGY, HENAN UNIVERSITY OF SCIENCE AND TECHNOLOGY
72: LIU, Mingzheng, LI, Changhe, LI, Xinping

54: VIBRATING DISC FEEDING DEVICE AND METHOD FOR POCKET LONG-DIAMETER SHELL BREAKING EQUIPMENT

00: -

The invention discloses a vibrating disc feeding device and a method for a socket long diameter shell breaking device, which comprises a vibrating disc device, a direct vibration device and a material distribution device. The vibrating disk device comprises a vibrating disk and a screening device. A direct vibration device is arranged below the screening device. The vibrating disk has a certain frequency of shaking in the vertical direction to make the material rise at a certain speed, and the screening device. The screening device transmits the material to the material distribution device in a long-diameter manner under the vibration of the direct vibration device. The separating device is connected with the end of the screening device. The transmission channel of the material distribution device will distribute the material to the socket of the socket long diameter shell breaking equipment while maintaining the long diameter. The technical scheme of the disclosure is based on the use of vibrating disc feeding, and the walnut in the vibrating disc hopper rises stably and continuously along the spiral track through the swing vibration generated by the base, so as to realize continuous and stable feeding.



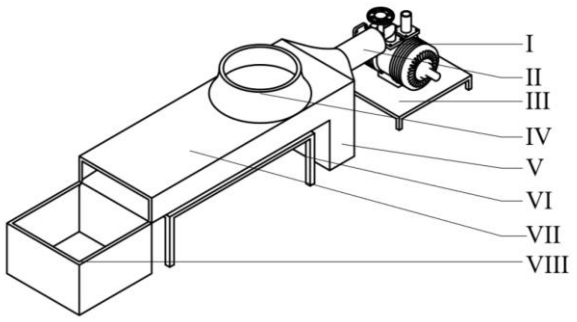
21: 2021/10671. 22: 2021-12-20. 43: 2022-03-11
51: A23N
71: QINGDAO UNIVERSITY OF TECHNOLOGY, HENAN UNIVERSITY OF SCIENCE AND TECHNOLOGY
72: LIU, Dewei, LI, Changhe, LIU, Mingzheng, LI, Xinping

54: A NEGATIVE PRESSURE TYPE WALNUT SHELL AND KERNEL SEPARATION DEVICE AND METHOD

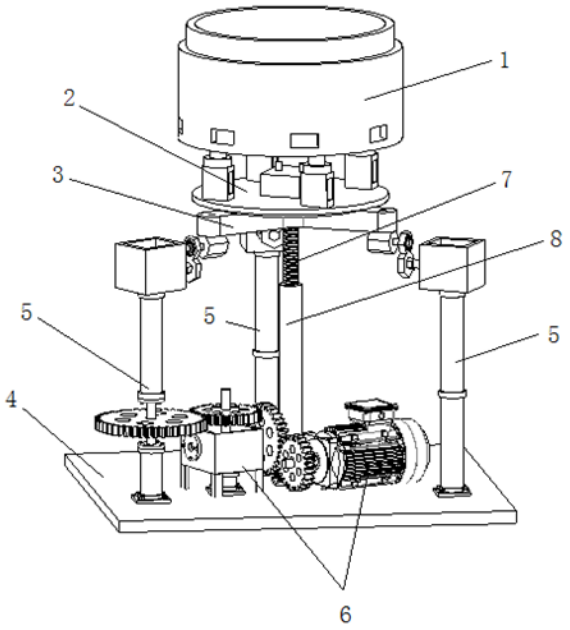
00: -

The present disclosure provides a negative pressure walnut shell-kernel separation device and method, belonging to the field of walnut shell breaking and

processing technology, including a discharge barrel, a separation track, a vacuum device, a walnut shell collection device and a walnut kernel collection device; the bottom of said discharge barrel is connected to the upper part of the separation track, said separation track is a hollow structure with two open ends, and the inner bottom surface of said separation track is at a predetermined angle to the outer bottom surface; the first end opening of the separation track is connected to the vacuum device, the second end opening is connected to the atmosphere, the bottom of the separation track near the first end opening is provided with a walnut shell collection device connected to the separation track, and the second end opening is provided with a walnut kernel collection device; through the pressure difference formed between the negative pressure generated by the vacuum device and the atmospheric pressure, the walnut shell and the walnut kernel move in opposite directions. It ensures that there is a uniform and stable pressure difference inside the negative pressure shell-kernel separation device, thus realizing the efficient and accurate separation of walnut kernel and walnut shell.

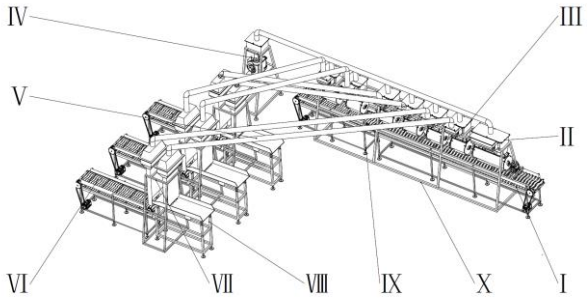


21: 2021/10672. 22: 2021-12-20. 43: 2022-03-11
51: B07B
71: QINGDAO UNIVERSITY OF TECHNOLOGY, HENAN UNIVERSITY OF SCIENCE AND TECHNOLOGY
72: ZHANG, Yanbin, LI, Wenyi, LI, Changhe, LIU, Mingzheng, LI, Xinping
54: THE UTILITY MODEL RELATES TO A RECIPROCATING OSCILLATING ULTRASONIC HIGH FREQUENCY VIBRATING SCREEN
00: -
The invention relates to a reciprocating swing type ultrasonic high frequency vibrating screen, which comprises: Screening device for holding material, described the screening device is installed on the ultrasonic vibration device, as described in ultrasonic vibration device of ultrasonic vibration to screening device, high frequency electromagnetic vibration, the supplies mentioned ultrasonic vibration device installed on the mechanical vibration actuators, mechanical vibration actuators and fixed on the base of the transmission mechanism of connection, The transmission mechanism is connected with the power mechanism, the power of the power mechanism is transmitted to the mechanical vibration executive device through the transmission mechanism, so that the reciprocating rotation swing, the material at the same time for low frequency mechanical vibration. The vibrating screen of the invention has high clearance rate, is not easy to be broken and has good screening effect.

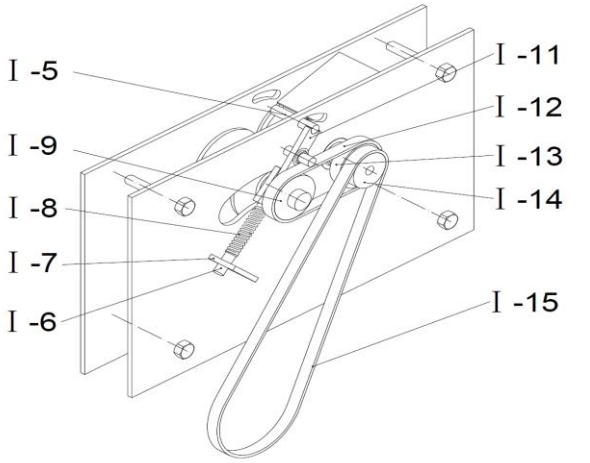


21: 2021/10673. 22: 2021-12-20. 43: 2022-03-11
51: A23N
71: QINGDAO UNIVERSITY OF TECHNOLOGY, XINJIANG JIANG NING LIGHT INDUSTRIAL MACHINERY ENGINEERING TECHNOLOGY CO., LTD.
72: LI, Kang, LI, Changhe, CHE, Ji, LIU, Mingzheng
54: MULTI-STAGE NEGATIVE PRESSURE SHELL AND KERNEL SEPARATION EQUIPMENT
00: -
The invention discloses a multi-stage negative pressure shell and kernel separation equipment, which solves the problem of incomplete shells and

kernels separation, and can realize high-efficiency shells and kernels separation for different varieties of walnuts. The production speed is fast and the degree of automation is high, while ensuring the thorough separation of shells and kernels. The technical solution is: including a vibrating feeding device and a negative pressure separating device. The vibrating feeding device is connected with the negative pressure separating device, and the negative pressure separating device absorbs and stores the fruit shells through the suction force of the negative pressure; the negative pressure separation device includes a plurality of negative pressure separators arranged side by side, the negative pressure separator is connected to the slag discharge fan through a channel; the vibrating feeding device includes a vibrating feeding table, and a secondary negative pressure separation component is arranged above one side of the vibrating feeding table, and the secondary negative pressure separation component is communicated with the negative pressure separator through a pipeline.

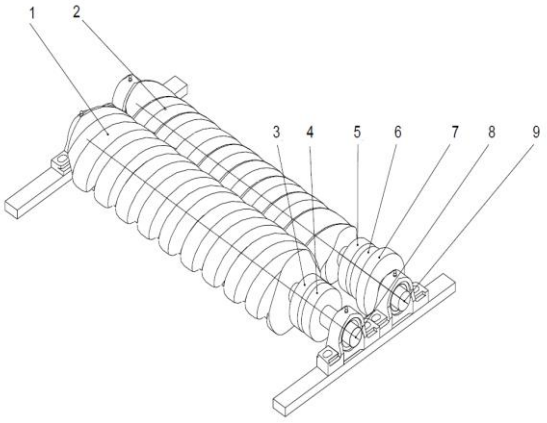


21: 2021/10674. 22: 2021-12-20. 43: 2022-03-11
51: A23N
71: QINGDAO UNIVERSITY OF TECHNOLOGY, XINJIANG JIANG NING LIGHT INDUSTRIAL MACHINERY ENGINEERING TECHNOLOGY CO., LTD.
72: XU, Wenhao, LI, Changhe, CHE, Ji, LIU, Mingzheng
54: WALNUT PRE-SHELL BREAKING DEVICE
00: -
The present invention discloses a walnut pre-shell breaking device, which solves the problems of large damage to walnut kernels and low degree of mechanical operation in the prior art, and has the effect of high pre-breaking efficiency and improving the whole kernel rate of walnut shelling and kernel extraction. The scheme adopted is as follows: extrusion shell-breaking mechanism, which includes two extrusion parts spaced in a set space, one extrusion part can rotate relative to the other extrusion part, or both extruded parts can rotate independently. The surface of the extrusion part is provided with a projection to squeeze the walnut between the two extrusion parts in order to break the walnut shell; one extrusion part can move relative to the other extrusion part, and the extrusion part is connected with a rebound mechanism for driving one or both extrusion members back to the original position.



21: 2021/10675. 22: 2021-12-20. 43: 2022-03-11
51: A23N
71: QINGDAO UNIVERSITY OF TECHNOLOGY, XINJIANG JIANG NING LIGHT INDUSTRIAL MACHINERY ENGINEERING TECHNOLOGY CO., LTD.
72: ZHANG, Xiaotian, LI, Changhe, CHE, Ji, LIU, Mingzheng
54: A SELF-GRADING WALNUT FLEXIBLE SHELL BREAKING DEVICE AND METHOD WITH THE SAME DIRECTION DOUBLE SPIRAL ROOLER
00: -
The invention provides a self-grading walnut flexible shell breaking device with the same direction double spiral roller. By setting two spiral rollers side by side and with non-parallel axes, the two spiral rollers have different diameters and the same steering direction, and the surfaces of the two spiral rollers are provided with grooves extending along the axial direction of the helix roll. The walnut falls on the two

spiral rollers. Due to the axial conveying effect of the helix, the walnut rolls forward along the spiral roll bus, and the walnut is subjected to downward pressure on the side of the spiral roll with large diameter. When the space of the walnut is appropriate to the size of the walnut itself, the pressure on the side of the spiral roll with large diameter presses the walnut into the spiral groove, and the walnut shell falls off from the surface of the kernel under the action of shell breaking and peeling of the shear force around the walnut, Under the action of gravity, the nucleolus falls through the groove of the opposite mouth of the two spiral rollers to realize shelling and kernel removal. The invention ensures that all points of walnut are stressed evenly in the process of shell breaking, and all forces cooperate with each other during shell breaking, so as to obtain a high whole kernel rate.

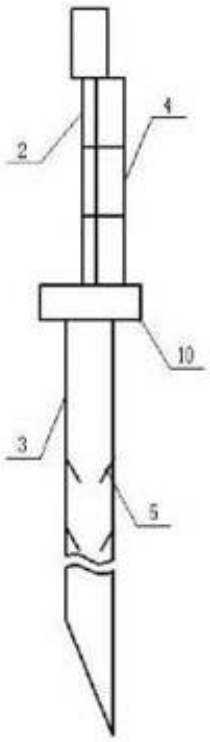


21: 2021/10700. 22: 2021-12-21. 43: 2022-03-17
51: A61B
71: JIANGSU CANCER HOSPITAL
72: FENG, Yong, ZHANG, Yufeng, QIAO, Wei, YIN, Li, HE, Xia

54: MAGNETIC NAVIGATION BEACON IMPLANTATION GUIDING PUNCTURE NEEDLE

00: -

The present invention discloses a magnetic navigation beacon implantation guiding puncture needle, and relates to the field of medical instruments, comprising a conduction capsule, a probe and a guiding needle; limiting clamp components are detachably arranged on the probe; and a group of clamping components are arranged in the guiding needle. The guiding puncture needle can introduce two magnetic particle beacons in one puncture surgery, to greatly reduce the number of puncture times, reduce the surgery time, reduce the surgery risk, improve the comfort of patients, reduce the cost of consumables, reduce the incidence of tumor implantative metastasis, massive hemorrhage, infection and other complications, and improve the success of surgery and follow-up therapy.



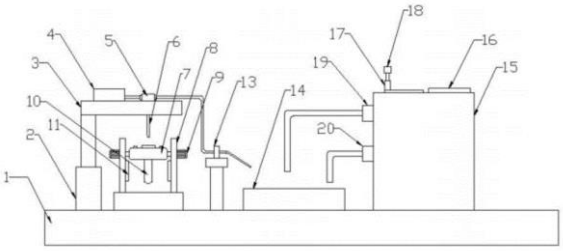
21: 2021/10718. 22: 2021-12-21. 43: 2022-03-17
51: G01N
71: North China University of Science and Technology
72: CHEN, Hongshuo
33: CN 31: 202011521692.6 32: 2020-12-21

54: FOOD DETECTION STRUCTURE BASED ON BIOSENSOR AND DETECTION METHOD THEREOF

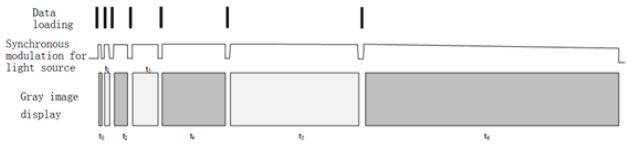
00: -

The present disclosure discloses a food detection structure based on a biosensor and a detection method thereof, belonging to the technical field of food detection, comprising a base, a detection device, a liquid sample processing mechanism and a solid sample processing mechanism, wherein the detection device is installed in the middle of the top of the base, a biosensor is provided in the detection

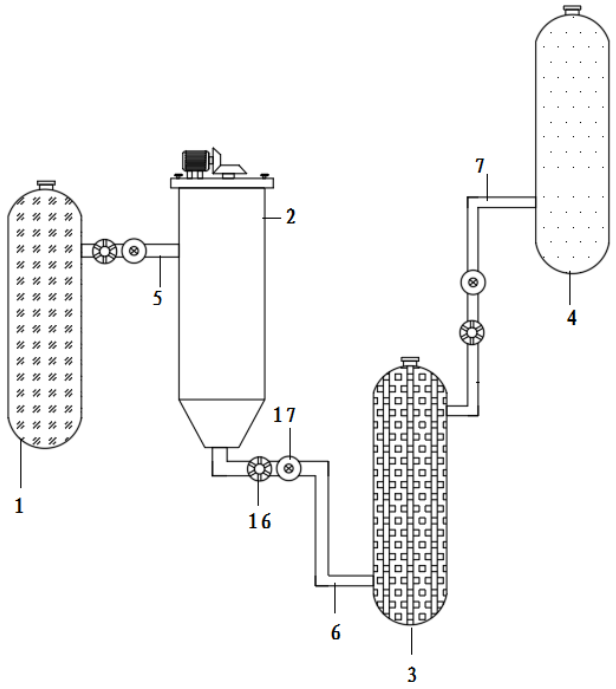
device, the liquid sample processing mechanism and the solid sample processing structure are respectively installed on the left and right sides of the top of the base, a support table is installed at the right side of the liquid sample processing mechanism, the liquid sample processing mechanism comprises a first hydraulic device, a support plate, a water tank, a water pump, a sampling needle, a bottom plate, a supporting seat, a vibrating motor, a fixed seat, an ultraviolet lamp and a liquid storage test tube.



21: 2021/10724. 22: 2021-12-21. 43: 2022-03-09
51: G09G
71: JINHUA FEIGUANG TECHNOLOGY CO., LTD.
72: CHENG, Panpan, ZHANG, Qiong, LI, Guofeng
54: METHOD FOR GENERATING GRAY IMAGE WITH HIGH FRAME FREQUENCY
00: -
A method for generating a gray image with a high frame frequency is based on a principle that when it starts to generate a one-frame gray image, a synchronous modulation signal for a light source is set to a low level. After the loading of first-bit plane image data is completed and a micromirror is overturned in place, the synchronous modulation signal for the light source is set to be high, the light source is turned on, and a -bit plane image starts to be generated; after the generation time is reached, the synchronous modulation signal for the light source is set to be low, and the light source is turned off; after the loading of second-bit plane image data B2 is completed and the micromirror is overturned in place, the synchronous modulation signal for the light source is set to be high.

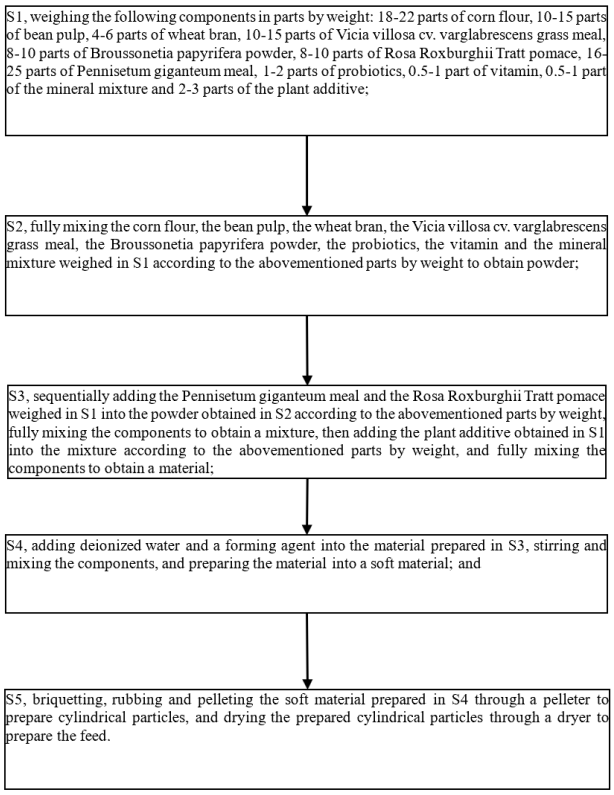


21: 2021/10725. 22: 2021-12-21. 43: 2022-03-09
51: A23N
71: SHANDONG PEANUT RESEARCH INSTITUTE
72: BI, Jie, YU, Lina, WANG, Mingqing, YANG, Weiqiang, SONG, Yu, JIANG, Chen, SHI, Chengren
33: CN 31: 202122768704.1 32: 2021-11-12
54: DEVICE FOR GRADED ENRICHMENT OF FLAVONOIDS, TERPENOIDS AND/OR STILBENOID COMPOUNDS IN PEANUT PLANTS
00: -
he present invention discloses a device for graded enrichment of flavonoid, terpenoid and/or stilbenoid compounds in peanut plants, comprising an oil bath heater, a stirring tank, a drying tank and a quench tower, wherein the oil bath heater is communicated with the stirring tank through a first conduit in an insertion connection manner, the stirring tank is communicated with the drying tank through a second conduit in an insertion connection manner, the drying tank is communicated with the quench tower through a third conduit in an insertion connection manner, a mounting cover plate is arranged at the top of the stirring tank, a driving motor is mounted at the top of the mounting cover plate, the output end of the driving motor is sleeved by a driving helical gear, a stirring rotating rod is arranged on the mounting cover plate in a rotational penetration manner, the top of the stirring rotating rod is positioned above the mounting cover plate and is sleeved by a driven helical gear, and the inner cavity of the stirring tank is detachably connected with a filtering sieve plate through a connection fastening mechanism. When the filtering sieve plate is disassembled, the filtering sieve plate is pulled upwards, in the pull process, the side wall of the inner cavities of the connecting clamping grooves are propped against the fastening clamping blocks, and the fastening clamping blocks compress the telescopic springs into the connecting groove holes, and are dissociated from the connecting clamping grooves.



21: 2021/10726. 22: 2021-12-21. 43: 2022-03-09
51: A23K
71: GUIZHOU INSTITUTE OF PRATACULTURAL
72: LI, Shige, SHANG, Yishun, WANG, Puchang, LI, Xiaodong, LUO, Jinhong, CHEN, Guangji, ZHANG, Rong, WANG, Ziyuan, LIU, Fengdan, CHEN, Qiang
33: CN 31: 202111325628.5 32: 2021-11-10
54: COMPLETE FEED FOR INCREASING A GROWTH RATE OF BLACK GOAT LAMBS AND PREPARATION METHOD OF COMPLETE FEED
00: -

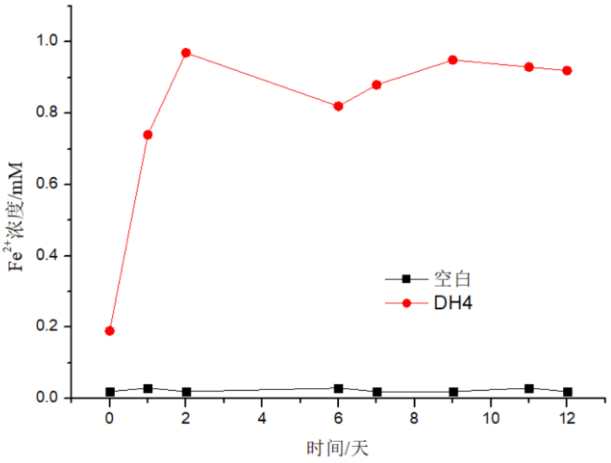
The invention discloses a complete feed for increasing a growth rate of black goat lambs and a preparation method of the complete feed, and relates to the technical field of animal feeds. According to the technical solution, the complete feed comprises: corn flour, bean pulp, wheat bran, Vicia villosa cv. varglabrescens grass meal, Broussonetia papyrifera powder, Rosa Roxburghii Tratt pomace, Pennisetum giganteum meal, probiotics, vitamin, a mineral mixture and a plant additive. The complete feed aims at breeding and fattening nutritional requirement features of the black goat lambs, and can promote development of rumens of the lambs while meeting nutrients needed by the lambs, part of functional components can effectively improve disease resistance and anti-stress capacity of the lambs, the plant additive has food calling similar to a sweetening agent, the feed intake of the lambs can be increased, and therefore the weight gain speed of the lambs is increased.



21: 2021/10727. 22: 2021-12-21. 43: 2022-03-09
51: C09K; C12N; C12R
71: YANGTZE UNIVERSITY
72: SHE, Yuehui, ZHANG, Fan, SU, Sanbao, SUN, Shanshan, DONG, Hao, WENG, Xue, ZHANG, Han, YU, Gaoming, LI, Yang, ZHENG, Anying
54: IRON-REDUCING BACTERIUM DH4 STRAIN AND APPLICATION THEREOF
00: -

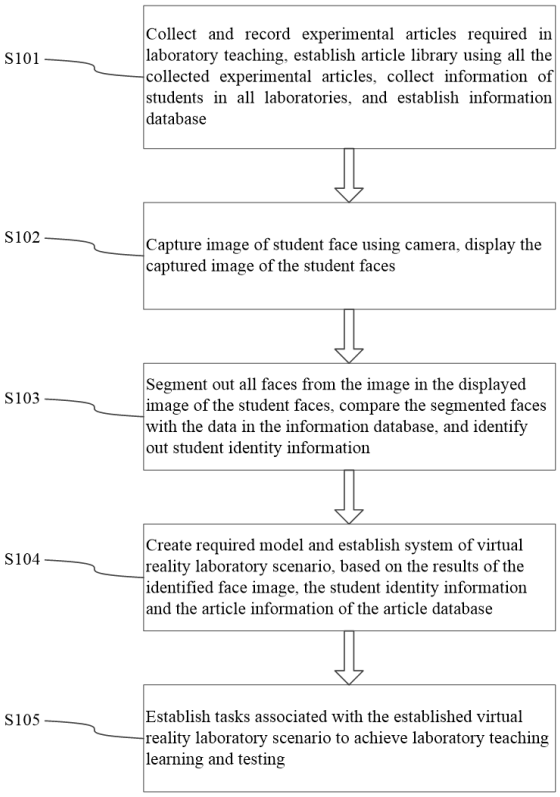
The present invention discloses an iron-reducing bacterium DH4 strain and application thereof. The iron-reducing bacterium Flavilexus salsibiricolia DH4 strain has been preserved in China Center for Type Culture Collection on Apr. 19, 2021, and is assigned with the accession number of CCTCC NO: M 2021401. In the present invention, an iron-reducing bacterium Flavilexus salsibutratiscola DH4 that is capable of efficiently reducing Fe (III) is isolated and screened from an oil reservoir environment, and analysis by a scanning electron microscope, and other means indicates that the iron-reducing bacterium can effectively decompose and corrode a montmorillonite mineral and inhibit clay swelling.

Meanwhile, a core experiment indicates that a Flaviexus salsoliticola DH4 biological preparation can improve the water sensitivity of a core and reduce a water injection pressure in petroleum development, and thus, the biological preparation can be applied in crude oil recovery for effectively enhancing a crude oil recovery rate.



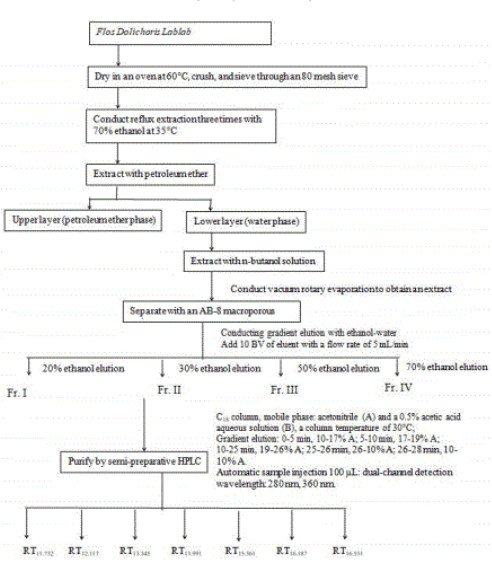
21: 2021/10728. 22: 2021-12-21. 43: 2022-03-09
51: B01J
71: QINGDAO UNIVERSITY OF SCIENCE AND TECHNOLOGY
72: CHEN, Dawei, GUO, Zhiyan, DU, Fanglin
54: METHOD FOR PREPARING MESOPOROUS BASIC NICKEL SILICATE/SILICA SHELL-CORE MICROSPHERES WITH ADJUSTABLE INNER CHAMBER SPACE SIZE
00: -
The present disclosure provides a method for preparing mesoporous basic nickel silicate/silica shell-core microspheres with an adjustable inner chamber space size, comprising the following steps: (1) adding silica spheres prepared by a method into deionized water, and carrying out ultrasonic dispersion to form a white emulsion; (2) uniformly dissolving nickel acetate into a white emulsion containing silicate microspheres; (3) transferring a mixed green emulsion into a stainless steel high-pressure kettle with a polytetrafluoroethylene lining, keeping the temperature at 150℃-200℃ for 3-28 h, cooling to a room temperature in the air, centrifuging, washing and drying, to obtain light green mesoporous basic nickel silicate/silica shell-core structure. The size of the inner chamber space between shell and core is adjustable, the preparation process is simple, and mass production is easy to carry out.

21: 2021/10752. 22: 2021-12-21. 43: 2022-03-09
51: G09B
71: HOTDIGIT TECHNOLOGY CO., LTD.
72: FENG, Yu, ZHAO, Xin, WANG, Hua, CUI, Hong, WU, Rui, WANG, Tao, LI, Qiling
54: METHOD FOR IMPLEMENTATION OF VIRTUAL LABORATORY TEACHING BASED ON 3D SIMULATION AND SYSTEM, MEDIUM AND EQUIPMENT THEREOF
00: -
The present invention provides a method for implementation of virtual laboratory teaching based on 3D simulation and system thereof, using the built virtual reality laboratory system, using a virtualized experimental system and cloud computing, establishing a virtual model of a scenario by collecting articles required for experimental teaching tasks, establishing an associated experimental task in a virtual reality laboratory scenario, performing scenario simulation through student login selection, realizing learning tracking, real-time feedback to students and virtual interaction in the experimental process, and monitoring the progress of each implementation task.



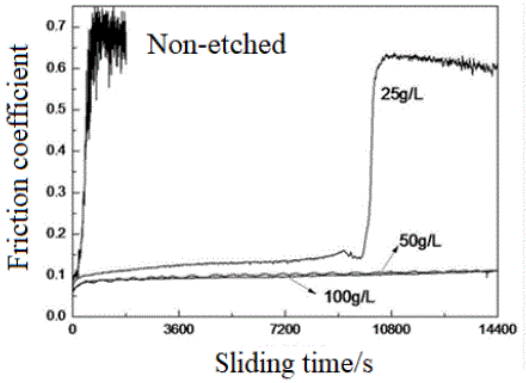
21: 2021/10759. 22: 2021-12-17. 43: 2022-02-17
51: G01N
71: Fujian University of Technology
72: Zhang Wei, Wei Jiangang
54: TESTING METHOD FOR TENSILE-SHEAR BONDING PERFORMANCE OF BASALT FIBER-REINFORCED PLATE AND CONCRETE
00: -
The invention discloses a special specimen and method for testing tensile-shear bonding performance of basalt-fiber reinforced plate and concrete interface; the ratio of tensile stress to shear stress of the interface in the testing process is set by changing the longitudinal initial peeling angle of a variable cross-section concrete prism (2); and a polyvinyl chloride insulating pipe (6) is arranged between the concrete prism (1) and the variable cross-section concrete prism (2) to ensure that two steel bars (5) are on the same straight line, thereby reducing the structural asymmetry; at the same time, it can be arranged horizontally or vertically, not only on the horizontal ground but also on the vertical loading instrument, which requires less structure of loading equipment. The invention has the characteristics of a simple testing method, easy operation, clear structural stress, and high-test data accuracy.

21: 2021/10764. 22: 2021-12-22. 43: 2022-02-17
51: C07D; C07H; A61P
71: Anhui Polytechnic University
72: CAI, Weirong, YUE, Danwei, ZHU, Ying, LI, Jingjing, WANG, Yuling, ZHUO, Yunyun, WANG, Qingqing
33: CN 31: 202110517765.2 32: 2021-05-12
54: FLOS DOLICHORIS LABLAB-DERIVED FLAVONOIDS AND PREPARATION METHOD THEREOF
00: -
The present disclosure provides Flos Dolichoris Lablab-derived flavonoids and a preparation method thereof. The method includes the following steps: subjecting Flos Dolichoris Lablab to impurity removal, washing and drying, and grinding, extraction and initially enrichment, and conducting separation on an AB-8 macroporous resin column to obtain a Fr. II; conducting purification by semi-preparative high performance liquid chromatography (HPLC), conducting gradient elution with a C18 column and a mobile phase of acetonitrile and a 0.5% acetic acid aqueous solution, and collecting effluents of each elution peak to obtain 7 Flos Dolichoris Lablab-derived flavonoids that can scavenge free radicals and inhibit alpha-glucosidase. The Flos Dolichoris Lablab-derived flavonoids can be used as raw materials or additives in medicines and healthcare nutritional products. The Flos Dolichoris Lablab-derived flavonoids have antioxidant and hypoglycemic activities, a simple preparation method, desirable safety, abundant raw material resources of Flos Dolichoris Lablab, and desirable development and use prospects.



21: 2021/10765. 22: 2021-12-22. 43: 2022-02-17
51: B05D; C23F
71: Qilu University of Technology
72: WAN, Yong, LIU, Mingming, ZHANG, Jian, WANG, Zhongqian, LIU, Yifang
54: METHOD FOR ETCHING MEDIUM CARBON STEEL MATRIX, ANTIFRICTION AND ANTIWEAR COMPOSITE LUBRICATING FILM, AND PREPARATION METHOD THEREFOR
00: -
The present disclosure provides a method for etching a medium carbon steel matrix, including using a mixed solution including FeCl3 and HCl to etch a medium carbon steel matrix material; the concentration of FeCl3 in the mixed solution is 25-75 g/L, and the concentration of HCl in the mixed solution is 25-100 g/L. The present disclosure further provides a method for preparing a composite lubricating film using the etching method, which

includes cleaning and then drying the etched medium carbon steel, and coating a surface of the dried medium carbon steel with a lubricant and then curing the lubricant to obtain an antifriction and antiwear composite lubricating film. In the method according to the present disclosure, an etching process can be implemented in a short time by using only the mixed solution of FeCl3 and HCl to etch the medium carbon steel matrix material, thereby reducing costs.

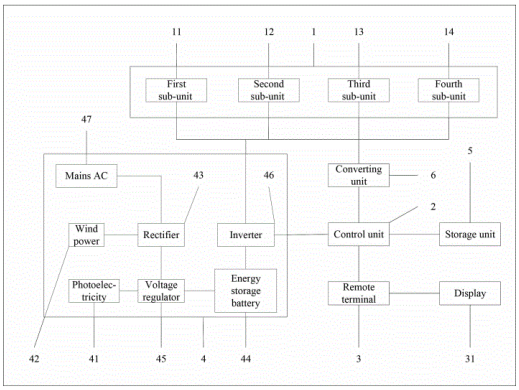


21: 2021/10766. 22: 2021-12-22. 43: 2022-02-17
51: E03B; G01N
71: Shandong Provincial Lunan Geology and Exploration Institute (Shandong Provincial Bureau of Geology and Mineral Resources No.2 Geological Brigade), SHANDONG PROVINCIAL GEO-MINERAL ENGINEERING CO., LTD., CGC Geological and Mineral Construction Co., Ltd.
72: YU, Sang, CHEN, Hao, LIANG, Wenji, LU, Xiaowei, LIU, Hong

54: WATER QUALITY MONITORING SYSTEM

00: -

The present disclosure relates to a water quality monitoring system. The system comprises a detection unit for acquiring parameter data of a to-be-detected water sample in real time, wherein the parameter data comprises a pH value, dissolved oxygen content, electrical conductivity, temperature, turbidity, heavy metal content, and radioactive pollutant content of the to-be-detected water sample; the control unit connected to the detection unit and used for acquiring the parameter data and comparing the parameter data with reference data, wherein when a value of any one of the parameter data exceeds corresponding threshold range, the control unit sends an alarm command; and a remote terminal connected to the control unit and used for receiving the parameter data and the alarm command, and sending an alarm signal according to the alarm command. Multiple parameters of the water quality can be effectively monitored in real time.

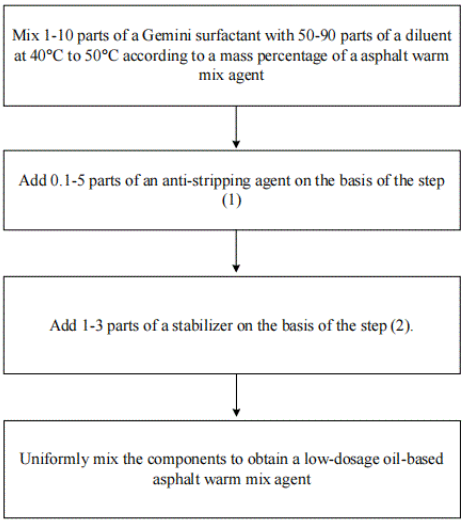


21: 2021/10767. 22: 2021-12-22. 43: 2022-02-17
51: C04B
71: Fushun Taimiao Chemical Technology Co., Ltd.
72: WANG, Hongguo, WANG, Zi'ang, WANG, Lili, LIAO, Kejian

54: LOW-DOSAGE OIL-BASED ASPHALT WARM MIX AGENT AND PREPARATION METHOD THEREOF

00: -

The present disclosure belongs to the field of road pavement materials and provides a low-dosage oil-based asphalt warm mix agent and a preparation method thereof. The asphalt warm mix agent includes the following components in parts by weight: 1-10 parts of a Gemini surfactant, 50-90 parts of a diluent, 0.1-5 parts of an anti-stripping agent, and 1-3 parts of a stabilizer. This asphalt warm mix agent can be used to prepare a warm mix asphalt mixture; and an asphalt pavement paved with the warm mix asphalt mixture is flexible, convenient and environmentally friendly in construction.

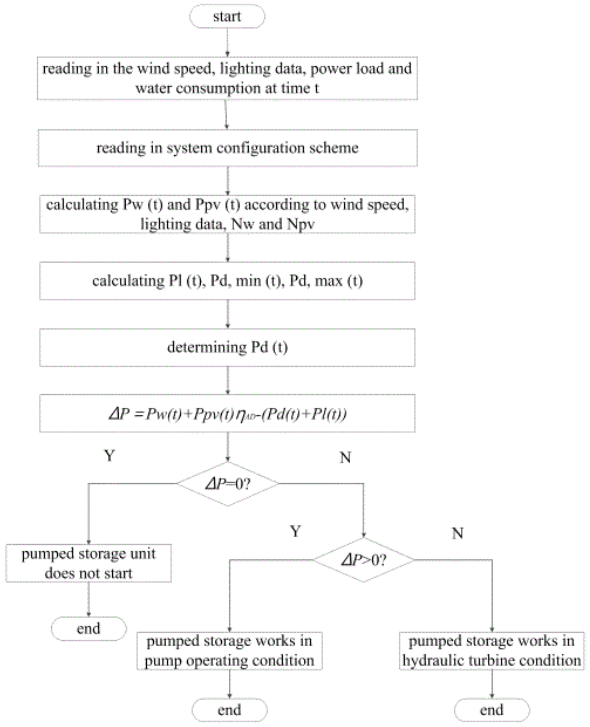


21: 2021/10768. 22: 2021-12-22. 43: 2022-02-17
51: A23K; A61K
71: Northeast Agricultural University
72: Zhang Ziwei, Xu Shiwen, Lin Hongjin, Guo Mengyao
54: LICKING BRICK FOR PREVENTING AND TREATING COW KETOSIS
00: -
A licking brick for preventing and treating ketosis in dairy cows relates to a licking brick for dairy cows. It solves the problems of short duration of efficacy, temporary solution, high recurrence rate and frequency, and poor palatability of the existing drugs for treating cow ketosis, and provides a licking brick for preventing and treating cow ketosis. The licking brick for controlling ketosis in dairy cows mainly consists of 5-20 g butafosfan, 5-20 g conjugated linoleic acid, 150-250 g xylitol, 200-300 g propylene glycol, 4-5 g niacinamide, 25-35 g nicotinic acid, 25-35 g lysine, 40-60 g methionine and 700-1,000g molasses. The invention makes the dairy cow ketosis treatment ingredients into licking bricks, and has the advantages of strong palatability, simple administration mode, automatic licking by dairy cows, labor saving and the like.

21: 2021/10769. 22: 2021-12-22. 43: 2022-02-17
51: A61M
71: Jiangxi Shengzhuo Technology Co., Ltd
72: Huang Zhengying
54: PIEZOELECTRIC-DRIVEN LIQUID MEDICINE SYRINGE AND CONTROL METHOD THEREOF
00: -
The invention relates to a piezoelectric-driven liquid medicine syringe and a control method thereof, belonging to the field of medical instruments. A lower cover, a base, an upper cover and a syringe are sequentially connected from left to right; the inner surface of the base is provided with driving teeth; one end of the elastic substrate is connected with a drive shaft, and the piezoelectric actuators are in a cantilever beam posture; the clamping pieces are clamped in the concave points; the piezoelectric actuators form a group A at the lower part of the drive shaft; the piezoelectric actuators form a group B at the upper part of the drive shaft; the piezoelectric actuators in group A and group B are alternately driven to obtain quantitative output of liquid medicine. The piezoelectric-driven liquid medicine syringe provided by the invention has the characteristics and advantages of simple structure, low power consumption, convenient control, good stability and repeated use.

21: 2021/10770. 22: 2021-12-22. 43: 2022-02-17
51: C02F; G05B; G06Q
71: North China University of Water Resources and Electric Power, Henan Chaotuo New Energy Technology Co., Ltd., Henan Shuigu Innovation Technology Research Institute Co., Ltd.
72: WU, Lile, NIE, Haoyu, LI, Feng, ZHU, Shasha, BAI, Lei, REN, Yan, WEI, Daohong, LI, Xue, WANG, Saishuang
54: ENERGY MANAGEMENT METHOD OF MULTI ENERGY COMPLEMENTARY SYSTEM BASED ON CONTROLLABLE LOAD
00: -
The present disclosure discloses an energy management method of multi energy complementary system based on controllable load, the multi energy complementary system based on controllable load is mainly composed of four parts: a wind power generation part, a photovoltaic power generation part, a pumped storage power station and a seawater desalination system. The energy management method of the present disclosure determines the residual power based on the conventional load, the load of the seawater desalination unit, the water demand, the renewable energy output and other factors, judges whether the pumped storage unit meets the operating conditions according to the residual power, and further determines the operating conditions of the pumped

storage unit if the pumped storage unit meets the operating conditions.

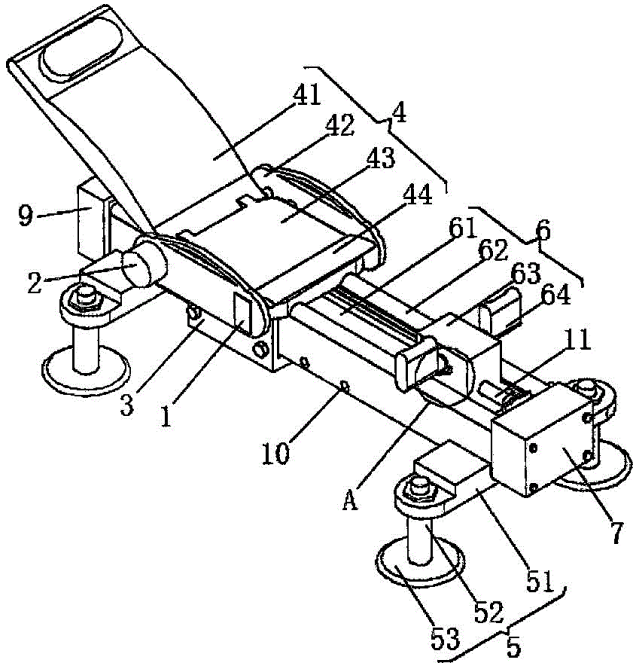


21: 2021/10771. 22: 2021-12-22. 43: 2022-02-17
51: A61H
71: The affiliated hospital of Qingdao university
72: Li Haiyan, Li Yanjiang, Kuang Guofang, Su Qingqing, Wang Lei

54: NON-TRAUMATIC KNEE JOINT STIFFNESS FUNCTION RECOVERY DEVICE

00: -

The invention discloses a non-traumatic knee joint stiffness function recovery device, which comprises a seat, a support unit and a knee joint recovery unit. Supporting unit: there are two groups of supporting units, and the knee joint recovery unit is fixed on the supporting unit by bolts, and the knee joint recovery unit comprises an electric telescopic rod, a guide rail, a movable block and a foot pedal; the guide rail is fixed on the support unit, one end of the guide rail is fixedly connected with a rear fixed seat, and the other end of the guide rail is connected with a front fixed seat through bolts; the fixed end of the electric telescopic rod is installed on the rear fixed seat, and the telescopic end of the electric telescopic rod is connected with the movable block. The invention provides a non-traumatic knee joint stiffness functional recovery device, which has an assembled structure, is simple and convenient to install and disassemble, is cheap, is suitable for household use, does not need the guidance of a doctor, and has the functions of knee joint recovery and knee joint strengthening training.



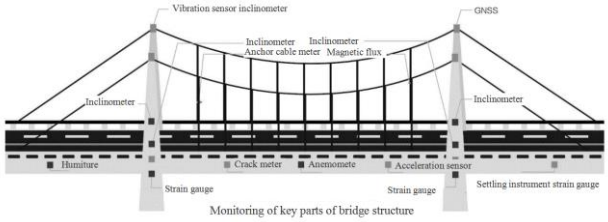
21: 2021/10772. 22: 2021-12-22. 43: 2022-02-17
51: G08C
71: Henan University of Urban Construction
72: Xia Yingzhi, Hu Guoping, Lyu Dawei, Jia Yaofei, Liu Jiawei, Wang Qingguo, Li Ruiduo, Li Hui

54: MONITORING DEVICE FOR BRIDGE CONSTRUCTION DEFORMATION

00: -

The invention discloses a monitoring device for bridge construction deformation, which effectively solves the problem that the signal received by the general monitoring room is interfered when frequency modulation processing is not set in the prior art, so that the accuracy of the signal is affected. The monitoring device for bridge construction deformation comprises a signal acquisition circuit, a signal transmission module and the general monitoring room, wherein a signal receiving circuit and a signal calibration circuit are also set between the signal transmission module and the general monitoring room. The signal receiving circuit receives the received signal and then transmits it to the signal calibration circuit, which transmits the signal to the general monitoring

room after passing through the resonator and calibrator, thus avoiding the interference phenomenon of the signal received by the general monitoring room.

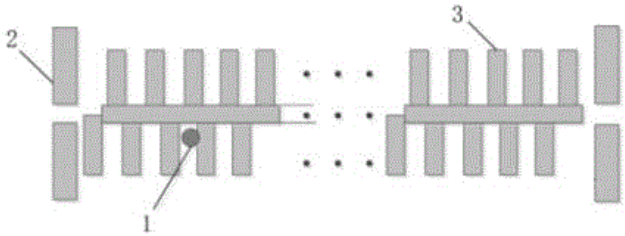


21: 2021/10773. 22: 2021-12-22. 43: 2022-02-17
51: H04W
71: Hunan University
72: Li Gaosheng, Xiao Pei, Li Hao, Li Jinxin, Zhang Chao, Yu Jie

54: HANDBAG ZIPPER ANTENNA FOR INTERNET OF THINGS

00: -

The invention discloses a handbag zipper antenna for Internet of Things, which comprises a handbag, a zipper and a feeding device; the zipper is arranged at the opening of the handbag, and the zipper comprises termination pieces at two ends, a plurality of zipper teeth in the middle and a handle; the feeding device is arranged under the termination piece to contact with the termination piece, or arranged under or on the side of the fastener element to contact with the fastener element; the metal zipper on the handbag is taken as the radiator. The invention has the advantages of low cost, no need for extra installation space, firm structure and no need to worry about falling off, and the radiation direction characteristic and gain with certain flexibility can be obtained, and the practicability is wide.



21: 2021/10774. 22: 2021-12-22. 43: 2022-02-17
51: C08F
71: Zhejiang Ocean University
72: Xu Lin, Xu Mingbiao, Xu Li, Wang Lang

54: SPHERICAL POLYMER TREATING AGENT FOR HIGH-TEMPERATURE RESISTANT DRILLING FLUID AND PREPARATION METHOD THEREOF

00: -

This invention provides spherical polymer treating agent for high-temperature resistant drilling fluid that comprises the following materials: 40-56 parts of oil phase, 40-56 parts of water phase, 2-5 parts of initiator, 2-5 parts of crosslinking agent. The spherical polymer treating agent for drilling fluid provided by the invention has a three-dimensional spherical appearance and a particle size distribution of 100-500nm. From the experimental results of embodiment 1-3, it can be seen that the spherical polymer treating agent for drilling fluid obtained by the invention has only a slight decrease in viscosity and increase in fluid loss after high-temperature aging in bentonite slurry, while common polyacrylamide and xanthan gum have no viscosity and no fluid loss reduction effect after high-temperature aging. The spherical polymer treating agent for drilling fluid provided by the invention can obviously keep the viscosity of drilling fluid within the normal range and the fluid loss is low when added into drilling fluid; However, common polyacrylamide and xanthan gum have no viscosity after aging at high temperature, and the filtrate loss is very large.

21: 2021/10775. 22: 2021-12-22. 43: 2022-02-17
51: C08G
71: Institute of Applied Chemistry, Jiangxi Academy of Science
72: Wang Ding

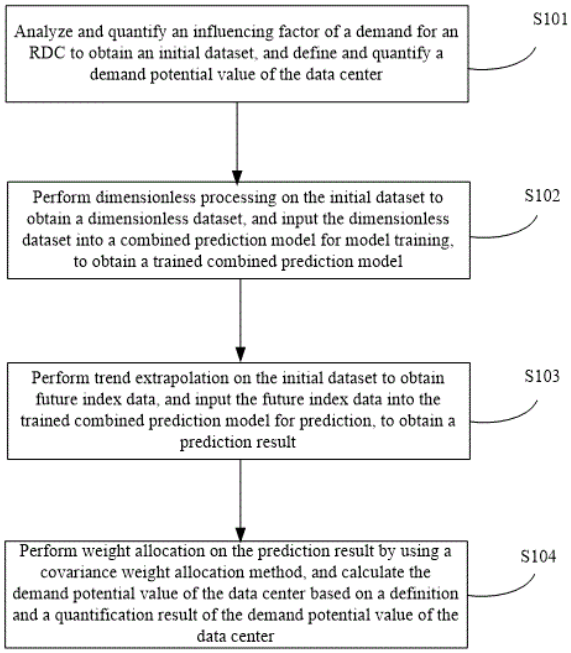
54: PREPARATION METHOD OF HYDROXYL-CONTAINING PHOSPHAZENE RESIN

00: -

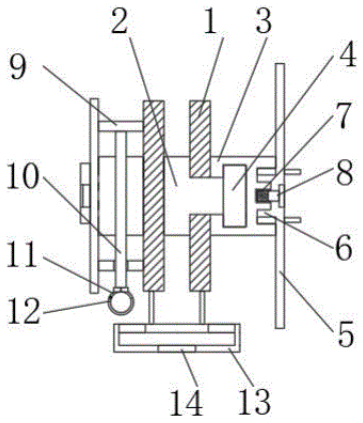
This invention provides preparation method of hydroxyl-containing phosphazene resin, belonging to a new phosphazene compound and its preparation method of the field of chemical industry and polymer materials. The compound reacts with hydroxylamine hydrochloride, phosphorus trichloride and chlorine gas to generate hydroxyl-containing phosphazene chloride trimer, which is then condensed with hydroquinone. The hydroxyl-containing phosphazene resin prepared by the invention can self-cure with the increase of temperature, which greatly reduces the curing difficulty and cost of common phosphazene resins and provides great

convenience for the application of the resin in the fields of coatings and the like.

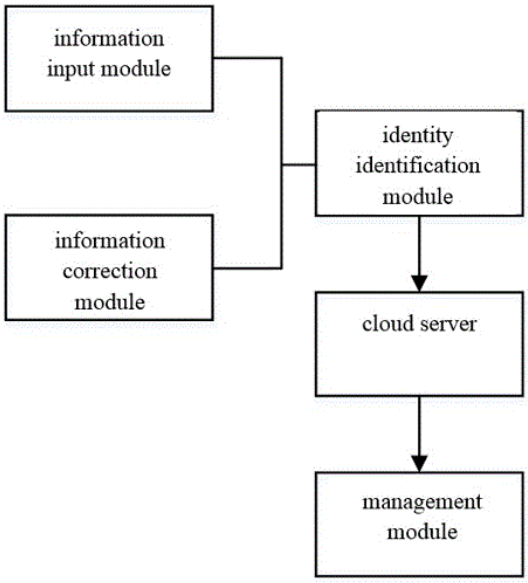
21: 2021/10776. 22: 2021-12-22. 43: 2022-02-16
51: G06N; G06Q
71: State Grid Energy Research Institute Co., Ltd., Tianjin University
72: TANG, Wei, ZHENG, Haifeng, WU, Peng, ZHENG, Zhihao, CHE, Yanbo, ZHANG, Yu, JI, Guoqiang, TAN, Qingkun, HUO, Molin, ZHAO, Shidong, HU, Qinxiao
54: COMBINED PREDICTION METHOD AND APPARATUS FOR DEMAND POTENTIAL OF REGIONAL DATA CENTER (RDC)
00: -
The present disclosure provides a neural network model–based combined prediction method and apparatus for a demand potential of a regional data center (RDC). The method includes: analyzing and quantifying an influencing factor of a demand for an RDC to obtain an initial dataset, and defining and quantifying a demand potential value of the data center; performing dimensionless processing on the initial dataset to obtain a dimensionless dataset, and inputting the dimensionless dataset into a combined prediction model for model training; performing trend extrapolation on the initial dataset to obtain future index data, and inputting the future index data into a trained combined prediction model for prediction; and performing weight allocation on a prediction result by using a covariance weight allocation method, to obtain the demand potential value of the data center. The present disclosure inputs the future index data of the influencing factor into the combined prediction model for prediction, thereby improving the prediction accuracy of the demand potential.



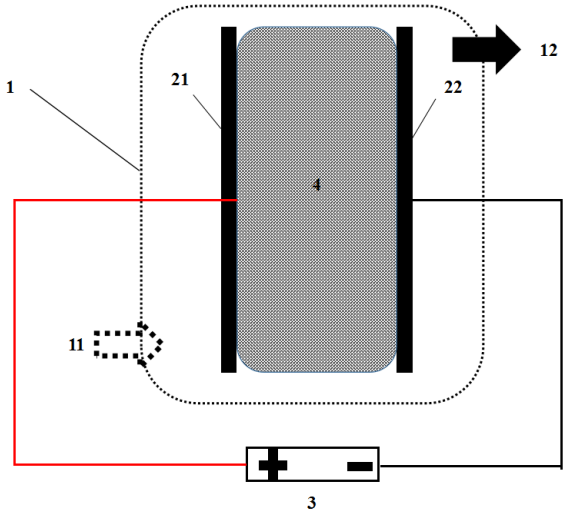
21: 2021/10777. 22: 2021-12-22. 43: 2022-02-16
51: G01N
71: Shandong Provincial Lunan Geology and Exploration Institute (Shandong Provincial Bureau of Geology and Mineral Resources No.2 Geological Brigade), CGC Geological and Mineral Construction Co., Ltd, SHANDONG PROVINCIAL GEO-MINERAL ENGINEERING CO., LTD.
72: LIU, Hong, YU, Sang, LU, Xiaowei, CHEN, Hao, LIANG, Wenji
54: LAYERED WATER PUMPING DEVICE FOR HYDROLOGICAL-ENGINEERING-ENVIRONMENTAL GEOLOGICAL DRILLING
00: -
The present disclosure belongs to the technical field of geological layered water pumping, and in particular, relates to a layered water pumping device for hydrological-engineering-environmental geological drilling. The layered water pumping device comprises a supporting frame, a connecting shaft is provided in the middle of the top of the supporting frame, a winding shaft is provided on the side of the position, close to the connecting shaft, of the supporting frame, and a rotating shaft with one end connected with the connecting shaft is provided in the winding shaft; a side baffle with the circular outer contour is provided at the end, away from the supporting frame, of the winding shaft, and a clamping block is fixed to the side, close to the winding shaft, of the side baffle.



21: 2021/10779. 22: 2021-12-22. 43: 2022-02-16
51: G09B
71: Baicheng Normal University
72: Sun Nannan, Li Wenwen, Liu Yang
54: AN INTERACTIVE LANGUAGE EDUCATION SYSTEM FOR INTERNATIONAL STUDENTS
00: -
The invention relates to an interactive language education system for international students, which comprises: an identity identification module for identifying the identity of students or teachers and verifying them; cloud server: used to translate, send and receive information; management module: used for account management, message transmission and learning evaluation; the identity identification module and the management module are respectively connected with the cloud server. According to the invention, learning materials are shared through the management module, which is convenient for students to guide their learning according to the materials; through the online guidance module, teachers can remotely guide, which is convenient for teachers to calibrate intonation in real time, so as to build a comprehensive real-time teaching guidance system, which is convenient for improving learning efficiency; meanwhile, the microphone is used to identify real-time audio and transmit it to the comparison unit, which compares the audio with standard audio and displays the comparison score, which is convenient for building a human-computer interaction interface, optimizing learning effect and improving learning interest.



21: 2021/10781. 22: 2021-12-22. 43: 2022-02-16
51: C23C; C30B
71: QINGDAO UNIVERSITY OF SCIENCE AND TECHNOLOGY
72: WANG, Lei, LI, Bin, MA, Yiru, ZHANG, Xinghao, XU, Guangrui, LIN, Haifeng
54: METHOD FOR PREPARING MONATOMIC SILICON BY UTILIZING JOULE HEAT
00: -
The present disclosure provides a method for preparing monatomic silicon by utilizing joule heat, and belongs to the technical field of preparation of lithium ion battery cathode materials. According to the method disclosed by the present disclosure, the monatomic silicon is prepared by utilizing the joule heat, the joule heat has the advantages of rapid heating and rapid heating, and the heating uniformity can be guaranteed, so that the monatomic silicon can be rapidly prepared. After the first crude silicon is obtained, the first crude silicon is heated to 1100-1300℃ and subjected to second heat preservation, decomposition of a byproduct magnesium silicide can be realized, and primary purification of the crude silicon is realized; and then the first crude silicon is heated to 1500-2000℃ for rapid evaporation of magnesium, and secondary purification is realized.

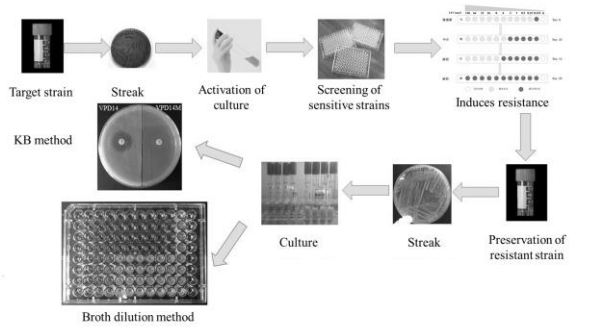


21: 2021/10782. 22: 2021-12-22. 43: 2022-02-16
51: C12N
71: SHANGHAI OCEAN UNIVERSITY
72: ZHAO, Yong, LIU, Jing, XU, Huan, ZHANG, Zhaohuan, HUANG, Zhenhua, WU, Qian, TAO, Qian

54: METHOD FOR INDUCING MICROEVOLUTION OF DRUG RESISTANCE IN GRAM-NEGATIVE FOOD-BORNE BACTERIAL PATHOGENS

00: -

The invention discloses a method for inducing the microevolution of drug resistance in gram-negative food-borne bacterial pathogens. The method includes the following steps: 1) screening of sensitive strains by a broth dilution method; 2) preliminary induction with an antibiotic at a sublethal concentration; 3) continuous induction with the antibiotic at the sublethal concentration; 4) preservation of drug-resistant strains; and 5) verification of the acquired drug resistance of mutant strains by two different susceptibility testing methods. With the method for inducing the microevolution of drug resistance in gram-negative food-borne bacterial pathogens as constructed according to the invention, drug-resistant strains with stable genetic characteristics can be acquired rapidly; the vacancy in the study of the method for inducing antibiotic resistance in the food-borne bacterial pathogens can be filled in; and a scientific and reliable tool is provided for studying the variation and mechanism of drug resistance in the food-borne bacterial pathogens.

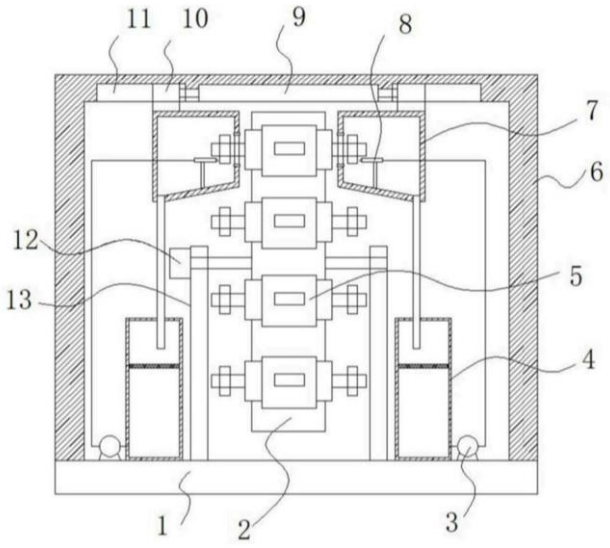


21: 2021/10783. 22: 2021-12-22. 43: 2022-02-16
51: B67D
71: ZONQ MOTOR CO., LTD.
72: LIN, Bo, YE, Lingrong, SONG, Zexin, CHEN, Husheng, ZHANG, Jiachun

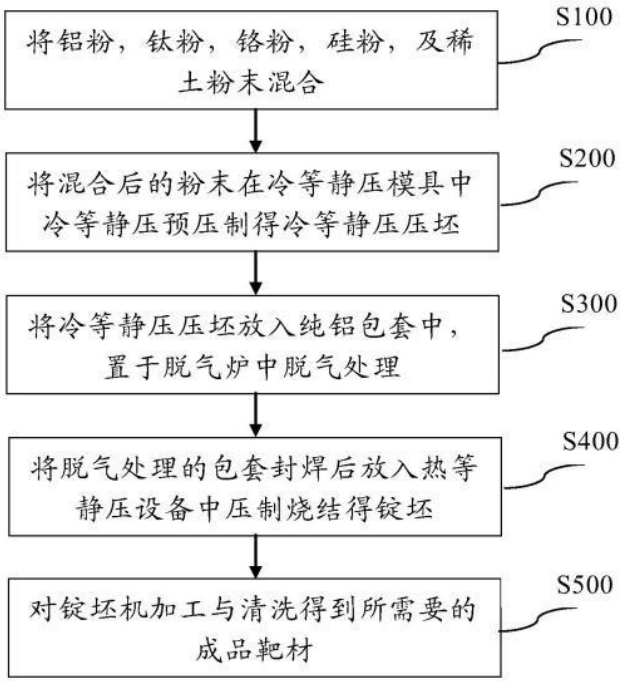
54: FULL-AUTOMATIC OILING DEVICE FOR ELECTRIC MOTOR

00: -

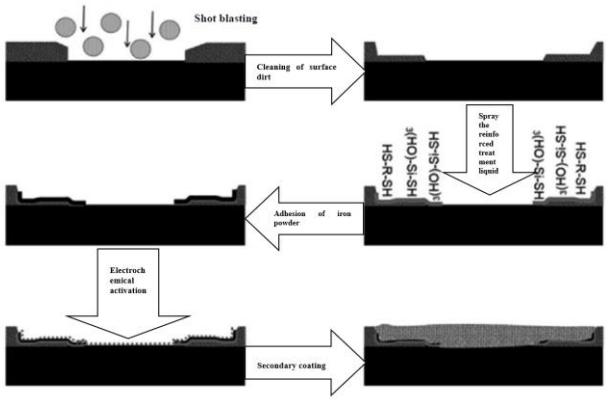
e present invention belongs to the field of electric motor bearings, and more particularly to a full-automatic oiling device for an electric motor. The solution is proposed as follows: the full-automatic oiling device comprises a base, wherein a support frame is mounted at a middle position of a top end of the base, a second electric motor is mounted on a side wall of the support frame, an output shaft of the second electric motor is connected to a rotating disc rotatably connected inside the support frame, a plurality of fixing recesses annularly arranged in an array are formed in an outer side wall of the rotating disc, and the fixing recess is provided with a locking mechanism; and the top end of the base is provided with a fixed frame located outside the rotating disc, a horizontally disposed first double-headed cylinder is mounted on an inner wall of a top end of the fixed frame, two output shafts of the first double-headed cylinder are both connected to first sliding blocks, working cartridges located on two sides of the rotating disc are mounted at bottom ends of the first sliding blocks, and communication holes are formed in side walls of the working cartridges close to the rotating disc. The device can quickly realize oiling of bearings on electric motor rotors, and is good in oiling effect and high in working efficiency.



21: 2021/10784. 22: 2021-12-22. 43: 2022-02-16
51: C22C
71: ADVANCED TARGETS MATERIALS CO., LTD
72: JIANG, Hai, TANG, Peixin
54: ALLOY TARGET MATERIAL CONTAINING RARE EARTH ELEMENTS AND PREPARATION METHOD THEREOF
00: -
The invention provides an alloy target material containing rare earth elements, comprising the following components: 30-80 at% of aluminum, 1-30% of titanium,1-30% of chromium, 1-20 at% of silicon and 0.1-10 at% of rare earth. The invention provides a preparation method of the alloy target material containing rare earth elements, comprising the following steps: evenly mixing chromium powder, aluminum powder, titanium powder and rare earth powder for cold isostatic prepressing and molding, then encapsulating, degasifying and carrying out hot isostatic pressing and sintering, and finally machining the obtained ingot blank to prepare an alloy target material needed. The alloy target material containing rare earth elements in the invention has high compactness, fine crystalline grain and uniform structure, without pores, loosening phenomenon or segregation, and is applicable for sputtering hard coatings needed by various tools and molds.

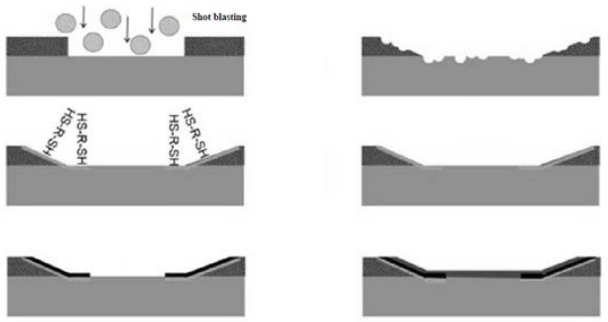


21: 2021/10785. 22: 2021-12-22. 43: 2022-02-16
51: B05D
71: SHANDONG LUQIAO GROUP CO., LTD.
72: LIU, Ying, XING, Xirui, WANG, Guoguang, QU, Zhenhua, MA, Lin, XING, Gaoqiang, HAN, Junxia, TIAN, Dong
33: CN 31: 202111390701.7 32: 2021-11-23
54: SECONDARY COATING METHOD FOR STEEL PLATE WITH COATING DEFECT
00: -
Provided is a secondary coating method for a steel plate with a coating defect, which can effectively improve the adhesion and anti-corrosion performance of a secondarily-coated paint film. The method includes: (1) pretreating an edge of an original coating layer; (2) preparing reinforced treatment liquid from the following raw materials: a bi-sulfydryl compound, sulfosalicylic acid, 2,2-bipyridine, carboxymethyl chitosan, ethanol, γ-thiopropyl triethoxy silane, and deionized water; (3) performing reinforcing treatment: spraying the reinforced treatment liquid in step (2) onto the edge treated in step (1) and a surface of a steel plate at a joint; (4) performing electrochemical activation by taking the steel plate to be subjected to secondary coating and the edge treated in step (3) as one pole of an electrolytic cell, and taking an inert electrode as the other pole; (5) spraying an epoxy zinc-rich primer, an intermediate coat, and a finishing coat onto the activated parts to complete the secondary coating.



21: 2021/10786. 22: 2021-12-22. 43: 2022-02-16
51: B05D
71: SHANDONG LUQIAO GROUP CO., LTD.
72: LIU, Ying, XING, Xirui, TIAN, Zhiguo, MA, Zhuang, QU, Zhenhua, MA, Lin, TIAN, Dong, HAN, Junxia
33: CN 31: 202111374055.5 32: 2021-11-19
54: REPAIR AND REGENERATION PRETREATMENT METHOD FOR CORRODED AREA OF STEEL STRUCTURE BRIDGE
00: -

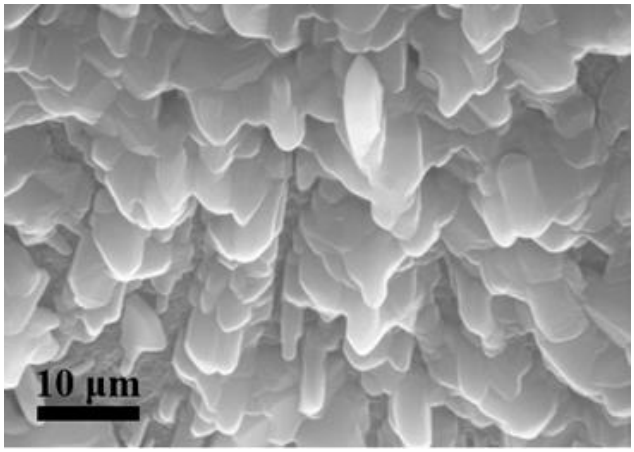
Provided is a method for repairing and regenerating a paint film corroded area of a steel structure bridge. The method includes the following steps: (1) clearing away a failed coating layer and corrosion products; (2) performing integrated treatment on a zinc rich primer section-steel plate combined part; (3) performing conductive treatment; and (4) plating iron by brush. The repair and regeneration pretreatment method for the corroded area of the steel structure bridge can improve the compatibility of new and old paint films, solve the problem of relatively poor anti-corrosion effect of the repaired coating layer caused by poor combination of the new/old paint film and poor combination of the primer and the corroded area after the failed coating layer of the current steel structure bridge is repaired, and can lay a foundation for the subsequent monitoring of the repaired coating layer. Provided is a method for repairing and regenerating a paint film corroded area of a steel structure bridge. The method includes the following steps: (1) clearing away a failed coating layer and corrosion products; (2) performing integrated treatment on a zinc rich primer section-steel plate combined part; (3) performing conductive treatment; and (4) plating iron by brush. The repair and regeneration pretreatment method for the corroded area of the steel structure bridge can improve the compatibility of new and old paint films, solve the problem of relatively poor anti-corrosion effect of the repaired coating layer caused by poor combination of the new/old paint film and poor combination of the primer and the corroded area after the failed coating layer of the current steel structure bridge is repaired, and can lay a foundation for the subsequent monitoring of the repaired coating layer.



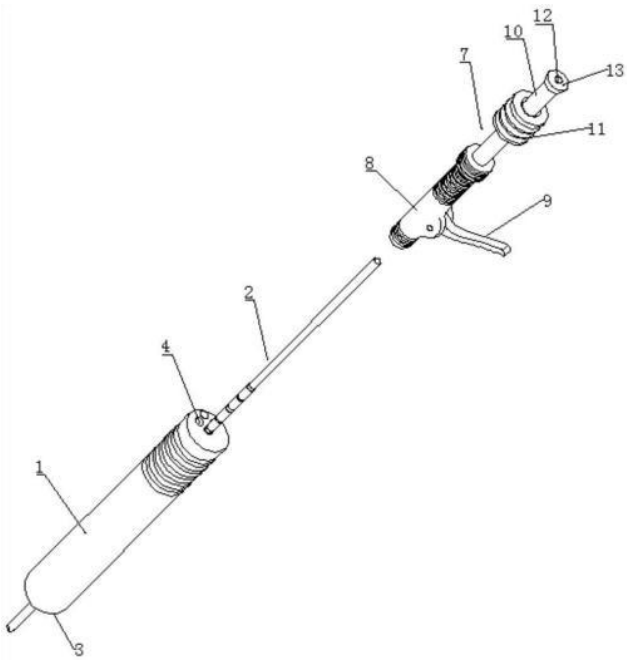
21: 2021/10787. 22: 2021-12-22. 43: 2022-02-16
51: B05D
71: SHANDONG LUQIAO GROUP CO., LTD.
72: LIU, Ying, XING, Xirui, QU, Zhenhua, MA, Lin, QI, Meng, HAN, Junxia, TIAN, Dong
33: CN 31: 202111373897.9 32: 2021-11-19
54: COATING PRETREATMENT METHOD FOR STEEL STRUCTURE BRIDGE
00: -

sed is a coating pretreatment method for a steel plate of a steel structure bridge, which can effectively improve the adhesion and anti-corrosion performance of a paint film on the surface of the steel plate. The method includes: (1) preparing an activation solution; (2) preparing a composite iron plating solution; (3) performing shot blasting treatment; (4) performing electrochemical activation; and (5) performing composite iron electroplating. The adverse effect of corrosion products of the steel plate on the adhesion of a primer can be reduced; the spreadability and the adhesion of the primer can be significantly improved; the anti-corrosion performance and the life cycle of the steel structure bridge can be increased; the problems that an anti-corrosion coating layer of the current steel structure bridge is easy to peel, has low anti-corrosion performance, and the like can be solved; steel bridge maintenance personnel can be prompted

when the primer loses the electrochemical protection effect.



21: 2021/10788. 22: 2021-12-22. 43: 2022-02-16
51: A61B
71: ZHENG, Yusong
72: ZHENG, Yusong, LIN, Jinding, TIAN, Kangyong
54: SPINE MINIMALLY INVASIVE SINGLE-QUADRANT ECCENTRIC MULTIPOINT NAIL ENTRY POSITIONING AND GUIDING DEVICE
00: -
he present disclosure relates to a spine minimally invasive single-quadrant eccentric multipoint nail entry positioning and guiding device. The device includes a positioning guiding body and a positioning guide needle, and one end of the positioning guiding body is provided with a conical radian. The positioning guiding body is provided with a plurality of first needle guiding perforations along a length direction, and one of the first needle guiding perforations is positioned along a central axis of the positioning guiding body, and axis of the other first needle guiding perforations is perpendicular to different positions in a radial direction of the positioning guiding body, when the positioning guiding body rotates on the basis of the first needle guiding perforation at its central axis, the other first needle guiding perforations respectively revolve around a circle of different trajectories.

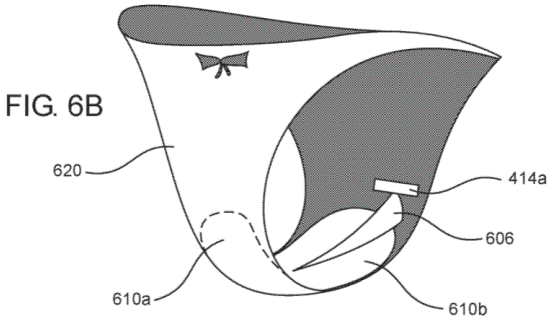


21: 2021/10789. 22: 2021-12-22. 43: 2022-02-16
51: A23F
71: GUIZHOU TEA RESEARCH INSTITUTE
72: SHEN, Qiang, ZHANG, Xiaoqin, YANG, Xiaowei, ZHENG, Wenjia
54: PROCESSING TECHNOLOGY FOR IMPROVING GABA CONTENT IN GREEN TEA AND PRODUCT THEREOF
00: -
The present disclosure discloses a processing technology for improving GABA content in green tea and a product thereof, wherein the processing technology comprises the steps of: performing anaerobic treatment on picked tea leaf raw materials for 2 hours; performing aerobic treatment on the tea leaf raw materials that are subjected to anaerobic treatment for 2 hours; withering the tea leaf raw materials that are subjected to aerobic treatment, and alternately performing anaerobic treatment and aerobic treatment on the withered tea leaf raw materials; and then performing enzyme deactivation, rolling, drying or stir-frying on the treated tea leaf raw materials to obtain a finished product.

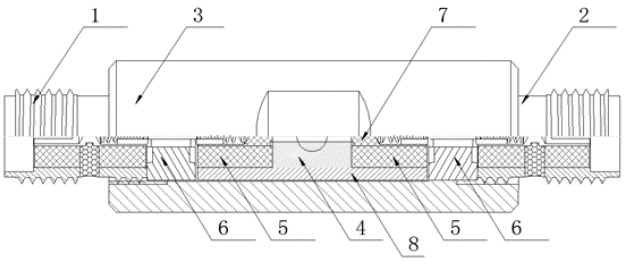
21: 2021/10790. 22: 2021-12-22. 43: 2022-02-16
51: A23F
71: GUIZHOU TEA RESEARCH INSTITUTE
72: SHEN, Qiang, ZHANG, Xiaoqin, YANG, Xiaowei, ZHENG, Wenjia
54: METHOD FOR PROCESSING HIGH-GABA FAMOUS GREEN TEA AND PRODUCT THEREOF

00: -
The present disclosure discloses a method for processing high-GABA famous green tea and a product thereof. The present disclosure improves the method for processing the green tea, the γ-aminobutyric acid content of the product is increased, the “green odor” is eliminated, the completeness of tea leaf buds is ensured to be good, and the aroma and taste substances in the tea are fully converted, the beneficial components of the tea can be further developed, and the finished product obtained by combining the steps has better tea color, aroma and taste effects.

21: 2021/10796. 22: 2021-12-22. 43: 2022-02-10
51: A61F
71: VAN PRAAG, Sarit
72: VAN PRAAG, Sarit
33: US 31: 62/866,620 32: 2019-06-26
54: SANITARY PAD WITH FOLD OUT ABRASION PROTECTION
00: -
The current invention in some embodiments thereof relates to a sanitary pad which has a flat configuration for easy storage and transport and folds to form a 3D shape including a bulge for dividing between skin in a sensitive area. In some embodiments, in the bulge may be perpendicular to a flat portion of the pad. Optionally, the fin may have a triangular shape. For example, a menstrual pad may include an anterior flat area configured to he against the vagina and/or absorb menstrual fluids and a posterior bulge configured to fit into an intergluteal cleft. For example, the bulge may have the form of a triangular fin. Optionally, the pad is reformed from the flat configuration to its 3D configuration by folding a posterior portion of the pad.



21: 2021/10812. 22: 2021-12-22. 43: 2022-02-16
51: G02B
71: NANJING UNIVERSITY, NANJING HMC SYSTEM CO., LTD, ANHUI HERMERC MICROELECTRONIC CO., LTD
72: YU, Yang, LU, Ling, LIU, Yinyin, YU, Tongxin
33: CN 31: 201910680129.4 32: 2019-07-26
54: INFRARED FILTER
00: -
The present invention discloses an infrared filter, including an input end, a filter cavity, and an output end. The input end and the output end both use SMA connectors, and an inner conductor, a filtering assembly, and attenuators are provided in the filter cavity. The infrared filter uses a highly matched infrared wave-absorbing material having an appropriate dielectric constant as a main body of the filter, so that infrared waves mixed in a microwave communication transmission path can be effectively absorbed; and by using an attenuator adding technology, the infrared filter is excellent in port standing wave index in a microwave frequency band, and the infrared filter is easy to produce, assemble and debug, small in device size, stable in performance, and capable of well satisfying the requirements of existing related systems.



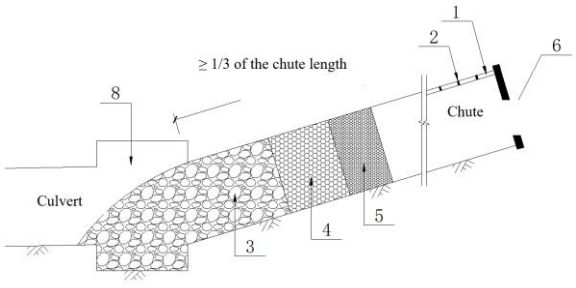
21: 2021/10814. 22: 2021-12-22. 43: 2022-02-16
51: E03F

71: SINOSTEEL MAANSHAN GENERAL INSTITUTE OF MINING RESEARCH CO., LTD, HUAWEI NATIONAL ENGINEERING RESEARCH CENTER OF HIGH EFFICIENT RECYCLE AND UTILIZATION FOR METALLIC MINERAL RESOURCES CO., LTD, ENGINEERING INVESTIGATION & DESIGN INSTITUTE OF SINOSTEEL MIMR CO., LTD
72: XU, Chuanhua, WANG, Bin, TANG, Kai, WU, Xiaogang, QIN, Ke, HOU, Yifeng, GUO, Guangtao, ZHAO, Jun, NI, Zhiwei, DAI, Yongxin, ZHOU, Yuxin, ZHAO, Mengsheng
33: CN 31: 202011245468.9 32: 2020-11-10

54: COMBINED BLOCKING AND DREDGING METHOD FOR DRAINAGE CHUTE AND DRAINAGE CULVERT OF TAILINGS POND

00: -

he present invention discloses a combined blocking and dredging method for a drainage chute and a drainage culvert of a tailings pond.The method is implemented by the following technical solutions: 1) blocking of drainage chute: backfilling the drainage chute with a block stone (3), a broken stone (4) and a pea stone (5) from bottom to top by means of a water inlet of the upstream drainage chute, and providing an integrated prefabricated top cover plate (6) at the water inlet of the drainage chute; 2) blocking of drainage culvert: providing an inverted body that has a length of not less than 5 m and is composed of a block stone, a broken stone and a pea stone from an outlet to the upstream of the drainage culvert, pre-embedding a specific quantity of PE seepage pipes in the drainage culvert to divert and drain water seepage in the drainage chute and the drainage culvert, and arranging a closed concrete retaining wall at an outlet of the drainage culvert. According to the present invention, the drainage chute and the drainage culvert are blocked according to a blocking and dredging principle. The method is simple, and has a small engineering quantity and low engineering cost. Therefore, potential safety hazards and risks caused by a blocking failure of a flood discharge system is effectively eliminated or reduced.



21: 2021/10815. 22: 2021-12-22. 43: 2022-02-16
51: C09K
71: SINOSTEEL MAANSHAN GENERAL INSTITUTE OF MINING RESEARCH CO., LTD, SINOSTEEL MIMR NEW MATERIAL TECHNOLOGY CO., LTD, HUAWEI NATIONAL ENGINEERING RESEARCH CENTER OF HIGH EFFICIENT RECYCLE AND UTILIZATION FOR METALLIC MINERAL RESOURCES CO., LTD
72: XU, Chuanhua, LIU, Yahui, LIU, Lei, SUN, Guoquan, PENG, Lifen, SUN, Binquan, GAO, Chunqing, SHEN, Jinjie
33: CN 31: 202011245464.0 32: 2020-11-10

54: METHOD FOR PREPARING MICRON-SIZED SPHERICAL WEIGHTING MATERIAL BY TAKING IRON ORE CONCENTRATE POWDER AS RAW MATERIAL

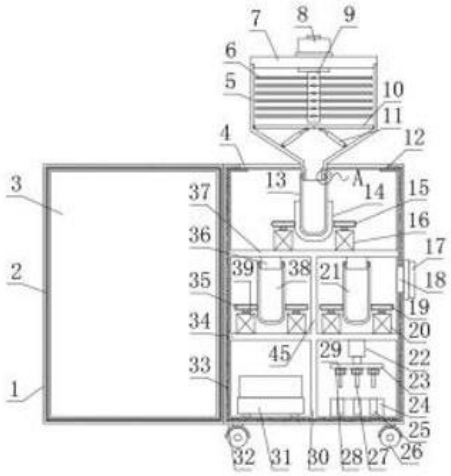
00: -

he present invention discloses a method for preparing a micron-sized spherical weighting material by taking an iron ore concentrate powder as a raw material. The method includes the following steps: selecting an iron ore concentrate powder with a density greater than or equal to 4.5 g/cm3 as a raw material, grinding-grading-separating the raw material to obtain a high grade iron ore concentrate powder with a density greater than or equal to 4.8 g/cm3; carrying out crushing-airflow classification on the high grade iron ore concentrate powder to obtain micro-powder particles with a particle size distribution D90 of 2–20 μm; applying electricity to the micro-powder particles, conveying the micro-powder particles into a high-temperature spheroidizing furnace through a conveying system for spheroidization, where the particles are molten when heated to 1400–1800°C by a heating system, and finally collecting a micron-sized spherical weighting material through a micro-powder collector. The prepared spherical weighting material has a density of 4.8–5.6 g/cm3, a particle size distribution D90 of 2–20 μm, and a sphericity ratio greater than

96%, and can be widely applied to high density and ultra-high density drilling fluids and liquid cement during oil and gas field exploitation.

21: 2021/10816. 22: 2021-12-22. 43: 2022-02-16
51: C09K
71: SINOSTEEL MAANSHAN GENERAL INSTITUTE OF MINING RESEARCH CO., LTD, SINOSTEEL MIMR NEW MATERIAL TECHNOLOGY CO., LTD, SINOSTEEL NANJING HUAXIN TECHNOLOGY CO., LTD
72: XU, Chuanhua, LIU, Lei, PENG, Lifen, SUN, Guoquan, LIU, Yahui, WANG, Guanghui
33: CN 31: 202011247134.5 32: 2020-11-10
54: METHOD FOR PREPARING MICRON-SIZED SPHERICAL WEIGHTING MATERIAL
00: -
he present invention discloses a method for preparing a micron-sized spherical weighting material. The preparation method includes the following steps: selecting a high-purity iron ore concentrate powder with a density greater than or equal to 4.8 g/cm3 as a raw material, and carrying out crushing-airflow classification to obtain micro-powder particles with a particle size distribution D90 of 2–20 μm; applying electricity to the prepared micro-powder particles to enable surfaces of the micro-powder particles to carry charges with the same electrical property; conveying micro-powder particles with the same electrical property on the surfaces into a high-temperature spheroidizing furnace through a micro-powder conveying system for spheroidization at 1400–1800°C, then conveying the micro-powder particles to a cooling device through airflow to complete surface homogenization of the spherical micro-powder particles, and finally collecting the micron-sized spherical weighting material through a micro-powder collector. The preparation method has the advantages of easily available raw materials, low price and low production cost; and the prepared spherical weighting material has a density as high as 4.8–5.6 g/cm3, a particle size distribution D90 of 2–40 μm, and a sphericity ratio greater than or equal to 96%. The prepared high density micron-sized spherical weighting material can be widely applied to drilling fluids and liquid cement.

21: 2021/10822. 22: 2021-12-23. 43: 2022-03-17
51: G01N
71: WEST ANHUI UNIVERSITY
72: SUN, Chuanbo, ZHAO, Qun
54: AUTOMATIC DETECTION ALL-IN-ONE MACHINE FOR TULIPA EDULIS AND DETECTION METHOD
00: -
Disclosed is an automatic detection all-in-one machine for Tulipa edulis, which comprises a case having a hollow cuboid structure with openings in the front surface and the top, a cover plate is detachably connected in the top opening of the case; a smashing jar having a detachable cover is fixed on the upper surface of the cover plate; a motor is fixed at the centre of the upper surface of the jar cover, a vertical shaft is rotatably connected with the centre of the lower surface of the jar cover. When the machine is used for detecting the medicinal material Tulipa edulis, the Tulipa edulis can be detected directly by the machine, so that inconvenience and cumbersome operation caused by the detection of an inspector for the medicinal material Tulipa edulis through multiple instruments and multiple steps can be avoided.

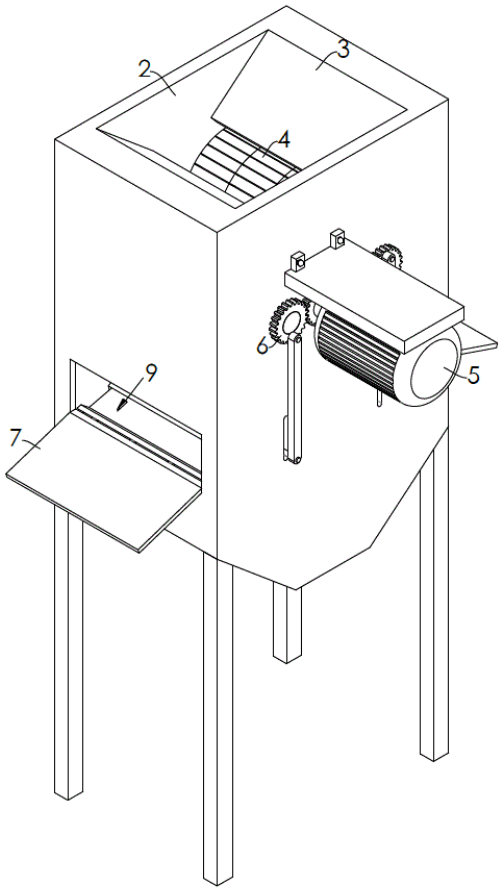


21: 2021/10824. 22: 2021-12-23. 43: 2022-02-15
51: A01G
71: GUANGXI ZHUANG AUTONOMOUS REGION STATE-OWNED WEIDULINCHANG, GUANGXI ZHUANG AUTONOMOUS REGION FORESTRY RESEARCH INSTITUTE
72: YANG, Jiaqiang, CHEN, Yunfeng, ZHAN, Nianyong, RONG, Changyou, LIU, Decheng, WEI, Fuqing, JIANG, Hua, LI, Fushen, WANG, Jinsong, SHEN, Wenhui, CHEN, Zhenke, TANG, Chunhong, PENG, Yuhua, LI, Yuanqiang

54: A NEW METHOD FOR CULTIVATING CHINESE TOON SPROUTS
00: -
The invention discloses a new method for cultivating Chinese toon sprouts, including S1 seed treatment; S2 seedling culture; S3 greenhouse construction; S4 soil preparation; S5 transplanting; S6 growth management; S7 harvesting. By the new method of the invention, Chinese toon sprouts will be cultivated in greenhouses, to effectively prolong the harvest time and meet people's needs. The seeds are pretreated in new ways to improve the germination rate, and the application of organic fertilizer enhances the yield and quality of Chinese toon sprouts.

21: 2021/10825. 22: 2021-12-23. 43: 2022-02-10
51: B66B; H04L; G06Q
71: GRAPHIC ERA (DEEMED TO BE UNIVERSITY)
72: HIMANSHU RAI GOYAL, KAMAL KUMAR GHANSHALA, SACHIN SHARMA
33: IN 31: 202111007972 32: 2021-02-25
54: SYSTEM AND METHOD OF FLOOD MANAGEMENT
00: -
The invention discloses a system 100 for managing flood risk, post flood management, and performing recommendation-based rescue operation, said system100 comprising: a plurality of smart IOT devices 101; a communication module 102; a Flash Flood Management Model (FDMM) 103; an Artificial Neural Network (ANN) module 104; a Profile Collector Central Agent (PCCA) 105; a Profile Collector Local Agent (PCLA) 106; a Recommendation Based Rescue Operation (RBRO)Model 107; a processor 108; and a memory 109 communicatively coupled to the processor 108. The memory 109 stores processor instructions, which, on execution, causes the processor 108 to manage flood risk, post flood management, and perform recommendation-based rescue operation. The plurality of smart IOT devices 101 comprises at least one of mobile phones, sensors related to water flow and rainfall rate, smart watches, devices with social media connected, or the like.

21: 2021/10826. 22: 2021-12-23. 43: 2022-02-10
51: B07C
71: ANHUI UNIVERSITY OF SCIENCE AND TECHNOLOGY
72: WANG, Shuang, MA, Xin, GUO, Yongcun, LI, Deyong, WANG, Xi
54: ADJUSTMENT SCREENING TYPE UNDERGROUND COAL GANGUE SEPARATION DEVICE
00: -
The present disclosure herein relates to the technical field of coal gangue separation, in particular to, an adjustment screening type underground coal gangue separation device, including a cabinet, feeding baffles, pressure selecting devices, a drive motor, a transmission mechanism, gangue discharge sliding plates, a screen filtering mechanism and a coal outlet. The two feeding baffles are symmetrically welded to a top of the cabinet; the two groups of pressure selecting devices are symmetrically mounted below the feeding baffles; the pressure selecting devices are both rotatably connected to the inside of the cabinet; the transmission mechanism is connected to one end of the pressure selecting device; the transmission mechanism is located outside the cabinet, and the drive motor is connected to one side of the transmission mechanism; the drive motor is fixed to a side wall of the cabinet by a screw; and the screen filtering mechanism is mounted below the pressure selecting device. According to the present disclosure, a crushing pressure can be adjusted in time according to a hardness difference of gangue in raw coal, so that the separation device can be prevented from crushing the gangue due to excessive pressure, and coal and the gangue cannot be mixed together. The separation device is wide in application range and high in universality.

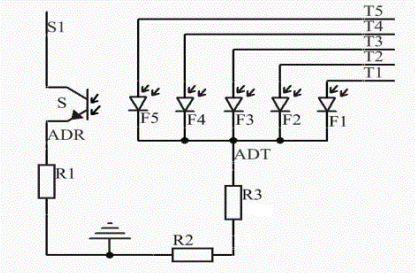


21: 2021/10827. 22: 2021-12-23. 43: 2022-02-10
51: G09F; H01L
71: SHENZHEN KILOTONE SCIENCE AND TECHNOLOGY CO., LTD.
72: HU, Ziqian, ZENG, Yan, YANG, Mingdong, CHEN, Zelong

54: ONE-RECEIVING FIVE-TRANSMITTING LIGHT GUIDE CIRCUIT AND USING METHOD THEREOF

00: -

The present disclosure relates to a one-receiving five-transmitting light guide circuit and a using method thereof, which comprises a transmitting component and a light guide receiving component; wherein the light guide receiving component comprises a photoelectric receiving element; the transmitting component comprises five transmitting elements; the input terminal of each transmitting element is connected with a micro-control unit, respectively, the micro-control unit is configured to provide a high level to each transmitting element; the output terminals of various transmitting elements are connected and grounded; the input terminal of the light guide receiving component is connected with the micro-control unit, and the output terminal of the light guide receiving component is grounded; the micro-control unit is configured to provide a high level to the light guide receiving component; the output terminal of the light guide receiving component is connected with the micro-control unit.

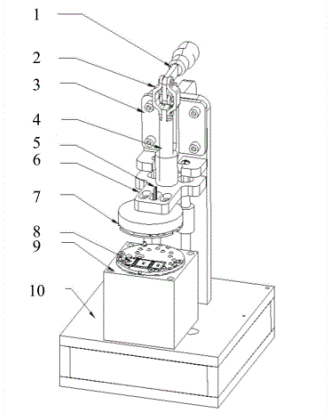


21: 2021/10828. 22: 2021-12-23. 43: 2022-02-15
51: G01R
71: SHENZHEN KILOTONE SCIENCE AND TECHNOLOGY CO., LTD.
72: HU, Ziqian, LAN, Chengmin, WANG, Yuanying, XIAO, Wenliang

54: LIGHT-GUIDE METERING DEVICE DETECTION APPARATUS AND METHOD

00: -

The present disclosure discloses a light-guide metering device detection apparatus and method. The light-guide metering device detection apparatus includes a light guide component and a controller. The controller is connected to a light-guide metering device. The controller is used for: sending a detection instruction to the light-guide metering device, so that the light-guide metering device emits light according to the detection instruction, where the light-guide metering device is in embedded fit with the light guide component before the light-guide metering device receives the detection instruction, so that the light beam emitted by the light-guide metering device can enter the light guide component; and outputting a detection state of the light-guide metering device according to a sampling result, where the detection state comprises qualified and unqualified, and the sampling result is obtained by performing, by the light-guide metering device, Analog-to-Digital sampling on the light beam returned through the light guide component.

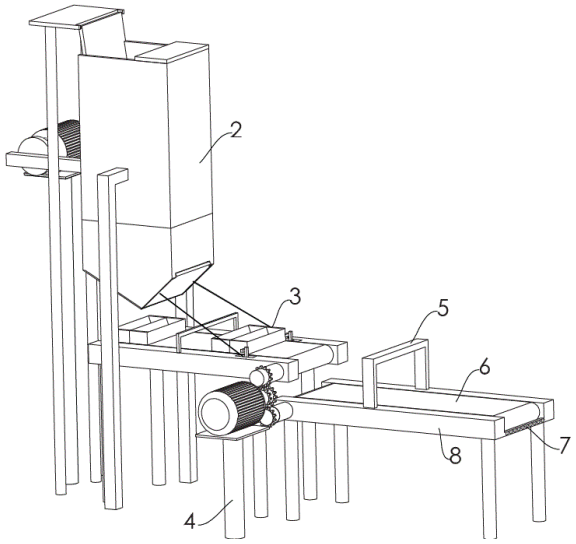


21: 2021/10829. 22: 2021-12-23. 43: 2022-02-15
51: B07C
71: ANHUI UNIVERSITY OF SCIENCE AND TECHNOLOGY
72: GUO, Yongcun, ZHOU, Junpeng, WANG, Shuang, HU, Kun, LI, Deyong

54: COAL GANGUE SEPARATION DEVICE BASED ON DUAL ENERGY X-RAY

00: -

The present disclosure relates to the technical field of coal gangue separation, in particular to a coal gangue separation device based on dual energy X-ray. The coal gangue separation device based on the dual energy X-ray includes an X-ray identification device, a first conveyor belt, a spraying and blowing mechanism and first supports; the first conveyor belt is rotatably mounted between the two first supports; the spraying and blowing mechanism is fixedly mounted at one ends of the two first supports; the X-ray identification device is fixedly mounted on one sides of the two first supports; a transmission mechanism is mounted on one sides of the two first supports; a discharging mechanism is mounted on one side of the transmission mechanism; and a crushing mechanism is mounted on an upper portion of the discharging mechanism. The present disclosure uses the crushing mechanism, coal blocks and gangue blocks after preliminary treatment enter a crushing bin shell through a feeding port, and a push plate moves forwards and backwards to extrude large coal blocks and large gangue blocks in the crushing bin shell so as to extrude the coal blocks and the gangue blocks to be substantially uniform in size, thereby reducing movement interference between adjacent coal blocks and gangue in a later spraying and blowing process, and improving a separation effect.



21: 2021/10830. 22: 2021-12-23. 43: 2022-02-15
51: C12N; C12R
71: Zhejiang University of Science and Technology
72: CAI, Chenggang, YAO, Feng, ZHAO, Miaomiao, CHANG, Guoli, ZHU, Ruiyu, CAI, Haiying

54: KITCHEN WASTE DEGRADATION AGENT AND PREPARATION METHOD THEREOF

00: -

The present disclosure discloses a kitchen waste degradation agent and a preparation method thereof, and belongs to the technical field of environmental protection. The kitchen waste degradation agent provided by the present disclosure contains Bacillus subtilis which has a good degradation effect on kitchen organic matters, the strain is currently preserved in China Center for Type Culture Collection on June 28th, 2017, and the preservation number is CCTCC M2017387. The kitchen waste organic matter degradation agent is simple in preparation method, good in degradation effect and large in application potential, and can solve the problems of environmental pollutants caused by waste kitchen waste and resource waste of nutritional organic matters.

21: 2021/10831. 22: 2021-12-23. 43: 2022-02-15
51: A61K
71: Beijing Huanya Zhongke Engineering Equipment Co., Ltd
72: ZHOU, Yukun, ZHAO, Chunlin, WANG, Junmei, SONG, Jianjun

54: COMPOSITE GEL FOR PLANT CAPSULES AND PREPARATION METHOD THEREOF

00: -

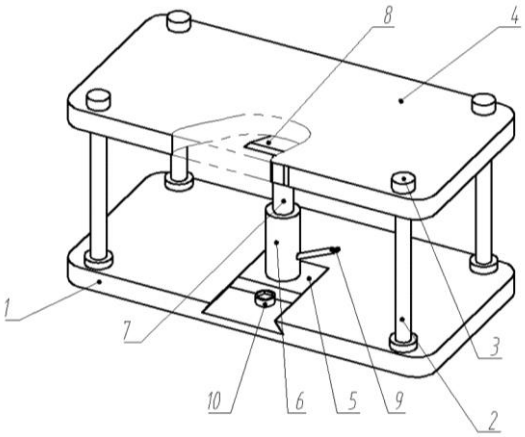
The present disclosure discloses a composite gel for plant capsules and a preparation method thereof. The composite gel is prepared by sufficiently and uniformly mixing the following raw materials in parts by weight in a mixer: 1-15 parts of K-carrageenan, 0.5-7.5 parts of iota-carrageenan and 77.5-98.5 parts of a component C (a cellulose derivative or plant polysaccharide). The composite gel for plant capsules is appropriate in raw material proportion, and is applicable to production of various plant capsules, and the qualification rate of plant capsule products can be greatly increased. By controlling viscosity of the composite gel and stability of a gelling temperature, a plant hollow capsule that meets standards of the Chinese Pharmacopoeia is prepared. The waterproof and oxygen-insulating rates of the capsule are both improved, and the waterproof and oxygen-insulating effects of the capsule are enhanced, which is beneficial to content stability and shelf life prolonging.

21: 2021/10832. 22: 2021-12-23. 43: 2022-02-15
51: B66F
71: ANHUI UNIVERSITY OF SCIENCE AND TECHNOLOGY
72: LU, Shuqun

54: QUICKLY MOUNTED AND DISMOUNTED PNEUMATIC LIFTING PLATFORM

00: -

The present disclosure belongs to a lifting device in the field of mechanical equipment, and specifically relates to a quickly mounted and dismounted pneumatic lifting platform, which includes a base, a top plate, guide rods, rod sleeves, a pneumatic lifting assembly, and a retaining nut. The base has a dovetail groove formed therein and four uniformly distributed threaded holes formed in four corners. One end of the guide rod is in threaded connection with the base. The top plate has a trapezoidal groove formed therein and four uniformly distributed unthreaded holes formed in four corners. The other end of the guide rod penetrates through the unthreaded hole of the top plate. The rod sleeve is in threaded connection with one end of the guide rod. The pneumatic lifting assembly includes a base plate, a cylinder barrel, a piston rod, a backing plate, and a pressure adjusting rod. The base plate is of a dovetail structure, and forms a connection relation with the dovetail groove in the base. The backing plate is of a trapezoidal structure. The retaining nut is mounted to one side of the base plate. According to the present disclosure, a platform lifting effect may be achieved by the pneumatic lifting assembly. Meanwhile, the base is detachably connected with the guide rod and the pneumatic lifting assembly respectively, so that the platform is mounted and dismounted quickly and conveniently, and is simple in overall structure and convenient to carry. The working efficiency may be improved effectively, and the space occupancy may be reduced.



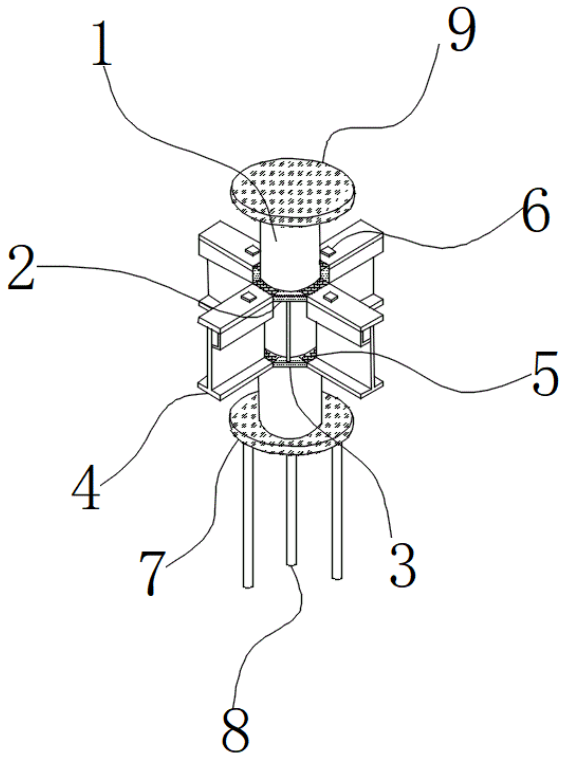
21: 2021/10833. 22: 2021-12-23. 43: 2022-02-15
51: E04B
71: National Institute of Natural Hazards, Ministry of Emergency Management of China, China Harbour Engineering Co., Ltd, Shijiazhuang Institute of

Railway Technology, Zuiyi Survey and design institute of water conservancy and hydropower Co.Ltd, Western University
72: Huang Shuai, Liu Chuanzheng, Li Penglin, Xu Chong, Xiu Liwei, Shang Yanliang, Yao Guozhuan, Goda Katsuichiro

54: ASSEMBLED INTELLIGENTLY DAMPING DEVICES AND CONSTRUCTION METHOD FOR SEISMIC REINFORCEMENT OF SLOPE

00: -

The invention discloses an assembled intelligent frame node with damping particles and a construction method thereof, relating to the technical field of frame nodes, including: node column; I-beams are configured into four beams arranged in a circumferential array, and each I-beam is connected with the node column by using an energy dissipation mechanism; and an expansion piece, one end of which is connected with the I-beam by a mounting seat, and the other end is connected to the top plate, and the top plate is fixed on the node column; in addition, a plurality of pressure sensor are embedded in that node column, and the pressure sensor and the expansion piece are uniformly controlled by a controller; furthermore, when two I-beams in the same direction have pressure towards the node column, and when the pressure exceeds a preset threshold, the controller controls one of the two expansion pieces corresponding to the two I-beams to perform micro-extension and the other to perform micro-contraction.



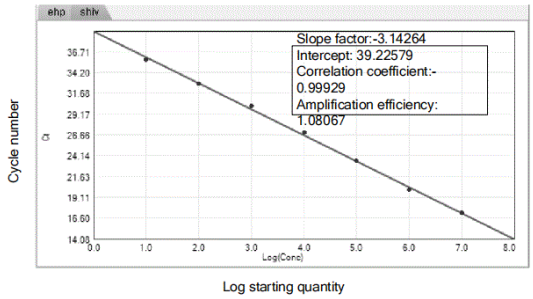
21: 2021/10834. 22: 2021-12-23. 43: 2022-02-15
51: C12N; C12Q; C12R
71: Zhuhai Kerric Testing Co., Ltd.
72: HOU, Yue'e, ZENG, Junxia, CHEN, Sina, LAN, Jianyuan, XU, Zaozhu, WAN, Shaoli

54: PRIMER/PROBE COMBINATION AND KIT FOR DUAL REAL-TIME FLUORESCENT QUANTITATIVE PCR DETECTION OF ENTEROCYTOZOON HEPATOPENAEI (EHP) AND SHRIMP HEMOCYTE IRIDESCENT VIRUS (SHIV)

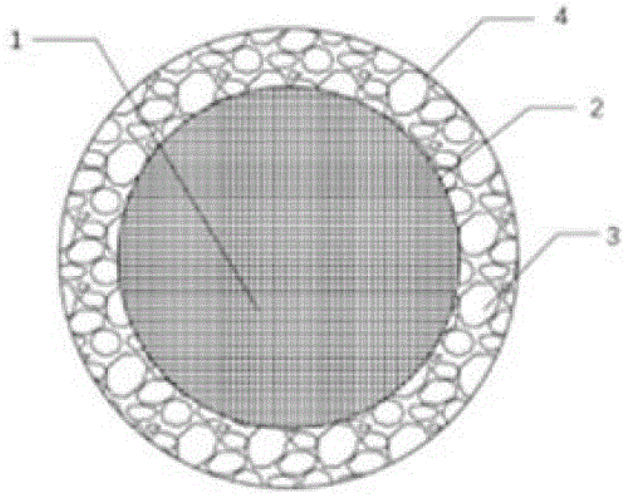
00: -

The present disclosure provides a primer/probe combination and kit for dual real-time fluorescent quantitative PCR detection of Enterocytozoon hepatopenaei (EHP) and shrimp hemocyte iridescent virus (SHIV), and belongs to the technical field of aquatic animal pathogen detection. With the primer/probe combination and a dual real-time fluorescent quantitative PCR detection method, DNAs of EHP and SHIV can be simultaneously amplified through specific detection primers and probes for EHP and SHIV. The kit provided by the present disclosure can achieve the simultaneous dual real-time fluorescent quantitative PCR detection of EHP and SHIV, which is convenient and rapid, has low detection limit, strong specificity, high

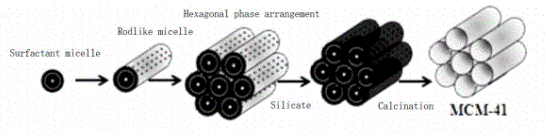
sensitivity, and high accuracy, and is suitable for early detection of inapparent shrimp infections.



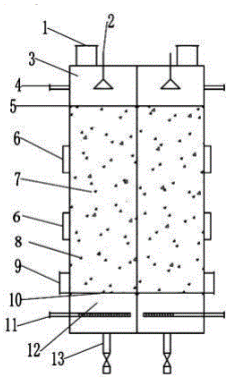
21: 2021/10835. 22: 2021-12-23. 43: 2022-02-15
51: E21F
71: Taiyuan University of Technology
72: Cui Chuanbo, Song Zhiqiang, Deng Cunbao, Chen Yankun, Jia Beibei, Zhang Hao
54: TEMPERATURE SENSITIVE INHIBITOR OF HIGH STRENGTH COMPOSITE PHASE CHANGE SHELL AND PREPARATION METHOD THEREOF
00: -
A temperature sensitive inhibitor of high strength composite phase change shell and a preparation method thereof belongs to the field of composite inhibitors technologies and can solve the problem of poor stability, easy failure, uneven distribution and the like of existing inhibitors. The temperature sensitive resistor of composite phase change shell comprises a “cell shell” (refers to a similar structure) and a inhibitor solution wrapped in the “cell shell”, wherein the “cell shell” comprises an inner composite semipermeable membrane, an outer composite semipermeable membrane and a high strength phase change shell between the inner composite semipermeable membrane and the outer composite semipermeable membrane. When the temperature reaches the critical temperature of coal spontaneous combustion, the paraffin wax melts, the composite semipermeable membrane is denatured, the high strength phase change shell is unstable, and the inhibitor solution is released to inhibit coal spontaneous combustion, which overcomes the problem that the traditional inhibitor is easy to fail, thus effectively inhibiting coal spontaneous combustion.



21: 2021/10836. 22: 2021-12-23. 43: 2022-02-15
51: B01D; B01J
71: SINOSTEEL MAANSHAN GENERAL INSTITUTE OF MINING RESEARCH CO, LTD, University of South China, Huawei National Engineering Research Center for Efficient Recycling of Metal Mineral Resources Co., Ltd.
72: LI, Gang, WU, Xiaoyan, KANG, Qian
54: PREPARATION METHOD OF SULFUR DIOXIDE ABSORBENT FOR FLUE GAS TREATMENT
00: -
Disclosed is a preparation method of a sulfur dioxide adsorbent for flue gas treatment, including: mixing 4.6 to 5.6 parts of ammonium hydroxide solution, 36.8 to 44.4 parts of cetrimonium chloride solution, 3.0 to 6.9 parts of tetramethylammonium hydroxide pentahydrate, 35.5 to 41.0 parts of tetramethylammonium silicate solution, and 4.0 to 9.8 parts of fumed silica to form a reaction gel; then putting the reaction gel into a hydrothermal reactor, adding concentrated sulfuric acid, adjusting a pH value and continuing a hydrothermal reaction for 1 to 4 times, and performing powder calcination on a product air-dried to prepare the sulfur dioxide adsorbent. The present invention is suitable for use at high temperature of 250 to 800°C, and particularly suitable for treatment of coal-fired flue gas in high temperature environments of metallurgy, electric power, etc.



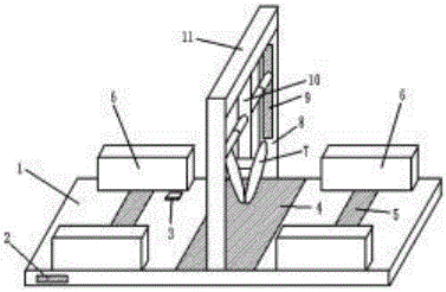
21: 2021/10837. 22: 2021-12-23. 43: 2022-02-17
51: B01D
71: SINOSTEEL MAANSHAN GENERAL INSTITUTE OF MINING RESEARCH CO, LTD, University of South China, Huawei National Engineering Research Center for Efficient Recycling of Metal Mineral Resources Co., Ltd.
72: LI, Gang, WU, Xiaoyan
54: FLUE GAS DESULFURIZATION ADSORPTION DEVICE BASED ON SILICON-BASED MESOPOROUS MATERIAL AND METHOD OF USING SAME
00: -
The present invention discloses a flue gas desulfurization adsorption device based on silicon-based mesoporous material and a using method. A purification tank is composed of a flue gas distribution chamber (12), a purification tank body (7), and a gas outlet chamber (3) connected sequentially from bottom to top, the flue gas distribution chamber (12) is provided with flue gas inlet pipes (11), the gas outlet chamber (3) is provided with flue gas outlet pipes (4), and 2-5 independent compartments are partitioned in the purification tank by vertical partitions (14); and a porous adsorbent support plate (10) is disposed at the junction between the purification tank body (7) and the flue gas distribution chamber (12), and an adsorbent isolation net (5) is disposed at the junction between the purification tank body (7) and the gas outlet chamber (3).



21: 2021/10838. 22: 2021-12-23. 43: 2022-02-15
51: A23K
71: Qingdao Agricultural University
72: Cao Yindi
54: COMPOUND BACTERIA FERMENTED PROTEIN FEED AND PREPARATION METHOD THEREOF
00: -
The invention discloses a compound bacteria fermented protein feed and a preparation method thereof, belonging to the technical field of feed production. The preparation method comprises the following steps: (1) preparing a solid fermentation culture medium, wherein the culture medium consists of nutrient matrix and water; (2) inoculating Bacillus subtilis and Candida utilis into solid fermentation medium for fermentation; after the fermentation, the fermentation product is obtained. The content of crude protein and total amino acids in the compound bacteria fermented protein feed prepared by the method of the invention is increased, which makes it easier to absorb. Experiments show that the compound bacteria fermented protein feed can replace 50 percent of soybean meal in basic daily ration, which not only realizes the waste recycling of Xanthoceras sorbifolium Bunge meal, but also provides a novel protein feed for animal husbandry, and has excellent economic value.

21: 2021/10839. 22: 2021-12-23. 43: 2022-02-15
51: B26D
71: Inner Mongolia Academy of Agricultural and Animal Husbandry Sciences
72: XIAN, Feng, LU, Zhanyuan, ZHANG, Jianzhong, CHEN, Liyu, CHENG, Yuchen, ZHANG, Xiangqian, WANG, Jianguo, YANG, Jianqiang, SU, He, WANG, Dingyuan, ZHAO, Xiaoqing, MENG, Wenhui
54: DEVICE FOR CUTTING DRIP TAPES ON COTTON SOWER
00: -
The invention discloses a device for cutting drip tapes on a cotton sower, comprising a base, wherein a cutting portion is disposed on the middle of the base, a clamping portion is disposed at the left and right sides of the base, and a first switch for operating the cutting portion is disposed on the base and is positioned on the track of the clamping portion, and further comprising a power supply unit, which is electrically connected with the clamping portion, the cutting portion, the first switch and a

second switch for operating the clamping portion. With the switch of the cutting portion disposed on the track of the clamping portion, the cutting portion automatically cuts the drip tape after it is clamped; and meanwhile, the first solenoids generate magnetic forces after being energized, thereby attracting the magnets and forcing the clamping blocks to clamp the drip tape.

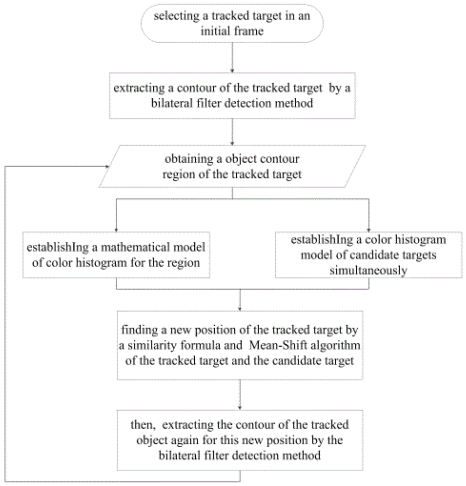


21: 2021/10840. 22: 2021-12-23. 43: 2022-02-17
51: G06T
71: Shenyang University of Technology
72: JIA, Danping, ZHANG, Lifeng, WANG, Dali, LI, Chunhua

54: VARIABLE KERNEL FUNCTION TARGET TRACKING METHOD BASED ON BILATERAL FILTERING

00: -

The present disclosure provides a variable kernel function target tracking method based on bilateral filtering. The method includes: extracting contour by bilateral filtering, determination of window width, target tracking based on Mean-Shift algorithm, introduction of color feature space, model establishment, target similarity measurement coefficient, etc., the specific advantages of the method are as follows: 1. the bandwidth of the kernel function is constantly changing, and the kernel bandwidth is changed according to the contour size of the target object in each frame; 2. the limitation of only considering color feature extraction is overcome, and the accuracy of target tracking is improved while also the tracking speed is increased; 3. the intelligent vehicle target tracking system is designed in android system; 4. the system can be implemented on ordinary mobile phones.



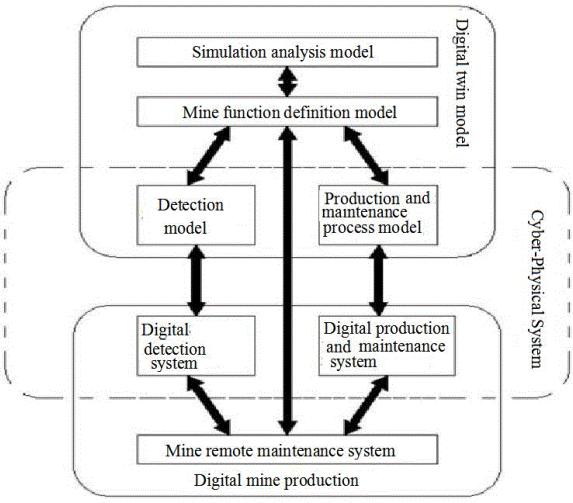
21: 2021/10841. 22: 2021-12-23. 43: 2022-02-17
51: G06N
71: Sinosteel MAANSHAN Mine Research Institute Co., Ltd
72: Nie Wen, Zhou Yuxin, Dai Bibo, Wang Yunmin, Zhu Junxing, Zeng Xuemin, Wu Xiaogang, Luo Minghua

54: MINE DIGITAL TWIN MODEL AND ITS CONSTRUCTION METHOD

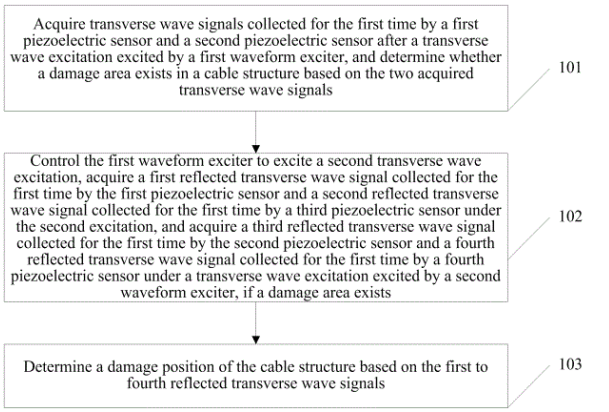
00: -

The invention relate to that technical field of mine digital management, and discloses a mine digital twin model and a construction method thereof, which comprise a mine digital twin model, wherein the mine digital twin model consists of a whole mine system model, a functional model, a remote operation and maintenance process model, a mine production equipment consumable management proces model, a fault detection and prediction and maintenance digital model, a data analysis and safety management model, a three-dimensional geometric model, a multi-physical model, a mine excavation and transportation model and a mine energy supply model. The mine digital twin model and its construction method can fully reflect all the characteristics of metal mine site from micro to macro through the digital twin model, and show the evolution process of the life cycle of metal mine site equipment. Based on the metal mine site equipment, it can also be extended to the monitoring and prediction management in mine excavation and transportation, mine energy supply and maintenance, achieving the effects of simple,

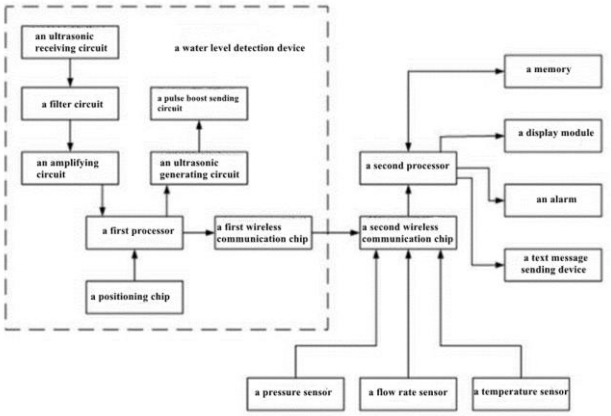
convenient and efficient management and high safety performance.



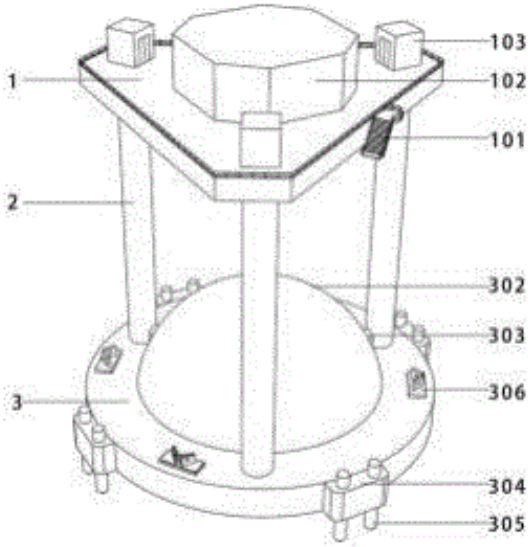
21: 2021/10842. 22: 2021-12-23. 43: 2022-02-17
51: G01N
71: South China University of Technology
72: MA, Niujing
54: METHOD FOR DETECTING DAMAGE OF CABLE STRUCTURE BASED ON STRESS WAVE TECHNIQUE
00: -
The present disclosure provides a method for detecting damage of a cable structure based on a stress wave technique, including: arranging piezoelectric sensors at ends of the cable structure, and arranging a waveform exciter and a piezoelectric sensor in the vicinity of an end; determining whether a damage area exists in the cable structure based on signals collected by the piezoelectric sensors under a transverse wave excitation excited by the waveform exciter; and determining a damage position of the cable structure based on reflected transverse wave signals collected by the piezoelectric sensors if a damage area exists in the cable structure. The present disclosure allows for improved accuracy of detecting damage of a cable structure.



21: 2021/10844. 22: 2021-12-23. 43: 2022-02-17
51: G01F
71: Harbin Engineering University
72: SUN, Yan, ZHENG, Wenxi
54: A REMOTE WATER LEVEL MONITORING SYSTEM BASED ON WIRELESS COMMUNICATION
00: -
The invention discloses a remote water level monitoring system based on wireless communication, comprising a water level detection device, pressure sensor, temperature sensor, flow rate sensor, processing module, memory, alarm module and display module based on system architecture, both the water level detection device and the pressure sensor are connected to the processing module, and the processing module is respectively connected to the memory, the alarm module and the display module. Compared with the prior art, the advantages of the invention are as follows: the system architecture design is reasonable, the function module names, architecture design, connection modes and working modes are also reasonable, the water level detection device and the pressure sensor are combined to detect the water level, which avoids the defect that the water level detection device detects the water level through ultrasonic waves which has a blind spot, the invention can also detect the water level at each position, which improves the accuracy and reliability of the water level detection, and has complete functions and multiple humanized designs, good applicability, and is easy to promote.



21: 2021/10845. 22: 2021-12-23. 43: 2022-02-17
51: B63B
71: ShanDong JiaoTong University
72: SUN, Chengmeng, LIN, Haihua, ZHANG, Yang
54: METHOD CAPABLE OF REALIZING UNDERWATER DINING
00: -
The present invention discloses a method for people dining under water and viewing seabed scenery, including the following steps: towing the underwater restaurant to a designated sea area; submerging on the seabed by filling with ballast water for the underwater restaurant; inserting the boot pile into the seabed; putting the underwater restaurant into normal operation after 24 hours observing without settlement; and transporting personnel to the underwater restaurant area for dining. The present invention realizes people eating underwater through the above steps, and the underwater restaurant realizes moving up and down through ballast water filling, and two modes of floating and submerging on the seabed in the underwater restaurant are realized. The method of the present invention provides a new environment and a better dining experience for people.



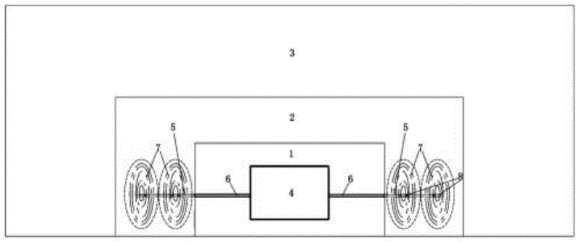
21: 2021/10846. 22: 2021-12-23. 43: 2022-02-17
51: C12N
71: Yunnan Agricultural University, Fumin county import and export Co. LTD, Jacobs Douwe Egberts
72: Liu Quanjun, Yi jing, Qin Xiaoping, Gao Xi, Jia Ben, Wu Guoxing, Tang Ping, He Mingchuan, Li Hongmei, Lan Mingxian, Shi Chunlan, Do Ngoc Sy
54: BEAUVERIA BASSIANA STRAIN HTN01 AND ITS APPLICATION
00: -
This invention discloses Beauveria bassiana strain HTN01 and its application, belonging to the technical field of agricultural microorganism. The Beauveria bassiana is reserved at 5th floor of chemistry Building at Chemistry Building, College of Plant Protection, Yunnan Agricultural University (CGMCC NO:16500). The Beauveria bassiana HTN01 is separated from the adult of Erythrus championi that died of illness, and the living body of the thallus or its spore suspension is used as the active ingredient for the preparation of biological agents that is beneficial to improving the yield and quality of coffee by preventing and treating the Xylotrechus quadripes Chevr and the coffee plant disease caused by the Xylotrechus quadripes Chevr.

21: 2021/10847. 22: 2021-12-23. 43: 2022-02-17
51: E21C; E21D; E21F
71: China University of Mining and Technology
72: GAO, Mingshi, HE, Yongliang, XU, Dong, YU, Xin
54: METHOD FOR FORMING ROADWAY ANTI-IMPACT SOFT STRUCTURE LAYER BY COAL-

ROCK PULSE CONTROLLABLE STRONG WAVE FRACTURING COAL-ROCK MASS

00: -

The invention discloses a method for forming a roadway anti-impact soft structure layer by coal-rock pulse controllable strong wave fracturing coal-rock mass, and relates to the field of coal mine underground roadway excavation. Boreholes are drilled in designated positions by a drilling machine and filled with water, high-voltage pulse equipment is placed into designated positions, the boreholes are sealed, and fracturing is performed to form a roadway anti-impact soft structure layer to absorb rock burst energy. By a steel pipe, high-voltage pulse equipment is smoothly taken out of the boreholes while damage to a roadway supporting layer is avoided. On the premise of effectively protecting the roadway supporting layer, rock burst energy is absorbed, and damage of rock burst to roadway is weakened, having significance for preventing rock burst; and fracturing coal mass by pulse controllable strong wave obtains safe, novel and practical soft structure layer and is widely applicable.



21: 2021/10848. 22: 2021-12-23. 43: 2022-02-17

51: B01D

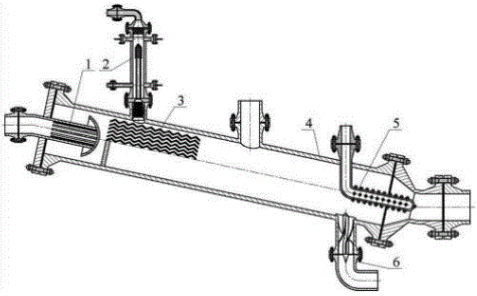
71: QINGDAO UNIVERSITY OF TECHNOLOGY

72: LIU, Xinfu, LIU, Chunhua, WU, Jianjun, ZHENG, Xiaopeng, YIN, Xiaoli, SHANG, Chao

54: INCLINED PIPE TYPE UNDERWATER PRE-DEHYDRATION AND DEGASIFICATION SEPARATION DEVICE

00: -

The invention provides an inclined pipe type underwater pre-dehydration and degasification separation device for underwater direct pre-dehydration-degasification of gas well flow. The device combines crude oil vertical and horizontal online separation technologies and achieves oil-gas water pre-separation, pre-dehydration and degasification through inclined arrangement and a pipe structure. A flow division pipe adopts a narrow slit round pipe and a collision hemispheric plate to finish gas-liquid separation, and a corrugated plate set finishes secondary gas-liquid separation through corrugated plates and separates associated gas. A gas-liquid separation pipe implements corrugated plate inclined pipe oil-water pre-separation treatment and removes most water phases. An exhaust balancer removes liquid drops in the associated gas through two-stage gas filtering of capturing liquid and filtering liquid and scrubbing action of a balance pipe, a drain pipe drains production water, a sand wash pipe periodically washes sand grains deposited at the bottom of the gas-liquid separation pipe.



21: 2021/10849. 22: 2021-12-23. 43: 2022-02-17

51: A01G; A01N; A01P

71: Qingdao Agricultural University, Dongying Qingnong Large Saline-alkali Land High-efficiency Agricultural Technology Industry Research Institute

72: XU, Xiaozhao, SU, Shenghui, TIAN, Qiuye, LI, Chao, WANG, Yongzhang, YUAN, Yongbing

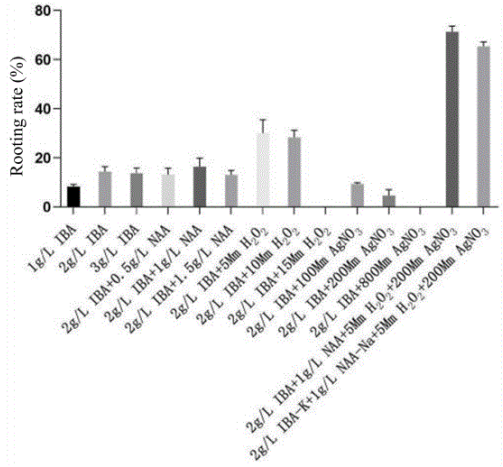
33: CN 31: 202011622198.9 32: 2020-12-31

54: ROOTING AGENT FOR CUTTING PROPAGATION OF DWARFING APPLE ROOTSTOCK M9T337, PREPARATION METHOD, AND PROPAGATION METHOD

00: -

The present disclosure relates to a rooting agent for cutting propagation of a dwarfing apple rootstock M9T337, a preparation method, and a propagation method, and belongs to the technical field of plant propagation. The rooting agent provided by the present disclosure includes indole-3-butyric acid (IBA) and/or indole-3-butyrate, 1-naphthyl acetic acid (NAA) and/or 1-naphthyl acetate, hydrogen peroxide, and silver nitrate; in the rooting agent, the IBA and/or indole-3-butyrate has a mass

concentration of 2 g/L, the NAA and/or 1-naphthyl acetate has a mass concentration of 1 g/L, and the hydrogen peroxide has an amount-of-substance concentration of 5 mM, and the silver nitrate has an amount-of-substance concentration of 200 mM. The rooting agent has the advantages of excellent rooting effect, fast rooting speed and easy and convenient preparation, and can solve the problem of difficulty in rooting of M9T337 cuttings.

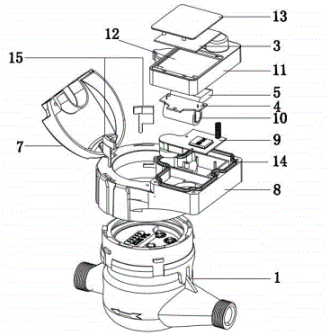


21: 2021/10850. 22: 2021-12-23. 43: 2022-02-17
51: G05B
71: SHENZHEN KILOTONE SCIENCE AND TECHNOLOGY CO., LTD.
72: HU, Ziqian, YANG, Mingdong, CHEN, Zelong, ZENG, Yan

54: LIGHT ENERGY RECEIVING METER

00: -

The present invention discloses a light energy receiving meter, which comprises a meter body and a light energy receiving module provided on the meter body, wherein the light energy receiving module comprises a light energy plate, a light energy conversion plate and an energy storage battery pack which are electrically connected, the natural light or lamplight received by the light energy plate is converted into electric energy by the light energy conversion plate and stored in the energy storage battery pack, and the energy storage battery pack is used to supply power to the meter body



21: 2021/10851. 22: 2021-12-23. 43: 2022-02-17
51: C12Q
71: Linyi University
72: Liu Yunguo, Liu Ke, Zhang Jie, Tang Xiaojuan, Lei Zhiwen, Liu Lingxiao, Cui Yawei, Xu Xiaomei
33: CN 31: 202110504836.5 32: 2021-05-10

54: METHOD FOR DETECTING ENTEROCOCCUS HIRAE IN MEDICAL FOOD BY DROPLET DIGITAL PCR

00: -

This invention discloses method for detecting Enterococcus hirae in medical food by droplet digital PCR that comprises the forward sequence of Enterococcus hirae primer: 5'-CCACTCAGCTTGATGTAA-3'', reverse sequence: 5'-GTTTGTTCAATAATCTTCAGATC-3, sequence of probe: 5'-6-FAM-ACAACAGCACCACGACGAT-TAMRA-3''. Method for detecting Enterococcus hirae in medical food by droplet digital PCR comprises the following steps: weigh 25 g of sample into a homogeneous bag that contains 225 milliliter of sterile water, mix it fully, and then dilute by 10 times gradient to obtain a sample to be detected, extract DNA from the sample, positive control and negative control to be tested, acquire PCR amplification primers and probes for identifying Enterococcus hirae. The obtained DNA was amplified by digital PCR in droplets, and the obtained reaction solution was detected and analyzed. The results showed that the primer was specific for the amplification of Enterococcus hirae. Moreover, droplet digital PCR is stable and repeatable. Take plasmid standard with concentration of 102-107copies/microlitre, pure culture of bacterial liquid with concentration of 102-107CFU/milliliter and simulated contaminated samples that contains Enterococcus hirae with concentration of 103-107CFU/g for detection, the result shows good sensitivity.

21: 2021/10852. 22: 2021-12-23. 43: 2022-02-17
51: C12Q
71: Linyi University
72: Liu Yunguo, Lei Zhiwen, Zhang Jie, Liu Lingxiao, Liu Ke, Ma Yun, Hu Hangwei, Cheng Chen
33: CN 31: 202110506088.4 32: 2021-05-10

54: METHOD FOR DETECTING ENTEROCOCCUS FAECALIS IN MEDICAL FOOD BY DROPLET DIGITAL PCR

00: -

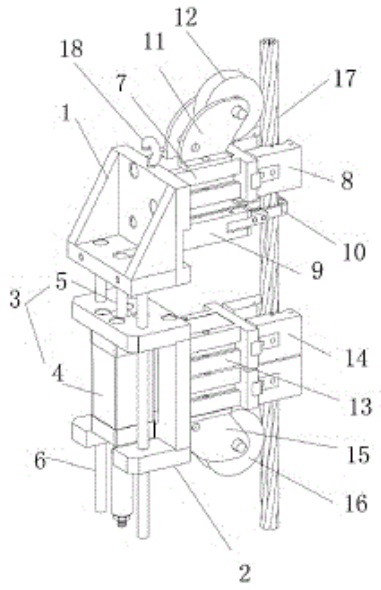
The invention discloses PCR amplification primer and probe primer of Enterococcus faecalis, which comprise forward sequence of Enterococcus faecalis primers: 5'-CCGAGTGCTTGCACTCAATTG-3', and, inverse sequence: 5'-CTCTTATGCCATGCGGCATAAAC-3', and, probe sequence: 5'-6-FAM-AAGAGGAGTGGCGGACGGGTGAG-BHQ1-3'. The invention provides method for detecting Enterococcus faecalis in medical food by droplet digital PCR, which comprises the following steps: Weigh 25 g of the sample into a homogeneous bag containing 225 mL of sterile water, fully mix and dilute it 10 times in gradient to obtain the sample to be tested, extract DNA of the sample to be tested, positive control and negative control, acquire PCR amplification primers and probes for identifying Enterococcus faecalis, amplify the obtained DNA by digital PCR with micro-droplets, and detect and analyze the obtained reaction solution. The results showed that the primer was specific for the amplification of Enterococcus faecalis. Moreover, droplet digital PCR is stable and repeatable. Take plasmid standard with a concentration of 102-107 copies/μL, pure culture of bacterial liquid with a concentration of 102-107 CFU/mL and simulated contaminated samples that contains Enterococcus faecalis with a concentration of 103,107 CFU/g for detection, the results showed the method of detection has good sensitivity.

21: 2021/10855. 22: 2021-12-23. 43: 2022-01-27
51: B25J; E02B
71: ZHEJIANG UNIVERSITY OF WATER RESOURCES AND ELECTRIC POWER
72: FANG, GUISHENG, ZHOU, YUXUAN, XU, ZHIWEN, CHENG, YUANQUN, ZHANG, GANG, ZHENG, GAO'AN
33: CN 31: CN2021101749883 32: 2021-02-09

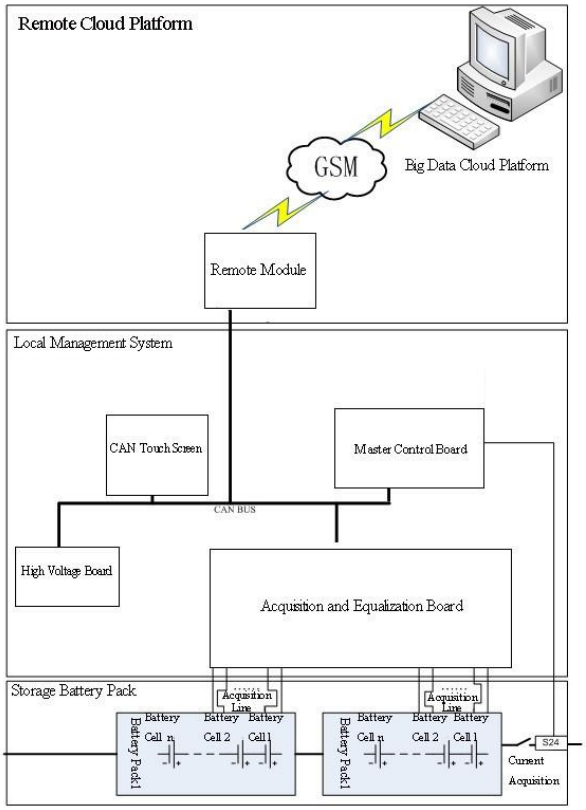
54: AUTOMATIC PNEUMATIC SLUICE STEEL WIRE ROPE CLIMBING APPARATUS FOR NARROW SPACE

00: -

The present invention belongs to the field of dedicated mechanical devices in water conservancy industry and relates to a sluice maintenance apparatus. An automatic pneumatic sluice steel wire rope climbing apparatus for a narrow space, comprising an upper mounting seat and a lower mounting seat, wherein a guide bar and a climbing air cylinder are arranged between the upper mounting seat and the lower mounting seat, the upper mounting seat and the lower mounting seat can slide relatively up and down, a front side surface of the upper mounting seat is provided with an upper clamping jaw air cylinder, the upper clamping jaw air cylinder stretching forwards is provided with two upper clamping fingers that hold and clamp a steel wire rope from two sides, a front side surface of the lower mounting seat is provided with a lower clamping jaw air cylinder, and the lower clamping jaw air cylinder stretching forwards is provided with two lower clamping fingers that hold and clamp the steel wire rope from the two sides. The objective of the present invention is to provide an automatic pneumatic sluice steel wire rope climbing apparatus for a narrow space to solve the problem that as the plurality of sluice steel wire ropes are mounted in parallel and the gaps between adjacent steel wire ropes are narrow, an existing surrounding type steel wire rope climbing apparatus is high in spatial requirement and is not suitable for a working condition of a narrow space. The steel wire ropes are held and clamped by way of stretching out the clamping fingers towards one side to clamp, so that the occupied space is small. Meanwhile, by designing the clamping mode, a falling risk that a single side stretches out to clamp is reduced.

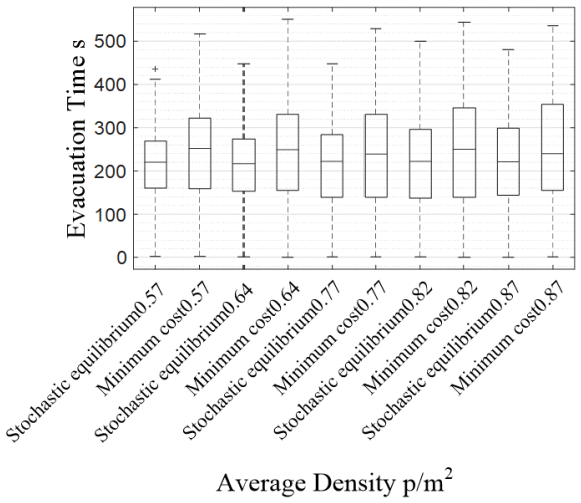


21: 2021/10861. 22: 2021-12-23. 43: 2022-02-10
51: B60M
71: SHANDONG JIAOTONG UNIVERSITY
72: WANG, Zhixue, HOU, Enguang, LIU, Guangmin, LI, Xiaowei, ZHANG, Yun, XIE, Zhaoyan
54: SYSTEM OF INTELLIGENT EXPERT MANAGEMENT FOR STORAGE BATTERIES IN ELECTRIC LOCOMOTIVE AND METHOD THEREOF
00: -
The present disclosure proposes the system of intelligent expert management for storage batteries in electric locomotive and method thereof, comprising a local management system and a remote management system; wherein the local management system comprises a master control board, a high-voltage board and an acquisition and equalization board; the acquisition and equalization board is connected to the storage battery pack in electric locomotive and collects the voltage signal and temperature signal of the battery pack in electric locomotive; the high-voltage board is connected to the acquisition and equalization board for collecting the total voltage of the battery pack; the input end of the master control board is connected to the acquisition and equalization board and current collection unit respectively, receiving the current signal, voltage signal and temperature signal of the storage battery pack in electric locomotive, and processing the signal to control the output of the relay connected to the storage battery pack in electric locomotive; the remote management system comprises the remote module and the big data cloud platform, realizing pre-analysis and pre-judgment of the working state of the storage batteries, and realizing the intelligent management of the whole life cycle of the storage batteries in electric locomotive.



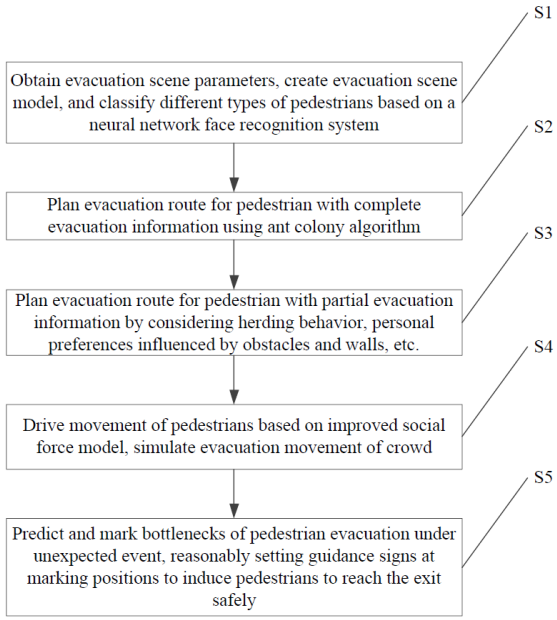
21: 2021/10862. 22: 2021-12-23. 43: 2022-02-10
51: G09F
71: QINGDAO UNIVERSITY OF TECHNOLOGY
72: YANG, Xiaoxia, PAN, Fuquan, KANG, Yuanlei, ZHANG, Rui, QU, Dayi, YANG, Jinshun, CHEN, Deqi, YANG, Xiaoli
33: CN 31: 202111171705.6 32: 2021-10-08
54: SYSTEM FOR OPTIMIZING PASSENGER FLOW LINES AND DYNAMIC GUIDANCE INDICATOR BOARD IN SUBWAY STATIONS AND DESIGN METHOD THEREOF
00: -
The present invention discloses a system and design method for passenger flow optimization and dynamic guidance indicator board in a subway station, which relates to the field of subway passenger flow evacuation. The system includes a passenger identification and positioning unit, a random user equilibrium passenger flow distribution unit based on passenger crowding degree, and a

real-time passenger position display and route recommendation unit in the station. The design method includes: extracting the images of each part of the subway station through the station monitoring equipment; extracting the passenger positions in the images using image processing to obtain the passenger distribution in the entire subway station; obtaining the optimized passenger flow distribution results based on the random user equilibrium passenger flow distribution model of passenger crowding degree; displaying the real-time distribution of passenger flow and the optimized recommended route on the dynamic guidance indicator board in the station. The present invention cannot only be used for route recommendation of passenger entry, exit, transfer, gate selection and other activities in the subway station under normal operation mode, but also realize the function of recommendation of evacuation route in the process of passenger escape under emergencies.



21: 2021/10863. 22: 2021-12-23. 43: 2022-02-10
51: G06N; G06Q
71: QINGDAO UNIVERSITY OF TECHNOLOGY
72: YANG, Xiaoxia, KANG, Yuanlei, PAN, Fuquan, YANG, Yi, QU, Dayi, ZHANG, Lixia, CHEN, Deqi, YANG, Xiaoli
33: CN 31: 202110180767.7 32: 2021-02-08
54: SYSTEM OF ASSISTED DECISION-MAKING FOR CROWD EVACUATION BASED ON ANT COLONY ALGORITHM AND IMPROVED SOCIAL FORCE MODEL
00: -

The present invention provides a system of assisted decision-making for crowd evacuation based on ant colony algorithm and improved social force model, comprising the steps of: S1, obtaining evacuation scene parameters through a filming device, creating an evacuation scene model in a computer, and classifying different types of pedestrians based on a neural network face recognition system; S2, planning an evacuation route for pedestrians with complete evacuation information using an ant colony algorithm; S3, planning an evacuation route for pedestrians with partial evacuation information by considering a herding behavior, personal preferences influenced by obstacles and walls, etc.; S4, driving a movement of pedestrians based on the improved social force model, simulating an evacuation movement of a crowd; S5, predicting and marking bottlenecks of pedestrian evacuation under an unexpected event, reasonably setting guidance signs at the marking positions to induce pedestrians to reach the exit safely. In the process of evacuation, the present invention makes balanced use of facility resources, predicts evacuation bottlenecks, sets guidance signs, and reasonably plans dynamic evacuation paths to improve evacuation efficiency and ensure pedestrian safety.



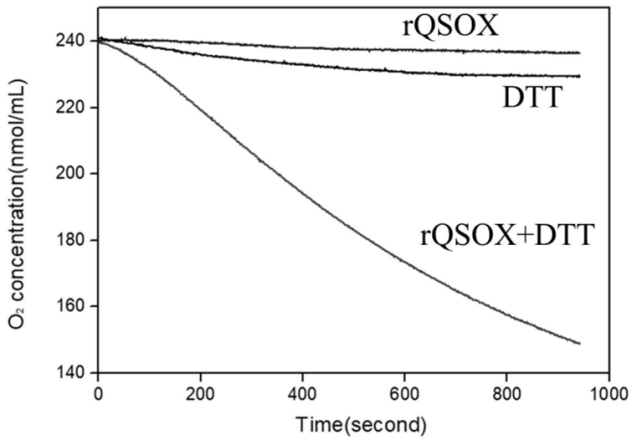
21: 2021/10867. 22: 2021-12-23. 43: 2022-02-10
51: A21D; C12N

71: Sericultural & Agri-Food Research Institute Guangdong Academy of Agricultural Sciences
72: Liu Guang, Zhang Mingwei, Wei Zhencheng, Zhang Yan, Tang Xiaojun, Deng Yuanyuan, Wang Jiajia, Li Ping
33: CN 31: 201911030928.3 32: 2019-10-28

54: APPLICATION OF RICE QUIESCIN SULFHYDRYL OXIDASE IN IMPROVING FLOUR PROCESSING QUALITY

00: -

The invention discloses an application of rice quiescin sulfhydryl oxidase in improving flour processing quality, belonging to the fields of genetic engineering and grain science. According to the invention, the recombinant rice quiescin sulfhydryl oxidase with sulfhydryl oxidation activity is prepared through a prokaryotic expression system, and has the characteristics of high expression amount, simple purification, easy amplification, suitability for industrial application and the like. The invention provides a method for improving flour processing quality by using recombinant rice quiescin sulfhydryl oxidase for the first time. Adding the recombinant enzyme directly into flour can significantly prolong the stability time of flour, effectively enhance flour flour quality characteristics and improve bread baking quality, and its improvement effect is better than that of potassium bromate, therefore, it can be developed into a new biological flour improving enzyme preparation instead of potassium bromate, which can be used for compounding with other biological improvers to promote the development of flour products processing industry.



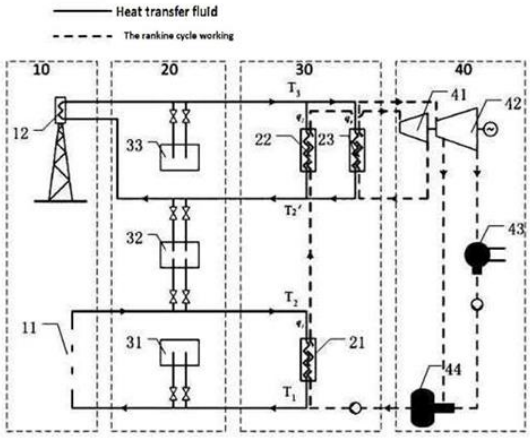
21: 2021/10907. 22: 2021-12-23. 43: 2022-02-10
51: F03G
71: GUANGDONG OCEAN UNIVERSITY

72: ZHANG, Cheng
33: CN 31: 202010146473.8 32: 2020-03-05

54: SOLAR TOWER AND TROUGH COMBINED POWER GENERATION

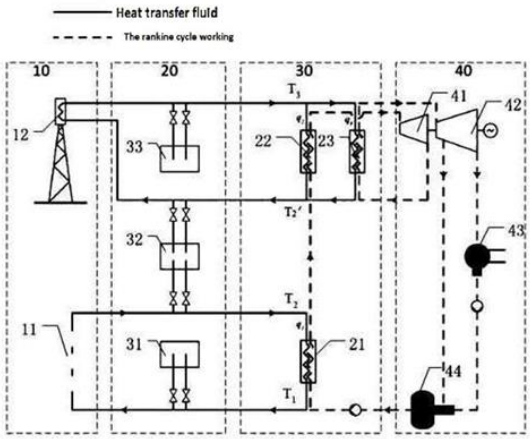
00: -

A solar tower and trough combined power generation system, comprising a trough-type heat collector (11), a tower-type heat collector (12), a preheater (21), a superheater (22), and a reheater (23). A heating pipe outlet of the trough-type heat collector (11) is connected to a heat transfer fluid inlet of the preheater (21); a heat transfer fluid outlet of the preheater (21) is connected to a heating pipe inlet of the trough-type heat collector (11); a heating pipe outlet of the tower-type heat collector (12) is separately connected to a heat transfer fluid inlet of the superheater (22) and a heat transfer fluid inlet of the reheater (23); a heat transfer fluid outlet of the superheater (22) and a heat transfer fluid outlet of the reheater (23) are connected to a heating pipe inlet of the tower-type heat collector (12). By using both the trough-type heat collector (11) and the tower-type heat collector (12) which work in respective optimum working temperature intervals, the system efficiency and the site utilization ratio of a tower-type mirror field are improved. Segmented heating of a working medium is implemented, and the flows of the heat transfer fluids in heat exchangers can be independently adjusted as needed, so that the heat exchange temperature difference and exergy loss are reduced and the power generation efficiency is improved.

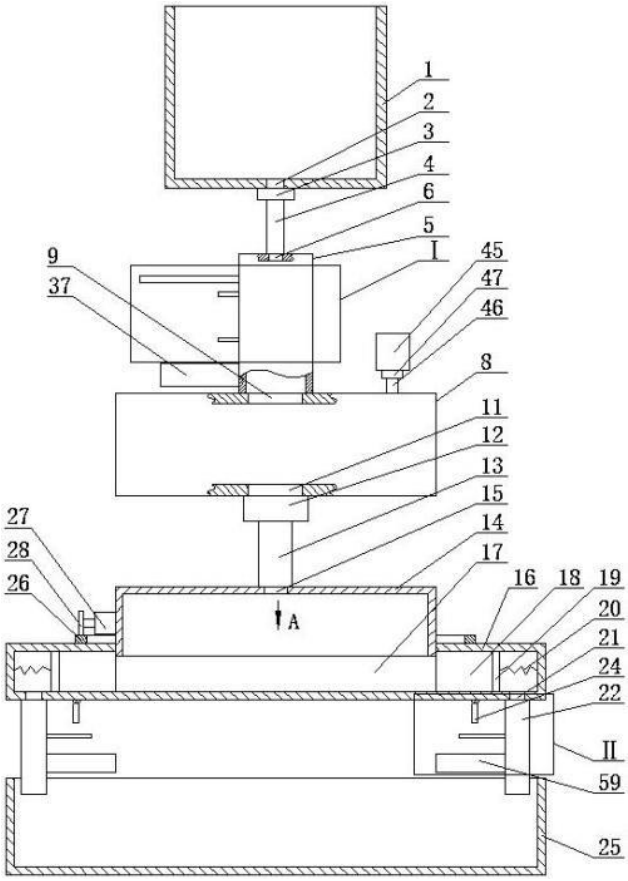


21: 2021/10907. 22: 2021-12-23. 43: 2022-02-10

51: F03G
71: GUANGDONG OCEAN UNIVERSITY
72: ZHANG, Cheng
33: CN 31: 202010146473.8 32: 2020-03-05
54: SOLAR TOWER AND TROUGH COMBINED POWER GENERATION
00: -
A solar tower and trough combined power generation system, comprising a trough-type heat collector (11), a tower-type heat collector (12), a preheater (21), a superheater (22), and a reheater (23). A heating pipe outlet of the trough-type heat collector (11) is connected to a heat transfer fluid inlet of the preheater (21); a heat transfer fluid outlet of the preheater (21) is connected to a heating pipe inlet of the trough-type heat collector (11); a heating pipe outlet of the tower-type heat collector (12) is separately connected to a heat transfer fluid inlet of the superheater (22) and a heat transfer fluid inlet of the reheater (23); a heat transfer fluid outlet of the superheater (22) and a heat transfer fluid outlet of the reheater (23) are connected to a heating pipe inlet of the tower-type heat collector (12). By using both the trough-type heat collector (11) and the tower-type heat collector (12) which work in respective optimum working temperature intervals, the system efficiency and the site utilization ratio of a tower-type mirror field are improved. Segmented heating of a working medium is implemented, and the flows of the heat transfer fluids in heat exchangers can be independently adjusted as needed, so that the heat exchange temperature difference and exergy loss are reduced and the power generation efficiency is improved.



21: 2021/10914. 22: 2021-12-24. 43: 2022-02-16
51: B01D
71: TANGSHAN UNIVERSITY
72: LIAN, Wenli
54: AUTOMATIC SEWAGE TREATMENT DEVICE
00: -
Disclosed is an automatic sewage treatment device, comprising a sewage storage tank, wherein a first through hole is formed on the bottom surface of the sewage storage tank; a first electromagnetic valve is fixedly mounted at the bottom of the first through hole; a vertical water inlet pipe is fixedly mounted at a water outlet of the first electromagnetic valve; a filter tank body is arranged at the bottom of the water inlet pipe; a second through hole is formed in the center of the top surface of the filter tank body; the top of the second through hole is fixedly connected with the bottom of the water inlet pipe in a sealed manner; a primary filter device is arranged in the filter tank body; an opening is formed on the bottom surface of the filter tank body; a stirring tank body is arranged below the filter tank body.

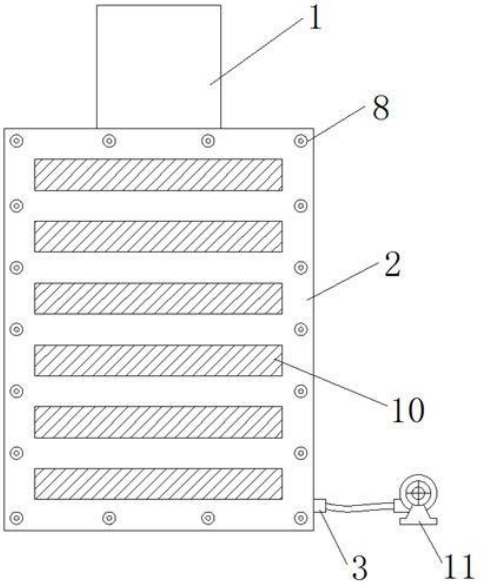


21: 2021/10915. 22: 2021-12-24. 43: 2022-03-15
51: A61F
71: JIANGSU CANCER HOSPITAL
72: QIAO, Wei, ZHANG, Yufeng, FENG, Yong, SONG, Miaomiao

54: MEDICAL THERMOSTATIC VACUUM SHAPING PAD

00: -

Disclosed is a medical thermostatic vacuum shaping pad, comprising a vacuum pad and a heating pad; the vacuum pad comprises a head pad and a body pad; the head pad comprises a first and second airtight outer layer and particles filled in the layers; the head pad is arranged in the middle of the front side of the body pad, with an inner cavity of is communicated with an inner cavity of the body pad which includes an exhaust pipe. The heating pad and body pad is similar in shape and can be detachably connected to one another, wherein the bottom and top surface edges of the body pad are connected by a snap fastener or hook & loop; the surface of the heating pad is attached with a waterproof layer; and the top surface of the waterproof layer is provided with a blood absorbing cotton frame along the edge.

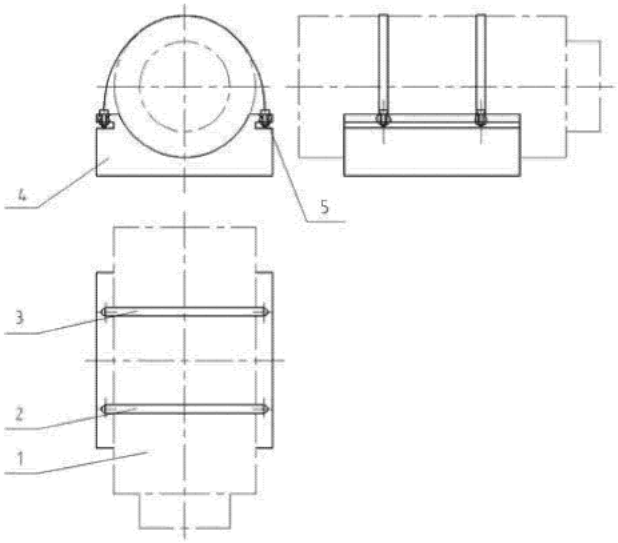


21: 2021/10916. 22: 2021-12-24. 43: 2022-02-16
51: B23B
71: QILU UNIVERSITY OF TECHNOLOGY
72: WANG, Yanshuang, ZHANG, Pu, CHENG, Yongjie, HUANG, Pengcheng, GAO, Xudong

54: METHOD AND DEVICE FOR FIXING HORIZONTALLY PLACED MOTORIZED SPINDLE

00: -

The present invention discloses a method and device for fixing a horizontally placed electric spindle. The device comprises 2 special fixing straps, 1 base and 4 nuts. The special fixing strap is composed of a metal strap, metal blocks and bolts. A head of the bolt is welded with two metal blocks. The two ends of the metal strap are riveted together with the metal blocks via rivets. A groove is provided at the central portion of the base. The groove is arc-shaped, and the diameter is equal to that of an outer cylindrical surface of the electric spindle. Both sides of an upper portion of the base are provided with upper flanges, and two through holes are provided on the upper flange at each side, wherein the diameter of the through hole is equal to that of the bolt.

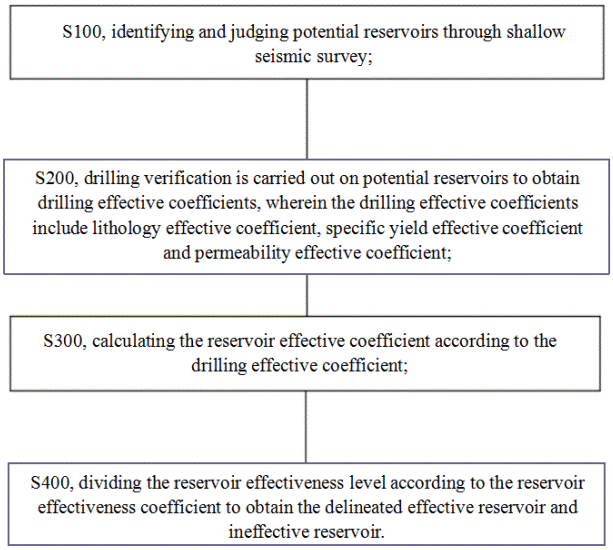


21: 2021/10919. 22: 2021-12-24. 43: 2022-02-16
51: G01F; G01V
71: Qinghai Provincal Qaidam Comprehensive Geological and Mineral Exploration Institute
72: Han Guang, Pan Tong, Liu Jiubo, Zhao Yuxiang, Li Dongsheng, Zhang Xiaodong, Hu Yan, Liu Dongliang, Li Shuwei, Cheng Kangnan, Fan Zenglin, Ma Zongde, Yang Yuzhen, Qiu Xindi, Tong Yongjun, Wang Jiang, Tao Yuande

54: METHOD FOR IDENTIFYING EFFECTIVE RESERVOIR OF SALT LAKE BRINE

00: -

The application discloses an method for identifying effective reservoir of salt lake brine, which identifies and judges potential reservoirs through shallow seismic survey; carry out drilling verification on potential reservoirs to obtain drilling effective coefficients, which include lithology effective coefficient, specific yield effective coefficient and permeability effective coefficient; according to the drilling effective coefficient, calculate the reservoir effective coefficient; according to the effective coefficient of the reservoir, the reservoir effectiveness level is divided, and the delineated effective reservoir and ineffective reservoir are obtained. It is able to understand the loose degree of reservoir lithology, specific yield value, permeability value and other information, classify reservoir lithology, specific yield value and permeability, and comprehensively determine the effective coefficient of reservoir. Through the classification of reservoir effective coefficient, the reservoir types are divided into different types of reservoirs, so as to determine effective reservoirs and ineffective reservoirs. The method can quantitatively judge the effectiveness of salt lake brine reservoir, so as to accurately identify the effective salt lake brine reservoir.



21: 2021/10920. 22: 2021-12-24. 43: 2022-02-16
51: C08L
71: Institute of Applied Chemistry, Jiangxi Academy of Sciences
72: Wang Ding

54: PREPARATION METHOD OF HIGH-TEMPERATURE RESISTANT AND TOUGH ADHESIVE

00: -

The invention discloses a preparation method of high-temperature resistant and tough adhesive, which comprises the following raw materials in parts by mass: 100 parts of phenolic epoxy resin, 1-90 parts of hydroxyl-containing phosphazene resin, 1-60 parts of liquid nitrile rubber, 0-5 parts of coupling agent, 10-50 parts of curing initiator and 1-500 parts of filler. The invention has the advantages that the high-temperature resistance of the whole adhesive system can be improved to a great extent by crosslinking the phenolic epoxy resin, hydroxyl-containing phosphazene resin and liquid nitrile rubber ternary system. The invention has simple synthesis process and good construction performance, and can be widely used in electronic industry, aerospace, chemical industry and other industries.

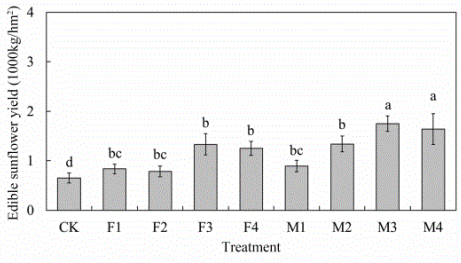
21: 2021/10921. 22: 2021-12-24. 43: 2022-02-16

51: A01B; A01G; C05G
71: INSTITUTE OF SOIL SCIENCE, CHINESE ACADEMY OF SCIENCES
72: WANG, Xiangping, YAO, Rongjiang, YANG, Jingsong, CHEN, Qiang, XIE, Wenping, ZHANG, Xin

54: SPECIAL FERTILIZER FOR PLANTING ECONOMIC CROPS IN SALINE-ALKALI LAND, AND PREPARATION METHOD AND APPLICATION THEREOF

00: -

A special fertilizer for planting economic crops in saline-alkali land and its preparation method and application thereof, which is composed of peat soil, fulvic acid, compound fertilizer, Bacillus subtilis spores, amino acids, rooting agent, medium and trace element fertilizer and attapulgite clay.

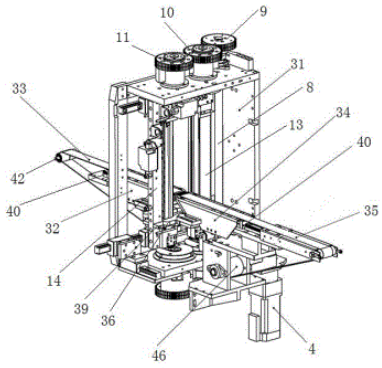


21: 2021/10922. 22: 2021-12-24. 43: 2022-02-16
51: B65B
71: Qingdao Feifan Packaging Machinery Co., Ltd.
72: CHE, Demei, HAO, Yingjie
33: CN 31: 202110652626.0 32: 2021-06-11

54: VERTICAL TYPE BOX MOTION HORIZONTAL SEALING DEVICE WITH AUTOMATIC CONVEYING

00: -

The invention discloses a vertical type box motion horizontal sealing device with automatic conveying, including a main body frame; a drive unit including a servo motor connected, through a linkage assembly, with an inner side cutter shaft and an outer side cutter shaft which are disposed longitudinally, and a conveying unit are arranged on the main body frame; the conveying unit includes an input unit and an output unit which are located on two sides of the inner side cutter shaft and the outer side cutter shaft; the input unit includes an input tackle and an input belt bypassing the input tackle; the output unit includes an output tackle and an output belt bypassing the output tackle; a front end of each of the input tackle and the output tackle is provided with a connection plate; and a strip-type guide slot is formed in the connection plate.

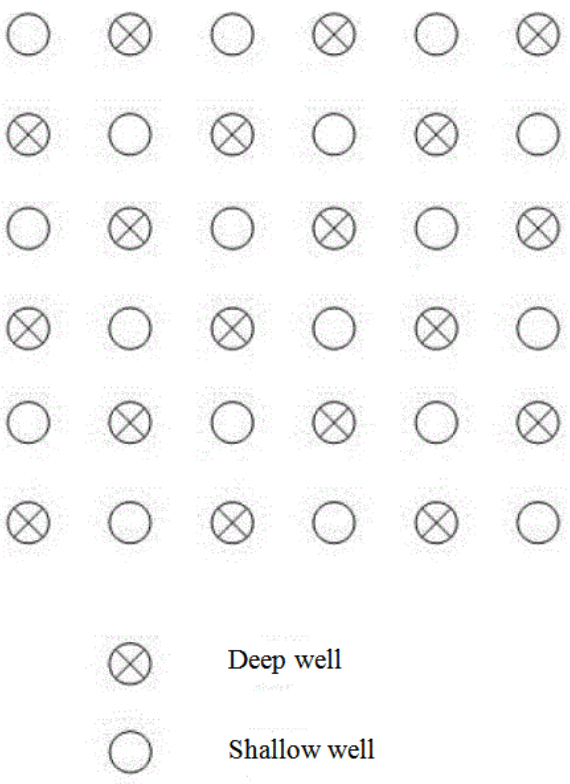


21: 2021/10923. 22: 2021-12-24. 43: 2022-02-16
51: B09C
71: Qingdao University of Technology, Shandong Environmental Protection Industry Group Co., Ltd.
72: ZHANG, Dalei, YANG, Xinfei, SUN, Yingjie, LI, Rongqiang, ZHANG, Haixiu

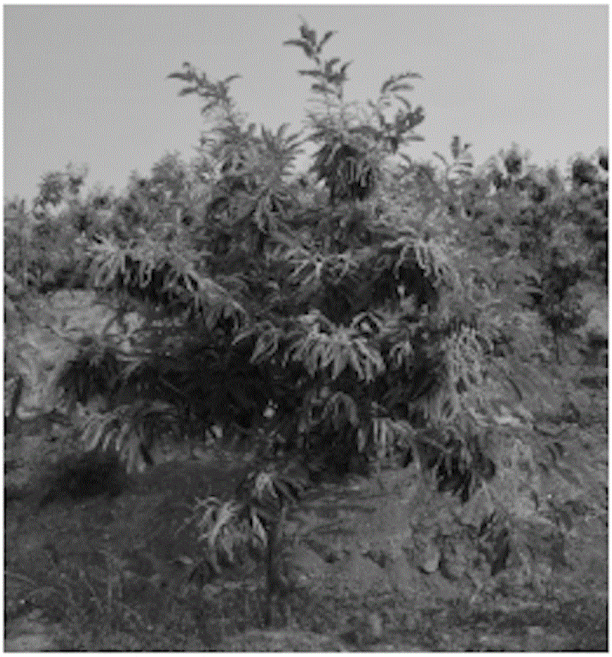
54: METHOD FOR IN-SITU REMEDIATION OF CR(VI)-CONTAINING SITE BY USING ORGANIC WASTE

00: -

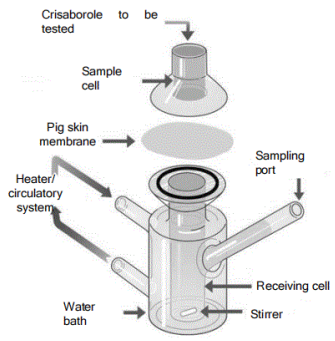
The invention relates to a method for in-situ remediation of a Cr(VI)-containing site by using organic waste, wherein the treatment thought of the method is as follows: driving specially-cultured digestive fluid with Cr(VI) reducing capacity into the site through shallow wells by means of special site construction, enabling the digestive fluid to finally permeate into underground deep wells, and meanwhile enabling the digestive fluid to evenly make contact with the site through continuous backflow, thereby achieving in-situ remediation of the site.



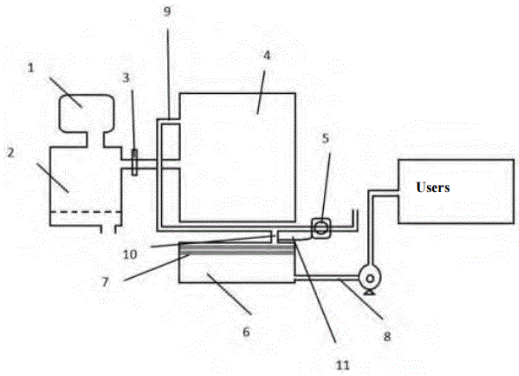
21: 2021/10924. 22: 2021-12-24. 43: 2022-02-16
51: A01G
71: Hebei Normal University of Science And Technology
72: CAO, Fei, ZHANG, Jingzheng, GUO, Chunlei, QI, Yongshun, WANG, Tongkun, JI, Liying, WANG, Chao, WANG, Dongsheng, LIU, Jing, ZHANG, Chenguang, WANG, Xuan
54: INVERTED GRAFTING TECHNOLOGY FOR CHINESE CHESTNUT TREES
00: -
The disclosure provides a grafting method for Chinese chestnut trees.



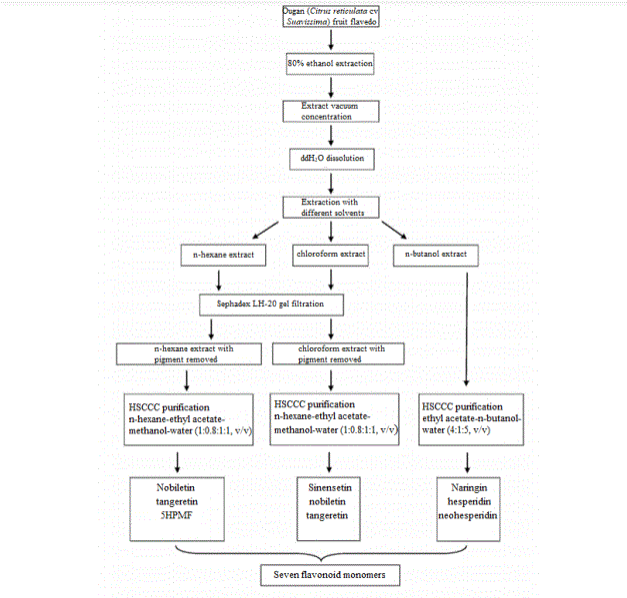
21: 2021/10925. 22: 2021-12-24. 43: 2022-02-16
51: A61K
71: SHANDONG INOMIC INSTITUTE OF PHARMACEUTICAL RESEARCH CO., LTD
72: LI, Mingli, ZHOU, Xiaomeng, WANG, Yupeng, DENG, Changjiang, FAN, Xiuhan, YAN, Lijiao, XIE, Yu, XING, Jinhua
33: CN 31: 202110794333.6 32: 2021-07-14
54: IN-VITRO TRANSDERMAL TEST METHOD OF BORON-CONTAINING DERMATITIS DRUG
00: -
The present disclosure belongs to the technical field of drug evaluation and provides an in-vitro transdermal test method of a boron-containing dermatitis drug. In the in-vitro transdermal test method provided by the present disclosure, a mixed solution of a 0.9wt% sodium chloride solution and ethanol at a volume ratio of 1:1 is used as a receiving solution; the ethanol is used to dissolve a boron-containing dermatitis drug to be tested and the boron-containing dermatitis drug is a crisaborole ointment; and the 0.9wt% sodium chloride solution provides an osmotic pressure for the receiving solution, such that the boron-containing dermatitis drug to be tested penetrating through a pig skin membrane can be quickly removed by microcirculation, a sink condition is formed and the bioavailability of the boron-containing dermatitis drug penetrating through the skin in vivo is better simulated.



21: 2021/10927. 22: 2021-12-24. 43: 2022-02-16
51: B01D; E03B; F22B; F25B
71: Xijing University
72: CHEN, Kai, ZHANG, Qian, LIU, Xinfei, ZHANG, Chenbo, QIN, Yao
54: BIOMASS WATER-MAKING MACHINE BASED ON LITHIUM BROMIDE HEAT PUMP AND WATER-MAKING METHOD THEREOF
00: -
Disclosed are a biomass water-making machine based on a lithium bromide heat pump and a water-making method thereof. The machine includes a pulverizing device, a combustion furnace, a first exhaust pipe, a lithium bromide heat pump, a second exhaust pipe, a steam-water separator, a first pipeline, a second pipeline, a water storage tank and a water pump, wherein a smoke outlet of the combustion furnace is communicated with a hot-source gas inlet of a lithium bromide heat pump through the first exhaust pipe; an outlet of the lithium bromide heat pump is communicated with the atmosphere through the second exhaust pipe; the steam-water separator is disposed on the second exhaust pipe; two ends of the first pipeline are communicated with the second exhaust pipe and the water storage tank respectively; a water outlet of the steam-water separator is communicated with the first pipeline through the second pipeline.



21: 2021/10928. 22: 2021-12-24. 43: 2022-02-16
51: A61K
71: ZHEJIANG UNIVERSITY
72: ZHU, Changqing, SUN, Chongde, WANG, Yue, LI, Xian
54: METHOD OF EFFECTIVELY SEPARATING AND PURIFYING SEVEN FLAVONOID COMPOUNDS FROM OUGAN FLAVEDO
00: -
The present invention provides a method of effectively separating and purifying seven flavonoid compounds from Ougan (Citrus reticulata cv. Suavissima) flavedo, including three steps of solvent extraction, Sephadex LH-20 gel filtration, and high-speed counter-current chromatography (HSCCC) purification. Ougan fruit flavedo is used as a raw material for purification to finally obtain seven flavonoid compounds, each of which has a purify of above 97%. The method of the present invention has simple operations and short production cycle, requires low sample consumption and equipment investment, and is performed under conditions that are stable and easily controlled. The seven flavonoid compounds include naringin, hesperidin, neohesperidin, sinensetin, nobiletin, tangeretin, and 5-hydroxy-6,7,8,3',4'-pentamethoxyflavone (5HPMF), and the present invention is suitable for industrial production and scientific research.

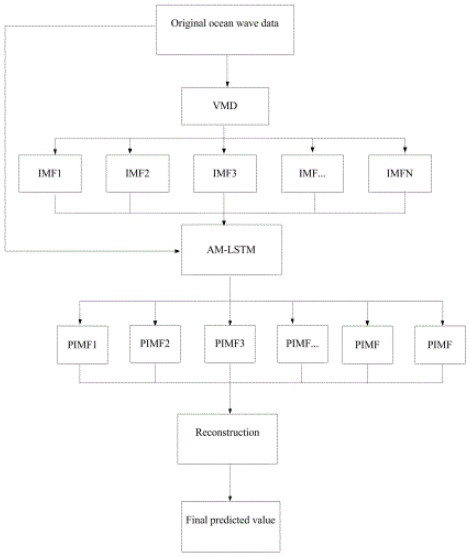


21: 2021/10929. 22: 2021-12-24. 43: 2022-02-15
51: G06F; G06N
71: Shanghai Ocean University
72: LU, Peng, NIAN, Shengquan, CAO, Yang, ZHANG, Na, LIU, Kaiyun, WANG, Zhenhua, ZHENG, Zongsheng

54: PREDICTION METHOD FOR AN OCEAN WAVE HEIGHT

00: -

The present disclosure discloses a prediction method for an ocean wave height. The prediction method includes: performing VMD decomposition of an original ocean wave height data sequence; inputting several discrete subsequences IMF1, IMF2...IMFk obtained by the VMD decomposition into an AM-LSTM model to obtain model prediction results PIMF1, PIMF2...PIMFk of the several discrete subsequences; inputting the original ocean wave height data sequence into the AM-LSTM model to obtain a model prediction result PIMF of the original ocean wave height data sequence; performing reconstruction calculation on the model prediction results PIMF1, PIMF2...PIMFk of the several discrete sub-sequences and the model prediction result PIMF of the original ocean wave height data sequence to obtain a final predicted value of the ocean wave height; evaluating the final predicted value.

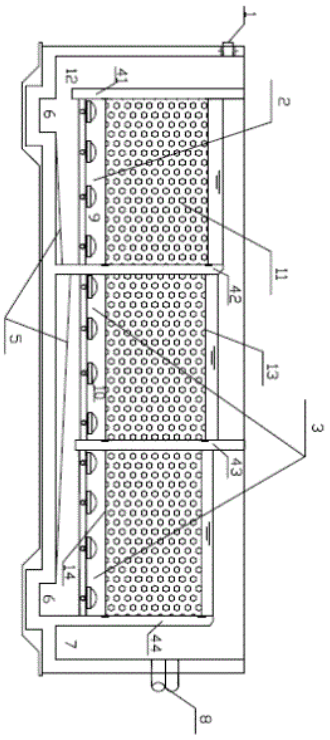


21: 2021/10930. 22: 2021-12-24. 43: 2022-02-15
51: C02F
71: China Academy of Transportation Science
72: LIU, Xuexin, TAO, Shuangcheng, KONG, Yaping, WANG, Xinjun, YAO, Jialin, CHEN, Yao

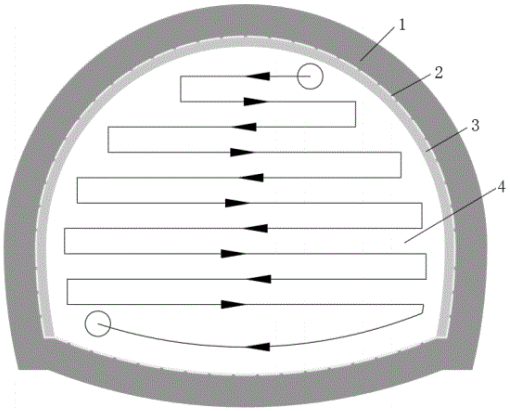
54: COOPERATIVE TREATMENT SYSTEM FOR POLLUTION AND CARBON REDUCTION OF PORT SEWAGE

00: -

The patent provides a cooperative treatment system for pollution and carbon reduction of port sewage, comprising a pre-aerated regulation and sedimentation tank and integrated biological aerated filter equipment connected orderly. As required, such ecological treatment unit as artificial wetland can be subsequently connected in series with the biological aerated filter for deep purification. The device has high treatment efficiency for various pollutants, especially for specific pollutants of ammonia nitrogen sewage. Moreover, besides deoiling and deodorization functions, the device has the advantages of no need for backwash and sludge backflow, small sludge production, simple management and maintenance, low operation cost, convenient and rapid construction, ecologicalization, landscaping, etc.

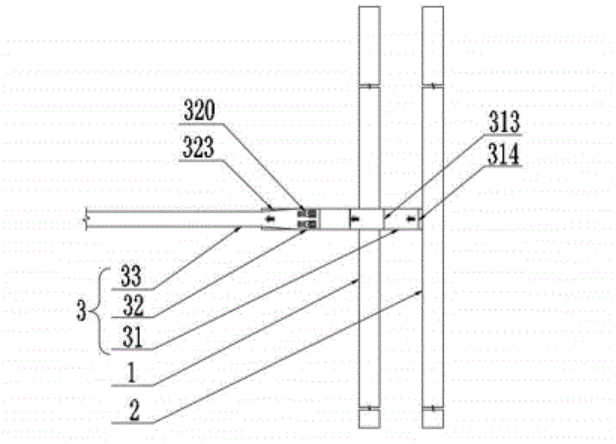


21: 2021/10931. 22: 2021-12-24. 43: 2022-02-15
51: E21D
71: SICHUAN COMMUNICATION SURVEYING AND DESIGN INSTITUTE CO,. LTD., SICHUAN TRANSPORTATION CONSTRUCTION GROUP CO,. LTD.
72: WEI, Zaibin, ZHANG, Sheng, CHEN, Yan, LI, Huizhong, CHEN, Ning, LUO, Yi, WANG, Jiping, LIU, Xiao, HUANG, Mingrong, ZENG, Dong, LI, Liangyong, YAO, Meng
33: CN 31: 202111271599.9 32: 2021-10-29
54: SURROUNDING ROCK TUNNEL TUNNELING CONSTRUCTION METHOD
00: -
The present invention discloses a surrounding rock tunnel tunneling construction method, which adopts full-section excavation during the excavation, and adopts S-shaped path to carry out layered excavation construction for the interior of a face; and then adopts an O-shaped path to carry out excavation construction for the edge of the face. According to the present invention, the excavation concept of “inner S-shaped + edge O-shaped” is adopted, the middle part of the tunnel is excavated by utilizing the layered S-shape, the surrounding rock near the designed contour is reserved for the final O-shaped path excavation, and the excavated tunnel contour is substantially parallel to the tunnel contour so that overbreak and underbreak can be better controlled, and the disturbance to the surrounding rock is reduced.



21: 2021/10932. 22: 2021-12-24. 43: 2022-02-15
51: E21D
71: SICHUAN TRANSPORTATION CONSTRUCTION GROUP CO,. LTD., SICHUAN COMMUNICATION SURVEYING AND DESIGN INSTITUTE CO,. LTD.
72: XU, Baiyang, ZHANG, Sheng, ZHANG, Ning, YU, Xuanlin, FAN, Jinhai, YIN, Biao, WANG, You, YIN, Lu, YU, Qiang, GAN, Lisong, HUANG, Mingrong, LUO, Yi, YANG, Guangxiao
33: CN 31: 202111254789.X 32: 2021-10-27
54: MULTIFUNCTIONAL TRANSVERSE PASSAGE STRUCTURE FOR TUNNEL AND CONSTRUCTION METHOD THEREOF
00: -
The invention discloses a multifunctional transverse passage structure for a tunnel and a construction method thereof. The multifunctional transverse passage structure for a tunnel includes a left-line tunnel and a right-line tunnel which are used for vehicles to pass and are parallel to each other, a smoke discharging transverse hole used for discharging flue gas in the left-line tunnel and the right-line tunnel, and a fan and a control room which are arranged in the smoke discharging transverse hole. The smoke discharging transverse hole includes a connecting section, a transition section, and a smoke discharging section; the smoke discharging transverse hole of the invention is of an equal-section structure which is horizontally arranged so that the construction of an up spanning structure and a gradually changing structure section of the traditional smoke discharging transverse hole

is avoided, and the construction length of the smoke discharging transverse hole is shortened.

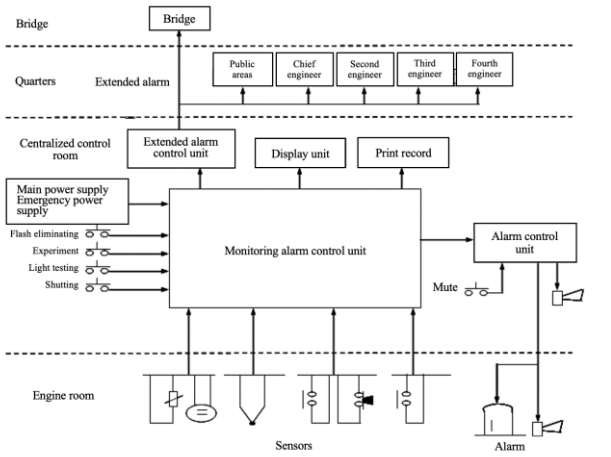


21: 2021/10933. 22: 2021-12-24. 43: 2022-02-15
51: F02D; G06Q
71: Zhejiang International Maritime College
72: GUO, Feijun, XU, Mingwei

54: A MONITORING AND ALARM SYSTEM FOR VESSEL ENGINE ROOM

00: -

The invention provides a monitoring and alarm system for vessel engine room, comprising a main station and several substations; the main station and the substations are in communication connection; the main station is an industrial computer installed in the vessel engine room, the substation comprises a data collection and processing unit, various sensors connected to the data collection and processing unit, and a communication unit for sending detected data; the industrial computer is respectively connected with a display unit and an alarm control unit, and is also set up in each position of the vessel through the extended alarm unit; it adopts the distribution of main station and substation, and the design of the extended alarm unit, which can realize real-time monitoring of each position of the vessel; and the alarm can be directly carried out in various critical positions of the vessel through the extended alarm unit, so that an unmanned engine room can be realized.



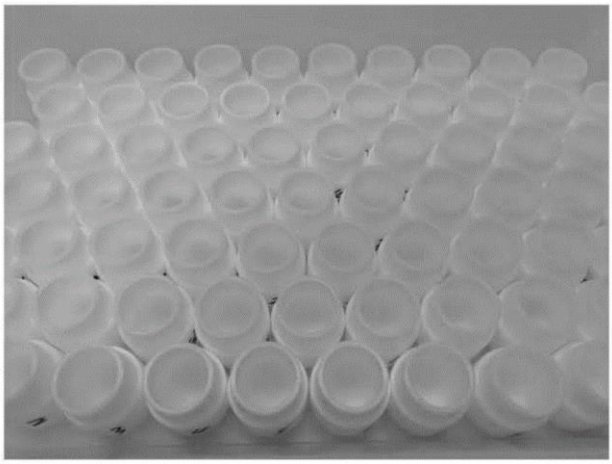
21: 2021/10934. 22: 2021-12-24. 43: 2022-02-15
51: G01N
71: First Institute of Oceanography, Ministry of Natural Resources
72: WANG, Hongmin, GAO, Jingjing, WANG, Xiaojing, LIU, Jihua

54: METHOD FOR DETERMINING MINOR ELEMENTS AND RARE EARTH ELEMENTS IN MARINE SEDIMENTS AND SOILS

00: -

The present invention provides a method for determining minor elements and rare earth elements in marine sediments and soils, wherein the method comprises the following steps: drying sediments or soils, grinding until a degree of fineness thereof reaches 200 meshes, and obtaining samples; placing the samples into inner liners of closed PTFE digestion vessels, adding sequentially redistilled hydrofluoric acid and redistilled nitric acid, sealing properly, heating, dissolving, cooling and adding redistilled nitric acid, ultrapure water and rhodium internal standard solution, sealing, heating and extraction, cooling to room temperature, adding redistilled nitric acid to a constant volume, and obtaining at least one sample solution; and determining interference coefficients, plotting a standard curve, measuring mass concentration of each element in the sample solution and a blank solution under the same conditions with ICP-MS; and calculating mass ratios of the minor elements and the rare earth elements. In the present invention, the sample digestion is done in a reaction kettle under high temperature and high pressure, in this way, the dissolution is complete, amount of acids used is small, and the procedural blank value

is low, and after dissolution, and deviations introduced when pretreating the samples have been considered to improve accuracy of the method.



21: 2021/10935. 22: 2021-12-24. 43: 2022-02-15
51: A61K; C12G
71: Guangxi Normal University for Nationalities
72: He Shuling, Ma Lingfa, Liu Shaopeng, Kang Xiaohua, Duan Wenbin, Yan Yinghui, Sun Yebin, Yu Jianfang, Yang Xianglan, Shi Wanyan, Wei Jiangyuan, Mo Caimiao

54: HEALTH-PRESERVING FRUIT WINE BASED ON FRUCTUS MORI AND PREPARATION METHOD THEREOF

00: -

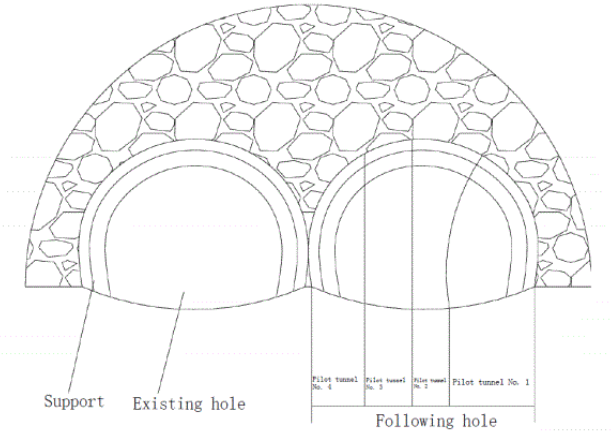
The invention discloses a health-preserving fruit wine based on Fructus Mori and a preparation method thereof, belonging to the technical field of fruit wine brewing. The wine comprises Fructus Mori pulp, white sugar, honey, boxthorn, Radix Rehmanniae Preparata, Radix Ginseng Rubra, Fructus Schisandrae Chinensis, notoginseng flower, Celastrus orbiculatus and Chinese liquor. carrying out enzymolysis treatment on Fructus Mori pulp with pectinase, and then adding white sugar, fruit wine yeast and water to ferment to obtain Fructus Mori fermentation liquor; grinding Fructus Lycii, Radix Rehmanniae Preparata, Radix Ginseng Rubra, Fructus Schisandrae Chinensis, Notoginseng Flos and Celastrus orbiculatus, mixing evenly, then adding Chinese liquor for soaking, filtering to get supernatant, mixing the supernatant with the fermentation liquor of Fructus Mori, adding honey and stirring to obtain the health wine based on Fructus Mori. The fruit wine prepared by the invention integrates fruit wine and health care, has dual functions of drinking and nourishing, and the prepared raw materials are nontoxic and harmless, can be drunk for a long time, have wide sources of raw materials, low cost, simple preparation process, and have good use value and market application prospect.

21: 2021/10936. 22: 2021-12-24. 43: 2022-02-15
51: F42D
71: SICHUAN TRANSPORTATION CONSTRUCTION GROUP CO,. LTD., SICHUAN COMMUNICATION SURVEYING AND DESIGN INSTITUTE CO,. LTD.
72: LEI, Liang, ZHANG, Sheng, WANG, Jianhua, YAN, Shun, LI, Liangyong, ZHOU, Weijin, SUN, Chenxin, YAN, Mingwang, WANG, Jiping, LI, Huizhong, ZHAO, Yulong, FAN, Jinhai, ZHANG, Ning
33: CN 31: 202111234540.2 32: 2021-10-22

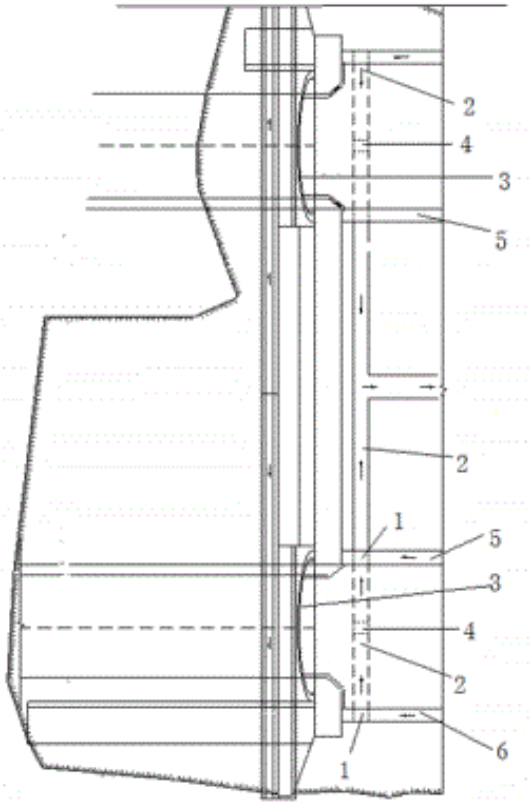
54: BLASTING TECHNOLOGY FOR HARD ROCK MULTI-ARCH TUNNELS

00: -

The present invention relates to the technical field of tunnel construction, discloses a blasting technology for hard rock multi-arch tunnels, and provides a blasting technology for hard rock multi-arch tunnels, which makes full use of a structure of a surrounding rock, does not need to excavate and support a middle pilot tunnel, can adapt to changing practical working conditions, and has low accuracy requirements and high operability, from the perspective of optimizing excavation regions and order of tunnel faces. The blasting technology can be widely used in the construction process of the hard rock multi-arch tunnel, reduces working faces and temporary supports, allows more flexible and convenient tunnel excavation and supporting, does not need additional materials, and reduces the engineering cost. After a step-shaped section is formed, the whole blasting excavation can be performed, so that the project progress is accelerated.

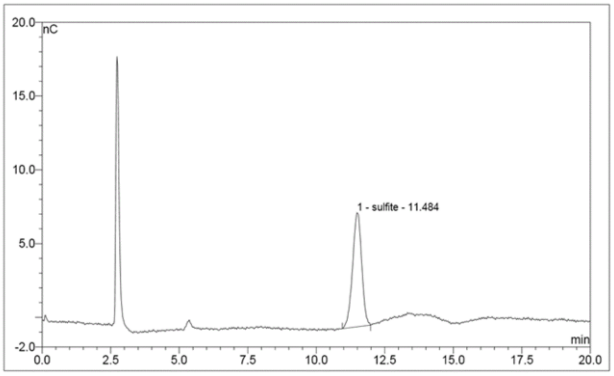


21: 2021/10937. 22: 2021-12-24. 43: 2022-02-15
51: E21F
71: SICHUAN COMMUNICATION SURVEYING AND DESIGN INSTITUTE CO,. LTD., SICHUAN TRANSPORTATION CONSTRUCTION GROUP CO,. LTD.
72: ZHOU, Cheng, XU, Jin, YIN, Biao, ZHANG, Sheng, YANG, Ke, ZHOU, Ke, RAN, Mi, LI, Huizhong, YANG, Guangxiao, ZHAO, Yulong, ZENG, Dong, WANG, You, LI, Weijie, ZHANG, Ning
33: CN 31: 202111283337.4 32: 2021-11-01
54: REVERSE-GRADIENT DRAINAGE SYSTEM OUTSIDE ENTRANCES OF SINGLE-WAY GRADIENT SINGLE AND TWIN TUNNELS
00: -
The present invention discloses a reverse-gradient drainage system outside entrances of single-way gradient single and twin tunnels, which includes a transverse drainage ditch which is arranged on a roadbed outside an entrance of a tunnel on a high end, and at least has a length across a width of the tunnel, and a first drainage ditch set including at least one first drainage ditch, wherein one end of the first drainage ditch is a drain end and is communicated with the transverse drainage ditch, while the other end is a water accumulating end which is arranged along the direction of a longitudinal slope of the roadbed; and a horizontal height of an opening of the water accumulating end is higher than that of an opening of the drain end, so accumulated water in the first drainage ditch can be drained from the water accumulating end to the drain end automatically.



21: 2021/10938. 22: 2021-12-24. 43: 2022-02-15
51: G01N
71: Chongqing Food and Drug Inspection and Testing Research Institute
72: XU, Jingbing, CAI, Lingli, YANG, Xiaoshan, HUANG, Siyu, FU, Qiyuan
33: CN 31: 2021113945199 32: 2021-11-23
54: METHOD FOR DETERMINING SULFUR DIOXIDE IN FOOD
00: -
The invention belongs to the field of food detection methods, and discloses to a method for determining sulfur dioxide in food. First drawing a standard curve; absorbing the sample by sodium hydroxide solution containing 10 mmol/L mannitol after it is distilled, and making the volume constant; using a 0.22 μm aqueous sample filter membrane to purify the sample; selecting IonPac AS 11 anion exchange analytical column and IonPac AG 11 anion protection column; using sodium hydroxide isocratic elution for separation; carrying out post-column derivatization with sulfuric acid; measuring the content by an electrochemical detector, and calculating the final content. The method provided by the invention is simple, rapid, highly sensitive and

reliable, obtains a good recovery rate of standard addition, and can be used to determine the content of sulfur dioxide and sulfite in food.

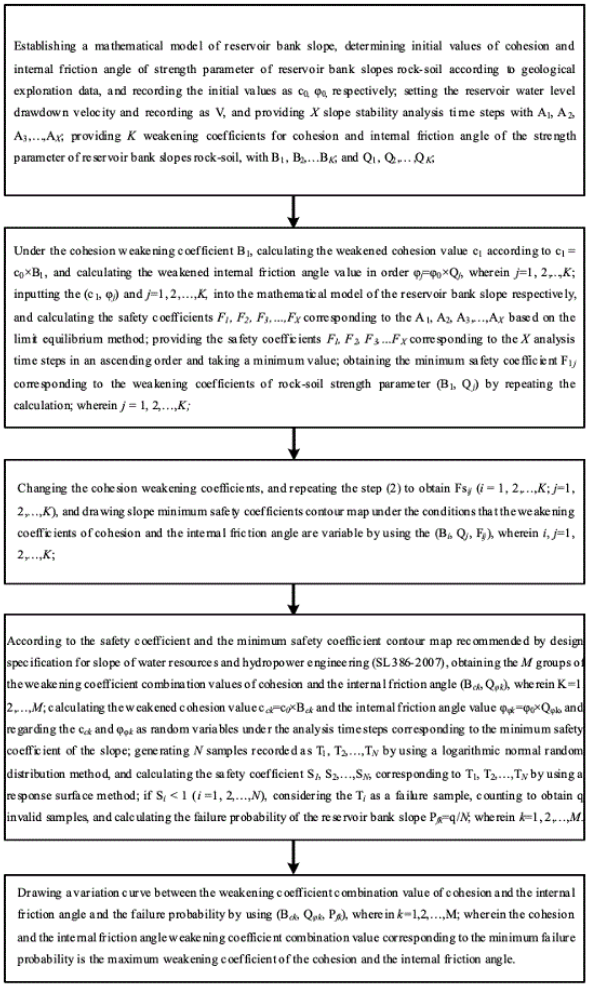


21: 2021/10939. 22: 2021-12-24. 43: 2022-02-15
51: G01N; G06F
71: Qingdao University of Technology
72: LI, Liang, LI, Dongxian, LI, Chunli, MENG, Kaiqi, XU, Liang, CHU, Xuesong

54: AN OPTIMUM WEAKENING COEFFICIENT DETERMINATION METHOD FOR THE STRENGTH PARAMETER OF RESERVOIR BANK SLOPES ROCK-SOIL

00: -

The invention discloses an optimum weakening coefficient determination method for the strength parameters of the reservoir bank slopes rock-soil, comprising the following steps: establishing a mathematical model; calculating weakened cohesion values ci and internal friction angle values PHIj and inputting them into the mathematical model; calculating the safety coefficients to take a minimum value, and repeating the above calculations to obtain a minimum safety coefficient Fij corresponding to the weakening coefficient; changing the weakening coefficients of cohesion, and repeating the above steps to draw a contour map of slope minimum safety coefficients; calculating the weakened cohesion values cck and internal friction angle values PHIPHIk, to calculate the failure probability Pfk; drawing a variation curve between the weakening coefficient combination value and the failure probability, and taking the optimum weakening coefficient. The invention determines the optimum weakening coefficient of the strength parameters of reservoir bank slopes rock-soil according to a given condition, improving the safety consideration on the slope. The method verifies the influences of the weakening coefficients of rock-soil strength parameters on the slope stability, realizing the wide applications to the technical fields of stability evaluation and disaster prevention of the reservoir bank slopes.



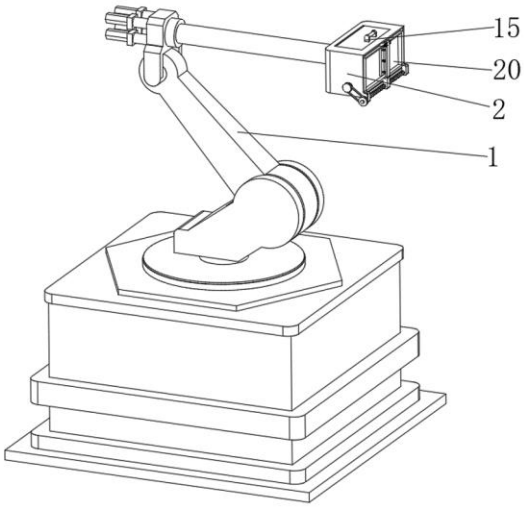
21: 2021/10940. 22: 2021-12-24. 43: 2022-02-15
51: G03B
71: Shanghai Maritime University
72: Yangjia Zhou, Houjun Lu
33: CN 31: 202123014607.X 32: 2021-12-03

54: A CAMERA LENS PROTECTIVE DEVICE CAPABLE OF CLEARLY RECORDING FOR MACHINE VISION

00: -

The invention discloses a camera lens protective device capable of clearly recording for machine vision, comprising: the robotic manipulator and a fixed chassis. The fixed chassis is fixedly installed on the interface of the robotic manipulator. A front side of the fixed chassis is fixedly installed with a transparent plate. The fixed chassis is slotted on the

upper and lower ends of one side of the transparent plate respectively, and the fixed chassis is slidingly connected with a first slider and a second slider through sliding rails. The invention facilitates the protection of the camera lens and avoids affecting the stability of the camera lens' work. It is convenient to clean the transparent plate, so as to prevent dust from adhering to the surface from affecting the camera lens' image collection of the outside world.

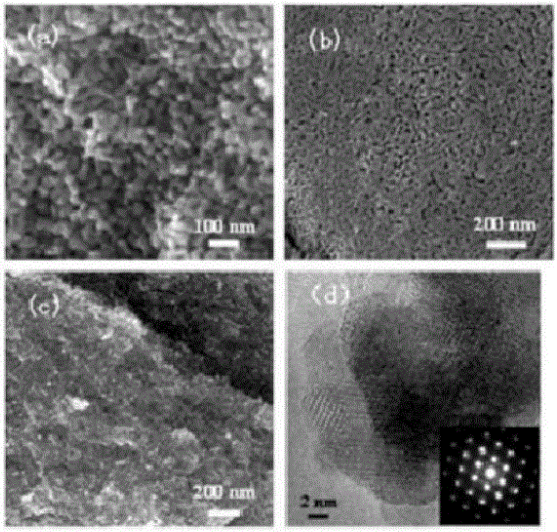


21: 2021/10941. 22: 2021-12-24. 43: 2022-02-15
51: A23L
71: Changshu Institute of Technology
72: Cui Zhumei, Peng Yingyun, Zhang Xinru, Guo Hua
54: OIL POWDER EMBEDDED WITH CAROTENE AND ITS APPLICATION IN PREPARING INSTANT MILK TEA
00: -
The disclosure relates to the technical field of food processing and provides an oil powder embedded with carotene and its application in preparing instant milk tea. The oil powder embedded with carotene prepared in this disclosure comprises the following components in parts by weight: 20-30 parts of hydrogenated vegetable oil containing carotene, 30-50 parts of wall material and 1-2.5 parts of emulsifier. The disclosure also provides a method for preparing the oil powder embedded with carotene and its application in preparing instant milk tea. According to the disclosure, sodium caseinate and beta-cyclodextrin are used in combination to embed and microencapsulate carotene into oil powder; the embedding rate and solubility of carotene are therefore improved, and the prepared carotene is excellent to be applied in preparing instant milk tea.

21: 2021/10942. 22: 2021-12-24. 43: 2022-02-15
51: C12G
71: Guangxi Normal University for Nationalities
72: He Shuling, Ma Lingfa, Liu Shaopeng, Kang Xiaohua, Duan Wenbin, Yan Yinghui, Sun Yebin, Yu Jianfang, Yang Xianglan, Shi Wanyan
54: METHOD FOR PREPARING PASSIFLORA EDULIS SIMS. CHARACTERISTIC FERMENTED FRUIT WINE
00: -
The invention discloses a method for preparing Passiflora edulis Sims. characteristic ferment fruit wine, belonging to the technical field of fermented food processing. The preparation method comprises the following steps: (1) the Passiflora edulis Sims. is cleaned and dried in the air; (2) separating the pulp and peel of Passiflora edulis Sims., and crushing them into 1-4 mm particles respectively; (3) enzymolysis of fruit and pulp; (4) enzymolysis of peel and pulp; (5) fermentation treatment; (6) aging; (7) purification. According to the invention, the Passiflora edulis Sims. raw materials are fully utilized, and the nutrient content in Passiflora edulis Sims. is effectively extracted, so that Passiflora edulis Sims. wine with good taste is prepared, and the nutritional value of Passiflora edulis Sims. wine is obviously improved, with the DPPH free radical scavenging rate of 95.83 percent, superoxide anion free radical scavenging rate of 78.21 percent and hydroxyl free radical scavenging rate of 92.66 percent.

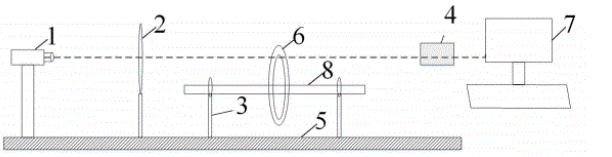
21: 2021/10943. 22: 2021-12-24. 43: 2022-02-15
51: B01J; C07C
71: Zhejiang University of Technology
72: LI, Xiaonian, ZHAO, Jia, ZHU, Wenrui, WANG, Tao, FENG, Tao, TANG, Qi, WANG, Ting, WANG, Saisai, LI, Yongkun
33: CN 31: 202110379237.5 32: 2021-04-08
54: PREPARATION METHOD OF NANOPOROUS COPPER CATALYST FOR ACETYLENE HYDROCHLORINATION AND USE THEREOF
00: -
The present disclosure discloses a preparation method of a nanoporous copper catalyst for acetylene hydrochlorination and use thereof. The

preparation method comprises the steps of: milling a Cu-Al alloy into fine particles, adding NaOH solution dropwise into the fine particles at a rate of 80 to 100 r/min with magnetic stirring for 10 to 12 h in an ice-water bath, and irradiating a resulting mixture with ultraviolet rays throughout the process so that the mixture is fully irradiated by ultraviolet rays, and then collecting an upper liquid by filtration and repeatedly washing the residue with deionized water to neutral, then thoroughly washing it with anhydrous ethanol, followed by a drying technology with drying high-voltage electric fields to obtain a nanoporous copper catalyst for acetylene hydrochlorination.



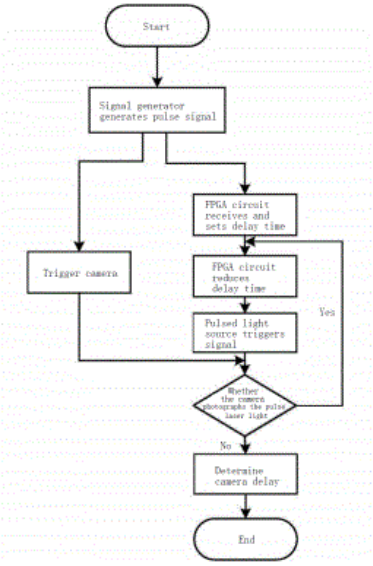
21: 2021/10944. 22: 2021-12-24. 43: 2022-02-17
51: A21D
71: GuangXi Academy Of Agricultural Sciences
72: LI, Mingjuan, ZHANG, Yayuan, YOU, Xiangrong, ZHOU, Kui, WANG, Ying, WEI, Ping, HUANG, Zhanwen
54: GLUTEN-FREE HUNGER-RESISTANT COMPRESSED BISCUIT AND PREPARATION METHOD THEREOF
00: -
The present disclosure relates to a technical field of food processing, and more particularly to a gluten-free hunger-resistant compressed biscuit, which is mainly prepared from the following materials in parts by weight: 80-100 parts of whole cassava flour, 20-40 parts of whole soybean flour, 10-15 parts of milk powder, 20-30 parts of nut powder, 0.5-1 part of table salt, 1.5-2.5 parts of a leavening agent, 3-5 parts of sodium carboxymethylcellulose, 3-4 parts of a microbial agent, 3-5 parts of yeast, 1.5-3 parts of citric acid, 10-15 parts of water, 30-40 parts of shortening, 20-30 parts of soft sugar, 10-20 parts of egg pulp, 10-20 parts of vegetable oil and 15-30 parts of liquid syrup. The gluten-free hunger-resistant compressed biscuit provided in the present disclosure can meet the needs of people who are allergic to gluten.

21: 2021/10945. 22: 2021-12-24. 43: 2022-02-17
51: G01S
71: QINGDAO UNIVERSITY OF TECHNOLOGY
72: HAN, Suli, LIU, Yujian, GUO, Feng, SHAO, Jing
54: METHOD AND DEVICE FOR MEASURING RADIAL INTERNAL CLEARANCE OF BEARING BASED ON LASER TRANSMISSION
00: -
The present disclosure provides a method and device for measuring a radial internal clearance of a bearing based on laser transmission and relates to the field of bearing parameter measurement. The method includes the following steps: based on diffraction of incident light at a radial internal clearance of a bearing in a stationary state, receiving first diffracted emergent light and obtaining first emergent light parameters; based on diffraction of incident light at the radial internal clearance of the bearing in a rotating state, receiving second diffracted emergent light and obtaining second emergent light parameters; and obtaining a static clearance in the bearing by combining a diffraction pattern of the first emergent light with the first emergent light parameters and obtaining an operating clearance in the bearing by combining a diffraction pattern of the second emergent light with the second emergent light parameters.

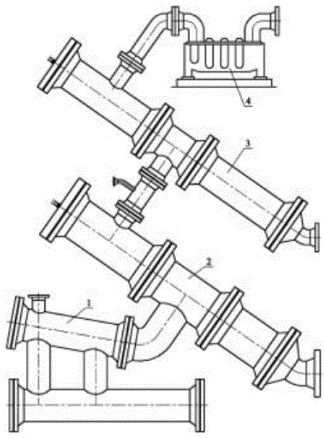


21: 2021/10946. 22: 2021-12-24. 43: 2022-02-17
51: H04N
71: North University of China
72: ZHAO, Dong'e, CUI, Min, CHU, Wenbo, ZHANG, Bin, MA, Yayun
54: METHOD AND SYSTEM FOR TESTING RESPONSE DELAY OF HIGH-SPEED CAMERA
00: -

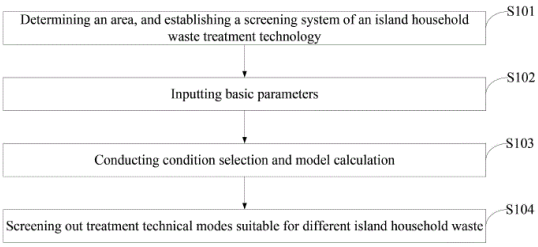
The present invention discloses a method and system for testing response delay of a high-speed camera, wherein a drive signal is divided into two paths, one path directly triggers the high-speed camera externally, and the other path triggers a laser light source after a set delay time; by adjusting the delay time, the camera can photograph from the laser of the laser light source to just fail to photograph the laser light, at this time, the delay time is the response time of the high-speed camera; by using FPGA time-delay circuit to adjust the delay and using pulsed laser light source as test light source, the test accuracy can be further improved, and the system is simple and easy to implement; the test method and system of the present invention can further improve the capture rate of high-speed dynamic small targets by the high-speed camera.



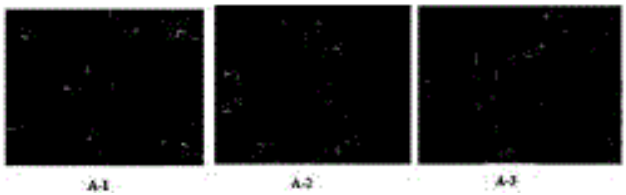
21: 2022/00011. 22: 2022-01-03. 43: 2022-02-22
51: C10G; E21B
71: Qingdao University of Technology
72: LIU, Xinfu, YANG, Yong, LIU, Chunhua, ZHANG, Shousen, SHANG, Chao, WU, Qianqian
54: INCLINED T-TYPE PIPE MULTI-LEVEL HIGH-VOLTAGE ELECTRIC FIELD SEABED SEPARATION METHOD
00: -
The invention provides an inclined T-type pipe multi-level high-voltage electric field seabed separation method with the characteristics of seabed crude oil three-level efficient separation, oil-gas gathering and transportation process simplifying, rapid deep dehydration and degasification, low crude oil water content, remote automatic control and the like.



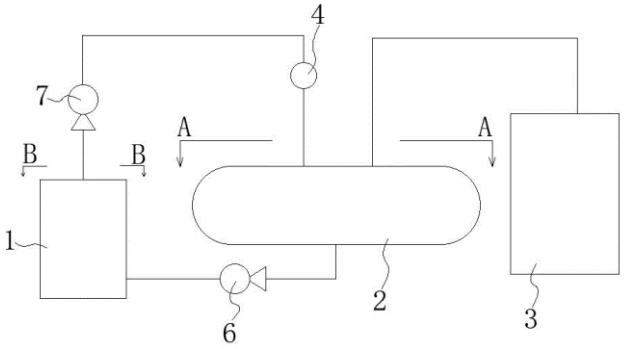
21: 2022/00012. 22: 2022-01-03. 43: 2022-02-22
51: B09B
71: First Institute of Oceanography, Ministry of Natural Resources
72: GUO, Zhen, XU, Wanying, ZHANG, Zhiwei, LIU, Yinchu, XU, Hao
54: SCREENING METHOD AND SCREENING SYSTEM FOR ISLAND HOUSEHOLD WASTE TREATMENT SOLUTIONS SELECTION
00: -
The present disclosure belongs to the technical field of island household waste treatment, and discloses a screening method and a screening system of an island household waste disposal technology, a medium, and a treatment station. The method comprises steps of: determining a research area, calculating through a terminal disposal and classification sorting module to obtain island household waste production; classifying and sorting the household waste, and calculating the number of other waste bins of a collection unit, diversion capacity of compostable waste and recyclable waste, and the number of compostable waste bins of the collection unit; conducting centralized resourceful treatment, calculating decentralized treatment capacity of the compostable waste, the number of recyclable waste bins of the collection unit, and the number of i-type recyclable waste bins of the collection unit; and transporting the recyclable waste outwards.



21: 2022/00013. 22: 2022-01-03. 43: 2022-03-03
51: C12N
71: The First Affiliated Hospital of Xinjiang Medical University, Xinjiang Medical University
72: Ma Hairong, Mu Wenbo, Li Yicheng
54: METHOD FOR CULTURING CANINE BONE MARROW MESENCHYMAL STEM CELLS
00: -
The invention relates to the technical field of bone marrow mesenchymal stem cell culture, in particular to a method for culturing canine bone marrow mesenchymal stem cells, which obtains bone marrow mesenchymal stem cells by directly culturing collected dog bone marrow blood and other processes. The present invention simplifies the steps of culturing bone marrow mesenchymal stem cells. On the one hand, bone marrow blood cells do not require to undergo pretreatment including filtration, centrifugation and fat cell removal, and its advantage lies in better maintaining the original microenvironment of dog bone marrow, avoiding external interference, so that the contained stromal cells, extracellular matrix components and secreted secretion factors provide a comprehensive nutritional environment for the growth of mesenchymal stem cells; on the other hand, this method only needs a simple medium to select adherent BMSCs, and does not need to separate hematopoietic stem cells by flow cytometry or immune sorting technology. Meanwhile, the bone marrow mesenchymal stem cells cultured by this method have short passage period and high yield.



21: 2022/00014. 22: 2022-01-03. 43: 2022-03-03
51: B01D
71: Dongguan University of Technology
72: Hu Bing
54: SEAWATER DESALINATION SYSTEM BASED ON HORIZONTAL TUBE FALLING FILM EVAPORATION
00: -
The invention relates to the technical field of seawater desalination, in particular to a seawater desalination system based on horizontal tube falling film evaporation. A seawater desalination system based on horizontal tube falling film evaporation comprises a water supply tank, an evaporator and a condenser which are communicated in sequence, wherein the evaporator comprises a shell, a heat exchange tube through which a heat exchange medium is communicated, a liquid distribution pipe for uniformly distributing liquid on the heat exchange tube, and a spray pipe for spraying seawater towards the liquid distribution pipe; the heat exchange tube, the liquid distribution pipe and the spray pipe are all arranged in the shell, the spray pipe is communicated with the water supply tank and positioned above the heat exchange tube; the liquid distribution pipe is arranged between the spray pipe and the heat exchange tube. The invention relates to a seawater desalination system based on horizontal tube falling film evaporation, which has the advantages of high desalination efficiency and high energy utilization rate.

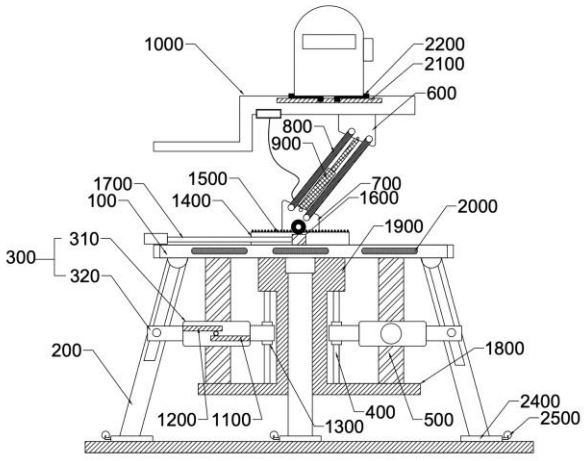


21: 2022/00015. 22: 2022-01-03. 43: 2022-03-03
51: G06F
71: Hebei University of Architecture
72: DI, Suwei, GUO, Quanhua, REN, Zhiyu, WEN, Wanli, DU, Wenjing, JIANG, Xiyan, LIU, Chentao, HUANG, Xiaoyun, LI, Bomin, ZHANG, Na, WEI, Wenbo, HAN, Yan, LI, Yanfang, YANG, Junchao, KOU, Bin, HOU, Yungui

54: ADJUSTABLE BUILDING GEOMATICS PLATFORM

00: -

The invention relates to an building geomatics technology, and an adjustable building geomatics platform is further publicized, which comprises a supportive adjusting unit and a altitude adjusting unit; the supportive adjusting unit comprises a supporting table, several supporting rods and connecting rods; the altitude adjusting unit comprises an upper mounting table and a lower mounting table arranged at upper and lower place, and a tilted lifting rod and an adjusting cylinder are arranged between the upper mounting table and the lower mounting table; the adjustable building geomatics platform of the present invention has multiple free adjustment degrees; among them, the supportive adjusting unit supporting the entire platform has multiple supporting rods, so as to accurately adjust the level of the supporting table; so that the geomatics platform can be available in different regions; the present invention can also adjust the use altitude of the geomatics platform through the altitude adjusting unit, and control the rotation of the geomatics platform with the rotating mechanism, which is beneficial to improve the efficiency of geomatics; therefore, it can be widely used in different fields.

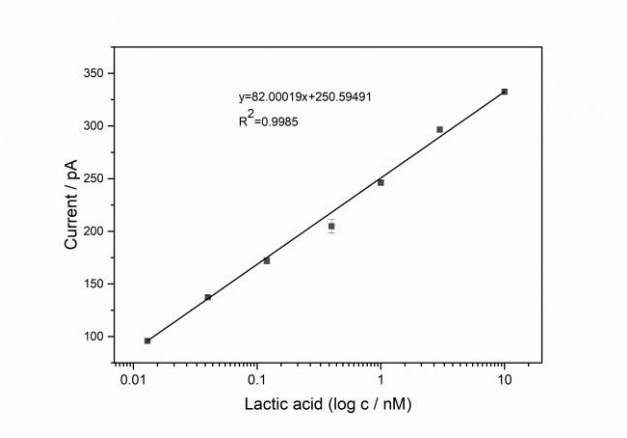


21: 2022/00016. 22: 2022-01-03. 43: 2022-02-22
51: G01N; G01R
71: Tianjin Institute of Environmental and Operational Medicine
72: Wang Yu, Han Tie, Gao Zhixian, Zhou Huanying, Peng Yuan, Li Shuang, Han Dianpeng, Ren Shuyue, Qin Kang, Ji Guangna

54: METHOD AND KIT FOR PAPER-BASED ELECTROCHEMICAL DETECTION OF LACTIC ACID IN SWEAT BASED ON CU-TCPP(FE)/AU METAL-ORGANIC FRAMEWORK HYBRID NANOSHEETS

00: -

The invention belongs to the technical field of electrochemical detection and analysis of fatigue markers, and relates to a detection method for real-time detection of lactic acid content in sweat based on Cu-TCPP(Fe)/Au hybrid nanosheets and lactate oxidase paper-based electrochemical biosensors. The sensor includes the following components: (1) Cu-TCPP(Fe)/Au hybrid nanosheets; (2) lactate oxidase; (3) paper-based electrode of three-electrode system; (4) electrochemical workstation; among them, the Cu-TCPP(Fe)/Au hybrid nanosheets and lactate oxidase can cause electrochemical reaction. The method of the invention can detect lactic acid in sweat with high sensitivity.



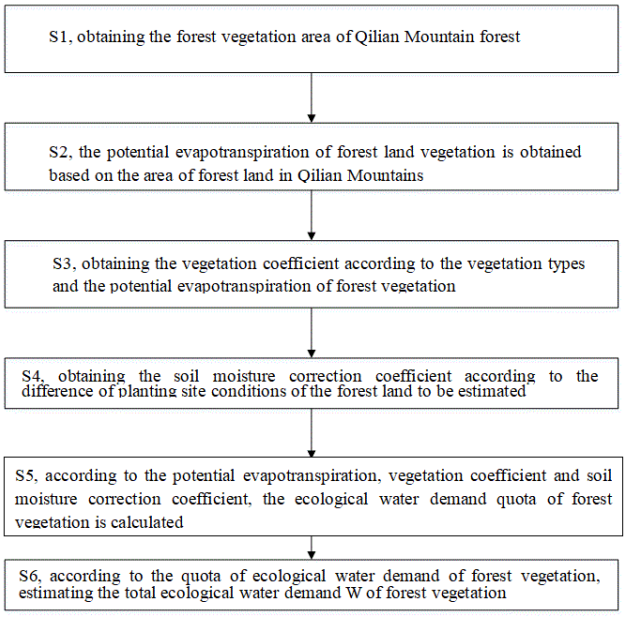
21: 2022/00017. 22: 2022-01-03. 43: 2022-03-03
51: G06Q
71: Nanjing University of Information Science & Technology
72: Wang Ranghui

54: ESTIMATION METHOD OF ECOLOGICAL WATER DEMAND OF FOREST VEGETATION IN MOUNTAIN ECOSYSTEM BASED ON EVAPOTRANSPIRATION

00: -

The invention provides a method of estimating ecological water demand of forest vegetation in mountain ecosystem based on evapotranspiration, which comprises the following steps: S1, acquiring the forest land vegetation area to be estimated; S2, acquiring potential evapotranspiration based on the

forest land vegetation area to be estimated; S3, acquiring vegetation coefficient based on the vegetation type and the potential evapotranspiration, wherein the vegetation coefficient is the ratio of the evapotranspiration of water demand and the potential evapotranspiration; S4, acquiring soil moisture correction coefficient based on the difference of planting site conditions of the forest land to be estimated; S5, calculating the ecological water demand quota of forest vegetation to be estimated based on the potential evapotranspiration, vegetation coefficient and soil moisture correction coefficient; S6, estimating the total ecological water demand of forest vegetation based on the ecological water demand quota of forest vegetation. According to the invention, the vegetation coefficient and the soil moisture coefficient are adopted to correct the ecological water demand of forest vegetation, so as to effectively reduce the influence of vegetation types and site conditions on the main water consumption items of forest vegetation.

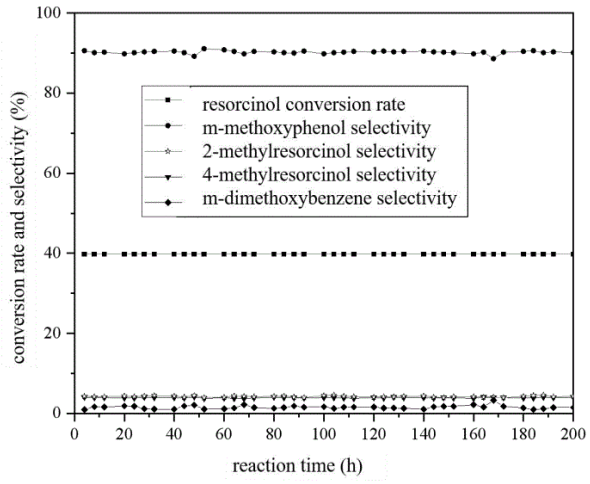


21: 2022/00018. 22: 2022-01-03. 43: 2022-02-22
51: C25B
71: Ningxia Huhui Pharmaceutical Technology Co., Ltd.
72: WANG, Xueguang, YIN, Yuchen, ZOU, Xiujing, WU, Baoqin, SHANG, Xingfu, DING, Weizhong, LU, Xionggang, KOU, Juan, YONG, Jingxue, GUO, Yuchen, YUE, Jing
33: CN 31: 202111042099.8 32: 2021-09-07

54: METHOD FOR SYNTHESIZING M-METHOXYPHENOL

00: -

The present disclosure provides a method for synthesizing m-methoxyphenol. The method provided by the present disclosure comprises the following step that a gas phase mixture of resorcinol and methanol is passed through metal phosphates-alumina as a solid phase catalyst for alkylation reaction to obtain m-methoxyphenol. The present disclosure adopts the gas-solid phase alkylation method to synthesize m-methoxyphenol, which does not require to separate the product obtained in the alkylation reaction from the catalyst, and is capable of realizing the continuous production in the industrial production process due to its continuous reaction characteristic. The present disclosure utilizes the acid-base catalysis active center on the surface of the solid phase catalyst to catalyze resorcinol and methanol for reaction, and has high resorcinol conversion rate and high m-methoxyphenol selectivity. The present disclosure uses methanol as the methylating agent, which is environmentally friendly, and has low cost and high economic benefits.

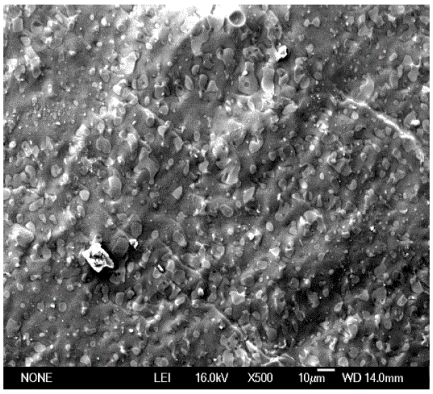


21: 2022/00019. 22: 2022-01-03. 43: 2022-02-22
51: C04B
71: Qingdao University of Science and Technology, Qingdao Liangmeiyi Ceramic New Material Technology Co., Ltd.
72: WANG, Zhiyi, MA, Zheng, WANG, Mingyue, WANG, Lixin, YANG, Changyu

54: SANITARY CERAMIC GREEN BODY

00: -

The present disclosure relates to a novel sanitary ceramic green body, further relates to a flux system of the sanitary ceramic green body, and belongs to the field of sanitary ceramic. In the present disclosure, the sanitary ceramic green body includes raw materials as follows: a quartz, a flux and a clay, where the flux is a synthetic flux, including the following chemical components by mole percentage: 45.0-70.0% of SiO_2, 1.0-8.0% of Al_2O_3, 1.0-10.0% of an alkali metal oxide, 0.0-40.0% of an alkaline earth metal oxide and 5.0-20.0% of B_2O_3. After replacing a feldspar flux with an same amount of the synthetic flux, a sanitary ceramic can remain an appearance quality unchanged. Meanwhile, this sanitary ceramic has a firing temperature reduced by 50-100 degrees centigrade and a flexural strength increased by 30-50%. The present disclosure perfectly unifies low-temperature and energy-saving firing with high performances during production of the sanitary ceramic.

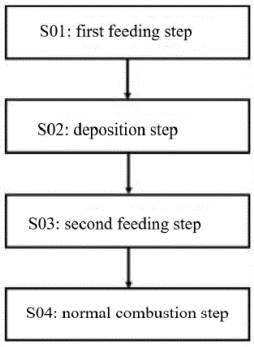


21: 2022/00020. 22: 2022-01-03. 43: 2022-02-22
51: C23C; C23F; F22B
71: Zhejiang University
72: LUO, Zhongyang, YU, Chunjiang, WANG, Qinhui, FANG, Mengxiang, CHENG, Leming

54: METHOD FOR INHIBITING HIGH-TEMPERATURE CORROSION OF HEAT EXCHANGE SURFACE OF BIOMASS FIRING BOILER

00: -

The present disclosure provides a method for inhibiting high-temperature corrosion on a surface of a heat exchanger of a biomass boiler.

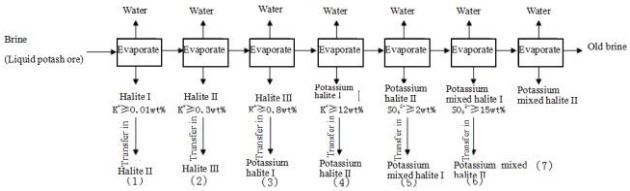


21: 2022/00021. 22: 2022-01-03. 43: 2022-02-22
51: C01D
71: Qinghai Provincal Qaidam Comprehensive Geological and Mineral Exploration Institute
72: Li Hongpu, Pan Tong, Li Dongsheng, Han Guang, Jia Jiantuan, Zhu Yunjun, Wu Liping, Jin Fang, Liu Jiubo, Cheng Kangnan

54: PRE-DRESSING METHOD OF LIQUID POTASSIUM ORE

00: -

The invention discloses a method for pre-dressing of liquid potassium ore, which belongs to the technical field of potassium ore dressing. Comprising naturally evaporating liquid potassium ore, separating and evaporating in stages based on the content of K^+ in halite crystals, and improving the recovery rate of potassium; the method comprises the following stages: crystallization of halite I, crystallization of halite II, crystallization of halite III, crystallization of potassium halite I, crystallization of potassium halite II, crystallization of potassium mixed halite I, crystallization of potassium mixed halite II; the method of the invention is used to pre-dress low-potassium and high-sodium liquid potassium ore, which can significantly improve the yield of potassium halite to 80 percent; the invention solves the technical problem that it is extremely difficult to develop and utilize low-potassium and high-sodium bittern, reduces the loss rate of potassium, improves the economic benefits of this type of potassium mine mining, increases employment, improves the output of potassium halite, and has good social benefits.

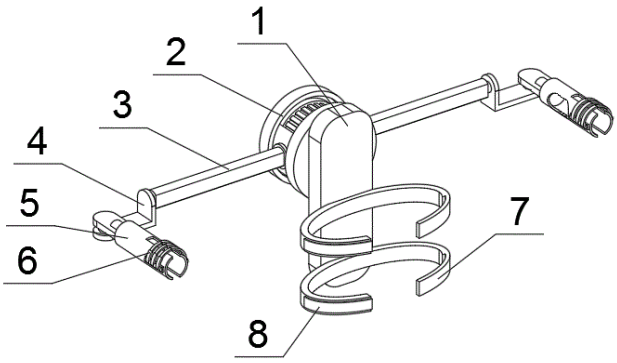


21: 2022/00022. 22: 2022-01-03. 43: 2022-02-22
51: C09K
71: The Second Hydro-geology and Geo-engineering Brigade of Shandong Provincial Bureau of Geology and Mineral (Shandong Lubei Geo-engineering Investigation Institute), Shanghai JieRang Environmental Technology Co., Ltd., Qingdao University of Technology
72: SHA, Fujian, ZHANG, Lanxin, YIN, Bingkui, HAN, Jianjiang, ZHANG, Dalei, SUN, Yingjie, QIAO, Yun, ZHANG, Jie
54: BIOGAS RESIDUE-BASED IN SITU AND ECTOPIC COUPLED DETOXIFICATION METHOD FOR HEXAVALENT CHROMIUM SITE
00: -

The present disclosure discloses a biogas residue-based in situ and ectopic coupled detoxification method for hexavalent chromium site. Biogas residues, carbon sources and sulfate are prepared into medicaments to be applied to the chromium-containing soil, and then special construction and maintenance mode is adopted to enable reducing ecological microbial agents to gradually permeate into the ground, so that the hexavalent chromium in the deep contaminated soil is reduced. According to the method, the chromium-containing site with high contamination depth can be remedied at low cost and high efficiency, meanwhile, waste is treated by waste, and the biogas residues are treated. According to the ideas of the method, the surface soil is preferentially remedied, meanwhile, chromium reducing floras such as sulfate-reducing bacteria are cultured in the surface soil site, and then reducing agents and microbial agents uniformly permeate into the ground through certain maintenance construction.

21: 2022/00023. 22: 2022-01-03. 43: 2022-02-22
51: B25J
71: Hangzhou Dianzi University
72: Chen Zihan, Fang Yinfeng
54: AN EXOSKELETON ROBOT DEDICATED BALANCE COMPONENT
00: -

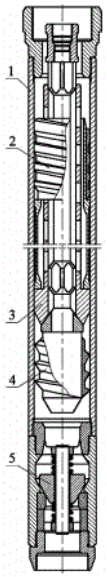
The present invention discloses an exoskeleton robot dedicated balance component, characterized in that it comprises a back plate, the upper side of the rear surface of said back plate is provided with a balance component, both sides of said balance component are provided with an extension rod respectively, the other end of said extension rods on both sides is provided with an L-shaped rotating plate in a rotational way, the upper surface of said L-shaped rotating plates on both sides is provided with a fixing plate in a rotational way, and the front end of said fixing plates on both sides connects to a sleeve in a fixed way. In the present invention, when arms pass through the inside of the sleeve, since the extension rods connect to L-shaped rotating plates in a rotational way, and the upper surface of L-shaped rotating plates connects to the fixing plate in a rotational way, the robot can move up and down or left and right as the arms move. The No.1 slide block is installed into the chute, when the No.1 slide block moves inside the chute, the spring jacking rod plays a support role, driving the No.1 fixture block to connect to the clamping gear on the gear surface in a meshing way, so that the No.1 slide blocks on both sides can be fixed, and extension rods are fixed to support and balance arms.



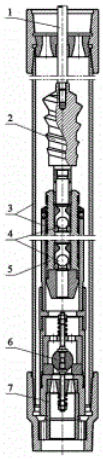
21: 2022/00024. 22: 2022-01-03. 43: 2022-02-22
51: C02F
71: QILU UNIVERSITY OF TECHNOLOGY
72: CHEN, Xiaoqian, LI, Yingzheng, ZHAO, Yaoyao, SHI, Yunlong, FU, Yingjuan
54: APPLICATION OF BIOMASS ASH AS FRAMEWORK CONSTRUCTION BODY IN SLUDGE DEWATERING AND METHOD FOR IMPROVING DEWATERING PERFORMANCE OF PAPERMAKING EXCESS SLUDGE
00: -

The present disclosure discloses an application of biomass ash as a framework construction body in sludge dewatering and a method for improving a dewatering performance of papermaking excess sludge, belonging to the field of sludge treatment. The method comprises the following steps: adding a framework construction body for treatment in a biological wastewater treatment process, adding a chemical conditioner into the treated excess sludge, and then performing deep mechanical dewatering treatment, wherein the framework construction body is biomass ash. Compared with the prior art, the application of the biomass ash as the framework construction body in sludge dewatering and the method for improving the dewatering performance of the papermaking excess sludge have the advantages that the sludge dewatering performance can be improved, the treatment cost can be reduced, and the popularization and application value is very high.

21: 2022/00025. 22: 2022-01-03. 43: 2022-02-22
51: F04B
71: Qingdao University of Technology
72: LIU, Xinfu, WU, Jianjun, WANG, Youqiang, ZHOU, Chao, YU, Bangting, CHEN, Xiaoning
54: HORIZONTAL WELL SELF-CENTERING MOVABLE PLUG TYPE CONE VALVE PUMP
00: -
The invention provides a horizontal well self-centering movable plug type cone valve pump. A movable plug type spiral sand scraping plunger, a double-centralizing rotary tooth stirring rod body, a traveling cone valve with a fixed cone valve and a movable cone valve seat and a fixed cone valve with a movable cone valve and a fixed cone valve seat are adopted to achieve timely discharging of produced liquid with sand grains, self-centering of the sand scraping plunger and the traveling cone valve and smooth opening and closing of the traveling cone valve and the fixed cone valve, and the problems about sand grain abrasion and eccentric wear between a long pump barrel and a movable plunger, horizontal well valve leakage, valve ball opening difficulty, untight closing and the like are solved.



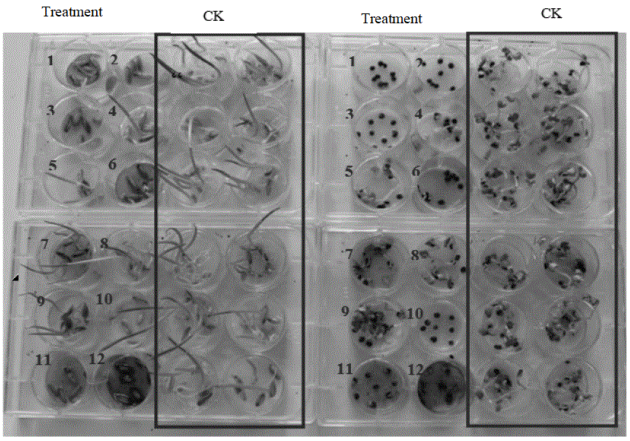
21: 2022/00028. 22: 2022-01-03. 43: 2022-02-22
51: F04B
71: Qingdao University of Technology
72: LIU, Xinfu, LIU, Guoqiang, WU, Jianjun, ZHOU, Chao, LI, Bo, HE, Hongming
54: LOW-SUBMERGENCE COAL-DUST RESISTANT DRAINAGE AND GAS PRODUCTION PUMP FOR COAL-BED METHANE WELL
00: -
The present invention provides a low-submergence coal-dust resistant drainage and gas production pump for a coal-bed methane well. With an axial-flow type follow-up centered stirring technology, a double-spring auxiliary starting technology, and a dust shaving short tube technology, functions of a smooth on/off of a pump valve and coal dust resistance under a low submergence condition are achieved.



21: 2022/00029. 22: 2022-01-03. 43: 2022-02-22
51: A01N; C12P
71: Qinghai Academy of Agriculture and Forestry Sciences
72: Zhu Haixia, Ma Yongqiang, Cheng Liang

54: ISOLATED MONOMER COMPOUND OF TRICHODERMA POLYSPORUM STRAIN, PREPARATION METHOD AND APPLICATION THEREOF

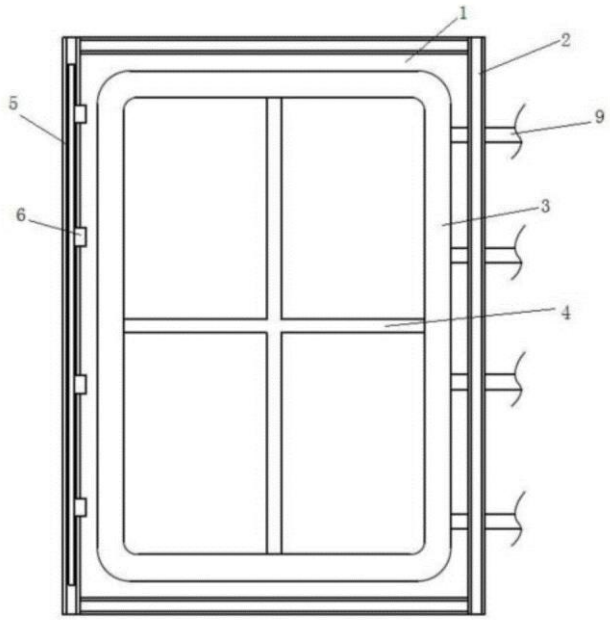
00: -
The invention discloses a monomer compound isolated from Trichoderma polysporum strain, a preparation method and application thereof, belonging to the chemical field. The monomer compound include compound 1-compound 3, which are respectively p-hydroxyphenyl-2, 3-dihydroxypropyl ether, o-hydroxy-3-carbonyl-1-phenylpropanol and 1,8-propanediol o-xylene, three monomer compounds with strong activity. The monomer compound can obviously inhibit the germination of Avena fatua and B. napus seeds, among which compound 3 has obvious inhibition effect on the germination of Avena fatua and B. napus seeds, with the inhibition rates of 83.33 percent and 86.67 percent respectively. The invention lay a foundation for developing novel microbial herbicide by directly utilizing that monomer compound and developing new compound with weeding function on the basis.



21: 2022/00030. 22: 2022-01-03. 43: 2022-02-22
51: A01G; A01K
71: Yangjiang Polytechnic
72: CHEN, Xinghan, LIANG, Qiyong, YANG, Wei, SI, Yuanyuan, FAN, Bin, XU, Ruiwen, TAN, Xiaoming

54: INSECT-RICE SYMBIOTIC COMPREHENSIVE PLANTING AND BREEDING METHOD MAINLY BASED ON TYLORRHYNCHUS PROLIFERATION

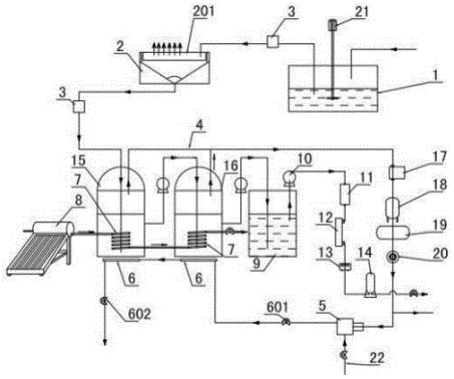
00: -
The present disclosure discloses an insect-rice symbiotic comprehensive planting and breeding method mainly based on tylorrhynchus proliferation. The planting method comprises: Step S1: paddy field selection; Step S2: field layout; Step S3: soil preparation and fertilization; Step S4: stocking of Tylorrhynchuss and seedlings; step S5: management of Tylorrhynchus proliferation; step S6: rice planting; step S7: field management; step S8: water level control; step S9: rice harvesting; step S10: Tylorrhynchus capturing. The present disclosure employs a comprehensive breeding mode of symbiosis between Tylorrhynchuss and rice. By first proliferating the Tylorrhynchuss in the rice field and then planting rice, it can simulate the growth environment of the Tylorrhynchuss in the field to the greatest extent, and give full play to the mutually beneficial symbiotic relationship between Tylorrhynchuss and rice, the rotten g rice roots, stems and leaves can provide food for the Tylorrhynchuss.



21: 2022/00031. 22: 2022-01-03. 43: 2022-02-23
51: C02F; C05F
71: Zouping Dafeng Food Co., Ltd., ZHAO, Shoushan
72: ZHAO, Shoushan, DONG, Jianzhong, LIU, Xiaoqing, SUN, Hongxia, ZHANG, Zhiwei, MA, Chao, ZHANG, Cheng, FU, Zhaohui, XIE, Qiancheng, YANG, Guang, YANG, Changdong, DONG, Hai, GAO, Shan, GAO, Xianbo, YU, Jinxia, MA, Wenhao, WANG, Cuiping, LI, Xueyan, SHI, Xiaomei

54: SYSTEM FOR PREPARING FERTILIZER FROM LIVESTOCK AND POULTRY MANURE WASTES AND APPLICATION

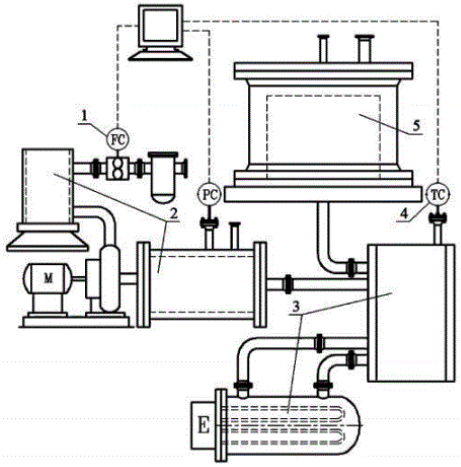
00: -
The present disclosure discloses a system for preparing a fertilizer from livestock and poultry manure wastes. The liquid outlet end of the manure-water mixture tank (1) is connected with a filtering tank (2) through a pipeline, a conveying pump (3) is arranged on a pipeline between the manure-water mixture tank (1) and the filtering tank (2), the liquid outlet end of the filtering tank (2) is connected with a biogas generation mechanism through a manure water conveying pipeline, the gas outlet end of the biogas generation mechanism is connected with a biogas boiler (5) through a biogas output pipeline (4), the water inlet end of the biogas boiler (5) is connected with a tap water supply pipeline, the water outlet end of the biogas boiler (5) is connected with floor heating coil pipes (6) through pipelines, the floor heating coil pipes (6) are positioned under the biogas generation mechanism.



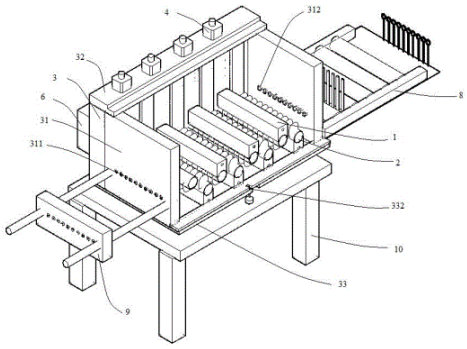
21: 2022/00032. 22: 2022-01-03. 43: 2022-02-22
51: G09B
71: Qingdao University of Technology
72: LIU, Xinfu, LIU, Chunhua, LI, Bo, WANG, Guodong, ZHANG, Shousen, HE, Hongming

54: TEMPERATURE REGULATION HIGH-PRESSURE WATER SUPPLY SYSTEM IN THREE-DIMENSIONAL SIMULATED TEST FOR REDUCED-PRESSURE PILOT PRODUCTION OF DEEP-WATER COMBUSTIBLE ICE

00: -
The present invention provides a temperature regulation high-pressure water supply system in a three-dimensional simulated test for reduced-pressure pilot production of deep-water combustible ice. Continuous and stable high-pressure water may be supplied automatically, and continuous and stable temperature-regulated high-pressure water may be supplied remotely and automatically through a temperature regulator and a temperature regulation simulated test control system, to implement an operating flow of simulating fluid production and temperature-regulated high-pressure water supply with a deep-water sediment for reduced-pressure pilot production of combustible ice.



21: 2022/00033. 22: 2022-01-03. 43: 2022-02-22
51: B29B
71: Shandong Dingyuan Zhiye New Material Co., Ltd.
72: BAI, Shulin, GUO, Zhishan, YUAN, Canyao
54: INFILTRATING MOLD AND INFILTRATION PROCESS OF LONG-FIBER REINFORCED THERMOPLASTIC COMPOSITES
00: -
The present disclosure relates to an infiltrating mold and an infiltration process of long-fiber reinforced thermoplastic composites, wherein the mold comprises an upper pressing roller and its fixation component, a lower pressing roller and its fixation component, a mold shell, a lifting mechanism, a heating mechanism, a molten bath transition section and a connecting flange. The mold shell comprises a mold side wall, a mold upper cover plate and a mold lower cover plate; the upper pressing roller and the lower pressing roller are parallel to each other and spaced apart; and the upper pressing roller and the lower pressing roller are both provided with through holes for resin to flow out. By adopting an upper pressing roller capable of lifting in combination with a stationary lower pressing roller, resin overflow holes for providing resin are arranged on contact surfaces between the upper and lower pressing rollers and the fiber.

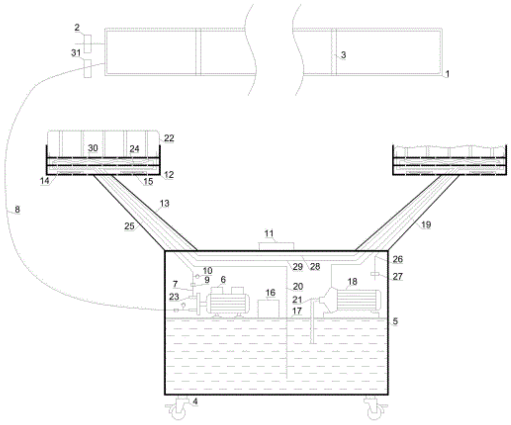


21: 2022/00034. 22: 2022-01-03. 43: 2022-02-22
51: A01N; A61K; A61P; A01P
71: Shandong Nuoxin Testing Co., Ltd.
72: DONG, Pingge, GAO, Yingjiao, HU, Yanqiu
54: MEDICAL ANTIBACTERIAL AND DISINFECTING BIODRESSING
00: -
The invention relates to a medical antibacterial and disinfecting biodressing. The medical antibacterial and disinfecting biodressing contains acidic electrolytic water, polyvinyl pyrrolidone and modified chitosan. The acidic electrolytic water has a high content of hypochlorous acid molecules for sterilization and disinfection effects and efficient broadspectrum antibacterial property. The polyvinyl pyrrolidone is used as a stabilizer for improving the stability of the medical antibacterial and disinfecting biodressing and prolonging the effective duration of same to 18 months. The modified chitosan is used as an antibacterial agent capable of forming an aqueous film on an object surface for prolonging the antibacterial time of the medical antibacterial and disinfecting biodressing. The medical antibacterial and disinfecting biodressing of the invention is faintly acidic and can be used for surface disinfection, and the degradation product is safe and nontoxic.

21: 2022/00035. 22: 2022-01-03. 43: 2022-02-22
51: C05G
71: YAN, Songgui
72: YAN, Songgui
54: ADDITIVE OF SELENIUM-RICH BIO-ORGANIC FERTILIZER, AND PRODUCTION AND USE METHODS OF SELENIUM-RICH BIO-ORGANIC COMPOUND FERTILIZER
00: -

An additive of a selenium-rich bio-organic fertilizer and production and use methods of a selenium-rich bio-organic compound fertilizer are disclosed.

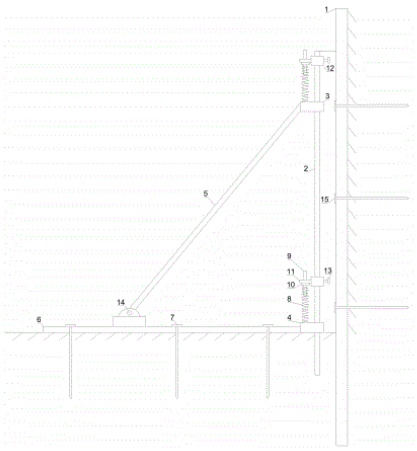
21: 2022/00036. 22: 2022-01-03. 43: 2022-02-22
51: B21D
71: Huainan First People's Hospital
72: ZHU, Beibei, YU, Chuanqing
33: CN 31: 202122463058.8 32: 2021-10-13
54: MOBILE AUXILIARY EQUIPMENT FOR AIR BED
00: -
The present invention provides a mobile auxiliary equipment for an air bed, which comprises an air bed body, including an air bed body provided with an inflation port and an exhaust valve, further includes a box with a universal wheel installed at a bottom position, and an air pump is fixedly installed in an inner cavity of the box body, an output end of the air pump is connected to one end of a connecting pipe, and the other end of the connecting pipe is arranged outside the box and is connected to the inflation port of the air bed body through an inflation tube, a first solenoid valve and an air pressure monitoring device are installed on the connecting pipe, and the first solenoid valve is located between the air pressure monitoring device and the air pump; an infrared monitoring device is installed on a top of the box.



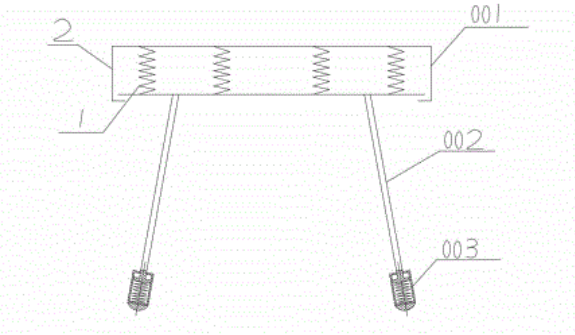
21: 2022/00037. 22: 2022-01-03. 43: 2022-02-22
51: C09K
71: China University of Geosciences (Beijing)
72: YAO, Jun, GU, Jihai, CHEN, Zhihui, LI, Hao, ZHU, Xiaozhe, LU, Chao, PANG, Wancheng, SONG, Qi, HUANG, Peng, MA, Bo
54: PREPARATION AND APPLICATION METHOD OF SCATTERED NON-FERROUS METAL TAILINGS IMPROVER
00: -
The invention relates to a preparation and application method of a scattered non-ferrous metal tailings improver and is used for treatment of typical scattered non-ferrous metal tailings. Compared with the prior art, the invention differs in that biochar-derived Arundo donax L. stalk is wide in source, resistant to extreme environment, large in harvest yield without artificial cultivation and wide in loam source. According to the preparation method, the tailings improver was prepared by mixing a sifted Arundo donax L. biochar material with loam at a mass ratio of 3:10. According to the method, the improver and the scattered non-ferrous metal tailings sand at a mass ratio of 1:5.6-1:6.7. Compared with prior art, the improver and the application method thereof have characteristics of low cost, low use dosage, higher heavy metal curing efficiency and the like; and promoting microbial activity of tailings, improving growth conditions of plants, and achieving high efficiency.

21: 2022/00039. 22: 2022-01-03. 43: 2022-02-22
51: E21C
71: ANHUI UNIVERSITY OF SCIENCE AND TECHNOLOGY
72: ZHANG, Kun, XU, Liangji, LIU, Xiaopeng, XU, Yang
33: CN 31: 202121499096.2 32: 2021-07-02
54: SIDE RETAINING DEVICE FOR REDUCING SIDE SLOPE SLIDING DEGREE OF A COAL MINING COLLAPSE PIT
00: -
A side retaining device for reducing side slope sliding degree of a coal mining collapse pit, including a baffle plate, wherein the baffle plate is arranged in a coal mining collapse pit and is attached to a side slope; a baffle plate towards the coal mining collapse pit is uniformly installed with a I-beam in a vertical direction, and one or more of the I-beams are respectively sleeved with a sliding ring group, each of the sliding ring group is composed of an upper ring (3) and a lower ring; each upper ring is respectively connected to one end of a support rod, and the other end of the support rod is rotatably connected with a bottom plate laid on an inner cavity bottom of the coal mining collapse pit, and each

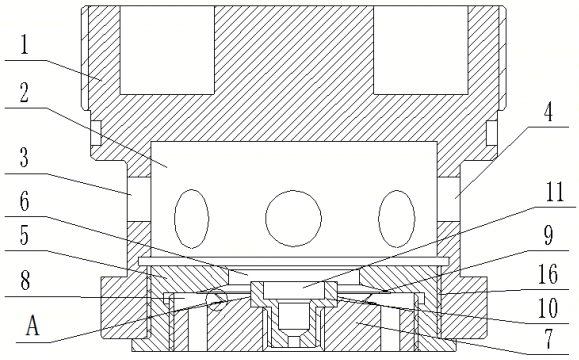
lower collar is respectively connected with one end of the bottom plate adjacent to the baffle plate.



21: 2022/00040. 22: 2022-01-03. 43: 2022-02-22
51: B64C
71: LINYI UNIVERSITY
72: ZHANG, Danhui, GONG, Wendi, WANG, Weijia, LIANG, Ruquan, YANG, Liu, ZHANG, Dengbo
54: PLANT PROTECTION UAV LANDING GEAR
00: -
The present disclosure discloses a plant protection UAV (unmanned aerial vehicle) landing gear, which comprises a bottom shock absorber, a bearing bar and a top shock mitigation system. The bottom shock absorber adopts a design of a built-in single spring, comprising a damping spring and a shock absorber housing; a middle bearing bar part adopts a carbon fiber hollow tube of a model T300 as a reference material; and a top shock mitigation system adopts a design of uniformly placed spring groups, with built-in springs similarly.

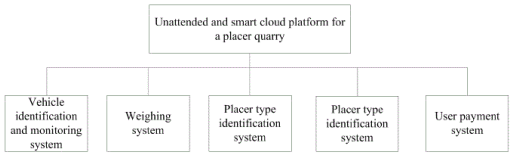


21: 2022/00041. 22: 2022-01-03. 43: 2022-03-04
51: B60G
71: Beijing Institute of Technology, Beijing Polytechnic
72: Zhang Haiyun, Shi Yuanfang
54: DAMPING VALVE PLATE STRUCTURE OF HYDRO-PNEUMATIC SPRING
00: -
The invention discloses a damping valve plate structure of hydro-pneumatic spring, which comprises an end cover, wherein the end cover is provided with a cavity; the cavity is provided with an oil inlet hole and an oil outlet hole along two opposite side walls of the axis; the bottom of the end cover is provided with a through groove, which is communicated with the cavity; a damping mechanism is installed in the through groove, and the damping mechanism comprises a valve body fixedly connected in the through groove; the valve body is provided with an installation groove, and the installation groove is communicated with the cavity; a valve seat is fixedly connected in the installation groove, and a first damping part and a second damping part are arranged on the valve seat, and the first damping part and the second damping part are connected with the cavity. The invention has the advantages of easy manufacturing, excellent sealing performance and good popularization and application value.



21: 2022/00042. 22: 2022-01-03. 43: 2022-02-22
51: G01G; G07C; G06Q
71: Guangxi University
72: ZHANG, Xuejun, XU, Xianfu, WAN, Haibin, BAN, Yanjiao, LI, Bin, KONG, Deyu, SU, Wenjun, LIU, Kai
54: UNATTENDED AND SMART CLOUD PLATFORM FOR PLACER QUARRY
00: -
An unattended and smart cloud platform for a placer quarry. which includes a placer quarry terminal and a cloud; the placer quarry terminal includes a vehicle

identification and monitoring system, a weighing system, and a placer type identification system; the vehicle identification and monitoring system performs license plate recognition for a vehicle entering the placer quarry to obtain an identity information of the vehicle; the weighing system measures a weight of an empty vehicle and weighs the vehicle after a placer is loaded; the placer type identification system recognizes a type of the placer on the vehicle after the placer is loaded; the cloud includes an enterprise supervision system and a user payment system; the enterprise supervision system calculates fee information according to the identity information of the vehicle, an empty vehicle weight, a loaded weight and a placer category of a corresponding vehicle; the user payment system deducts fees.

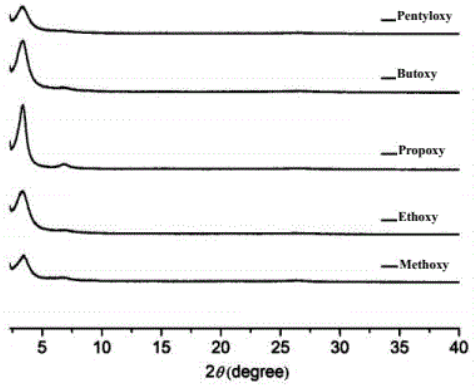


21: 2022/00043. 22: 2022-01-03. 43: 2022-02-22
51: C08G; C09K; G01N
71: LINYI UNIVERSITY
72: WEI, Pifeng, TANG, Lijie, WEN, Zhenhao, HAN, Xiaoying, WANG, Yaqi

54: COVALENT ORGANIC FRAMEWORK MATERIALS AND SYNTHESIS METHOD AND APPLICATION THEREOF

00: -

A synthesis method of covalent organic framework materials is disclosed, which includes the following steps: 2,4,6-trihydroxy-1,3,5-benzenetricarboxaldehyde and 2,5-dialkoxy-1,4-benzenedicarboxyl hydrazine are uniformly mixed in an organic solvent, and reacting is carried out under the catalysis of acetic acid to obtain the covalent organic framework materials, and the alkoxy is methoxy, ethoxy, propoxy, butoxy or pentyloxy. The covalent organic framework materials are applied to fluorescence detection of Cu2+, Co2+, Cr3+ and Pb2+. The covalent organic framework materials synthesized by the disclosure have long-range ordered twodimensional hexagonal structures and regular pore channels; and the covalent organic framework materials may be used as fluorescent probes, and fluorescence is quenched when the covalent organic framework materials are identified by heavy metal ions Cu2+, Co2+, Cr3+ and Pb2+, and the materials have a sensitive fluorescent response behavior.



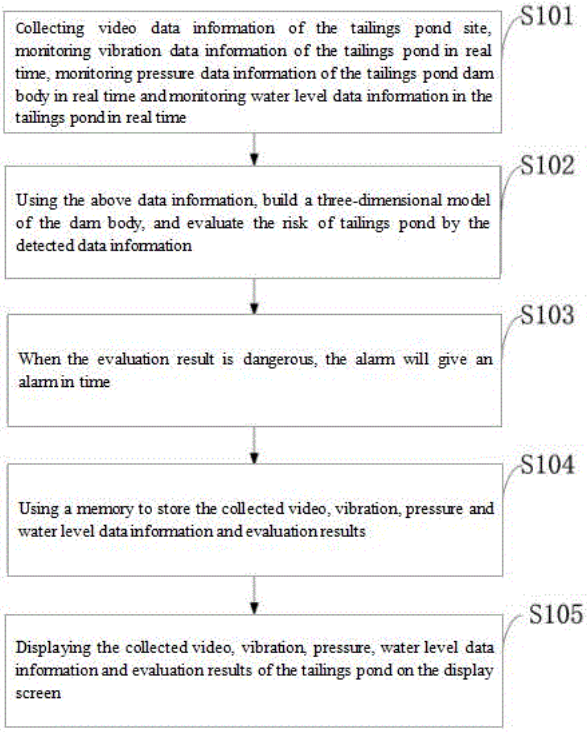
21: 2022/00044. 22: 2022-01-03. 43: 2022-03-03
51: G01F; G05B
71: Quanzhou Equipment Manufacturing Research Institute
72: Nie Wen, Lu Song, Guo Siliang, Wang Lei

54: INFORMATION-BASED INTELLIGENT CONTROL SYSTEM AND A CONTROL METHOD FOR SAFELY MONITORING TAILINGS PONDS

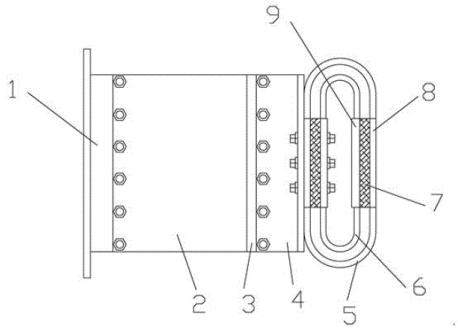
00: -

The invention belongs to the technical field of tailings pond monitoring, and discloses an information-based intelligent control system and a control method for safety monitoring tailings ponds. The information-based intelligent control system for safety monitoring tailings ponds includes a video acquisition module, a vibration monitoring module, a pressure monitoring module, a water level monitoring module, a main control module, a dam model building module, a risk assessment module, an alarm module, a data storage module and a display module. According to the invention, the shape and distribution characteristics of the saturation line in the model test can be controlled by the dam body model building module, so that the similarity between the experimental dam body model and the actual dam body is improved, thereby improving the accuracy of the experiment; At the same time, the risk assessment module can not only evaluate the safety status of tailings pond according to historical data, but also increase spatial information, further refine the evaluation system of tailings pond, facilitate the real-time early warning

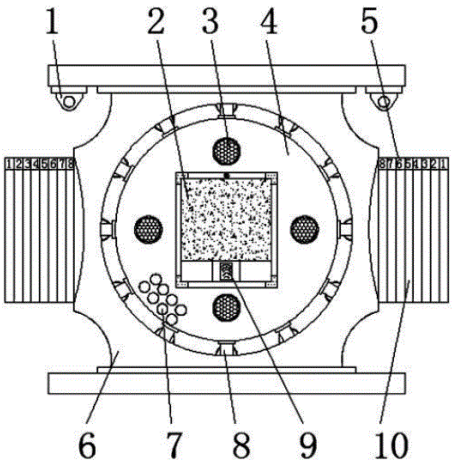
and risk investigation of tailings pond, and curb the disaster in the bud.



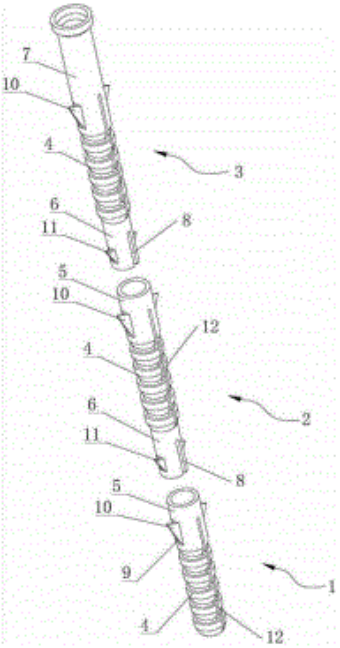
21: 2022/00046. 22: 2022-01-03. 43: 2022-02-22
51: E01D; E04B
71: Qingdao Agricultural University
72: GUO, Min
54: BUILDING DAMPER
00: -
The present disclosure discloses a building damper. The building damper comprises a viscoelastic damper and a mild steel metal damper, wherein one end of the viscoelastic damper is connected to an embedded part in a coupling beam, the other end of the viscoelastic damper is connected to one end of the mild steel metal damper, and the other end of the mild steel metal damper is connected to the embedded part in the coupling beam at the other end. The building damper can be conveniently installed in the middle of a coupling beam span or among frames. Under the normal use state, the building damper can improve the integral rigidity of the structure, play the role of classified yield energy dissipation for different intensities of earthquakes during the earthquake, and effectively alleviate the vibration response of the structure, therefore the building damper has a wide engineering application prospect.



21: 2022/00047. 22: 2022-01-03. 43: 2022-02-22
51: G06K; G07C
71: North China University of Science and Technology
72: ZENG, Yijun, HAN, Yihua, SUN, Fengqin, ZHAI, Yujia, TONG, Lu
54: PERFORMANCE RECORDING SYSTEM FOR HUMAN RESOURCE MANAGEMENT
00: -
The invention discloses a performance recording system for human resource management, including a front clamping plate and a rear clamping plate. Hanging rings are arranged on two sides above the front clamping plate. A device body is embedded into a front side of the front clamping plate. Voice broadcast devices are mounted around the device body. A face scanning screen is fixedly arranged in the middle of device body. A fingerprint identification part is mounted below the face scanning screen. Operating keys are fixedly arranged below the left of the face scanning screen. A sucker is mounted to a rear side of the rear clamping plate. Rollers are fixedly arranged between the rear clamping plate and the front clamping plate. A writing plate is arranged between the rollers. A calendar bar is at an upper end of the writing plate. The system accurately records clock-in conditions and uses clock-in manners.



21: 2022/00048. 22: 2022-01-03. 43: 2022-02-22
51: F16B
71: Shandong Guochuang Energy-Saving Technology Co., Ltd.
72: WU, Likan
54: PLUG-IN ASSEMBLY TYPE WALL-ANCHORING EXPANSION BOLT
00: -
Provided is a plug-in assembly type wall-anchoring expansion bolt, which avoids a potential safety hazard caused by a limited anchoring force of existing expansion bolts. The bolt includes a plug-in head and a plug-in tail, wherein the plug-in head is composed of an expansion portion and an outer plug-in pipe arranged in the front and the back, and the plug-in tail is composed of an inner plug-in pipe, an expansion portion and a sleeve arranged in sequence in the front and the back, with the inner plug-in pipe being plugged into the outer plug-in pipe; the expansion portion is provided with a second longitudinal notch extending in a length direction of the expansion portion; and the outer plug-in pipe is provided with an embedding recess, and an outer surface of the inner plug-in pipe is provided with an embedding lug which is opened outwards and embedded into the embedding recess.



21: 2022/00049. 22: 2022-01-03. 43: 2022-03-02
51: C08K; C08L; E04B
71: Shandong Guochuang Energy-Saving Technology Co., Ltd.
72: WU, Likan
54: FLAME-RETARDANT POLYSTYRENE BOARD AND METHOD FOR PRODUCING THE SAME
00: -
The present invention relates to a flame-retardant polystyrene board. The flame-retardant polystyrene board is composed of a molded polystyrene foam board and a fireproof paste, wherein a cavity filled with the fireproof paste is provided between polystyrene particles of the molded polystyrene foam board; the fireproof paste is poured into the cavity to form a fireproof layer, thereby realizing A-level fireproofing. The polystyrene particles are prevented from being bonded together due to addition of a large amount of adhesives, etc., and cost of the polystyrene board is significantly decreased with an effect improved by several-dozen times. The flame-retardant polystyrene board is a major breakthrough in thermally-insulated materials, with excellent cost performance and great social benefits.

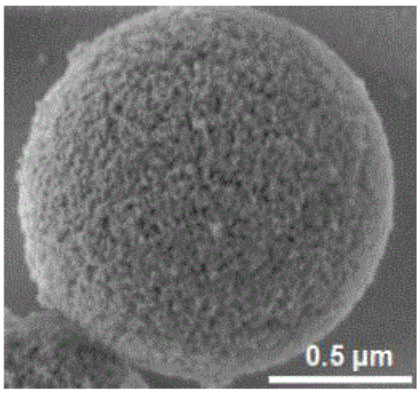
21: 2022/00050. 22: 2022-01-03. 43: 2022-02-22
51: B01J; C02F; C05B; C09K
71: Qingdao University of Science and Technology, Frontier Institute of Nano and Micro Science (Qingdao) Co., Ltd.

72: WANG, Lei, XIAO, Zhenyu, ZHANG, Jiaxin, DU, Yunmei, YANG, Shu, FENG, Shouhua

54: HIERARCHICAL POROUS PHOSPHATE MATERIAL AND PREPARATION METHOD AND USE THEREOF

00: -

The present disclosure provides a hierarchical porous phosphate material and a preparation method and use thereof, belonging to the technical field of supercapacitors. In the present disclosure, ethanol and ethylene glycol are used as organic solvents, and a unique coordination skeleton structure of a spherical precursor are effectively maintained by adjusting a reaction temperature and a reaction time, and the spherical precursor is mixed with a phosphate solution. Phosphate is used as an etchant, and phosphate ions can replace all relatively bulky organic ligands in the spherical precursor by adjusting the reaction temperature and the reaction time, to finally obtain a hierarchical porous phosphate material with a significantly-enhanced active specific surface area.



21: 2022/00054. 22: 2022-01-03. 43: 2022-03-03

51: G02B

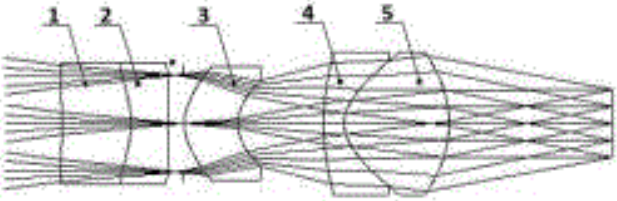
71: Qingdao University of Technology

72: Chen Jianjun

54: ASPHERIC SHORT-WAVE INFRARED LENS

00: -

The invention provides an aspheric short-wave infrared lens, which comprises five lenses. The lenses are positive, negative, negative and positive in sequence along the incident direction of light; the focal length of the lens is 16.8 mm, the F number is 2.5, the working band is short-wave infrared band, the wavelength range is 1000 nm-2500 nm, the field of view angle is 16°, the total optical length of the system is 39.4 mm, and the back intercept is 11.6 mm; the lens is designed as an image telecentric structure, which can be mainly used as a telescopic system of a short-wave infrared imaging spectrometer, and can also be directly used as a short-wave infrared imaging system. In the design process, the lens uses aspheric technology to correct and balance all kinds of aberrations. Therefore, the lens has the advantages of wide working band range, large relative aperture, long back intercept, excellent image quality, miniaturization and light weight.



21: 2022/00055. 22: 2022-01-03. 43: 2022-02-22

51: F24F

71: Xijing University

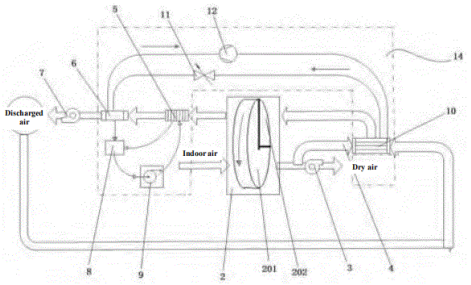
72: CHEN, Kai, ZHANG, Chenbo, LIU, Xinfei, QIN, Yao, ZHANG, Qian

33: CN 31: 202110426100.0 32: 2021-04-20

54: MOVABLE ROTARY DEHUMIDIFIER

00: -

The invention discloses a movable rotary dehumidifier, comprising a desiccant rotary wheel, wherein the desiccant rotary wheel is divided into a drying area and a dehumidification area. To-be-treated air is introduced into an air inlet of the drying area; an air outlet of the drying area is divided into two paths, one is connected with a treatment fan and the other is connected with an air inlet of the dehumidification area; air discharged from an air outlet of the dehumidification area passes through a heat pump cycle unit and then enters a regeneration fan to be treated and discharged or recycled. By adding the regeneration dehumidification area and the heat pump unit, emission of high-temperature and high-humidity gas generated by the dehumidifier is achieved to replace existing drilling emission. The invention can meet the application requirements of different working positions, achieve cyclic energy utilization and reduce energy consumption.



21: 2022/00056. 22: 2022-01-03. 43: 2022-03-03
51: C12N
71: RICE RESEARCH INSTITUTE, GUANGDONG ACADEMY OF AGRICULTURAL SCIENCES
72: Zhang Jing, Li Chen, Lv Shuwei, Jiang Liqun, Mao Xingxue, Liu Qing, Sun Bingrui, Chen Wenfeng, Fan Zhilan, Pan Dajian

54: METHOD FOR SELECTING MAJOR QTL AND MOLECULAR MARKERS OF RICE GERMINATION AND FLOOD TOLERANCE

00: -

A method for selecting major QTL for rice germination and flood tolerance and molecular markers includes the following steps: step 1, selecting multiple F2 single plants of female parent and male parent, constructing flood tolerance and non-flood tolerance gene pool, combining two parents for BSA sequencing, step 2, verifying the effect of candidate sections, step 3, further screening the sections, and step 4, obtaining molecular markers closely linked with major QTL for rice germination and flood tolerance. Through the initial mapping of rice germination flood tolerance traits, the major QTL controlling this trait was obtained, and the effect of candidate segments was verified. Combined with further fine mapping, the molecular marker closely linked with the major QTL of rice germination flood tolerance was finally obtained. Mining high flood-tolerant germplasm and cloning rice germination flood-tolerant genes with breeding application value from it have important application prospects for molecular marker-assisted breeding of direct seeding rice.

Genotypes and phenotypes of recombinant individual plants of BC_2F_2

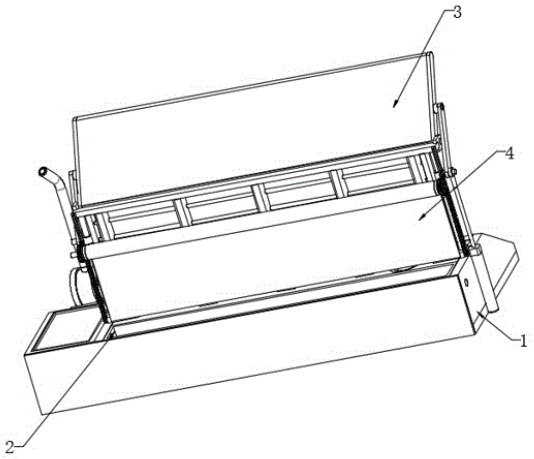
Recombinant individual plant	Genotype													Coleoptile length (cm)
	RM24 312	RM2 4313	RM2 4328	RM24 334	RM2 4350	RM2 4353	RM24 355	RM24 356	RM2 4371	RM24 382	RM24 390	RM24 421	RM2 4497	
H21-1	H	H	H	H	H	H	H	H	H	H	H	A	A	7
H22-1	H	H	H	H	H	H	H	H	H	H	A	A	A	7
H33	A	A	A	H	H	H	H	H	H	H	H	H	H	6.6
H159	B	B	H	H	H	H	H	H	H	H	H	H	H	5.5
H252	B	B	H	H	H	H	H	H	H	H	H	H	H	6.3
H18	B	B	B	H	H	H	H	H	H	H	H	H	H	6.4
H8	B	B	B	B	B	H	H	H	H	H	H	H	H	6.3
Z65	B	B	B	B	B	B	B	B	B	H	H	H	H	5.8
H20-1	B	B	B	B	B	B	B	B	B	H	H	H	H	7.1
H76	H	H	H	H	H	H	H	H	H	H	H	B	B	6.3
H235	H	H	H	H	H	H	H	H	H	H	H	B	B	6.3
H14	H	H	H	H	H	H	H	H	H	H	H	B	B	6.4
H36	H	H	H	H	H	H	H	H	H	B	B	B	B	5.8
H208	H	H	H	H	H	H	H	H	H	B	B	B	B	6.3
S123	B	B	B	B	B	B	B	B	B	H	H	H	H	2.8

21: 2022/00057. 22: 2022-01-03. 43: 2022-03-03
51: E02D
71: Sinosteel MAANSHAN Mine Research Institute Co., Ltd
72: Nie Wen, Zhou Yuxin, Dai Bibo, Wang Yunmin, Zhu Junxing, Zeng Xuemin, Wu Xiaogang, Luo Minghua

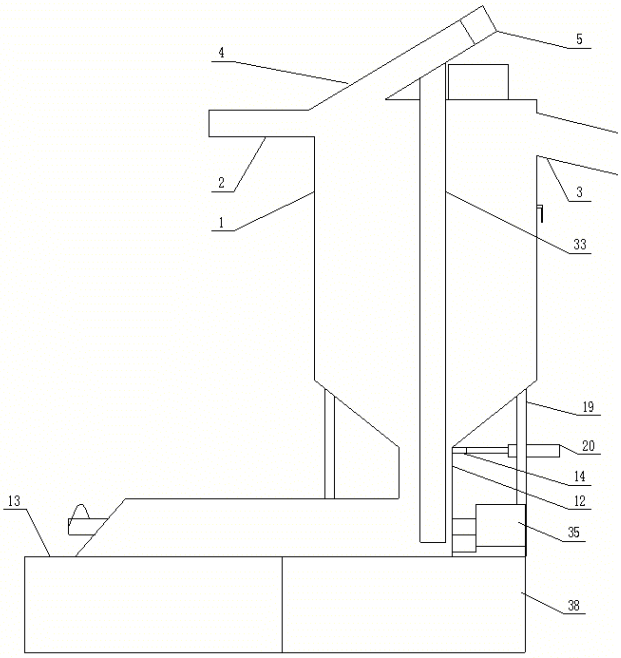
54: AUTOMATIC RAIN-PROOF DRAINAGE DEVICE FOR SLOPES

00: -

The invention discloses an automatic rain-proof drainage device for slopes, which belongs to the technical field of rain-proof drainage and comprises a frame bracket, a drainage device, a supporting device, a blocking device and a waterproof device, wherein the drainage device and the waterproof device are installed on the top of the frame bracket, and the supporting device and the blocking device are installed on the top of the drainage device. According to the invention, by arranging the folding rain baffle assembly, the folding rain baffle assembly is raised and unfolded when the rainfall is heavy, and the excess rainwater is poured into the special drainage channel, so that when the equipment is not working, the folding device can be folded, and the growth of the slope vegetation is not affect.

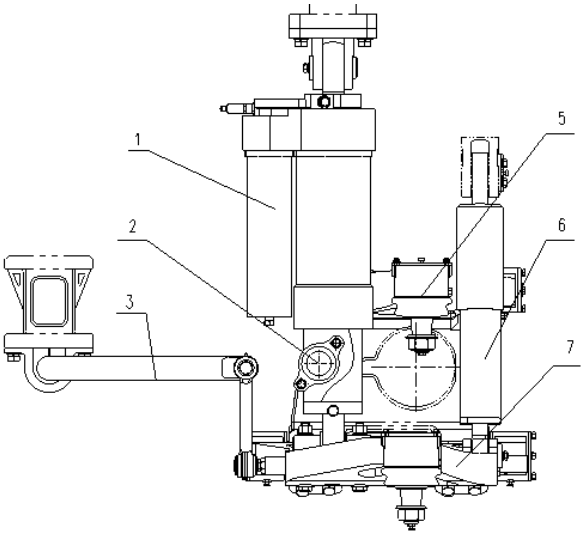


21: 2022/00058. 22: 2022-01-03. 43: 2022-03-03
51: C02F
71: Zhejiang Tongji Vocational College of Science and Technology
72: Zhu Yubo
33: CN 31: 202111524077.5 32: 2021-12-14
54: NOVEL CONSTRUCTION WASTEWATER TREATMENT DEVICE
00: -
The invention disclose a novel construction wastewater treatment device, which comprise a vertical barrel, wherein a wastewater injection pipe is fixedly installed at one side of the top of the side wall of the vertical barrel, and a water outlet pipe is fixedly installed at the other side of the top of the side wall of the vertical barrel; a preliminary filter mechanism is installed at the joint of the wastewater injection pipe and the vertical barrel, a precipitation filter mechanism is installed at the bottom of the vertical barrel, and an adsorption filter mechanism is installed inside the vertical barrel; the wastewater injection pipe is communicated with the preliminary filter mechanism, the preliminary filter mechanism is communicated with the precipitation filter mechanism, and the precipitation filter mechanism is communicated with the adsorption filter mechanism. According to the invention, large granular materials, fine sediment materials and organic matters are separated from the construction wastewater in layers, thus avoiding pipeline blockage caused by the large granular materials such as crushed stones and the like, which can prevent wastewater treatment or damage the wastewater treatment equipment, and effectively accelerating the wastewater treatment efficiency and improving purification quality; meanwhile, large granular materials and silt can be separately screened out and recycled as building materials, thereby effectively saving resources and reducing construction cost.



21: 2022/00059. 22: 2022-01-03. 43: 2022-02-23
51: B60G
71: Beijing Institute of Technology, Beijing Polytechnic
72: Zhang Haiyun, Shi Yuanfang
54: BRAND-NEW DOUBLE WISHBONE SUSPENSION STRUCTURE WITH LARGE STROKE AND HIGH LOAD
00: -
The invention disclose a brand-new double wishbone suspension structure with large stroke and high load, which comprises an upper arm assembly connecte with an external axle housing through a first movable structure, a lower arm assembly connected with that external axle house through a second movable mechanism, The upper arm assembly and the lower arm assembly are movably connected with wheels respectively, and the lower arm assembly is provided with one end of a first buffer and one end of a second buffer respectively; the other ends of the first buffer and the second buffer are movably connected with the vehicle body, and the lower arm assembly is provided with a lower limiter; All forces and moments between the wheel

and the vehicle body are transmitted through the first buffer, the upper arm assembly and the lower arm assembly, and the impact load transmitted from the uneven road surface to the vehicle body is alleviated through the first buffer, the lower limiter and the second buffer which are arranged on the lower arm assembly, so that the vibration caused by the impact load is attenuated, and the bumps of the vehicle when driving on the uneven road surface are reduced to ensure the ride comfort of the vehicle. The suspension structure is compact, and can meet the long-range and high-load requirements of armored vehicles.

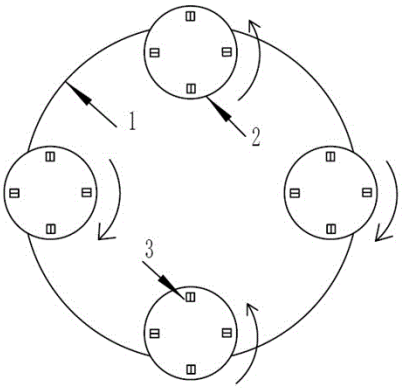


21: 2022/00061. 22: 2022-01-03. 43: 2022-03-03
51: E21C
71: Hunan Institute of Engineering, Central South University
72: Huang Zhonghua, Xie Ya, Dai Yu

54: SEABED POLYMETALLIC SULFIDE CUTTING HEAD

00: -

The invention discloses a seabed polymetallic sulfide cutting head, which adopts a plurality of symmetrically arranged cutterheads to cut polymetallic sulfide at the same time. When the cutting head works, the adjacent cutterheads rotate in opposite directions. When the cutting head is working, the adjacent cutterheads rotating in opposite directions will change the stress form of the polymetallic sulfide ore body when cutting the polymetallic sulfide ore body, making the polymetallic sulfide ore body more easily broken. At the same time, because polymetallic sulfide are porous brittle minerals, when multiple cutterheads produce multiple cutting holes on polymetallic sulphide ore bodies, the polymetallic sulfide between the cutting holes will naturally fracture. Compared with the cutting polymetallic sulfide with a single large-size cutterhead, using multiple adjacent cutterheads with different rotation directions to simultaneously cut polymetallic sulfide ore bodies can effectively reduce the resistance of the cutting head in the cutting process, ensure the cutting efficiency, reduce the power required by the cutting head, and reduce the reaction force on the cutting head in the cutting process.



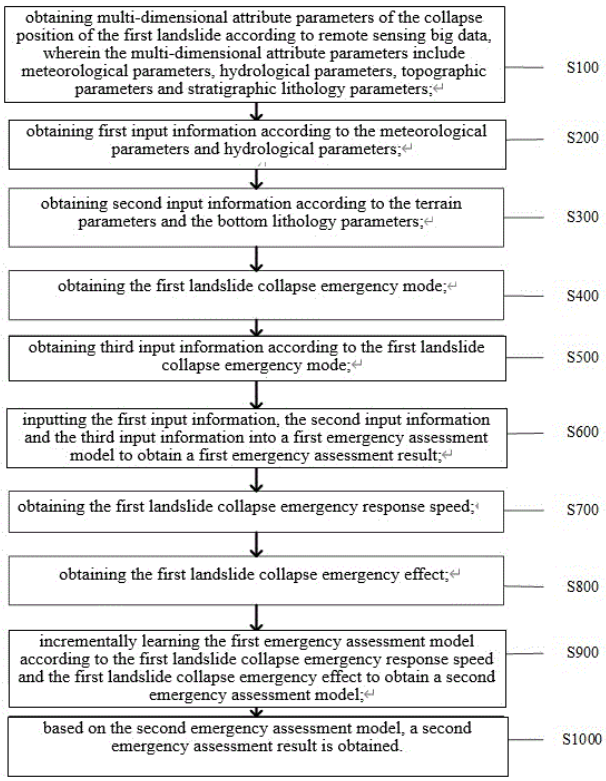
21: 2022/00062. 22: 2022-01-03. 43: 2022-03-03
51: G06Q
71: National Institute of Natural Hazards, Ministry of Emergency Management of China, China Harbor Engineering Co., Ltd, Guizhou Earthquake Agency, Shijiazhuang Institute of Railway Technology
72: Huang Shuai, Liu Chuanzheng, Wang Rong, Xu Chong, Xiu Liwei, Li Shijie, Shang Yanliang

54: EMERGENCY EVALUATION METHOD AND SYSTEM FOR LANDSLIDE AND COLLAPSE

00: -

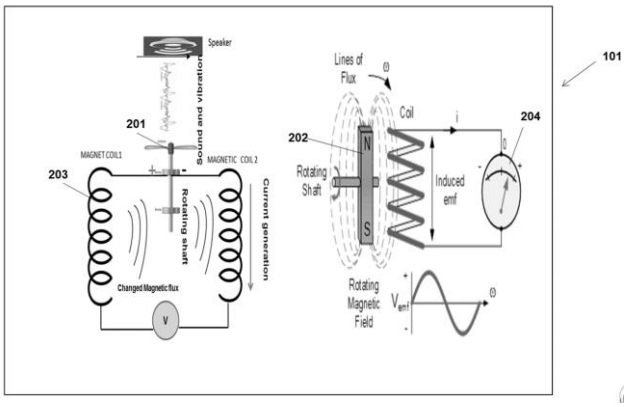
The invention provides an emergency evaluation method and system for landslide and collapse based on remote sensing big data, wherein the method comprises the following steps: obtaining multi-dimensional attribute parameters of a first landslide collapse position, including meteorological, hydrological, topographic and stratigraphic lithology parameters; Obtaining first input information according to meteorological and hydrological parameters; Obtaining second input information according to terrain and bottom lithology parameters; Obtaining a first landslide collapse emergency mode

and obtaining third input information; Inputting the first input information, the second input information and the third input information into a first emergency assessment model to obtain a first emergency assessment result, a first landslide collapse emergency response speed and a first landslide collapse emergency effect; Incrementally learning the first emergency assessment model to obtain the second emergency assessment model and the second emergency assessment result. The method solves the technical problem that the prior art lacks a timely and accurate evaluation method for the emergency rescue plan of landslide and collapse, and can not make targeted adjustment to the rescue plan.



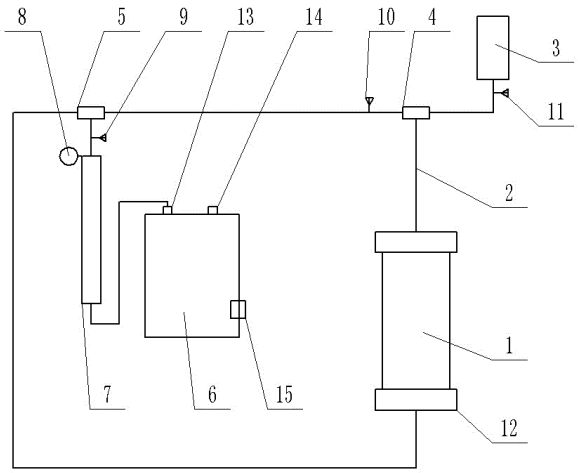
21: 2022/00063. 22: 2022-01-03. 43: 2022-02-23
51: H02K; H02N; H04M; H04R
71: GRAPHIC ERA (DEEMED TO BE UNIVERSITY), GRAPHIC ERA HILL UNIVERSITY, DEHRADUN CAMPUS
72: Deepak Singh Rana, Sumeshwar Singh, Shiv Ashish Dhondiyal, Dr. Varij Panwar, Palak Aggarwal
33: IN 31: 202111023402 32: 2021-05-26
54: ELECTRICITY GENERATING DEVICE
00: -

The invention discloses an electricity generating device 101 for generating electricity using sound energy of the environment, said device 101 comprising: a fan motor 201; a magnetic bar 202; a sound vibration source 102; a plurality of magnetic coil 203; a voltmeter 204; a battery; a memory; and a processor. The method of generating electricity using sound energy of the environment comprises: receiving vibration of sound from said sound vibration source 102 to generate magnetic flux between two poles of said magnetic bar 202; rotating said fan motor 201 fitted between said magnetic bar 202 due to vibration of sound received from said sound vibration source 102 for changing magnetic flux; generating electricity in said plurality of magnetic coil 203 due to change in magnetic flux by rotating said fan motor 201; and storing, by said electricity generating device 101, said electricity in said battery for further use.



21: 2022/00064. 22: 2022-01-03. 43: 2022-03-03
51: G01N
71: Guangdong University of Petrochemical Technology, China University of Geosciences(Beijing), Guangdong Geological Survery Institute
72: Chen Lingkang, Chen Haixia, Wang lin, Zhang Lian, Guo Min, Zhang Wei, Huang Huagu
54: METHOD FOR MEASURING THE POROSITY OF IONIC RARE EARTH ORES AND DEVICE THEREOF
00: -
The invention discloses a method and device for measuring the porosity of ionic rare earth ore, which comprises the following steps: field sampling, stratified sampling by sampling tubes; Indoor measurement, weighing the original mass M1; Then drying the sample to obtain dry mass M2; Measuring

the length of the sample and the inner diameter of the sampling tube to obtain the volume Q1 of the sample; Using kerosene as medium, and measuring the density of kerosene by volumetric method; Make kerosene naturally penetrate into the sample through atmospheric pressure until the sample is completely soaked with kerosene; Place the sample vertically until no kerosene seeps out; Weighing the kerosene-soaked sample to obtain the quality M3 of the kerosene-soaked sample; Calculate the mass of kerosene in pores of rare earth minerals M=M3-M2, then calculate the volume of kerosene in pores of samples Q=M/0.748g/ cm3, and finally calculate the porosity of samples Q/Q1× 100%. The method solves the measurement of the in-situ porosity of rare earth ores on a large scale, and provides a basis for scientific analysis of the research of the theories such as spatial porosity change and seepage of rare earth ores, leaching experiments and the like.

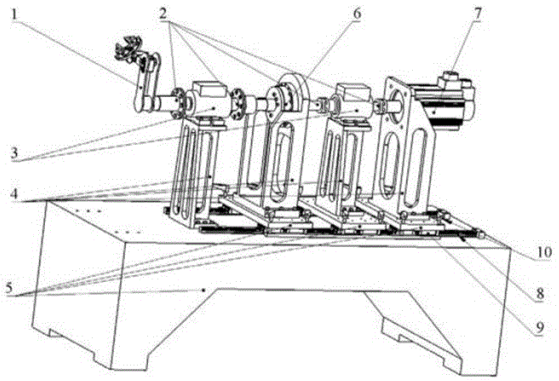


21: 2022/00065. 22: 2022-01-03. 43: 2022-03-03
51: G01L
71: Anhui Polytechnic University, Wuhu Ceprei Robotics Industry Technology Institute Co., Ltd.
72: Liu Yongming, Zhao Zhuanzhe, Zhang Zhen, Ding Yujie, Chen Yu, Tu Zhijian

54: RV SPEED REDUCER PERFORMANCE TESTING DEVICE BASED ON MECHANICAL ARMS

00: -

The invention discloses a mechanical arm-based RV speed reducer performance testing device. The testing device is provided with a base, on which an RV speed reducer, a servo motor and two torque speed sensors are fixed through a support, wherein one torque speed sensor is connected with the output shaft of the servo motor and the input shaft of the RV speed reducer through a coupling, and the other torque speed sensor is connected with the output shaft of the RV speed reducer and the mechanical arm through a coupling. The mechanical arm is used to test the load of the RV speed reducer. The device reduces the material consumption during the manufacturing and processing of the support and saves the cost of the testing device.



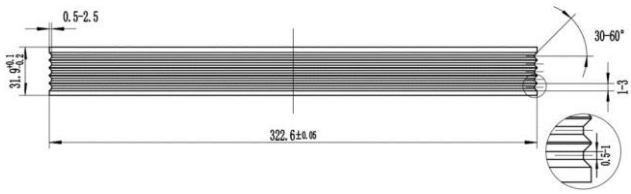
21: 2022/00066. 22: 2022-01-03. 43: 2022-03-03
51: B24B
71: Shenyang University of Technology
72: Yuan Zewei, Wang Ying, Wu Tianzheng

54: MANUFACTURING METHOD AND DEVICE OF GRINDING WHEEL FOR CHAMFERING SILICON WAFER

00: -

The invention relates to a manufacturing method and a manufacturing device of a grinding wheel for chamfering silicon wafers, which comprises the following steps: 1) sintering to form a disk-shaped metal bonded diamond grinding wheel by adopting a hot pressing sintering method; 2) trimming the surface shape of the outer cylinder of the sintered metal bonded diamond grinding wheel by EDM; 3) rolling a ladder-shaped groove on the outer cylindrical surface of the diamond grinding wheel by using a cemented carbide rolling wheel with a specific shape; 4) trimming the ladder groove of the diamond grinding wheel by EDM with the working electrode with the same shape as the cemented carbide rolling wheel. The device is provided with rough machining cemented carbide rolling wheel, finish machining cemented carbide rolling wheel,

diamond grinding wheel dressing working electrode and grinding wheel groove dressing working electrode to manufacture and process the diamond grinding wheel respectively. The invention effectively solve that problems that the diamond abrasive particle are easy to fall off, the precision of the groove section shape of the grinding wheel is not high, the groove shape and spacing are inconsistent, and the groove bottom arc is difficult to form in the traditional preparation method of the silicon wafer chamfer grinding wheel.

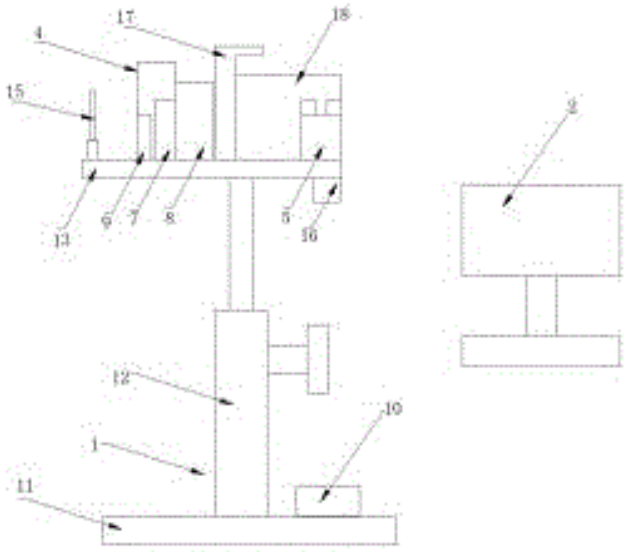


21: 2022/00067. 22: 2022-01-03. 43: 2022-03-03
51: G01B; G01N
71: Quanzhou Equipment Manufacturing Research Institute
72: Nie Wen, Lu Song, Guo Siliang, Wang Lei, Hu Mingqiang

54: ELASTIC WAVE DETECTION DEVICE BASED ON DYNAMIC DEFORMATION MEASUREMENT

00: -

The invention discloses an elastic wave detection device based on dynamic deformation measurement, which relates to the technical field of detection equipment. The technical scheme of the elastic wave detection device comprises a detection device body and an upper computer, wherein the detection device body is provided with a dynamic deformation measurement unit, a data analysis processing unit and an elastic wave detection and result display unit; The dynamic deformation measuring unit includes a binocular high-definition camera and a landmark image sensing unit; The elastic wave detection and result display unit comprises an embedded chip and a display screen; The data analysis and processing unit is a programmable controller; The detection device body is provided with a power supply device. It can accurately measure the dynamic deformation characteristic data information such as three-dimensional coordinates, displacement and attitude trajectory of the reference point of the object to be measured in real time in a non-contact manner, display the coordinates and position information of each deformation state reference point in three dimensions, and convert the dynamic deformation measurement results of the object to be measured in real time into the elastic wave characteristics of the object to be measured, thereby realizing the detection of the elastic wave of the object to be measured.



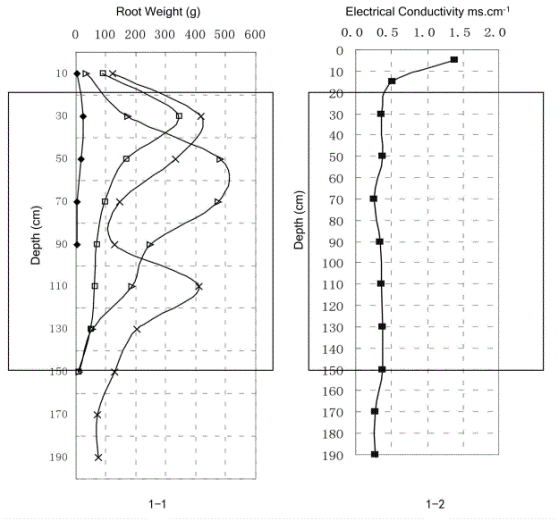
21: 2022/00068. 22: 2022-01-03. 43: 2022-02-23
51: A01G
71: XINJIANG INSTITUTE OF ECOLOGY AND GEOGRAPHY, CHINESE ACADEMY OF SCIENCES
72: WANG, Yongdong, YOU, Yuan, ZHOU, Na, XU, Xinwen

54: DRIP IRRIGATION METHOD OF SALINE WATER FOR PREVENTION OF SALT ACCUMULATION IN PROTECTION FOREST

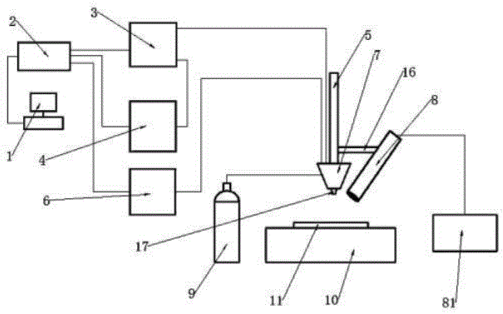
00: -

The present disclosure relates to a drip irrigation method of saline water for prevention of salt accumulation in a protection forest and belongs to the technical field of protection forest irrigation. The drip irrigation method of the present disclosure includes the following step: performing drip irrigation on desert soil during a growing period and the end of the growing period, where the drip irrigation uses saline water with a salinity of 4 to 30 g/L; the drip irrigation is performed during the growing period for 10 to 12 times, each for 6 hours; and the drip irrigation is performed once for 12 hours at the end of the growing period. The drip irrigation method of the present disclosure can use saline water with a

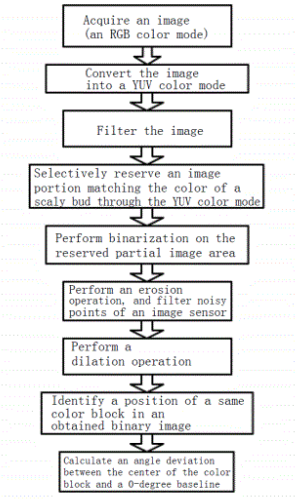
high salinity for irrigation and effectively prevent soil accumulation in soil in the protection forest.



21: 2022/00070. 22: 2022-01-03. 43: 2022-02-23
51: C23C
71: Qingdao University of Technology
72: WANG, Yuling, ZHANG, Jie, JIANG, Fulin
54: METHOD FOR LASER CLADDING NANO-CERAMIC COATING ON METAL SURFACE ASSISTED BY ULTRASONIC FIXED-POINT FOCUSING
00: -
The present invention relates to a method for laser cladding a nano-ceramic coating on a metal surface assisted by ultrasonic fixed-point focusing. In the process of laser cladding, fixed-point ultrasonic focusing is introduced to act on a bonding surface between a metal substrate and a nano-ceramic powder layer, and inter-diffusion of elements between the metal substrate and the nano-ceramic powder layer is promoted, so as to form a good metallurgical bond between the metal substrate and the nano-ceramic powder layer. Meanwhile, a thermal effect, a cavitation effect and an acoustic streaming effect produced by ultrasonic focuses can promote the formation of crystal nuclei and liquid metal fluidity, make tissue components more uniform and the structure more compact, and improve the strength and wear resistance of a cladding layer. Moreover, the degree of flexibility is high, which is suitable for various complicated laser cladding processing environments.



21: 2022/00071. 22: 2022-01-03. 43: 2022-02-23
51: A01C; G05D; G06K
71: QINGDAO UNIVERSITY OF TECHNOLOGY
72: YANG, Fazhan, CAO, Mingkai, WANG, Shucheng, WANG, Chao, WANG, Xin, DU, Xiangwen, LI, Weihua
54: METHOD FOR IDENTIFYING AND ADJUSTING SCALY BUDS IN PRECISION DIRECTIONAL PLANTING OF ZINGER OFFICINALE ROSCOE
00: -
The present invention relates to a method for identifying and adjusting scaly buds in precision directional planting of Zinger Officinale Roscoe, which includes an HSV conversion stage, a color segmentation stage, an image binarization stage, an erosion operation stage, an image identification stage, a deviation calculation stage, and a stage of calculating an angle deviation of the scaly buds of Zinger Officinale Roscoe relative to a 0-degree baseline and adjusting the scaly buds; and during the planting, a stepper motor adjusting apparatus is controlled to drive a rhizome of Zinger Officinale Roscoe to rotate, thereby adjusting the direction of the scaly buds of the Zinger Officinale Roscoe.

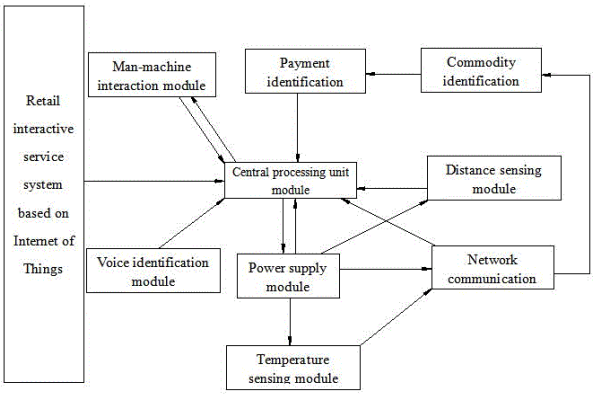


21: 2022/00072. 22: 2022-01-03. 43: 2022-03-03
51: G06Q
71: Anhui University of Science And Technology
72: Cui Xingwen, Zhang Chengjun

54: RETAIL INTERACTIVE SERVICE SYSTEM BASED ON INTERNET OF THINGS

00: -

The invention belongs to the technical field of the Internet of Things, in particular to a retail interactive service system based on the Internet of Things, which comprises a central processing unit module, a payment identification module, a distance sensing module, a network communication module, a commodity identification module, a voice identification module, a man-machine interaction module, a power supply module and a temperature sensing module. The central processing unit module is connected with the payment identification module through signals; The CPU module is connected with the man-machine interaction module through signals; The CPU module is connected with the voice recognition module through signals; The CPU module is connected with the distance sensing module through signals; By adding the distance sensing module to the system, the retail device can enter the standby state when it is not in use for a period of time, and only the central processing unit module, the distance sensing module, the power supply module and the temperature sensing module are kept in operation, thus greatly reducing the electricity consumption of the retail device when it is standing still and reducing the waste of energy.

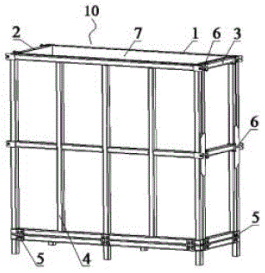


21: 2022/00074. 22: 2022-01-03. 43: 2022-02-23
51: A01G
71: Qingdao University of Technology
72: YANG, Fazhan, YANG, Yunpeng, LI, Weihua, LIU, Guohua, ZHANG, Guodong, WANG, Liyang, MOU, Jiahong, ZHANG, Na

54: MOVABLE CHINESE YAM PLANTING BOX AND INDUSTRIALIZED METHOD FOR PLANTING CHINESE YAM

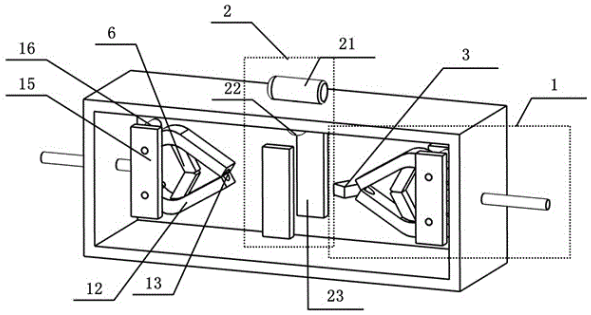
00: -

The present invention discloses a movable Chinese yam planting box and a method for industrialized Chinese yam planting, which provides a movable Chinese yam planting box capable of flexible assembly and disassembly, which breaks through the disadvantages of deep ditch excavation in traditional Chinese yam planting, difficult excavation in harvesting and easy damage to Chinese yam; the movable Chinese yam planting box is made from a large number of materials, such as waste furniture plates and building waste plates, so as to improve the utilization rate of waste resources; at the same time, the waste materials can be greatly degraded by crops to achieve the effects of green, low-carbon and resource recycling.

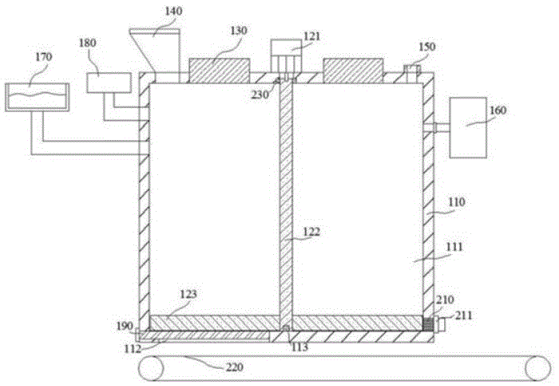


21: 2022/00075. 22: 2022-01-03. 43: 2022-03-03
51: G01N

71: Zhengzhou University of Aeronautics
72: Hou Xiaoying, Yan Xiangmei, Liu Haiyang
54: TENSILE TEST DEVICE FOR ENGINEERING STRUCTURAL COMPONENTS
00: -
The invention discloses a tensile test device for engineering structural components, which utilizes clamping legs and clamping blocks to clamp the components to be tested, and utilizes a tension rod to pre-tighten the clamping force of the clamping legs to avoid clamping loosening. In the process, the refrigeration component and the heating component are used to adjust the temperature of the components to be tested respectively, so that various components can be clamped and the material characteristic data of the components in high temperature and extremely cold environment can be obtained.

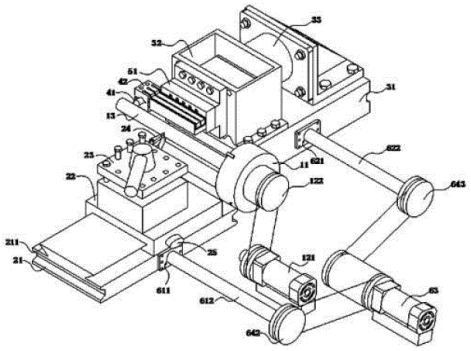


21: 2022/00076. 22: 2022-01-03. 43: 2022-03-03
51: C10B
71: Anhui University of Science and Technology
72: Ge Tao, Zhou Bingyi, Luo Xiaoman, Wang Zhaohui, Qiao Yueyue, Zhang Mingxu
54: COAL MICROWAVE DESULFURIZATION PROCESS APPLIED TO DESULFURIZATION OF HIGH-SULFUR COAL
00: -
The invention relates to the technical field of microwave desulfurization, in particular to a coal microwave desulfurization process applied to desulfurization of high-sulfur coal, which comprises the following steps: step 1, adding high-sulfur coal into a desulfurization chamber in a main body of a microwave desulfurization device from a feed hopper; step 2, starting a stirring device to uniformly stir the high-sulfur coal; step 3, adding desulfurizer and clear water, continuously stirring for 5-10 min, mixing desulfurizer and clear water with high-sulfur coal, and standing for 10-15min; after stirring; step 4, filling nitrogen into the desulfurization chamber; step 5, turning on the microwave generators and stirring device, and irradiating the high-sulfur coal with the microwave generated by the microwave generators for 8-10 min while stirring; step 6, opening the liquid outlet valve, discharging the liquid in the desulfurization chamber from the liquid outlet, and discharging the coal in the desulfurization chamber from the coal outlet, so as to remove sulfur from the high-sulfur coal. The invention can effectively improve that mix effect of desulfurizer and coal, and can also improve the effect of microwave irradiation, thereby improving the desulfurization efficiency.



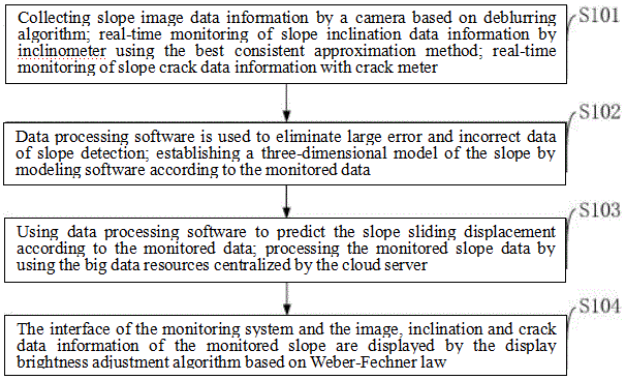
21: 2022/00077. 22: 2022-01-03. 43: 2022-02-23
51: G01N
71: Qingdao University of Technology
72: JIANG, Fulin, YANG, Fazhan, WANG, Yuling
54: A FRICTION TESTING DEVICE FOR TESTING FRICTION PERFORMANCE OF CUTTING TOOL COATING
00: -
The invention relates to the technical field of friction and wear testing, and in particular to a friction testing device for testing the friction performance of a cutting tool coating. The invention comprises a rotation fixing mechanism, a cutting mechanism, a feeding action mechanism, a friction mechanism, a data acquisition mechanism and a pressure regulating mechanism; the rotation fixing mechanism comprises a three-jaw chuck, a first driving device for driving the three-jaw chuck to rotate circumferentially, and a cylindrical workpiece fixedly mounted on the three-jaw chuck and used for a friction testing; and the cutting mechanism comprises a base, a cutting base, a turret tool rest mounted on the cutting base, and a cutting tool mounted on the turret tool rest, the cutting tool being

located beside the cylindrical workpiece. The invention enables long test time while ensuring a sufficient contact pressure.



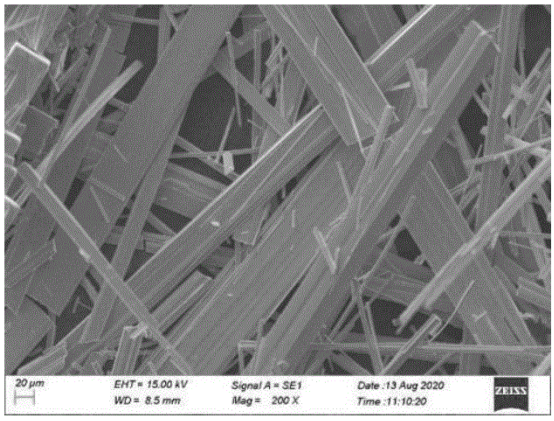
21: 2022/00078. 22: 2022-01-03. 43: 2022-02-23
51: A23C
71: Shanghai Jiao Tong University
72: DENG, Yun, YIN, Hao, SUN, Suyang, ZHONG, Yu, WANG, Danfeng
33: CN 31: 202111273609.2 32: 2021-10-29
54: DOUBLE PROTEIN GOAT MILK YOGURT BASED ON ROSA ROXBURGHII TRATT FRUIT AND BLACK GARLIC AND PREPARATION METHOD THEREOF
00: -
The present disclosure provides a double protein goat milk yogurt based on Rosa roxburghii Tratt fruits and black garlic and a preparation method thereof, belonging to the technical field of fermented milk processing. The goat milk yogurt includes the following raw materials: goat milk, a saccharide, inulin, a black garlic extract, a Rosa roxburghii Tratt fruit residue extract, a Hemp seed protein and lactic acid bacteria. In the present disclosure, the goat milk is fermented using the lactic acid bacteria, and the black garlic extract and the Rosa roxburghii Tratt fruit residue extract are added to bring an aroma of black garlic and a Rosa roxburghii Tratt fruit, so that a flavor of the goat milk is greatly improved, and a smell of mutton in the goat milk is reduced. In addition, active substances in the yogurt are enriched to improve a biological activity of the yogurt.

21: 2022/00079. 22: 2022-01-03. 43: 2022-03-03
51: E02D
71: Quanzhou Equipment Manufacturing Research Institute
72: Nie Wen, Lu Song, Guo Siliang, Wang Lei
54: SLOPE MONITORING SYSTEM BASED ON BIG DATA ANALYSIS FOR OBTAINING THREE-DIMENSIONAL DATA OF SLOPE DEFORMATION
00: -
The invention belongs to the technical field of slope monitoring, and discloses a slope monitoring system for acquiring three-dimensional data of slope deformation based on big data analysis. The slope monitoring system for acquiring three-dimensional data of slope deformation based on big data analysis comprises an image acquisition module, an inclination monitoring module, a crack monitoring module, a main control module, a data processing module, a three-dimensional model building module, a sliding prediction module, a cloud service module and a display module. According to the invention, the data processing module solves the influence of the distribution of errors in data on the culling result, and overcomes the problem of low precision of the traditional method for gross error culling of multivariate data; It is more convenient to separate error from normal data from a large number of variable data. At the same time, through the sliding prediction module, a large number of dynamic databases of slope sliding trends based on big data can be established, and the prediction and early warning of slope sliding can be realized according to many monitoring data of slopes, so as to prevent and reduce disaster.



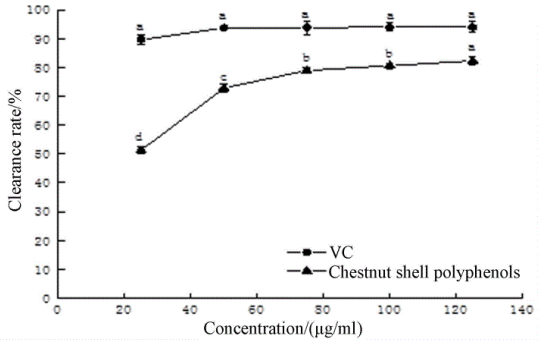
21: 2022/00080. 22: 2022-01-03. 43: 2022-02-23
51: C07C
71: Institute of Energy Research, Jiangxi Academy of Sciences
72: XI, Xiping, HAN, Fei, FAN, Min, WANG, Lingling, YAN, Heng, TU, Mengzi, XI, Shuyue, LI, Hui, WANG, Zhicheng
54: PREPARATION METHOD OF PEROVSKITE MICROCRYSTAL

00: -
The invention discloses a preparation method of a CH3NH3PbI3 perovskite microcrystal, comprising: step 1: dissolving lead acetate trihydrate completely in hydroiodic acid, adding ethanol and isopropanol mixed solvent, continuing stirring till the solution turns faint yellow, and dropwise adding methylamine water solution to form an ash-black mixed solution; step 2: continuously stirring the ash-black mixed solution, transferring to a polytetrafluoroethylene lining, putting in a high-pressure reactor for a solvothermal reaction, and then naturally cooling to room temperature to obtain a black precipitate; step 3: collecting the black precipitate, washing multiple times by an organic solvent, leaching and drying. A perovskite microcrystal with an uncovered cavity box structure is prepared through partially replacing isopropanol with low-boiling ethanol as a solvent for a solvothermal reaction to obtain a perovskite nanoribbon under the condition of regulating the volume fraction of ethanol in the mixed solvent and the solvothermal reaction temperature.



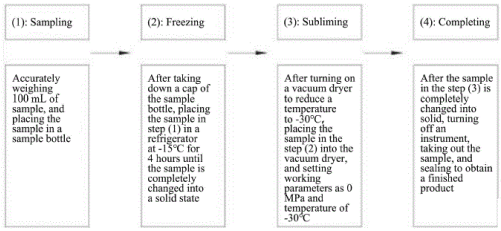
21: 2022/00081. 22: 2022-01-03. 43: 2022-02-23
51: A01G
71: XINJIANG INSTITUTE OF ECOLOGY AND GEOGRAPHY, CHINESE ACADEMY OF SCIENCES
72: WANG, Yongdong, YOU, Yuan, LIU, Guojun, XU, Xinwen
54: AFFORESTATION METHOD FOR SERIOUSLY SALINIZED LAND IN MID-LATITUDE DESERT GRASSLAND
00: -
The present invention provides an afforestation method for seriously salinized lands in desert grassland.

21: 2022/00082. 22: 2022-01-03. 43: 2022-02-23
51: A23B; A23L
71: Hebei Normal University of Science And Technology, ZHEJIANG UNIVERSITY
72: LIU, Suwen, WANG, Shuyu, CHANG, Xuedong, CHEN, Shiguo, YE, Xingqian, WANG, Hao, MA, Chenjing
54: HIGH DIETARY FIBER, POLYPHENOL SAUSAGE AND PREPARATION METHOD THEREOF
00: -
The present disclosure provides a high dietary fiber polyphenol sausage, which is developed by using freeze-drying and ultra-fine grinding technology and the characteristics of the raw materials. No pigment and preservatives, suitable for general taste, color, fragrance, taste, elasticity, unique flavor, mellow mouth, delicious taste, smooth taste of nutrition and health products.



21: 2022/00083. 22: 2022-01-03. 43: 2022-02-23
51: G01N
71: Qinghai Geological and Mineral Testing Center
72: LIU, Dao, SHI, Hua, TAO, Liping, ZHANG, Jianmin, AN, Guorong
54: METHOD FOR PREPARING STANDARD SUBSTANCE FOR POTASSIUM, SODIUM, CALCIUM AND MAGNESIUM ELEMENTS IN GROUNDWATER
00: -
A method for preparing a standard substance for potassium, sodium, calcium and magnesium elements in groundwater is provided. The method comprises: filtering the groundwater by a 25-micron filter membrane, and accurately transferring 100 mL of the groundwater into a 125 mL screw-top bottle with a cap; opening a screw cap, and sealing a bottle mouth with a layer of preservative film; placing

a transferred sample into a refrigerator for freezing until the sample is completely changed into a solid state; turning on a freeze dryer; taking out the frozen ground water sample bottle, poking 5-10 holes on the preservative film at the bottle mouth, and placing the sample bottle into the freeze dryer; under a set condition, enabling the freeze dryer to work for 10 hours, then taking out the sample bottle, and covering the screw-top bottle cap immediately to obtain a sample.

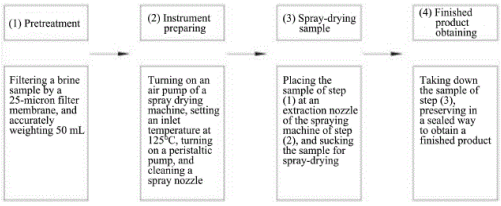


21: 2022/00084. 22: 2022-01-03. 43: 2022-02-23
51: G01N
71: Qinghai Geological and Mineral Testing Center
72: SHI, Hua, LIU, Dao, TAO, Liping, AN, Guorong, ZHANG, Jianmin, ZHANG, Ming

54: METHOD FOR PREPARING CANDIDATE OF STANDARD SUBSTANCE FOR BRINE

00: -

A method for preparing a candidate of a standard substance for brine is provided. The method comprises steps of: filtering brine by a 25-micron filter membrane, and accurately transferring 50 mL of the brine into a glass colorimetric tube; turning on an air pump of a small spray drying machine for a laboratory, setting the power of the air pump at 90% and an inlet temperature of the spray drying machine at 125 degrees centigrade; turning on a heater of the spray drying machine, turning on a compressor and a peristaltic pump after the inlet temperature of the spray drying machine reaches 125 degrees centigrade, and cleaning a nozzle; extracting a filtered brine sample into the spray drying machine through a ruby nozzle, and spray-drying the sample; and taking down the spray-dried sample, and preserving the sample immediately in a sealed way to obtain a finished product.

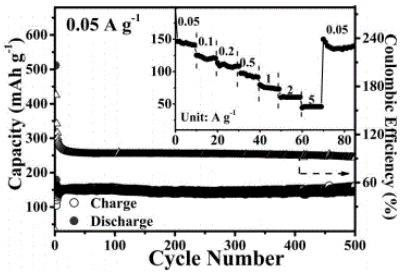


21: 2022/00085. 22: 2022-01-03. 43: 2022-02-23
51: H01M
71: Qingdao University of Science and Technology
72: Ding, Shiqi, Li, Zhenjiang, Meng, Alan, Dai, Xin
33: CN 31: 202111159109.6 32: 2021-09-30

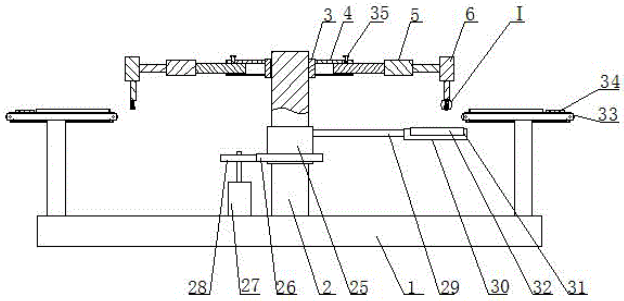
54: MAGNESIUM IONS BATTERY CATHODE MATERIAL PVP-VS4 ACQUIRED BY PVP INDUCING MICROSTRUCTURE MODULATION OF VS4 AND APPLICATION THEREOF

00: -

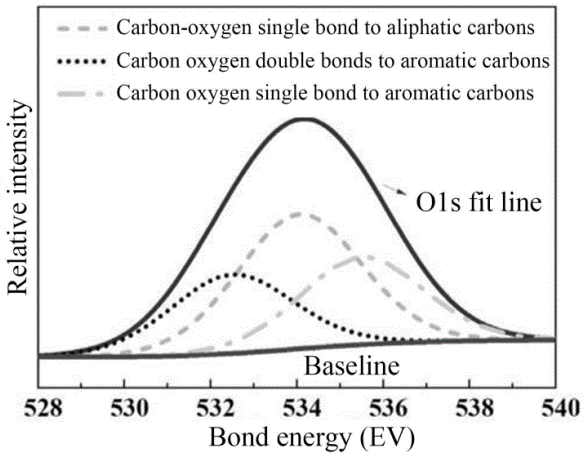
The present invention discloses a magnesium ions battery cathode material PVP-VS4 acquired by PVP inducing microstructure modulation of VS4 and application thereof, and belongs to the technical field of battery materials. Firstly, mixing ammonium metavanadate and polyvinylpyrrolidone at a ratio of 1:100 to prepare an aqueous solution with a concentration of 0.167M, mixing the aqueous solution with excess thioacetamide in a glycol solution, and performing hydrothermal process in a reactor at 200 Celsius degree for 4 h; then washing with deionized water and ethanol for 3 times, respectively, and drying to obtain the magnesium ions battery cathode material PVP-VS4. The present invention, by one-step hydrothermal process, realizes the intercalation of PVP in VS4 interchain; and it also realizes the co-intercalation of Mg2+ and MgCl+ ions during the discharge process. The magnesium ions battery assembled therefrom has high specific capacity, excellent cycle stability and rate characteristics, and has broad application prospects.



21: 2022/00086. 22: 2022-01-03. 43: 2022-03-03
51: B23P
71: Henan Polytechnic
72: Yu Dongxian, Song Huan, Wang Xiaoyan, Li Jiayan, Wang Junping, Li Jiyun, Sun Jie, Zhao Dapeng, Dong Junlei, Zheng Baolin
54: FULLY-AUTOMATIC INTELLIGENT KEYBOARD MANUFACTURING DEVICE
00: -
Fully-automatic intelligent keyboard manufacturing device, characterized in that: it comprises a circular base, the middle of the upper part of the base is provided with a standing column in a fixed way, the upper end of the standing column is covered with a ring in a fixed way, the lateral side of the ring is provided with several evenly distributed adjustable expansion rods vertical to standing columns, and the end of the fixed rod of the adjustable expansion rods connects to the lateral side of the ring in a fixed way. The present invention is simpler than transmission-based automatic assembly devices. With the delicate design of the mechanical structure, use of a large number of sensor-type electronic components is avoided, fewer electronic components are used in the present invention than traditional devices, faults are less likely to occur during keyboard assembly, and the reliability is significantly improved. Since the structure is simple, the manufacture cost, the repair cost of the present invention are relatively low, and the production cost of the manufacturer is reduced, so the present invention can be widely applied.

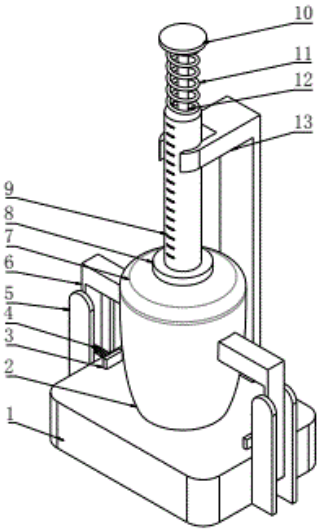


21: 2022/00087. 22: 2022-01-03. 43: 2022-02-23
51: C01B
71: Shandong University of Science and Technology
72: ZHU, Shoupu, MENG, Xiaoru, HUANG, Jingrui, LIN, Meng-Chang
54: DISPERSION OF OXYGEN-CONTAINING GROUPS SUPPORTED ON CARBON NANOTUBE AND PREPARATION METHOD THEREOF
00: -
The present disclosure belongs to the technical field of material modification on carbon nanotubes (CNTs), and discloses a CNTs dispersion attached with oxygen-containing groups and a preparation method thereof.



21: 2022/00088. 22: 2022-01-03. 43: 2022-02-23
51: G01F
71: Jiangsu Wanlian Yida Electronic Technology Co., Ltd.
72: TAN, Yusheng, HU, Benlong
54: INTELLIGENT VOLUME MONITORING DEVICE FOR WINE BREWING
00: -
The present utility model relates to an intelligent volume monitoring device for wine brewing, comprising a placing table. One side outer wall of the placing table is provided with a rectangular hole,

the rectangular hole penetrates through the other side outer wall of the placing table, square holes are provided in the middle of the top and bottom of the rectangular hole, and the square hole located at the top penetrates through the top of the placing table; a trigger assembly is mounted inside the rectangular hole, clamping assemblies adapted to the trigger assembly are mounted on both side outer walls of the placing table, a jar is placed in the middle of the top of the placing table, and an inverted L-shaped plate is fixed at one end of the middle of the top of the placing table.

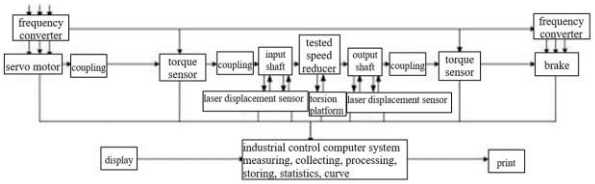


21: 2022/00091. 22: 2022-01-03. 43: 2022-03-03
51: G01B
71: Anhui Polytechnic University, Wuhu Ceprei Robotics Industry Technology Institute Co., Ltd.
72: Zhao Zhuanzhe, Liu Yongming, Chen Yu, Zhang Zhen, Ding Yujie, Tu Zhijian

54: ONLINE TESTING DEVICE FOR SPEED REDUCER

00: -

The invention discloses an online testing device for speed reducer, in which a servo motor is connected with an input shaft through a coupling, the input shaft is connected with the input end of the tested speed reducer, the output end of the tested speed reducer is connected with an output shaft, the output shaft is connected with a brake through a coupling, the input shaft and the output shaft are both provided with first deflection detection units, and the two first deflection detection units are both provided with two laser displacement sensors; two laser sensors collect distance signals on the same side of the output shaft and the input shaft, and the first deflection detection units are connected to the industrial control computer system through signal lines and sends the obtained distance signals to the industrial control computer system. The invention has the advantages of high precision, good consistency, high reliability and long service life.

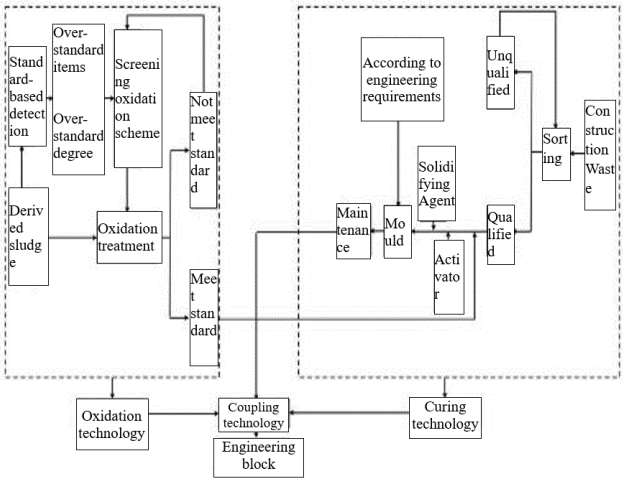


21: 2022/00092. 22: 2022-01-03. 43: 2022-03-03
51: C02F; E04B
71: Tianjin Research Institute for Water Transport Engineering, Ministry of Transport, Environmental Technology Development Of Tiwte (Tianjin) Co., Ltd.
72: Li Mingming, Wang Jiangong, Han Xue, Li Mingzhe, Zhao Hongyan, Zheng Ying

54: METHOD FOR COMPREHENSIVELY TREATING WATER-BASED MUD AND CONSTRUCTION WASTE DERIVED FROM OIL AND GAS EXPLOITATION

00: -

The invention provides a method for comprehensively treating water-based mud and construction waste derived from oil and gas exploitation, which comprises the following steps: water-based mud is mixed with reagent A, then mixed with reagent B, and then reacted 1-3 hours, preliminarily crushing the construction waste; after being qualified, the crushed construction waste particles are mixed with the treated and reacted water-based mud, added with activator and curing agent, injected into the mold, cured, demoulded, dried and put into use. According to the invention, the derived water-based mud generated in the process of oil and gas exploitation and the refractory solid waste of construction waste are cooperatively treated, so that reusable bricks, breakwater materials and the like are prepared, which are recycled and the treatment efficiency is greatly improved.



21: 2022/00095. 22: 2022-01-03. 43: 2022-02-23
51: A01G
71: XINJIANG INSTITUTE OF ECOLOGY AND GEOGRAPHY, CHINESE ACADEMY OF SCIENCES
72: LIU, Guojun, WANG, Yongdong, LEI, Jiaqiang, ZHANG, Shicong, LI, Shengyu, YOU, Yuan, WANG, Shijie

54: METHOD FOR THREE-DIMENSIONALLY PLANTING ROSA RUGOSA AND MEDICAGO SATIVA LINN UNDER JUGLANS REGIA TREES

00: -

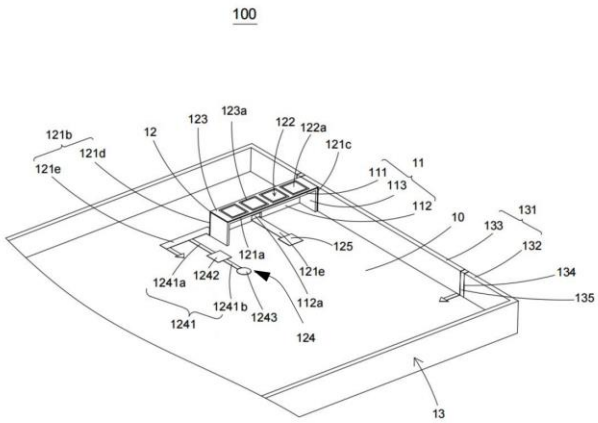
The present disclosure relates to a cultivation method for three-dimensionally planting Rosa rugosa and the Medicago Sativa under the Juglans regia trees, and relates to a cultivation method of roses and alfalfas by agro-forestry, belonging to the technical field of crop cultivation, and is suitable for the cultivation of Rosa rugosa and the Medicago Sativa by agro-forestry, and relating to three-dimensional plant cultivation technology. The cultivation method for three-dimensionally planting Rosa rugosa the Medicago Sativa under the Juglans regia trees provided in the present disclosure comprises the following steps of soil preparation, field planting, sowing, irrigation, management, picking and harvesting. The Rosa rugosa the Medicago Sativa are planted by fully utilizing open spaces under the trees, three-dimensional planting of trees, shrubs and grass is achieved, and the utilization efficiency of land, moisture and light and heat is improved.

21: 2022/00096. 22: 2022-01-03. 43: 2022-02-23
51: H01Q
71: ETHETA COMMUNICATION TECHNOLOGY (SHENZHEN) CO., LTD.
72: HUANG, Huan-Chu, GAO, Dasong, QI, Zhixing, LIN, Hong, ZHOU, Yanchao
33: CN 31: 202111354677.1 32: 2021-11-16

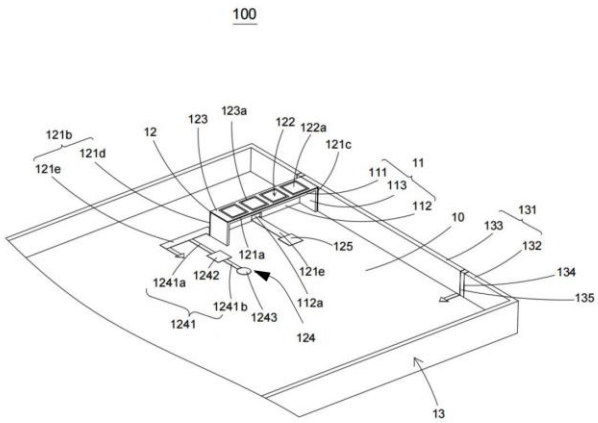
54: ANTENNA APPARATUS AND ELECTRONIC DEVICE

00: -

The present disclosure discloses an antenna apparatus and an electronic device. The antenna apparatus includes a circuit board, an antenna stand arranged on the circuit board, and an antenna structure arranged on the antenna stand. The antenna structure includes a flexible printed circuit board, a millimeter wave (mm-wave) antenna arranged on the flexible printed circuit board, and a non-mm-wave antenna arranged on the flexible printed circuit board. The antenna structure formed by the mm-wave antenna and the non-mm-wave antenna is arranged on the flexible printed circuit board, and the antenna structure is arranged on the antenna stand on the circuit board, so that integration of the mm-wave antenna and the non-mm-wave antenna is realized, and the antenna stand effectively bears the antenna structure; the design flexibility of the antenna structure and the antenna apparatus is increased; the challenge for disposing a number of antennas in the electronic device is solved; and the space utilization rate is increased in a limited space, thereby improving the product competitiveness.



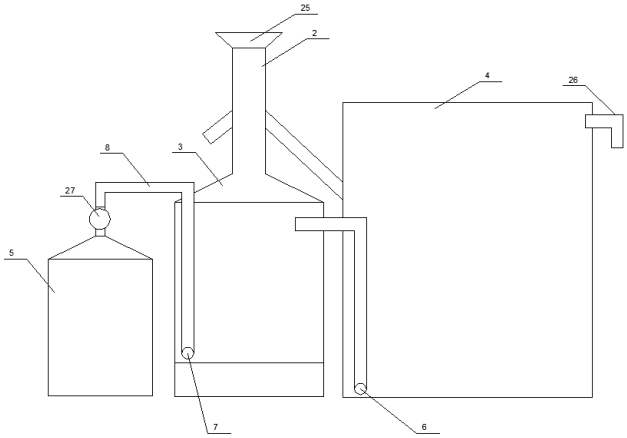
21: 2022/00096. 22: 2022-01-03. 43: 2022-02-23
51: H01Q
71: ETHETA COMMUNICATION TECHNOLOGY (SHENZHEN) CO., LTD.
72: HUANG, Huan-Chu, GAO, Dasong, QI, Zhixing, LIN, Hong, ZHOU, Yanchao
33: CN 31: 202111354677.1 32: 2021-11-16
54: ANTENNA APPARATUS AND ELECTRONIC DEVICE
00: -
The present disclosure discloses an antenna apparatus and an electronic device. The antenna apparatus includes a circuit board, an antenna stand arranged on the circuit board, and an antenna structure arranged on the antenna stand. The antenna structure includes a flexible printed circuit board, a millimeter wave (mm-wave) antenna arranged on the flexible printed circuit board, and a non-mm-wave antenna arranged on the flexible printed circuit board. The antenna structure formed by the mm-wave antenna and the non-mm-wave antenna is arranged on the flexible printed circuit board, and the antenna structure is arranged on the antenna stand on the circuit board, so that integration of the mm-wave antenna and the non-mm-wave antenna is realized, and the antenna stand effectively bears the antenna structure; the design flexibility of the antenna structure and the antenna apparatus is increased; the challenge for disposing a number of antennas in the electronic device is solved; and the space utilization rate is increased in a limited space, thereby improving the product competitiveness.



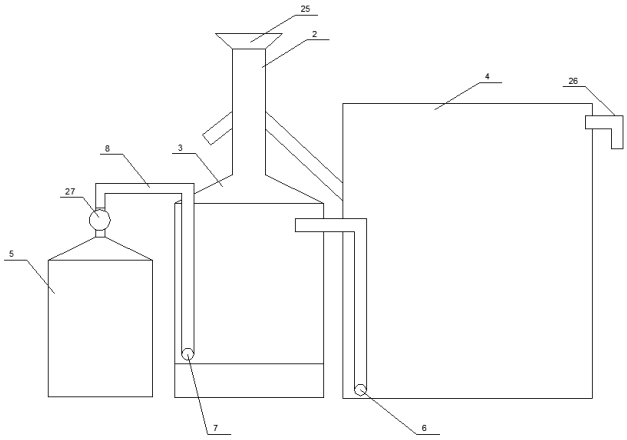
21: 2022/00097. 22: 2022-01-03. 43: 2022-02-23
51: A01G; C12G
71: JUNDING WINERY CO., LTD.
72: LI, Hua, ZHANG, Zhengwen, SHAO, Xuedong, WANG, Lin, ZHONG, Xiaomin, ZHAO, Jinzhan, LIU, Xingkai, WANG, Jixia, BIAN, Feng'e
33: CN 31: 202111038149.5 32: 2021-09-06
54: SIMPLIFIED CULTIVATION METHOD FOR WINE BREWING VINEYARD
00: -
The invention discloses a simplified cultivation method for a wine brewing vineyard, and belongs to the field of grape cultivation. The method comprises the steps of planting fruit trees, setting up frame rods, erecting steel wires, laying a drip irrigation belt, and pruning fruit branches in a “crawler” mode after grape field planting and cultivation, so that the main vine is connected end to end on the first steel wire; during pruning in summer, making the leaf canopy layer grow into a hedge with height of 1.7 m and thickness of 0.5 m; and hanging branches in winter, and spraying the degradable protective film on the branches. According to the wine grape cultivation scheme, the operation is simple and convenient, the vineyard is formed quickly and put into production early; and pruning is not needed in winter, the labor costs for vineyard management are greatly saved, and the efficiency is improved.

21: 2022/00098. 22: 2022-01-03. 43: 2022-02-23
51: C02F
71: QINGDAO UNIVERSITY OF TECHNOLOGY
72: LYU, Mou, LI, Hongwei
54: SYSTEM FOR COMPREHENSIVELY TREATING KITCHEN CLEANING WASTEWATER AND KITCHEN GARBAGE
00: -

The present invention discloses a system for comprehensively treating kitchen cleaning wastewater and kitchen garbage, including a system for rapidly treating indoor kitchen cleaning wastewater and kitchen garbage, and a system for collecting outdoor kitchen cleaning wastewater and kitchen garbage. According to the invention, the kitchen garbage can be changed into organic fertilizer after meal on the same day in resident households or dining places, the weight of the kitchen garbage can be reduced by more than half, and the kitchen garbage is directly transported to a designated place for comprehensive utilization by an urban environmental sanitation facility engineering system. An existing large-scale kitchen garbage disposal mode is changed into a household disposal and comprehensive utilization mode, kitchen garbage is changed into recyclable garbage, time and labor are saved, land is not occupied, pollution is avoided, the mode in which the kitchen garbage is conveyed into a garbage landfill, a garbage incineration plant, a kitchen garbage treatment plant and the like for disposal is ended, and the ecological environment is changed.

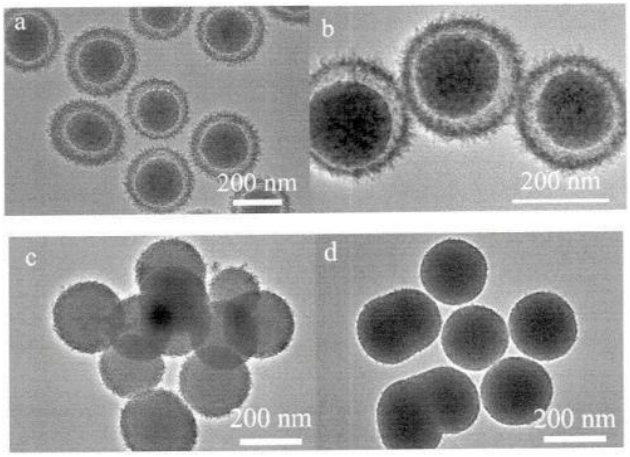


21: 2022/00099. 22: 2022-01-03. 43: 2022-02-23
51: C02F
71: QINGDAO UNIVERSITY OF TECHNOLOGY
72: LYU, Mou, LI, Hongwei
54: METHOD FOR COMPREHENSIVELY TREATING KITCHEN CLEANING WASTEWATER AND KITCHEN GARBAGE
00: -
The present invention discloses a method for comprehensively treating kitchen cleaning wastewater and kitchen garbage, including a system for rapidly treating indoor kitchen cleaning wastewater and kitchen garbage, and a system for collecting outdoor kitchen cleaning wastewater and kitchen garbage. According to the invention, the kitchen garbage can be changed into organic fertilizer after meal on the same day in resident households or dining places, the weight of the kitchen garbage can be reduced by more than half, and the kitchen garbage is directly transported to a designated place for comprehensive utilization by an urban environmental sanitation facility engineering system. An existing large-scale kitchen garbage disposal mode is changed into a household disposal and comprehensive utilization mode, kitchen garbage is changed into recyclable garbage, time and labor are saved, land is not occupied, pollution is avoided, the mode in which the kitchen garbage is conveyed into a garbage landfill, a garbage incineration plant, a kitchen garbage treatment plant and the like for disposal is ended, and the ecological environment is changed.



21: 2022/00101. 22: 2022-01-03. 43: 2022-02-23
51: B01J
71: QINGDAO UNIVERSITY OF SCIENCE AND TECHNOLOGY
72: CHEN, Dawei, GUO, Zhiyan, DU, Fanglin
54: METHOD FOR PREPARING MESOPOROUS SILICA/ BASIC COPPER SILICATE CORE-SHELL COMPOSITE MATERIAL
00: -
A method for preparing a mesoporous silica/basic copper silicate core-shell composite material. The method comprises the following steps: (1), placing silica spheres into deionized water and performing ultrasonic dispersion to form white emulsion; (2), adding a certain amount of copper-containing compound and a small amount of ammonia water

into the deionized water to form a mixed solution; and (3) mixing the above two solutions and stirring for a period of time, placing the uniformly stirred emulsion into a water bath and mechanically stirring for 0 to 30 h at the temperature of between room temperature and 95℃, cooling the stirred product in air to room temperature, and then centrifuging, washing and drying to obtain a mesoporous silica/basic copper silicate core-shell composite material. The raw materials involved in the present disclosure are cheap and easily available, low in cost, the product process is simple and easy to realize.

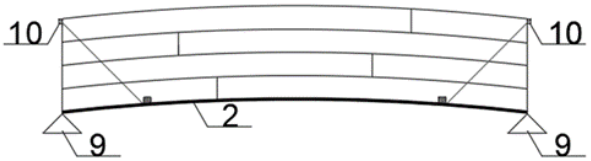


21: 2022/00103. 22: 2022-01-03. 43: 2022-02-24
51: E04C
71: HEBEI UNIVERSITY OF ARCHITECTURE
72: LI, Zhiqiang, BU, Narui, FU, Xiaolin, ZHANG, Hongjia, SUN, Yujie

54: COMPOSITE WOOD BEAM

00: -

The invention discloses a composite wood beam, relating to wood structure building technology, comprising: multiple layers of wood plates successively stacked in a thickness direction, wherein adjacent wood plates are bonded and connected by an adhesive, and each of the wood plates comprises a plurality of sub-wood plates located on a same plane and spliced successively; it further comprises a stiffened bar, wherein a first through hole is provided on the sub-wood plates at both ends of a top-most wood plate along a length direction; a second through hole is provided on a bottom surface of the sub-wood plates at both ends of a bottom-most wood plate along the length direction; and the first through hole and the second through hole at the same end of the composite wood beam communicate with each other.

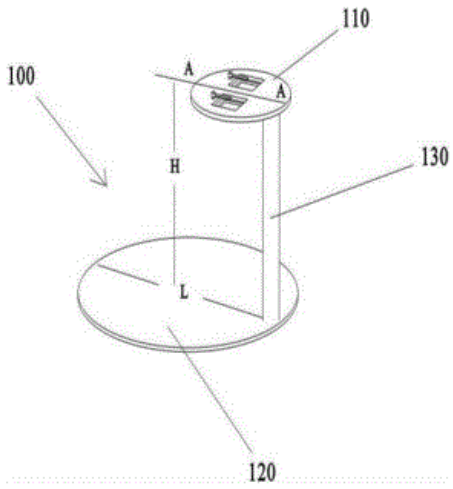


21: 2022/00104. 22: 2022-01-03. 43: 2022-02-23
51: B01L
71: North China University of Science and Technology
72: SONG, Tushun, TIAN, Miao, WANG, Fusheng, TIAN, Zhuang, QU, Xiyu

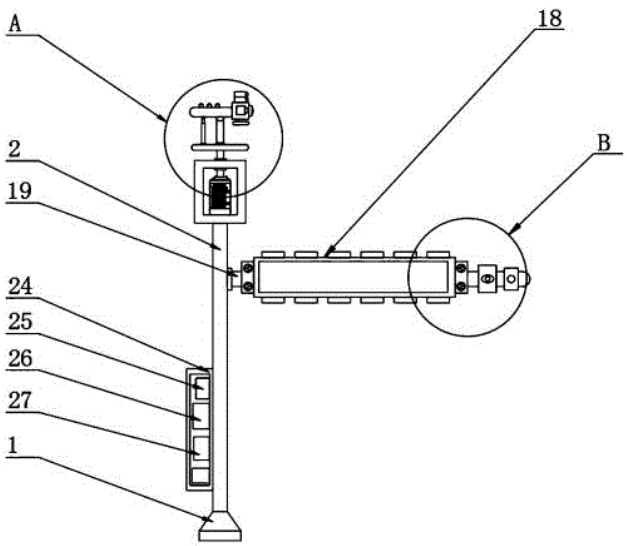
54: DEVICE AND METHOD FOR SIMULATING FLUID-ROCK EXPERIMENT

00: -

The present invention discloses a device and method for simulating a fluid-rock experiment, including a bottom liner, a bracket, and a sample table. A bottom of the bracket is fixed on the bottom liner, the sample table is mounted on a top of the bracket, a plurality of sample fixing grooves are arranged on the sample table, and each sample fixing groove corresponds to a sample fixing clamp. The bottom liner and the sample table are made of PTFE through integral injection molding, which takes full consideration of thermal convection during reaction, avoids contamination of test results, and can be widely used for simulating experiments under actual geological conditions. With the sample fixing grooves, the sample fixing clamps, and a bearing portion arranged on the sample table, an experiment sample can be fixed well, and stability of a lining component and a reaction kettle in an experiment can be ensured.



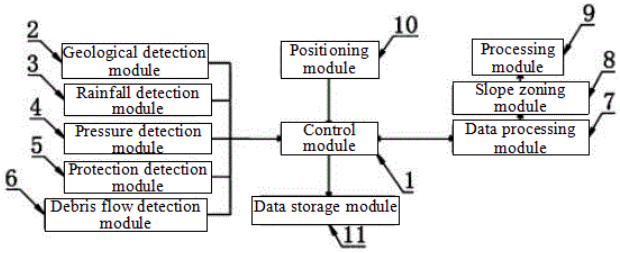
21: 2022/00105. 22: 2022-01-03. 43: 2022-03-03
51: G01B; G08G
71: Quanzhou Equipment Manufacturing Research Institute
72: Nie Wen, Chen Shuiman, Lu Song, Guo Siliang
54: INTELLIGENT MONITORING AND EARLY WARNING DEVICE FOR HIGHWAY SLOPE SAFETY BASED ON DEPTH CAMERA
00: -
The invention discloses an intelligent monitoring and early warning device for highway slope safety based on depth camera, in particular to the technical field of highway traffic engineering safety management, which comprises a base, wherein the top of the base is fixedly provided with a fixing rod, and the top of the fixing rod is provided with a monitoring mechanism; the monitoring mechanism comprises a chassis, wherein a stepping motor is arranged inside the chassis; the top of the stepping motor is provided with a rotating shaft, the top of which is provided with an adjusting plate; the top of the adjusting plate is fixedly provided with a positioning rod, and one side of the positioning rod is provided with an electric telescopic rod. By setting the monitoring mechanism, the invention can carry out remote monitoring, effectively detect the external factors that affect the highway slope landslide accidents and the factors that affect the safety during the driver's driving, improve the monitoring strength, improve the prevention effect of the landslide accident factors and the factors that affect the safety, adjust the detection angle according to the needs, and at the same time improve the detection range.



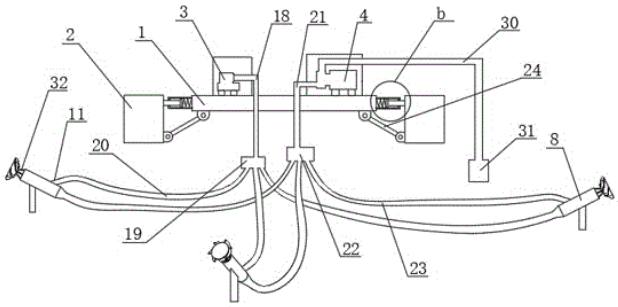
21: 2022/00106. 22: 2022-01-03. 43: 2022-02-23
51: A01G
71: Shandong University
72: ZHENG, Fengying, LIU, Xueqin, JIN, Yanmei, GE, Changzi
54: METHOD FOR TRANSPLANTING PHYLLOSPADIX IWATENSIS
00: -
The present disclosure discloses a method for transplanting Surfgrass, wherein a “poverty-tending growth” strategy of plants is utilized, small patches of Surfgrass plant with roots fixed on rock sea reefs are collected in Autumn and placed in a net bag with a special structure, the roots of the plants are suspended in water, the natural fixation growth state of the plants is relieved, poverty-tending growth of the roots is promoted, a large number of new small root hairs grow on the roots within a short period of time, then the plants are transported to a transplanted sea area, the transplanted plant patches are bound on the stone block and are placed in a shallow water area of a subtidal zone or a low tide area of an intertidal zone, and new roots of the plants can be quickly fixed and grow on transplanted stones.

21: 2022/00107. 22: 2022-01-03. 43: 2022-03-03
51: G01L
71: Quanzhou Equipment Manufacturing Research Institute
72: Nie Wen, Chen Shuiman, Lu Song, Guo Siliang
54: PRESSURE DETECTION AND EARLY WARNING DEVICE FOR HIGHWAY SLOPE
00: -

The invention discloses a pressure detection and early warning device for highway slope, which specifically relates to the field of slope detection, and comprises a control module, wherein the input end of the control module is provided with a geological detection module, a rainfall detection module, a pressure detection module, a protection detection module and a debris flow detection module; the connection end of the control module is provided with a data processing module, the output end of the data processing module is provided with a slope zoning module, and the output end of the slope zoning module is provided with a processing module. According to the invention, the slope and its surrounding environment are monitored by the geological detection module, the rainfall detection module, the pressure detection module, the protection detection module and the debris flow detection module, and then the slope strength and safety are graded by the slope zoning module, the slope is zoned according to the rating result, and the early warning is given according to the zoning result, and meanwhile, the slope area with lower strength grade and safety grade is maintained, so that the overall detection of the invention is more comprehensive and the safety is higher.

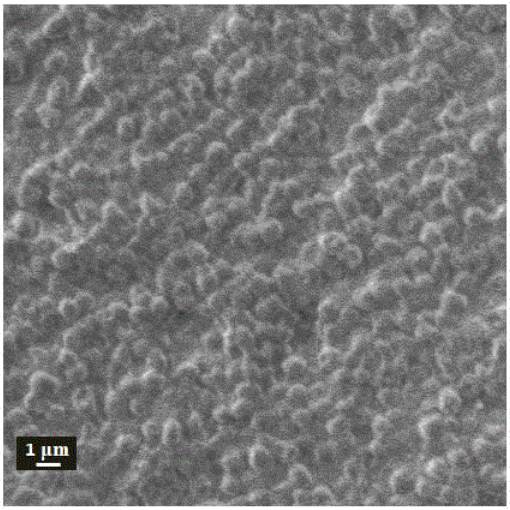


21: 2022/00110. 22: 2022-01-03. 43: 2022-03-03
51: A01K
71: Bureau of Agriculture and Rural Affairs of Ningyang County, Bureau of Agriculture and Rural Affairs of Daiyue District, Taian City
72: Song Jin, Li Huiyun
54: OXYGEN SUPPLY DEVICE FOR FRESHWATER FISH CULTURE
00: -
The invention discloses an oxygen supply device for freshwater fish culture, which comprises a floating assembly, wherein the floating assembly comprises a bottom plate which is movably connected with a plurality of floating blocks; oxygen supply device for freshwater fish culture also comprises a water-air power component, wherein the water-air power component comprises an air pump and a water pump, and the air pump and the water pump are installed on the bottom plate; also comprises water-air mixers, wherein the air pump and the water pump are respectively communicated with the water-air mixers; the water-air mixers are provided with a plurality of air outlet holes; the water-air mixers are provided with a rapid water-air channel and a slow water-air channel which are communicated with each other. The device not only meets the requirements of oxygenation in different water layers, but also can be provided with a plurality of water-air mixers, thus expanding the range of oxygenation and improving the working efficiency of oxygenation.



21: 2022/00111. 22: 2022-01-03. 43: 2022-02-23
51: G01N
71: Qingdao Agricultural University
72: Lei Han, Xuhui Bian
54: PORTABLE THREE-IN-ONE ORGANOPHOSPHATE PESTICIDE ASSAY DEVICE BASED ON MINERALIZED MICROBIAL SURFACE-DISPLAYED ENZYMES AND ITS APPLICATION
00: -
The invention relates to the field of nanometer materials, catalysis and analytical chemistry and particularly provides a device for quickly detecting and degrading organophosphorus pesticide and application. The device modifies a layer of microbe-copper phosphate hybridized catalytic material showing organophosphorus hydrolase on the surface on a business-like filter membrane filter through a physical method. By utilizing the allosteric effect of enzyme and multiple catalyzing functions of an inorganic material, the device can achieve selective, real-time and visual detection of organophosphorus pesticides and can also achieve

multi-purpose quick degradation of the organophosphorus pesticides.

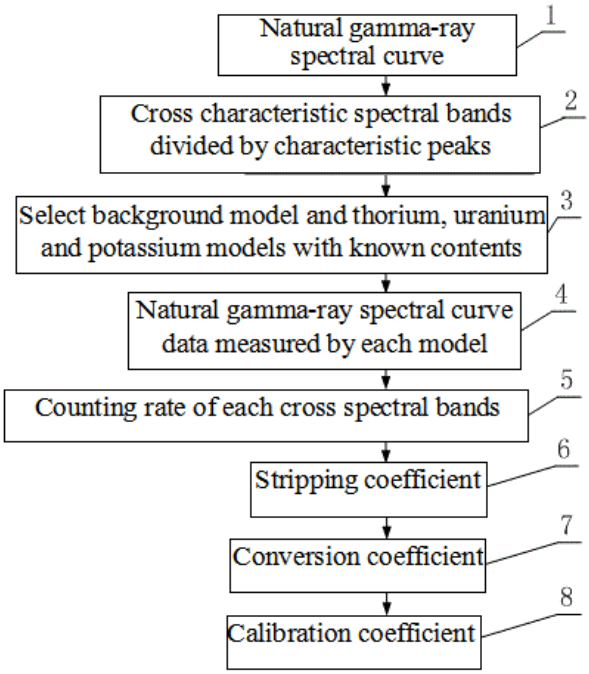


21: 2022/00112. 22: 2022-01-03. 43: 2022-03-03
51: G01T
71: East China University of Technology
72: Tang Bin, Wang Haitao, liu Zhifeng, Zhang Xiongjie, Wang Renbo, Zhang Yan, Huang Fan, Zhang Lijiao, Chen Rui, Zhou Shumin

54: A SOLUTION OF CALIBRATION PARAMETERS FOR THE QUASI-FULL-SPECTRAL ANALYSIS (QFSA) OF URANIUM QUANTIFICATION GAMMA-RAY LOGGING

00: -

The invention belongs to the field of nuclear radiation detection and relates to a Uranium Quantification calibration coefficient calculation method based on spectral energy logging Quasi-full-spectral analysis (QFSA). According to the method, characteristic peaks corresponding to thorium, uranium-radium and potassium in the spectral natural gamma-ray curve are taken as objects, and the spectral natural gamma-ray curve is divided into a plurality of cross characteristic spectral segments; and the calibration coefficient represents a constant calibrated in a saturated ore bed and responded by a logging tool, and represents the counting rate of all gamma-rays emitted by a certain radioactive element per unit content in the saturated ore bed in response to each characteristic spectral segment. The method for calculating the quantitative calibration coefficient of uranium based on the QFSA of spectral energy logging can ensure the analytical accuracy of the content of 3 natural gamma-ray radioactive elements, namely thorium, uranium-radium and potassium, and at the same time, make the speed of natural spectral gamma-ray logging reach a level equivalent to that of natural Total Gamma-ray (TGR) logging.

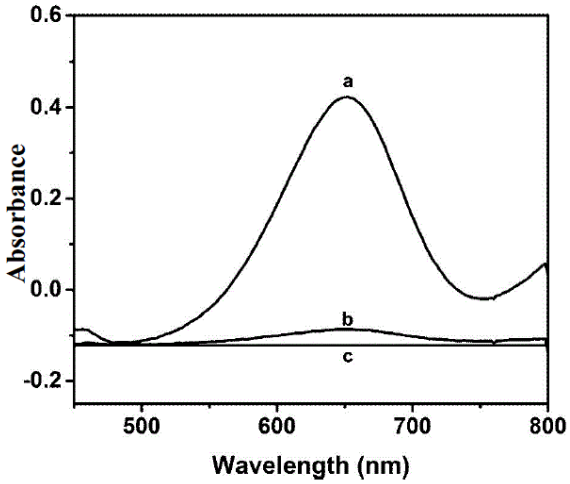


21: 2022/00113. 22: 2022-01-03. 43: 2022-02-23
51: G01N
71: Qingdao Agricultural University
72: Lei Han, Yucui Zhang

54: WHITE NANOZYME AND ITS APPLICATION ON ANTI-INTERFERENCE COLORIMETRIC ASSAY

00: -

The invention relates to the field of nanocatalysis and analytical chemistry, in particular to germanium dioxide (GeO2) nanozyme and its application in pesticide detection. GeO2 nanozyme has peroxidase-mimicking activity when at a pH causing a solution to take on acid-stage, and can catalyze the color reaction between hydrogen peroxide and organic chromogenic substrate. According to the invention, the quantitative analysis of organophosphorus pesticides is realized by coupling the prepared GeO2 nanozyme with acetylcholinesterase. The invention can be applied to the fields of pesticide residue analysis, biomedicine, environmental monitoring and the like.



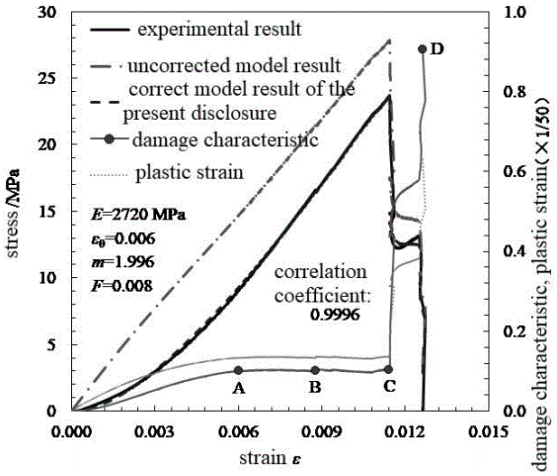
21: 2022/00114. 22: 2022-01-03. 43: 2022-03-03
51: C12N
71: Institute of Pomology, Shanxi Agricultural University
72: Xu Haihong, Yang Kai, Dou Yanxin, Wang Yunyun, Jin Mengchen, Chu Mingli, Ma Dongge
33: CN 31: 202111504700.0 32: 2021-12-10
54: EFFICIENT MUTAGENESIS METHOD FOR BREEDING APPLE POLYPLOID
00: -
The disclosure provides an efficient mutagenesis method for breeding apple polyploid, which relates to the technical field of agricultural planting and comprises the following steps: culturing of apple explants in a culture medium containing colchicine, carbon nanomaterials and the cell wall of Sac-charomyces cerevisiae for doubling, and then carrying out tissue culture and subculture in the culture medium containing carbon nanomaterials and the cell wall of Sac-charomyces cerevisiae. The hybrid breeding method of the present disclosure can improve the rooting rate of clustered buds in the breeding process of apple triploid, and therefore improve the utilization rate of high-quality germplasm resources.

21: 2022/00115. 22: 2022-01-03. 43: 2022-02-23
51: A01C; A01G; A01N; C05G; A01P
71: Shandong University of Traditional Chinese Medicine
72: GAO, Demin, SUN, Yan, BU, Xun, LIU, Li, DU, Kan
54: IMITATIVE WILD PLANTING TECHNIQUE OF BUPLEURUM CHINENSE ON BARREN HILLS
00: -
The present disclosure discloses imitative wild planting technique of Bupleurum chinense on barren hills.

21: 2022/00116. 22: 2022-01-03. 43: 2022-03-03
51: C23F
71: Institute of Applied Chemistry, Jiangxi Academy of Sciences, Institute of Energy Research, Jiangxi Academy of Sciences
72: WANG, Lingling, HAN, Fei, ZENG, Guoping, CHEN, Wei, HU, Yin, ZHANG, Fen
54: THE PREPARATION METHOD OF MAGNETIC GRAPHENE OXIDE/CARBOXYMETHYL CHITOSAN COMPOUND CORROSION INHIBITOR AND ITS APPLICATION
00: -
The present disclosure relates to a magnetic graphene oxide/carboxymethyl chitosan compound corrosion inhibitor and a preparation method thereof. Carboxymethyl chitosan and magnetic graphene oxide with different masses are firstly weighed respectively, are mixed according to different proportions and are dissolved in a corrosion medium at the same time, ultrasonic dispersion is further conducted, and a magnetic graphene oxide/carboxymethyl chitosan compound corrosion inhibition system is obtained. The magnetic graphene oxide/carboxymethyl chitosan compound corrosion inhibitor is added into a non-acidic corrosion medium where steel is located, and a corrosion inhibition film is formed on the surface of the steel. The corrosion inhibition effect of the corrosion inhibitor is greatly improved through the interaction force between the magnetic graphene oxide and the carboxymethyl chitosan, the amount of the corrosion inhibitor is effectively reduced, and isolation of the non-acidic corrosion medium and inhibition of corrosion of the steel are facilitated.

21: 2022/00117. 22: 2022-01-03. 43: 2022-02-23
51: G06F
71: China University of Mining and Technology
72: CAI, Wu, CAO, Anye, GONG, Siyuan, DOU, Linming, HE, Hu, MU, Zonglong, LI, Xuwei, YUAN, Shasha
54: UNIVERSAL PARAMETER FOR CORRECTING CONSTITUTIVE RELATIONSHIP OF LOADED COAL ROCK MATERIAL AND DETERMINING METHOD THEREOF
00: -

The present disclosure relates to a universal parameter for correcting constitutive relationship of loaded coal rock material and determining method thereof, which is applicable for theoretical calculation, numerical simulation and engineering stability analysis in an application field of rock mechanics and geotechnical engineering. The universal parameter of the present disclosure is f(Epsilon Theta)=1-exp(-EpsilonEpsilon Theta), and the correction method is Sigma(Epsilon Theta)=f(Epsilon Theta).Sigma(Epsilon), where Epsilon is a total strain,Epsilon Theta is a strain in the initial fracture compaction stage, Sigma(Epsilon) is an uncorrected stress-strain constitutive relationship, Sigma(Epsilon Theta) is a corrected stress-strain relationship of the present disclosure. Wherein, the characteristic Epsilon Theta is calculated and obtained by a linear regression method of moving window data points.

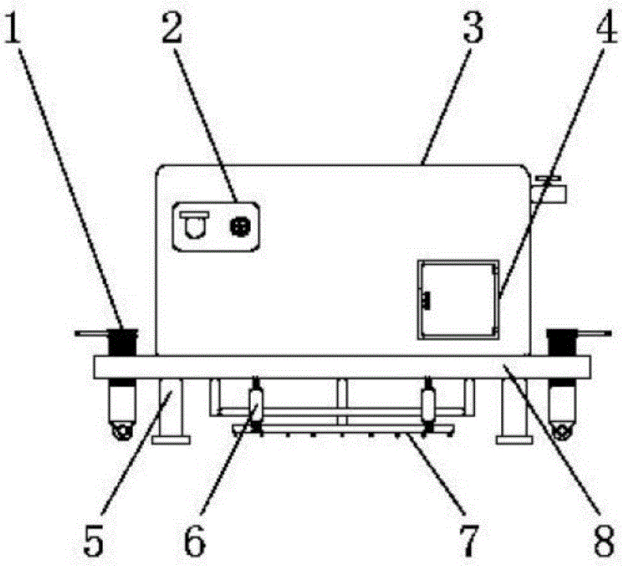


21: 2022/00120. 22: 2022-01-03. 43: 2022-02-23
51: G01N
71: Tarim University
72: GUAN Yao, HE Xinghong, ZHU Zhu, WU Lei, LI Mengqin, DING Xiaofan, SUN Ying, ZHANG Yahui, ZHEN Xiaotong, WU Qian

54: INFILTRATION AND SEEPAGE SIMULATION EXPERIMENT MEASURING DEVICE

00: -

The invention discloses an infiltration and seepage simulation experiment measuring device. The infiltration and seepage simulation experiment measuring device comprises a main body shell, and a baseplate is arranged on the outer surface of the lower end of the main body shell. By arranging a moving auxiliary mechanism, a one-way gear ring can be rotated by holding an operating holding rod by a hand when required, so that synchronous rising and falling of a threaded column are driven, finally, rollers replace supporting feet to play a supporting role, and thus more convenience is achieved during moving; by arranging a liquid mixing mechanism, different medicine liquid can be injected into a liquid mixing chamber from an addition opening for mixing when using is carried out for plants, then the circulation of a fluid replacement pipe is controlled by a switching valve, so that mixing operation is carried out better, and the degree of purity of a main water body cannot be affected; andby arranging a humidity measuring mechanism, a humidometer can be risen and fallen along a guide rail so as to be better adapt to grounds with different flatness, and a probe can be enabled to play arole better.



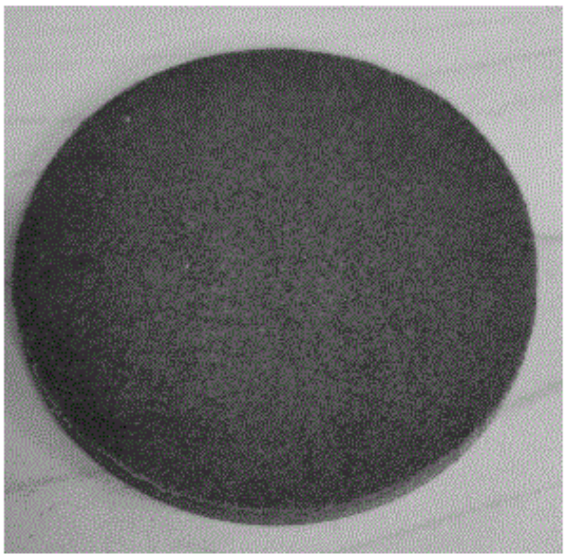
21: 2022/00121. 22: 2022-01-03. 43: 2022-02-23
51: B32B; F16L
71: Qingdao University of Science and Technology
72: WANG, Xiujuan, WANG, Ziwei, ZHU, Xianpeng, GAO, Zekun

54: ORGANOSILICON RUBBER WITH HIGH THERMAL CONDUCTIVITY PHASE CHANGE AND PREPARATION METHOD AND APPLICATION THEREOF

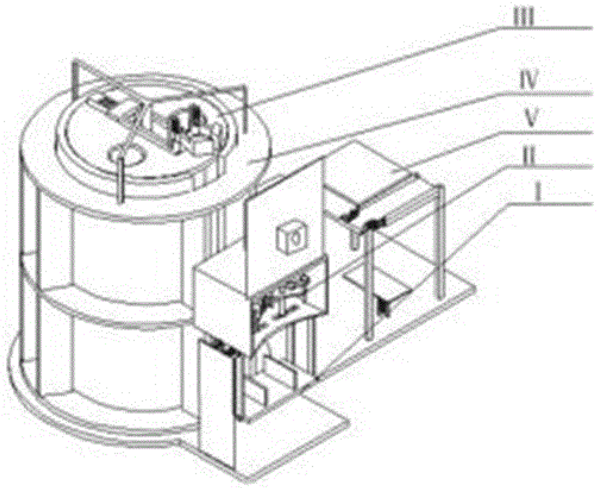
00: -

The present disclosure relates to the technical field of organic silicon rubber, and particularly relates to organosilicon rubber with high thermal conductivity phase change. The organosilicon rubber with high

thermal conductivity phase change comprises the following components in parts by mass: 100 parts of vulcanized silicone rubber, 20-30 parts of silane coupling agent modified aluminum oxide, 10-20 parts of silane coupling agent modified boron nitride and 30-60 parts of graphite/paraffin phase-change material. The present disclosure realizes the improvement of the thermal conductivity of the silicone rubber when the addition amount of the above three fillers is small, without affecting the physical processing performance of the silicone rubber.

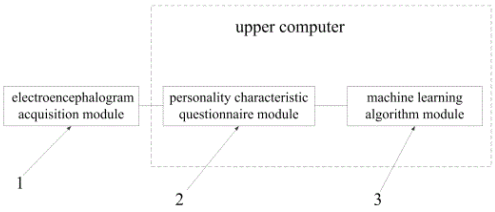


21: 2022/00122. 22: 2022-01-03. 43: 2022-03-03
51: A47B
71: Qingdao University of Technology
72: Wang Yanjun, Wang Zilong, Guan Jing
54: SELF-POSITIONING MULTILAYER STORAGE BOOKCASE AND A SYSTEM THEREOF
00: -
The invention relates to a self-positioning multi-layer storage bookcase and a system thereof, which comprises an annular bookshelf which is vertically arranged and can rotate along the central axis, wherein mechanical grippers are arranged in the annular bookshelf, the mechanical grippers can be driven by an actuator to vertically lift and translate along the radius direction of the annular bookshelf and the side surface of the annular bookshelf is provided with a gap, which is used to pass through the mechanical grippers, so that the books held in the mechanical grippers can be transferred between the inner cavity and the outside of the annular bookshelf.

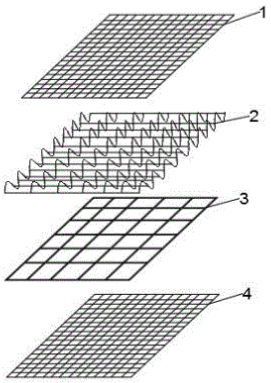


21: 2022/00124. 22: 2022-01-03. 43: 2022-02-23
51: A61B
71: Shaanxi Normal University
72: JI, Ming, YOU, Xuqun, LI, Ying, LAN, Jijun, YAN, Bihua, LUO, Yangmei, LI, Yuan, LI, Ying, XU, Quan, LIU, Bo
54: PERSONALITY DISORDER CHARACTERISTIC MATCHING SYSTEM BASED ON EEG SIGNAL ACQUISITION
00: -
The present disclosure relates to a field of special post personality matching technique, and in particular to relate a personality disorder characteristic matching system based on EEG signal acquisition, including: an electroencephalogram acquisition module, a personality characteristic questionnaire module and a machine learning algorithm module; the electroencephalogram acquisition module and the personality characteristic questionnaire module are respectively configured to collect electroencephalogram signals and personality characteristic signals; the machine learning algorithm module is configured to receive the electroencephalogram signals and the personality characteristic signals and establish a personality characteristic and brain electrophysiological characteristic model of a specific population. The scheme combines personality tendency assessment results, response time and resting state electroencephalogram measurement results, through the artificial intelligence machine learning algorithm, the

subjective and objective measurement indexes of excellent candidates and patients with severe personality disorder are mathematically modeled, so as to improve the selection hit rate of excellent post competent persons.



21: 2022/00125. 22: 2022-01-03. 43: 2022-02-24
51: G01D; G08B
71: BOSTD GEOSYNTHETICS QINGDAO LTD
72: ZHANG, Yunyi, ZHENG, Hong, CHEN, Lili, XIA, Fei, YUAN, Shaopeng, WANG, Yazhong, XU, Fangjun, XIA, Wang, WANG, Xulong, DAI, Zhengjie, ZHOU, Keqing, ZHU, Yanjie, FU, Quande
54: ANTI-SLIDING NET FOR IMPROVING SLOPE STABILITY COEFFICIENT
00: -
The present disclosure discloses an anti-sliding net for improving slope stability coefficient. The anti-sliding net comprises multiple anti-sliding subnets, and the multiple anti-sliding subnets are spliced to form the anti-sliding net, each anti-sliding subnet comprises a first net layer, a second net layer, a third net layer and a soil fixing net, the soil fixing layer comprises multiple wavy net lines, the net lines pass through the first net layer and the second net layer, the wave crest positions of the net lines are the joints of the soil fixing nets and the first net layers, the wave trough positions of the net lines are the joints of the soil fixing net and the second net layers; the third net layers and the second net layers are connected in a sewn mode.



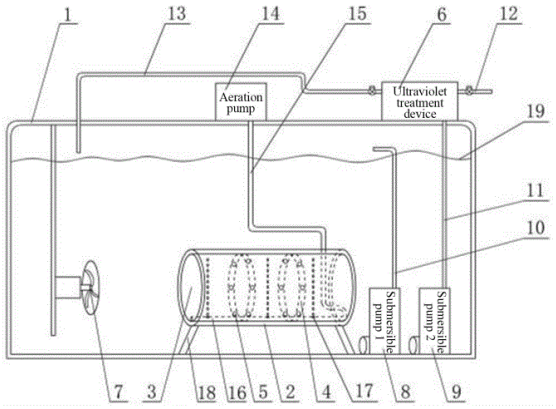
21: 2022/00126. 22: 2022-01-03. 43: 2022-02-24
51: G06F; G07G
71: ZHEJIANG JIANLIN ELECTRONIC Co., LTD
72: ZHOU, Jianjun, WANG, Yaqun, JIN, Ying
54: SELF-SERVICE RECEIPT PRINTING DEVICE
00: -
The present disclosure relates to a self-service receipt printing device, which includes a computer and a printer. The computer is loaded with a self-service receipt printing system and adopts two methods of real-time interaction and transmission and storage in advance to perform data interaction and transmission with a remote server, the printer is connected with the computer, and the self-service receipt t printing system activates the printer to print a content specified by a customer according to a customer instruction. In addition, the system also includes a check scanning module and a seal verification device connected with the computer and has the characteristics of less system space occupied by receipt storage, faster running speed, stronger intelligence and anti-counterfeiting ability.

21: 2022/00127. 22: 2022-01-03. 43: 2022-02-24
51: C02F
71: Shandong Analysis and Test Center
72: Li, Qing, You, Hong, Zhang, Jing, Ma, Junjian, Guo, Beibei

54: DEVICE AND METHOD FOR ALGAE REMOVAL AND STERILIZATION OF BALLAST WATER BASED ON CESIUM 137 IRRADIATION AND ULTRAVIOLET IRRADIATION

00: -

A device for algae removal and sterilization of ballast water based on cesium 137 irradiation and ultraviolet irradiation is provided. Radioactive substance cesium 137 is stored in the radioactive substance, algae inhibition, algae removal, and sterilization of different wave bands on water can be achieved by utilizing Y rays and ultraviolet waves for irradiation, more hydroxyl free radicals can be generated by blowing air to enhance the effects of algae removal and sterilization, thus facilitating to maintain ecological balance of different sea areas.

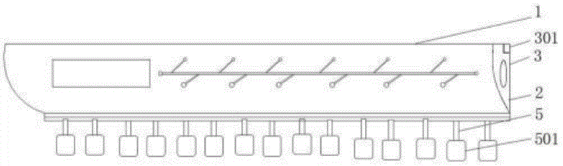


21: 2022/00129. 22: 2022-01-03. 43: 2022-02-24
51: A61L; B61D
71: Qingdao University of Technology
72: ZANG, Xiaolin, YIN, Qinchen, HU, Shuangyue, SHA, Ang

54: TWO-PURPOSE BOX TYPE ULTRAVIOLET DISINFECTION REPLACEABLE HANDLE DEVICE

00: -

The present invention provides a two-purpose box type ultraviolet disinfection replaceable handle device, including a main body; a box body is mounted at a middle part of the main body; a disinfection mechanism is mounted at a middle part of the box body; an ultraviolet disinfection lamp is mounted opposite to the disinfection mechanism; a bottom of the ultraviolet disinfection lamp is provided with a replacement mechanism; an inner wall of a top end of the box body is provided with a hinge; and an inner wall of the hinge is provided with a door body. The two-purpose box type ultraviolet disinfection replaceable handle device is provided with the disinfection mechanism, and the water storage tank accommodates disinfectant fluid, so that when a user uses a handle or replaces the handle, a disinfection nozzle will automatically spray the disinfectant fluid to the upper end of the handle.



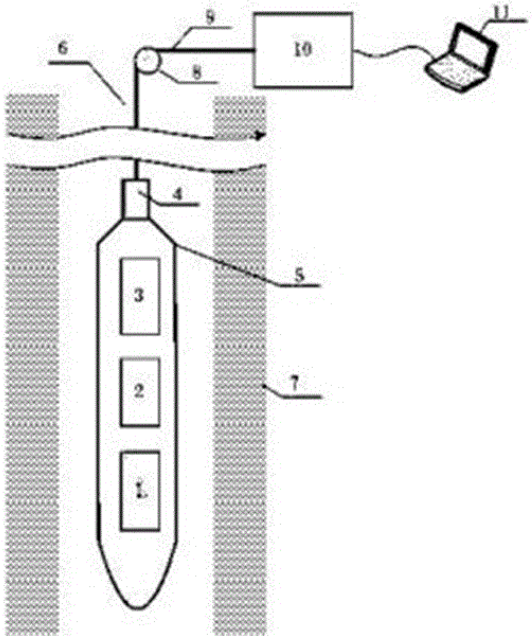
21: 2022/00130. 22: 2022-01-03. 43: 2022-03-02
51: G01T
71: East China University of Technology

72: Tang Bin, Wang Haitao, Zhang Xiongjie, Zhang Yan, Wang Renbo, Chen Rui, Liu Zhifeng, Huang Fan, Zhang Lijiao, Zhou Shumin

54: SOLUTION OF CALIBRATION PARAMETERS IN COMBINED NEUTRON/GAMMA LOGGING FOR URANIUM QUANTIFICATION (CNGU)

00: -

The invention discloses a uranium logging method and a calibration parameter calculation method which are used for uranium exploration and mining and integrate natural gamma energy spectrum and prompt neutron time spectrum. Specifically, it refers to the uranium logging method, which measures the natural gamma energy spectrum formed by natural radioactive elements in the rock and mineral bed point by point along the borehole and the prompt neutron time spectrum caused by uranium fission of pulse neutron, and analyzes the content of natural radioactive elements such as uranium, thorium, radium and potassium in the rock and mineral bed according to this, as well as the calculation method of scale parameters such as conversion coefficient, sensitivity factor and background response. The method is the organic combination and data fusion of two kinds of nuclear logging methods, especially for a single nuclear logging method for uranium quantification, which does not need to carry out radioactive equilibrium correction to “uranium-radium-radon”, so it has the characteristics of no need of core sampling and chemical analysis, and has the advantages of improving drilling efficiency, reducing exploration cost, shortening uranium quantitative period, etc. It can also realize uranium quantification field analysis by computer programming.



21: 2022/00132. 22: 2022-01-03. 43: 2022-02-24

51: A01G

71: Jiangsu Academy of Agricultural Sciences

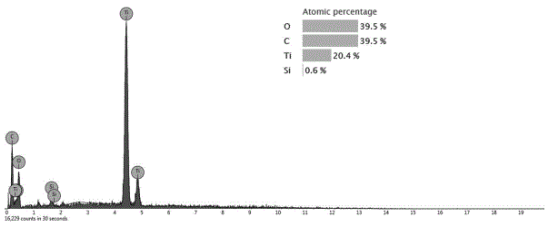
72: ZHU, Haijun, CAI, Heng, ZHANG, Tao

54: METHOD FOR FLORAL INDUCTION FROM AXILLARY BUDS OF YOUNG CARYA ILLINOENSIS TREES

00: -

The present disclosure discloses a method for floral induction from axillary buds of young Carya illinoensis trees, and belongs to the technical field of fruit tree cultivation. The method comprises the following steps: selecting robust seedlings of improved variety for field planting, performing management in the field planting year and the second year, regulating and controlling the tree vigor of the young trees, and flowering and fruiting the axillary buds of the young trees. According to the technology, paclobutrazol is utilized to control the vegetative growth of tree bodies and promote reproductive growth, and a matched bud-notching measure is utilized to promote the flowering and fruiting of the axillary buds, so that the problems of less early fruiting and low yield caused by the fact that the young pecan trees fruit only by apical buds and 1-3 buds below the apical buds are solved.

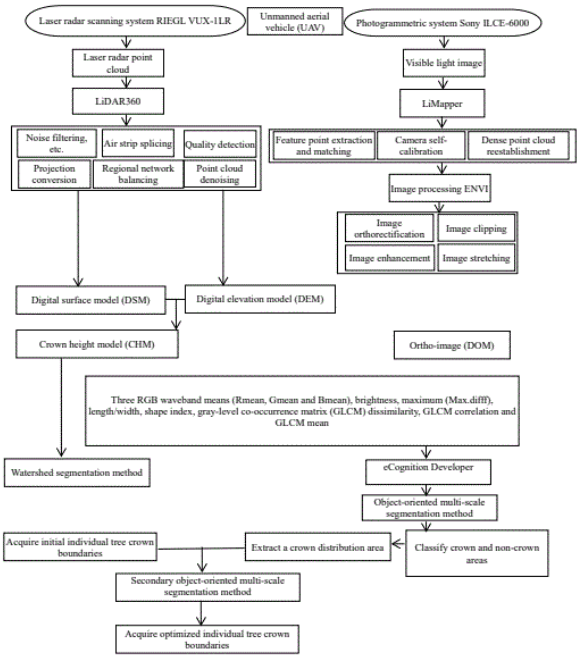
21: 2022/00133. 22: 2022-01-03. 43: 2022-02-24
51: C09D
71: Zhejiang University of Science and Technology
72: ZHANG, Yan, WANG, Huile, ZHAO, Huifang, WANG, Yifan, CHEN, Yinghao
54: METHOD FOR PREPARING TITANIUM DIOXIDE/TALCUM POWDER COMPOSITE FILLER BY MICROEMULSION METHOD
00: -
The present disclosure provides a method for preparing a titanium dioxide/talcum powder composite filler, which includes the following steps: (1) dispersing; (2) grinding; (3) formulating an aqueous phase system; (4) formulating an oil phase system; (5) preparing the composite filler by a microemulsion method; (6) emulsifying; and (7) separating and drying to obtain a white powdered solid. The talcum powder and titanium dioxide employed in the present disclosure have high coating strength and are not easy to fall off; TiO2 is evenly distributed on the surface of talcum powder, and is not easy to agglomerate; and the coating thickness is easy to control, the purity is high, the process is simple, and there is no pollution.



21: 2022/00134. 22: 2022-01-03. 43: 2022-03-02
51: A61K
71: Northwest Institute of Plateau Biology, Chinese Academy of Sciences, Pingdingshan University
72: Yu Ruitao, Yu Ruixue
54: METHOD FOR PREPARING ARCTIGENIN FROM SAUSSUREA MEDUSA AND APPLICATION THEREOF
00: -
The invention relates to a method for preparing arctigenin from Saussurea medusa, which comprises the following steps: (1) extracting crushed Saussurea medusa powder with tap water, filtering, discarding the aqueous solution, and draining to obtain Saussurea medusa residue; (2) adding alcohol into the residue of Saussurea medusa, extracting, and filtering to obtain extracted solution; (3) evaporating the extracted solution under reduced pressure to a constant weight to obtain arctigenin extract; (4) dry-loading the arctigenin extract on a 100-300 mesh silica gel column; (5) eluting the silica gel column with petroleum ether, acetone with 20 percent mass concentration and acetone solution with 40 percent mass concentration in turn, and collect 40 percent acetone eluent; (6) evaporating the eluent under reduced pressure to a constant weight to obtain arctigenin extract; adding anhydrous ethanol-petroleum ether-acetone into the extract of arctigenin refined extract for recrystallization, standing for 2-96 hours, and placing in a ventilating cabinet to obtain arctigenin prismatic crystals. The method has the advantages of simple process, good safety and good repeatability.

21: 2022/00135. 22: 2022-01-03. 43: 2022-02-24
51: G06K; G06T
71: Institute of Forest Resource Information Techniques CAF
72: CHEN, Qiao, CHEN, Yongfu, WANG, Juan, XU, Zhiyang
54: CROWN EXTRACTION METHOD BASED ON MULTI-SOURCE REMOTE SENSING OF UNMANNED AERIAL VEHICLE
00: -
The invention discloses a crown extraction method based on multi-source remote sensing of an unmanned aerial vehicle, comprising: acquiring visible light images and laser radar point cloud, extracting individual tree crown information by taking visible light ortho-images and laser radar point cloud as data sources and adopting that watershed segmentation and objectoriented multi-scale segmentation are combined, extracting crown and non-crown areas of the visible light images by adopting the object-oriented multi-scale segmentation method, and extracting a crown distribution range by taking the crown areas as masks; acquiring an individual tree crown preliminary segmentation result based on a CHM and by adopting the watershed segmentation method; and performing secondary segmentation on the crown areas based on crown boundaries segmented by a watershed and by taking brightness of the visible light ortho-images as features, and acquiring optimized individual tree crown boundary

information, thereby improving accuracy of remote sensing crown extraction.

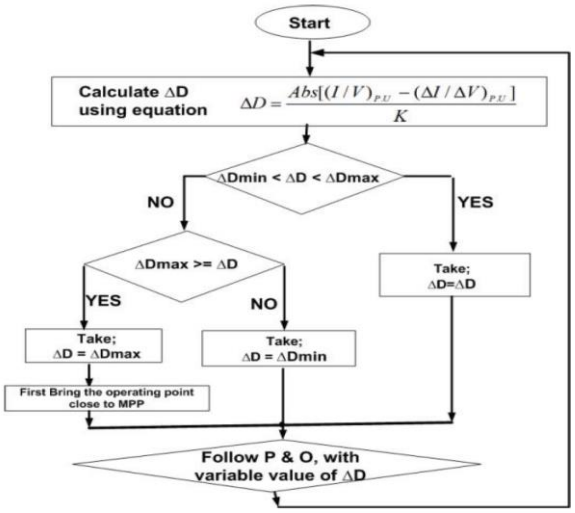


21: 2022/00144. 22: 2022-01-03. 43: 2022-02-24
51: G01S; H02J
71: HUSAIN, Mohammed Aslam, KHAN, Asif, HASAN, Mohammad Kamrul, AHMAD, Naeem, ABBAS, Khusnood
72: HUSAIN, Mohammed Aslam, KHAN, Asif, HASAN, Mohammad Kamrul, AHMAD, Naeem, ABBAS, Khusnood

54: A MODIFIED MAXIMUM POWER POINT (MPP) TRACKING MODULE FOR PHOTOVOLTAIC SYSTEM AND A METHOD THEREOF

00: -

A device and a method for increasing tracking speed of a MPPT module in a photovoltaic system, comprises of:a boost converter (102) comprising of a Fast Mutable Duty (FMD) MPPT technique to adapt best value of step size by calculating an optimum value of change in duty, wherein the FMD MPPT technique increases the tracking speed, wherein the value of change in duty gets updated according to a plurality of parameters; a controlling unit (104) for controlling duty ratio of the boost converter (102) by varying the step size that results in a fast convergence with low or almost zero oscillations during steady state at faster rate of changing environmental conditions, wherein the step size of the duty mutates itself according to distance between an operating point and a desired point; and a current measuring unit (106) for measuring current from the photovoltaic system.

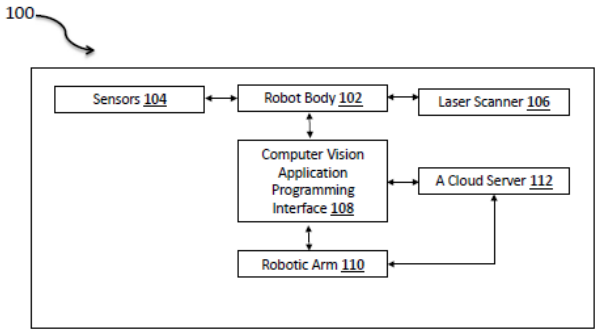


21: 2022/00147. 22: 2022-01-03. 43: 2022-02-24
51: G10H
71: BISWAS, Anupam
72: BISWAS, Anupam

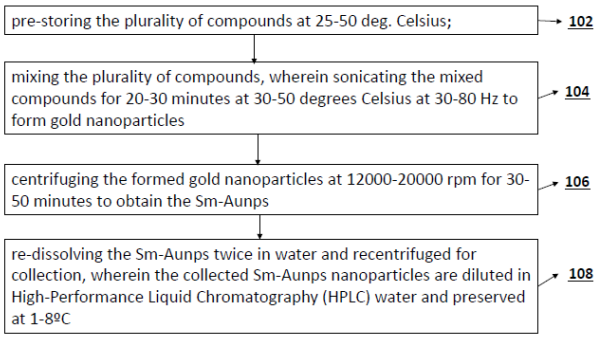
54: AN AUTOMATIC METHOD FOR REPOSITIONING DEFORMED NOTE OF MUSICAL INSTRUMENTS IN CLASSICAL MUSIC

00: -

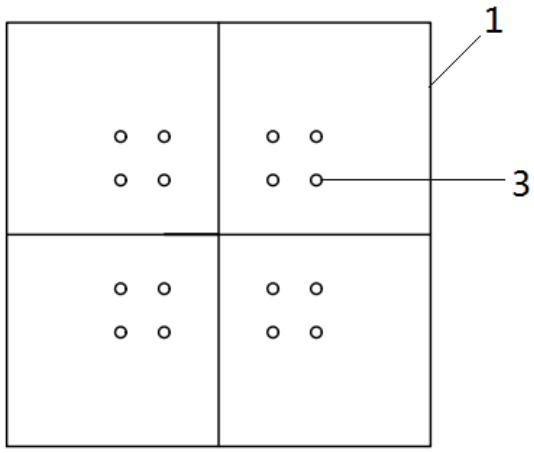
The present invention generally relates to an automatic method for repositioning deformed note of musical instruments in classical music comprises comparing a Thaat note with a Saptaknote for repositioning the Thaat note; and shifting position of notes other than Saptaknote and repositioned Thaat note, wherein shifting of notesfor the repositioning of notes is done towards TaarSaptak. The shifting of notes for the repositioning of notes is done towards TaarSaptak. i.e., the method considers repositioning of notes towards high frequency notes. The method promotes repositioning a normally practiced notes to new notes in order to match with the tonal quality of vocalist.



21: 2022/00148. 22: 2022-01-03. 43: 2022-02-24
51: A61L
71: DAS, Suvadra, ROY, Partha, HALDER, Asim, KUNDU, Sonia, UDDIN, Abul Bashar Mohammed Helal
72: DAS, Suvadra, ROY, Partha, HALDER, Asim, KUNDU, Sonia, UDDIN, Abul Bashar Mohammed Helal
54: A FORMULATION FOR SYNTHESIS OF SILYMARIN CONJUGATED GOLD NANOPARTICLE TO HEAL WOUND AND A METHOD THEREOF
00: -
A formulation for synthesis of silymarin conjugated gold nanoparticle (Sm-Aunps), wherein a plurality of compound of the formulation comprises of: 1.3mM aqueous chloroauric acid; 0.5-2ml of 4.8 mM methanolic solution of the silymarin (Sm); wherein the plurality of compounds is mixed and sonicated for a first defined time interval min at a predefined temperature at a fixed frequency range to form gold nanoparticles; and wherein the formed gold nanoparticles are centrifuged at a defined revolution per minute (rpm) for a second defined time interval to obtain the Sm-Aunps.

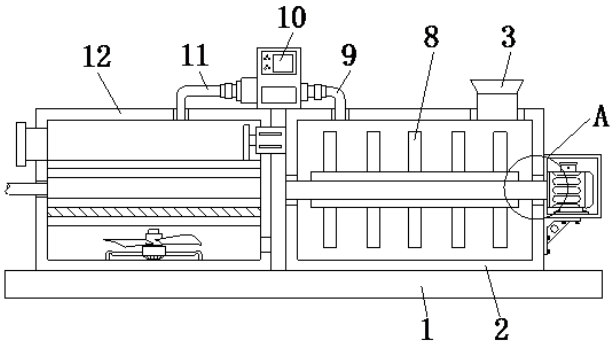


21: 2022/00150. 22: 2022-01-03. 43: 2022-02-24
51: A01K
71: YELLOW SEA FISHERIES RESEARCH INSTITUTE, CHINESE ACADEMY OF FISHERY SCIENCES
72: LI, Jiao, GONG, Pihai, GUAN, Changtao
33: CN 31: 202110393135.9 32: 2021-04-13
54: SHELLFISH-ALGA ECOLOGICAL REEF
00: -
The invention discloses a shellfish-alga ecological reef, relating to the technical field of fishery culture and proliferation infrastructures. The reef comprises a first fixed plate, a second fixed plate, a frame set, a metal net and shells. The first and the second fixed plates are disposed side by side in parallel and spaced with each other; one frame set is provided between the first plate and the second plate, various frame sets are spaced and disposed side by side, and a first end of each frame set is fixedly connected with the first plate while a second end of each frame set is fixedly connected with the second plate; each frame set comprises one frame with a multi-face enclosed structure, and the metal net is fixedly connected with the frame and can enclose various frame faces; shells are placed in a space surrounded by the frame and the metal net.



21: 2022/00151. 22: 2022-01-03. 43: 2022-02-24
51: C08B
71: SHANDONG PEANUT RESEARCH INSTITUTE
72: YU, Lina, BI, Jie, WANG, Mingqing, SONG, Yu, YANG, Weiqiang, JIANG, Chen, SHI, Chengren
33: CN 31: 202122740374.5 32: 2021-11-10
54: CONSECUTIVE OPERATION DEVICE FOR EXTRACTION SEPARATION AND PURIFICATION OF HIGH-ACTIVITY FUNCTIONAL POLYSACCHARIDES IN PLANT-BASED MEAL

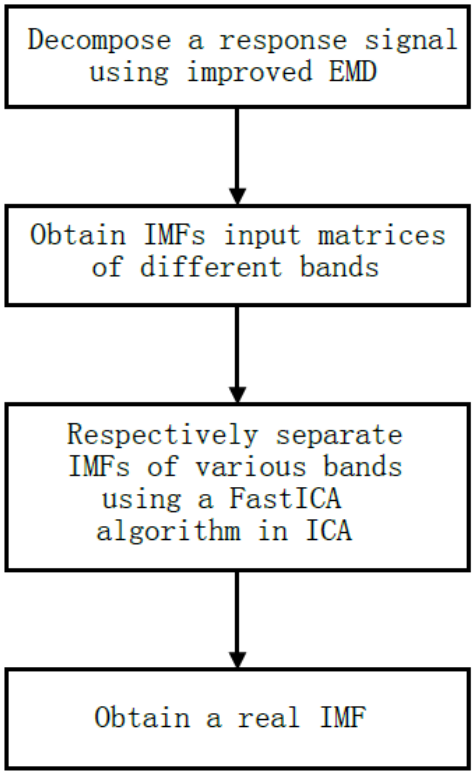
00: -
The present invention relates to the field of consecutive operation devices, and more particularly to a consecutive operation device for extraction separation and purification of high-activity functional polysaccharides in plant-based meal, comprising a holding plate and a separation shell, wherein a heating shell is mounted at the top end of the holding plate; a feeding tube is mounted at the top end of the heating shell; a motor is arranged at one end of the heating shell; a bearing is arranged at the other end of the motor; the bearing is internally provided with a silica gel heat conduction tube; a rod sleeve is arranged outside the silica gel heat conduction tube; and stirring blades are arranged on the upper side and the lower side of the rod sleeve. According to the consecutive operation device for extraction separation and purification of high-activity functional polysaccharides in plant-based meal, due to arrangement of the motor, the stirring blades are driven by the bearing to stir, and then materials in the heating shell can be conveniently stirred uniformly for uniform distillation. Due to arrangement of the pump body, a gas is fed into the separation shell through the connecting tube and the conveying tube, subsequently the semiconductor chilling plate is powered on, then cooling is performed in the separation shell through the semiconductor chilling plate, and moisture discharged into the separation shell is cooled down.



21: 2022/00153. 22: 2022-01-03. 43: 2022-02-22
51: G06F
71: FUZHOU UNIVERSITY, FUJIAN CAI JIAN JI TUAN CO., LTD.
72: JIANG, Shaofei, FU, Chun, WU, Zhaoqi, LIN, Guixing

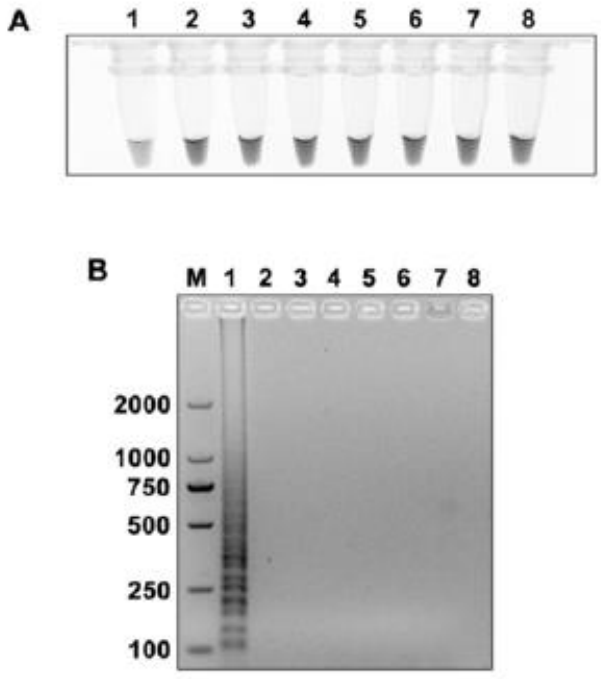
54: IMPROVED INTRINSIC MODE FUNCTION JUDGMENT METHOD IN EMPIRICAL MODE DECOMPOSITION PROCESS BASED ON INDEPENDENT COMPONENT ANALYSIS

00: -
The invention relates to a new improved intrinsic mode function (IMF) judgment method in an empirical mode decomposition (EMD) process based on independent component analysis (ICA). Aiming at the problem that excessive IMF components are generated in a band filtering improved EMD process, the method introduces ICA into the improved EMD process to automatically separate real IMF components. The method includes: decomposing a structural response signal using an improved EMD to obtain IMFs of various bands; and taking the IMFs as input matrices respectively, separating the IMFs using a FastICA algorithm in ICA, and automatically separating a real IMF. The method can well process multi-degree of freedom, nonlinear and unsteady response signals, may be combined with other methods (such as Hilbert transform) to identify modal parameters, and may be used for signal processing and modal parameter identification in civil engineering, aerospace, automatic control, mechanical engineering, and other fields.

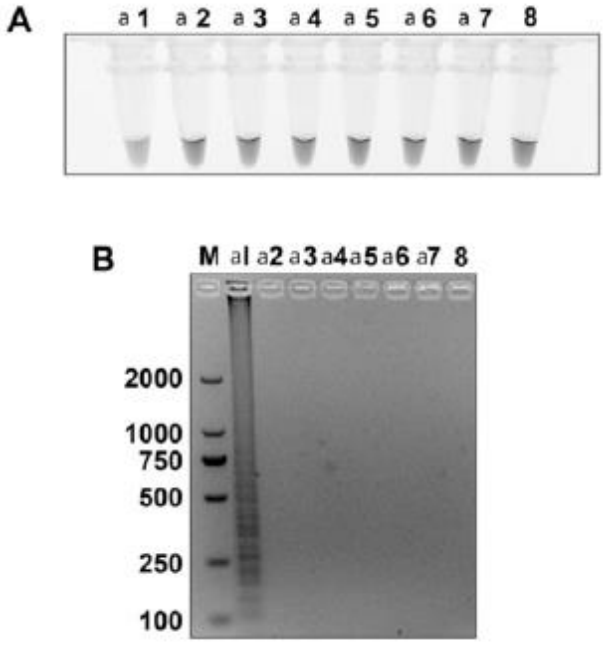


21: 2022/00154. 22: 2022-01-03. 43: 2022-02-22

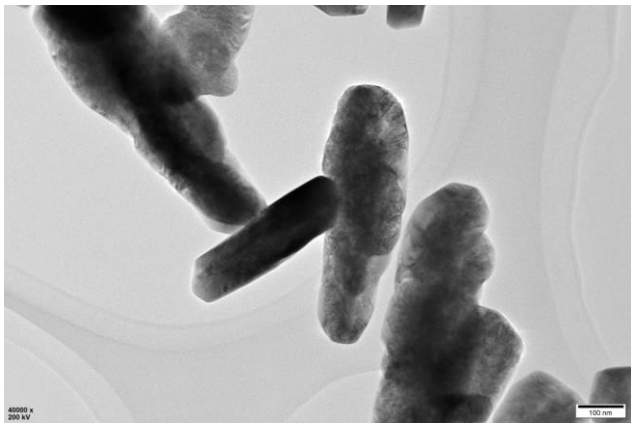
51: C12Q
71: QINGDAO AGRICULTURAL UNIVERSITY
72: REN, Weichao, LIU, Na, LI, Baohua
54: LAMP PRIMER FOR RAPIDLY DETECTING VENTURIA INAEQUALIS, AND KIT AND DETECTION METHOD THEREOF
00: -
The present invention discloses a LAMP primer for rapidly detecting Venturia inaequalis, and a kit and detection method thereof. The LAMP primer consists of a pair of outer primers F3 and B3, a pair of inner primers FIP and BIP, and a pair of loop primers LF and LB. The outer primer F3 is as shown in SEQ ID No. 1, the outer primer B3 is as shown in SEQ ID No. 2, the inner primer FIP is as shown in SEQ ID No. 3, the inner primer BIP is as shown in SEQ ID No. 4, the loop primer LF is as shown in SEQ ID No. 5, and the loop primer LB is as shown in SEQ ID No. 6. Through LAMP amplification on a sample to be tested using the aforementioned 3 pairs of specific LAMP primers, rapid detection of Venturia inaequalis can be realized. This technology has advantages of simple operations, high sensitivity and strong specificity, and fast detection, is suitable for early diagnosis of Venturia inaequalis in a field and detection and identification of pathogens, and is of great significance for timely and effective prevention and control of Venturia inaequalis.



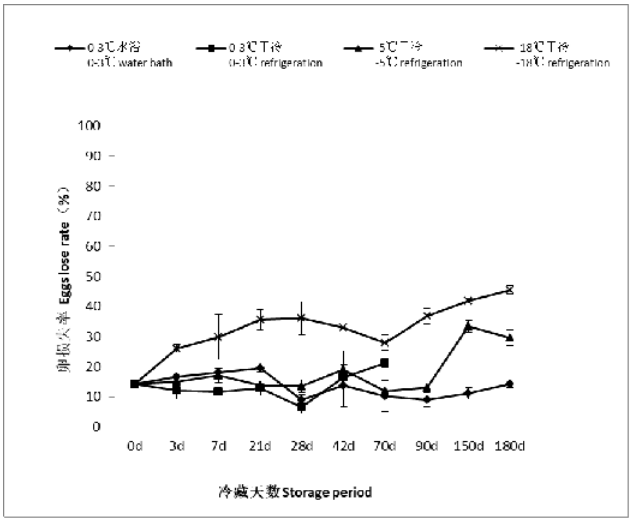
21: 2022/00155. 22: 2022-01-03. 43: 2022-02-22
51: C12Q
71: QINGDAO AGRICULTURAL UNIVERSITY
72: LIU, Na, REN, Weichao, LI, Baohua
54: LAMP PRIMER FOR RAPIDLY DETECTING MARSSONINA CORONARIA, AND DETECTION METHOD AND KIT THEREOF
00: -
The present invention discloses a LAMP primer for rapidly detecting Marssoninacoronaria, and a detection method and kit thereof. The LAMP primer consists of a pair of outer primers F3 and B3 and a pair of inner primers FIP and BIP. The forward outer primer F3 is as shown in SEQ ID No. 1, the reverse outer primer B3 is as shown in SEQ ID No. 2, the forward inner primer FIP is as shown in SEQ ID No. 3, and the reverse inner primer BIP is as shown in SEQ ID No. 4. Through LAMP amplification a sample to be tested using the aforementioned two pairs of specific LAMP primers, rapid detection of Marssoninacoronaria can be realized. This technology has advantages of simple operations, high sensitivity and specificity, and fast detection, and no need of expensive instruments and equipment, and is suitable for early diagnosis of Marssoninacoronaria in a field and detection and identification of pathogens.



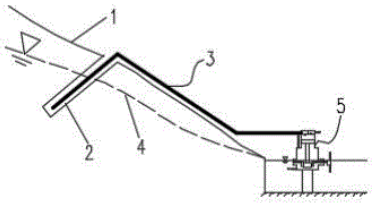
21: 2022/00156. 22: 2022-01-03. 43: 2022-02-22
51: B22F
71: QINGDAO UNIVERSITY
72: LIU, Aihua, LIU, Junchong, CAI, Yuanyuan
54: PREPARATION METHOD AND APPLICATION OF CUXO NANOROD WITH NADH PEROXIDASE MIMICS
00: -
The disclosure provides a CuxO nanorod with NADH peroxidase-mimetic activity and its preparation method and application, which belongs to the field of nanomaterials, biocatalysis and analytical assay technology. The present invention discloses for the first time to facilely prepare CuxO nanorods with NADH peroxidase-like activity with good stability. The invention has a broad development prospect in biochemical analysis, biocatalysis and medical detection.



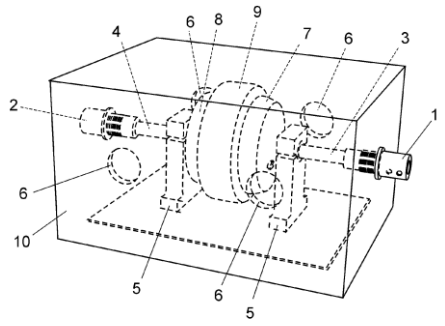
21: 2022/00157. 22: 2022-01-03. 43: 2022-02-22
51: A61K
71: PLANT PROTECTION RESEARCH INSTITUTE GUANGDONG ACADEMY OF AGRICULTURAL SCIENCES
72: ZHAO, Can, LI, Dunsong, ZHANG, Baoxin, FENG, Xinxia
33: CN 31: 202110276081.8 32: 2021-03-15
54: STORAGE METHOD FOR ANTHERAEA PERNYI EGGS
00: -
The present invention discloses a storage method for Antheraea pernyi eggs which comprises the following steps: A. pernyi eggs are immersed in a liquid medium after being sealed and stored under refrigeration at 0-3°C. Water may be used as the liquid medium. Through the storage method for A. pernyi eggs of the present invention, after A. pernyi eggs are stored in a water bath at 0-3°C for 180 days, there is no significant difference in the broken egg rate, the green egg rate, the egg lose rate, the eclosion rate and the female rate from CK. Through the storage method for A. pernyi eggs of the present invention, the effective storage time of A. pernyi eggs is significantly prolonged, the loss of A. pernyi eggs caused by refrigeration is reduced, and the commercial production cost of Anastatus fulloi is lowered.



21: 2022/00159. 22: 2022-01-03. 43: 2022-02-22
51: E02D
71: JIAXING JINXILAI TECHNOLOGY CO. LTD
72: LV, Yan
33: CN 31: 201911159952.7 32: 2019-11-23
54: RIVER BANK SLOPE WATER DRAINAGE SYSTEM
00: -
Provided is a river bank slope water drainage system, wherein a downward inclined drill hole is drilled in a river bank slope; a water drainage pipe is placed in the drill hole; a water inlet of the water drainage pipe is provided at the bottom of the drill hole; a water outlet of the water drainage pipe is connected to a starting device; the diameter of the water drainage pipe is 4 mm; the starting device is placed in river water; the starting device is fixed to the bottom of a riverbed; the water drainage pipe is connected to a water inlet chamber; a water outlet pipe A is connected between the water drainage pipe and a lower chamber; a valve A is arranged between an upper chamber and the water inlet chamber; a valve B is arranged between the upper chamber and a water outlet chamber; a water outlet pipe B is connected to the water outlet chamber; a water outlet pipe C is connected to the bottom of the lower chamber; the elevation of the water outlet pipe C is configured to be below the lowest water line of a river; a rotating shaft is installed at the lower chamber and is in the shape of the Chinese character “concave”; one end of the rotating shaft is connected to a shell; the other end of the rotating shaft extends out of the shell and is connected to a paddle; a rotating wheel is arranged on the rotating shaft; a connecting rod is connected between the rotating wheel and a plug body; and the upper chamber and the lower chamber are separated by the plug body.



21: 2022/00165. 22: 2022-01-03. 43: 2022-02-23
51: B64D; H02G; H02H
71: DINNTECO FACTORY GASTEIZ, S.L.
72: MALDONADO PARDO, Antonio Javier
33: ES 31: P201930547 32: 2019-06-14
54: ELECTROMAGNETIC VARIABLE-RADIOFREQUENCY COMPENSATOR DEVICE FOR THE PROTECTION OF THE BLADES OF WIND TURBINE TOWERS OR OTHER MOVABLE OR STATIC STRUCTURES
00: -
The invention relates to an electromagnetic variable-radiofrequency compensator device for the protection of the blades of wind turbine towers or other movable or static structures, which comprises: two conductive connection adapters (1, 2), a first adapter (1) for the connections of the device to the external sensors of the element to be protected and a second adapter (2) for the earthing connections; and two elements (3, 4) having high reactance to the passage of high-frequency current and which absorb energy generated in the form of heat. The two elements are connected to both sides of a frequency resonator, formed by a dielectric insulator (9) disposed between a first conductive element (7) and a second conductive element (8), and are respectively connected to the two adapters (1, 2), thereby generating a counter-electromotive force against the passage of high-frequency starting current, reducing the frequency and absorbing part of the energy generated as heat.

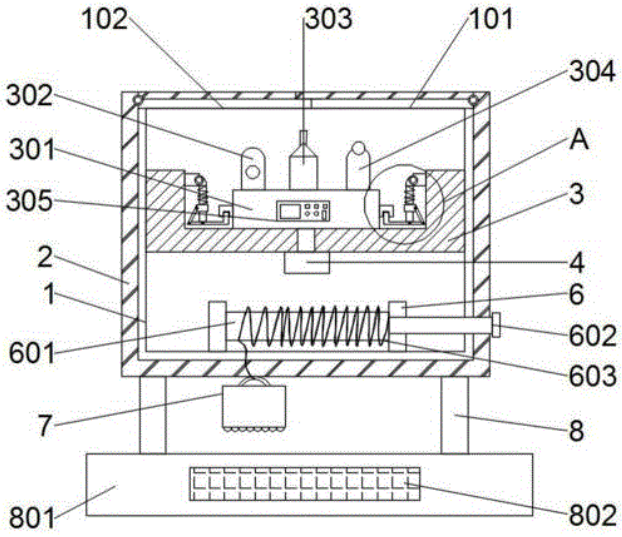


21: 2022/00200. 22: 2022-01-04. 43: 2022-03-09
51: G01D
71: Gansu Province Academy of Qilian Water Resource Conservation Forests Research Institute
72: Rongxin Wang, Wenmao Jing, Jian Ma, Simin Liu, Hairong He, Weijun Zhao, Jingzhong Zhao, Xuee Ma, Xiurong Wu, Yongyan He, Longqing Wu, Kehai Zhang

54: MONITORING DEVICE FOR ECOLOGICAL ENVIRONMENT MANAGEMENT

00: -

The invention belongs to the technical field of ecological environment governance, and particularly relates to a monitoring device for ecological environment governance, which comprises a detection box, when air needs to be detected, a screw is rotated to drive a connecting block to rotate, the connecting block drives an inclined rod to rotate, a clamping rod is promoted to be separated from a clamping groove block, and meanwhile, a fixed seat is separated from a detection table; on the contrary, after the detection is finished, the detection table is descended to the original position, the screw rod is rotated in the opposite direction, the clamping rod is clamped with the clamping groove block, the detection table and the fixed seat can be fixed, the detection table is prevented from being bumped and damaged in the transportation process, and the detection efficiency is improved. A lifting rope on the surface of a winding roller can be limited through a baffle, the lifting rope is wound or scattered by the winding roller by rotating a rotating plate, an electric push rod is started to push the water quality monitor to move downwards, and then the water quality monitor can detect the water quality at different water levels.



21: 2022/00201. 22: 2022-01-04. 43: 2022-03-09
51: C12G; C12H
71: Northwest A and F University
72: Yanlun Ju, Xiaofeng Yue, Jiexing Wang, Jinsheng Zhang, Shuang He, Yulin Fang

54: BREWING METHOD OF CABERNET SAUVIGNON SWEET WHITE WINE

00: -

The invention discloses a brewing method of Cabernet Sauvignon sweet white wine. The specific method comprises the following steps: step 1, squeezing and decolorizing: crushing and squeezing picked Cabernet Sauvignon for no more than 3 times by using an air bag squeezer, adding sulfur dioxide after the squeezing, adding pectinase and activated bentonite after adding the sulfur dioxide, enabling the bentonite to act for 72-120 hours, keeping a tank opening closed, stabilizing the temperature below 4°C in the bentonite settling process, and taking clear and decolorized juice from the upper layer of the liquid after the bentonite is settled; step 2, preparation of a yeast activation solution and inoculating and fermenting: opening closed circulation twice a day in the fermentation process; step 3, fermentation stopping; and step 4, stabilizing treatment: step 4.1, clarification and filtration, and step 4.2, filling and storing. The method solves the defect of a process for producing the white wine by using the Cabernet Sauvignon in the prior art is, and meanwhile, reduces the content of total tannin in the wine.

21: 2022/00202. 22: 2022-01-04. 43: 2022-03-09
51: E04F
71: Qingdao Agricultural University
72: GUO, Xiaoxia
54: ENVIRONMENT-FRIENDLY WALL
00: -
The present technology discloses an environment-friendly wall, relating to the technical field of walls, including: a bamboo layer, comprising a plurality of bamboos, with concrete poured at the bamboo layer; an outer steel keel layer, disposed at the outside of the bamboo layer, and poured with concrete; an inner steel keel layer, fixed to the inside of the bamboo layer, and poured with concrete; an outer wall layer, fixed to the outside of the outer steel keel layer; and an inner wall layer, fixed to the inside of the inner steel keel layer. According to the present technology, bamboos are used as a part of the wall, which reduces the consumption of steel and concrete, and the bamboos are green plants, which can effectively reduce environmental pollution and achieve the technical effect of environment protection.

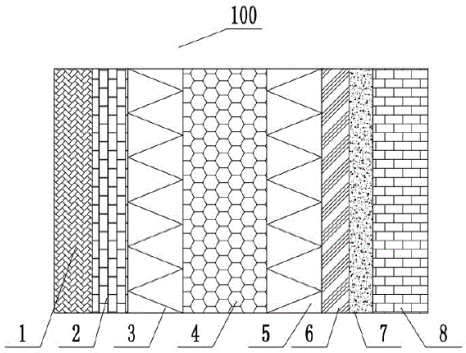
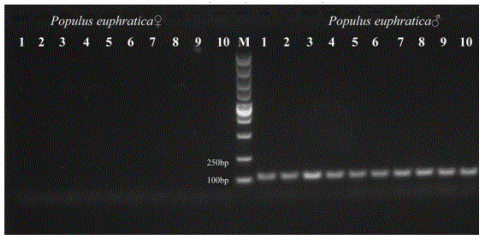


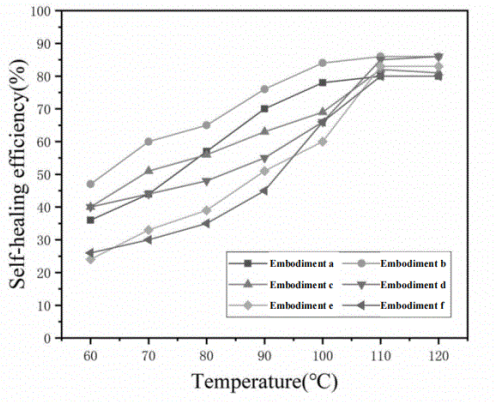
FIG. 1

21: 2022/00203. 22: 2022-01-04. 43: 2022-03-09
51: C12N; C12Q
71: Tarim University, South-Central University For Nationalities
72: LI, Zhijun, WU, Zhihua, ZHANG, Shanhe, LIU, Hong, QU, Wenrui, QIN, Rui, ZHAI, Juntuan, HAN, Xiaoli
54: SPECIFIC DNA MOLECULAR MARKER FOR SEX IDENTIFICATION OF POPULUS EUPHRATICA OLIV. BASED ON BULKED-SEGREGANT ANALYSIS SEQUENCING (BSA-SEQ) ANALYSIS
00: -
The present disclosure develops a specific DNA molecular marker for sex identification of a Populus euphratica Oliv. based on a bulked-segregant analysis sequencing (BSA-Seq) analysis, and designs corresponding detection primers based on a sequence information of the specific DNA molecular markers. The present disclosure can economically, quickly, accurately and sensitively distinguish sex of Populus euphratica Oliv. from different locations, thereby providing technical supports for selective transplanting of female or male plants of the Populus euphratica Oliv. in seedling breeding, and further providing theoretical supports for the Populus euphratica Oliv. in promotion of desertification control.



21: 2022/00204. 22: 2022-01-04. 43: 2022-03-09
51: D06M; D06N
71: Tiangong University
72: LI, Ting-Ting, HAN, Xiao, XING, Meng-Fan, GAO, Bo, LIN, Jia-Horng, LOU, Ching-Wen
33: CN 31: 202110247356.5 32: 2021-03-05
54: NANO-COMPOSITE GEL MATRIX MULTILAYER FABRIC PUNCTURE-RESISTANT COMPOSITE MATERIAL AND PREPARATION METHOD THEREOF
00: -
The invention discloses a nano-composite gel matrix multilayer fabric puncture-resistant composite material and a preparation method thereof. The preparation method comprises: dissolving pluronic F127 diacrylate in a solvent, stirring for at least 12 h, adding hydroxyapatite nanoparticles under stirring, adjusting temperature to 0-10 degrees Celsius, adding a monomer, an initiator and an accelerant, introducing nitrogen for at least 15 min for nitrogen bubbling to obtain nano-composite hydrogel, stacking multiple layers of aramid fabrics impregnated with the nano-composite hydrogel, and standing for at least 24 h in a vacuum environment to obtain the nano-composite gel matrix multilayer fabric puncture-resistant composite material. After the puncture-resistant material formed after the

nano-composite hydrogel and the fabrics are bonded is damaged, damage of fibers is unrecoverable, but part of the hydrogel in the fabrics can be self-repaired, so that the self-cured nano-composite gel matrix multilayer fabric puncture-resistant composite material still has a certain puncture-resistant effect.

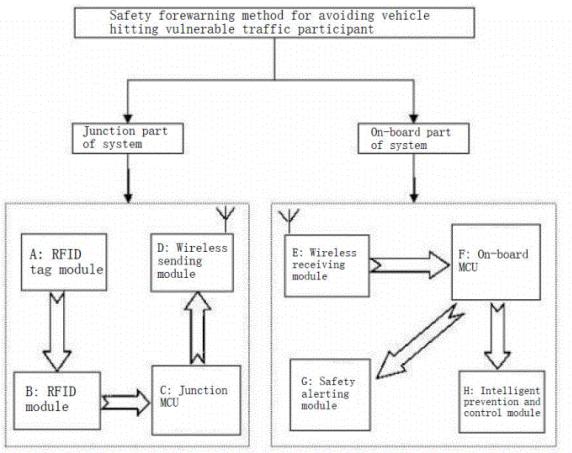


21: 2022/00205. 22: 2022-01-04. 43: 2022-03-09
51: C04B
71: Nanjing Tech University
72: Li Dongxu, Liao Dalong, He Cheng, Jiao Jiawei
54: GYPSUM SELF-LEVELING MORTAR FOR UNDERFLOOR HEATING BACKFILL AND PREPARATION METHOD THEREOF
00: -
The present invention relates to a gypsum self-leveling mortar for underfloor heating backfill comprising the following components by weight. 400-460 parts of gypsum powder, 100-140 parts of industrial solid waste, 30-70 parts of cement, 20-35 parts of graphite powder, 5-15 parts of calcium oxide, 5-15 parts of 3-15 parts of magnesium aluminum silicate, 9-15 parts of redispersible latex powder, 2-5 parts of defoamer, 0.5-1 part of gypsum retarder, 0.5-1 part of water reducing agent, 160-220 parts of water. Industrial waste residue is used as aggregate in gypsum self-leveling mortar, which reduces the use of sand in self-leveling mortar and effectively improves the strength and wear resistance of gypsum-based self-leveling mortar. The gypsum self-leveling mortar of the invention has low cost, stable quality, good wear resistance, compressive strength and thermal conductivity, is suitable for different types of floor heating backfill, and has simple preparation, simple construction and low energy consumption.

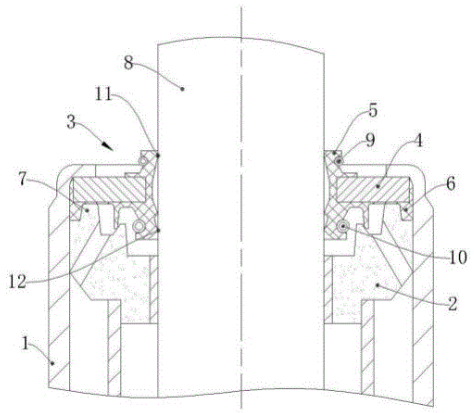
21: 2022/00206. 22: 2022-01-04. 43: 2022-03-09
51: B01J; C04B
71: Tianjin Research Institute for Water Transport Engineering, Ministry of Transport, Environmental Technology Development Of Tiwte (Tianjin) Co., Ltd.
72: Li Mingming, Zhou Bin, Li Xiuli
54: METHOD FOR FIRING CERAMSITE FROM MARINE SLUDGE WITH HIGH SALT CONTENT AND HIGH ORGANIC MATTER
00: -
The invention discloses a method for firing ceramsite from marine sludge with high salt content and high organic matter, which belongs to the technical field of ceramics. The method comprises the following steps: adjusting the pH value of marine sludge to acidity, adding hydrogen peroxide and Fe2+, adjusting the pH value to 6-8 with alkali after the reaction is finished, dehydrating, adding fly ash and slag, uniformly mixing, grinding, granulating and drying to obtain ceramsite green body, pre-sintering the ceramsite green body, and then sintering to obtain ceramsite. The ceramsite prepared by the method has high strength and low water absorption, and can meet the requirements of being used as building engineering materials.

21: 2022/00207. 22: 2022-01-04. 43: 2022-03-09
51: G08G
71: Shandong University of Science and Technology
72: LIU, Zhaohui, ZHANG, Xike, LI, Chongchong, WANG, Chao, ZHAO, Chuanqi
54: SAFETY FOREWARNING METHOD FOR AVOIDING VEHICLE HITTING VULNERABLE TRAFFIC PARTICIPANT
00: -
The invention discloses a safety forewarning method for avoiding a vehicle hitting a vulnerable traffic participant, including a radio frequency tag module, an RFID module, a junction MCU, a wireless sending module, a wireless receiving module, an on-board MCU, a safety prompting module and an intelligent prevention and control module. An implementation process is as follows. (1) Pedestrians carrying specific RFID tags are identified at a pedestrian crossing at a junction, and Step (2) is entered. (2) Identified pedestrian information is sent to a vehicle within a certain distance from an approach, and Step (3) is entered. (3). An on-board system, after receiving the information, prompts a driver to avoid, and Step (4) is entered. (4) The on-board system

responds differently to different running states of the vehicle, needs not to intervene if the vehicle has slowed down, and intervenes in driving if the vehicle does not slow down.



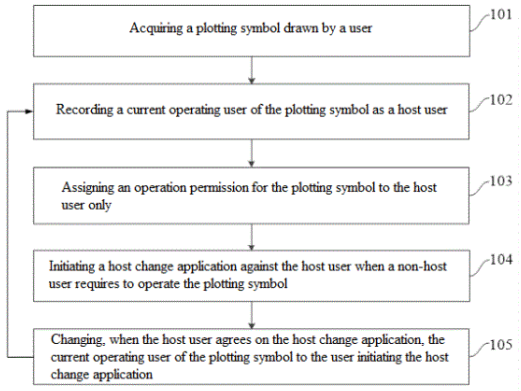
21: 2022/00208. 22: 2022-01-04. 43: 2022-03-07
51: F16F
71: Qingdao Regency Oil Seal Co., Ltd
72: ZHENG, Dewu, LI, Fang, LIU, Yanfang
33: CN 31: 202110649687.1 32: 2021-06-10
54: ASSEMBLY METHOD OF OIL SEAL AND GUIDER ASSEMBLY
00: -
The disclosure relates to an assembly technology of a shock absorber, and in particular to an assembly method of an oil seal and guider assembly, which includes the following steps: A. an annular sealing body sleeves outside an annular boss; B. an oil seal and a guider are pressed into an outer cylinder together; and C. after the guider is positioned, pressure is further applied to the oil seal, so that the annular sealing body expands to be respectively in interference fit with the outer cylinder and the annular boss. The characteristic that the annular sealing body made of rubber deforms before and after being compressed is utilized, so that the press-fitting times in the assembly process of the oil seal and guider assembly is reduced, and the assembly efficiency of the shock absorber is improved.



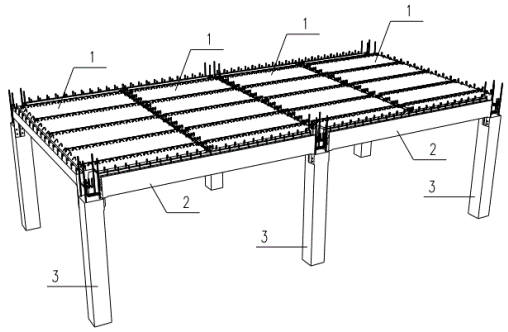
21: 2022/00209. 22: 2022-01-04. 43: 2022-03-07
51: C02F
71: Jilin Jianzhu University
72: Zhang Xiaoyu, Lu Hai, Li Na, Zhao Ke, Wang Jianhui
54: WATER TREATMENT FILLER AND PREPARATION METHOD THEREOF
00: -
This invention provides water treatment filler and preparation method thereof, which comprises embedding carrier and embedding contents, wherein the embedding carrier comprises 20-30 parts of montmorillonite, 90-110 parts of waste incineration fly ash, 15-25 parts of carbon fiber bundle, 3-5 parts of gelatin, 5-8 parts of modified chitosan and 20-30 parts of agricultural and forestry wastes, and the embedding contents comprise 5-8 parts of vitamin E and 7-9 parts of lysine, 3-5 parts of 6-benzyladenine, 15-18 parts of iron, 15-17 parts of zinc, 5-8 parts of manganese, 6-7 parts of cobalt and 20-30 parts of glucose, carrying out anaerobic fermentation on agricultural and forestry wastes to obtain fermentation products, adding raw materials into the fermentation products, roasting to obtain carriers, and coating the embedded carriers and embedded contents to obtain water treatment fillers. The fillers of the invention can simultaneously meet the requirements of good biocompatibility, large specific surface area and difficult blockage.

21: 2022/00210. 22: 2022-01-04. 43: 2022-03-09
51: G06F; G06Q
71: Chinese Academy of Surveying and Mapping
72: LU, Wenjuan, FANG, Chiyu, ZHANG, Chengcheng, MA, Zhaoting, YIN, Jie, HONG, Zhiyuan, ZHU, Lining, WU, Zheng, YANG, Xiao

33: CN 31: 202111396125.7 32: 2021-11-23
54: METHOD AND SYSTEM FOR COLLABORATIVELY PLOTTING SITUATION MAP
00: -
Provided are a method and a system for collaboratively plotting a situation map. The method includes the following steps: acquiring a plotting symbol drawn by a user; recording a current operating user as a host user; assigning an operation permission to the host user only; initiating a host change application against the host user when a non-host user requires to operate the plotting symbol; and changing, when the host user agrees on the host change application, the current operating user of the plotting symbol to the user initiating the host change application, and proceeding with the step of recording a current operating user of the plotting symbol as a host user. An exclusive control manner is applied to solve a concurrency control problem, so that users are forced to sequentially operate the plotting symbol, thereby avoiding message conflict, and increasing a success rate of multi-user collaborative operation.



21: 2022/00211. 22: 2022-01-04. 43: 2022-03-09
51: E04B
71: FCEC Prefabricated Building Research Institute Company Limited
72: Yu REN, Siyuan CHI, Yajie ZHANG, Meiting LIU, Peitao XU
33: CN 31: 202120728641.4 32: 2021-04-10
54: PRE-CASTED CONCRETE STRUCTURE WITH BEAM-SLAB INTEGRATION AND CONSTRUCTION METHOD
00: -
This invention relates to a kind of pre-casted concrete structure with beam-slab integration and construction method. The pre-casted concrete structure includes prefabricated beam slab, prefabricated composite frame beam, concrete column and cast-in-situ concrete pavement. For the array distribution of the mentioned concrete column, its upper end is equipped with the bearing piece A,B. Both ends of the mentioned prefabricated composite frame beam are set at upper end of adjacent concrete column, and the prefabricated composite frame beam is equipped with the bearing piece C. The mentioned prefabricated beam slab is set between two parallel prefabricated composite frame beams. The top surface of prefabricated beam slab, top surface of prefabricated composite frame beam, and the beam-column joint among prefabricated beam slab and prefabricated composite frame beam, have the cast-in-situ concrete to form the cast-in-situ concrete pavement. The mentioned construction method is to first complete the array construction of concrete column, then install prefabricated beam slab and prefabricated composite frame beam in an orderly fashion, and finally have the cast-in-situ concrete pavement. The present invention has the advantage of achieving the support-free and mold-free prefabricated structure site construction, which can significantly accelerate construction speed and reduce the site construction cost.

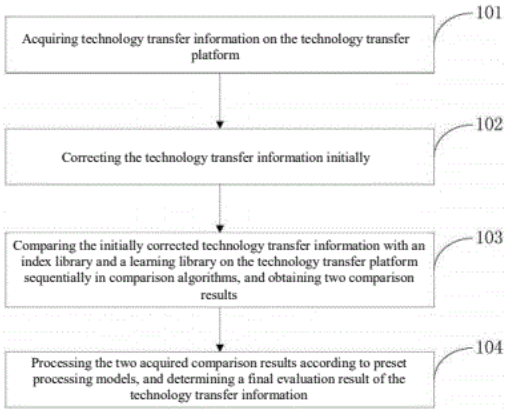


21: 2022/00212. 22: 2022-01-04. 43: 2022-03-09
51: B64C
71: Civil Aviation Flight University of China, Pan Weijun
72: Pan Weijun, Zhang Hengheng, Zuo Qinghai, Wang Rundong, Wang Xuan, Chen Li, Liu Haochen
54: LANDING GEAR UPPER LOCK STRUCTURE FOR AVIATION EMERGENCY
00: -
This invention provides landing gear upper lock structure for aviation emergency, which comprises

locking hook and a thrust rod, wherein the lock hook is connected with the thrust rod, upper connecting rod, lower connecting rod and telescopic device. One end of the upper connecting rod is used for being hinged with the fuselage, the hinge point of the upper connecting rod and the fuselage is the first hinge point, and the other end of the upper connecting rod is hinged with the lower connecting rod. The hinge point at which the upper connecting rod and the lower connecting rod are hinged is the second hinge point, the lower connecting rod is connected with the thrust rod, one end of the telescopic device is used for fixedly connecting with the fuselage, and the other end of the telescopic device is connected with the second hinge point, and the telescopic device can push the second hinge point to move, so that the lower connecting rod rotates relative to the second hinge point, due to the telescopic device, when the hydraulic system fails, the telescopic device is used to complete emergency unlocking, which improves the safety and reliability of aircraft landing.

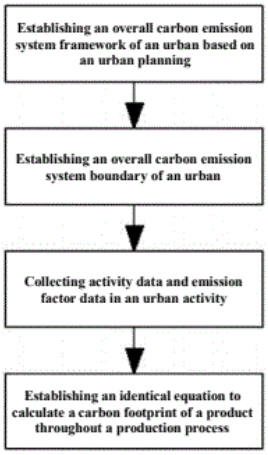
21: 2022/00213. 22: 2022-01-04. 43: 2022-03-09
51: A01G; A01K
71: Guizhou Normal University
72: LI, Li, NIU, Guoshuang, WU, Dongling, SHEN, Tian, WEI, Yun, ZHANG, Mengmeng
33: CN 31: 202111363060.6 32: 2021-11-17
54: METHOD FOR CONTROLLING LARVAE AND PUPAE OF LASIODERMA SERRICORNE (FABRICIUS) BY USING SCLERODERMA GUANI XIAO ET WU
00: -
The present disclosure belongs to the field of biological control of warehouse pests, and particularly relates to a novel method for controlling larvae and pupae of Lasioderma serricorne (Fabricius) by using Scleroderma guani Xiao et Wu. The method comprises the following steps: 1, performing induction type breeding on Scleroderma guani Xiao et Wu; 2, collecting and storing larvae and pupae of Lasioderma serricorne (Fabricius) in different insect states; and 3, verifying the indoor control effect of female adult Scleroderma guani Xiao et Wu on the larvae and pupae of Lasioderma serricorne (Fabricius). According to the method, induction type breeding is applied to breeding of Scleroderma guani Xiao et Wu, so that the breeding amount of Scleroderma guani Xiao et Wu is greatly increased.

21: 2022/00215. 22: 2022-01-04. 43: 2022-03-09
51: G06F
71: Institute of Science and Technology for Development of Shandong, Qilu University of Technology (Shandong Academy of Sciences), Energy Research Institute of Shandong Academy of Sciences, Qilu University of Technology (Shandong Academy of Sciences)
72: SUN, Lingwen, XIAO, Bing, YANG, Dong, LIU, Qian, SHI, Feng, ZHANG, Hongjun
54: MULTI-AGENT SIMULATION-BASED TECHNOLOGY TRANSFER EVALUATION METHOD
00: -
Embodiments of the present disclosure disclose a multi-agent simulation-based technology transfer evaluation method.

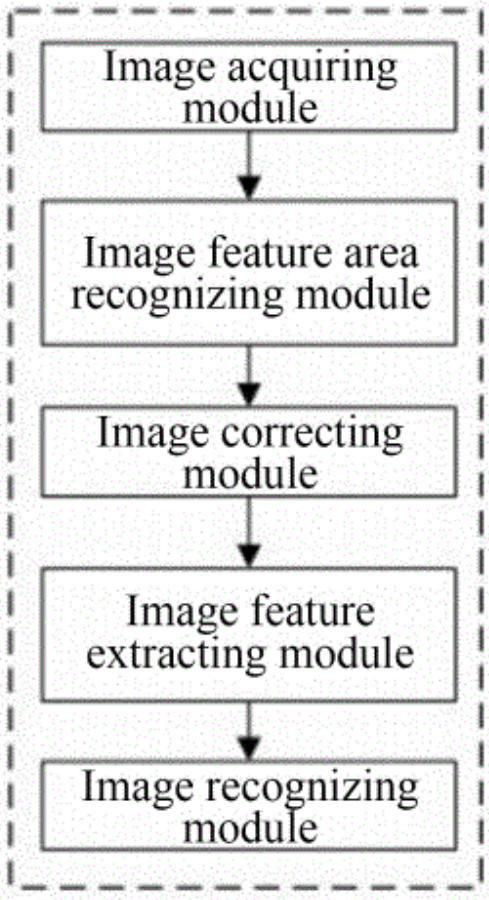


21: 2022/00216. 22: 2022-01-04. 43: 2022-03-09
51: G06Q
71: Institute of Science and Technology for Development of Shandong, Qilu University of Technology (Shandong Academy of Sciences)
72: SUN, Mengqi, LU, Xinjie, YANG, Dong, WU, Hongzhi, HAN, Feng, SHI, Feng
54: URBAN-SCALE ACCOUNTING METHOD FOR RENEWABLE RESOURCE POTENTIAL DEVELOPMENT AND CARBON EMISSION
00: -
Disclosed an urban planning-based carbon emission metering method in the technical field of a carbon emission metering of an urban. The method is characterized by including the following steps of: S1, establishing an overall carbon emission system framework of the urban based on an urban planning;

S2, establishing an overall carbon emission system boundary of the urban; S3, collecting activity data and emission factor data in an urban activity; and S4, establishing an identical equation to calculate a carbon footprint throughout a production process. In the present disclosure, a carbon dioxide emission is quantized in the urban planning by collecting and metering all sources that cause greenhouse gas emissions within an urban planning range, thereby providing a complete scientific basis for designating a low-carbon technology and a low-carbon policy of the urban. The method is wide in a metering range and simple in calculation.

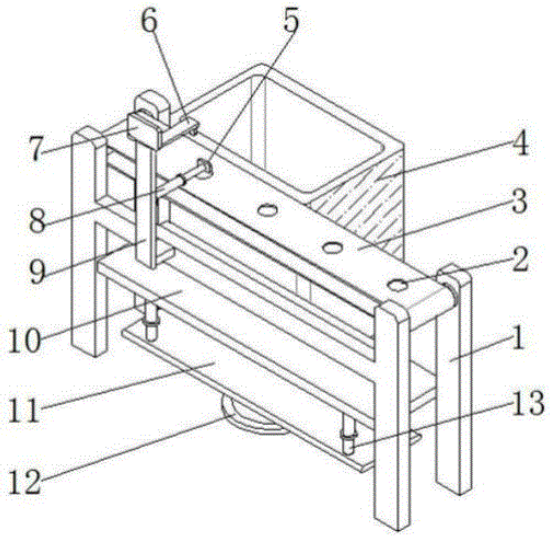


21: 2022/00217. 22: 2022-01-04. 43: 2022-03-09
51: G06K; G06N
71: XU, Hong, ZHANG, Mingbo, YE, Caizeng, Shandong Institute of Commerce and Technology, Baike Rongchuang (Shandong) Technology Development Co., Ltd.
72: XU, Hong, ZHANG, Mingbo, YE, Caizeng
54: IMAGE RECOGNITION SYSTEM AND IMAGE RECOGNITION DEVICE
00: -
The present disclosure relates to the technical field of image recognition, in particular to an image recognition system and an image recognition device, wherein the system comprises: an image acquiring module, which is configured to acquire target images; an image feature area recognizing module, which is configured to recognize an image feature area based on a neural network model; an image correcting module, which is configured to correct the deflection angle of the image feature area; an image feature extracting module, which is configured to extract the feature parameters of the image feature area; and an image recognizing module, which is configured to fuse the feature parameters of the image feature area and realize image recognition.

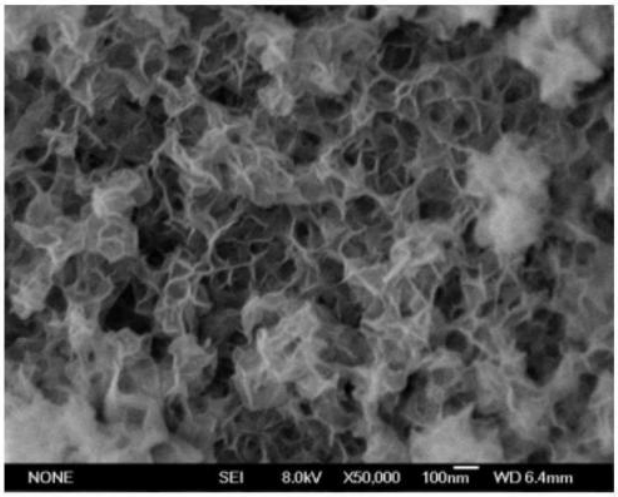


21: 2022/00218. 22: 2022-01-04. 43: 2022-03-09
51: B07C
71: XU, Hong, ZHANG, Mingbo, YE, Caizeng, Shandong Institute of Commerce and Technology, Baike Rongchuang (Shandong) Technology Development Co., Ltd.
72: XU, Hong, ZHANG, Mingbo, YE, Caizeng
54: FRUIT GRADING DEVICE BASED ON COMPUTER VISION
00: -
The present disclosure belongs to the technical field of fruit grading, in particular to a fruit grading device based on computer vision, which comprises a transmission frame, wherein a transmission belt is installed above the inside of the transmission frame, a vertical plate is installed on the front surface of the transmission frame, a first electric push rod is

installed below the rear surface of the vertical plate, and the other end of the first electric push rod is installed with a push plate to stretch a lifting frame.

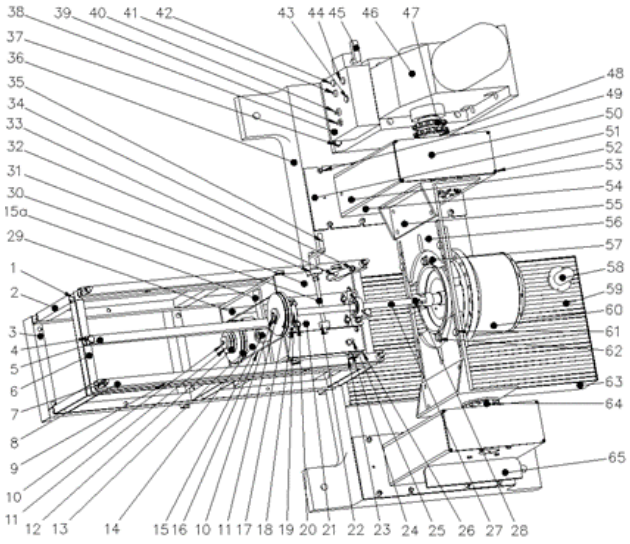


21: 2022/00219. 22: 2022-01-04. 43: 2022-03-09
51: C25B; B82Y
71: QINGDAO UNIVERSITY OF SCIENCE AND TECHNOLOGY
72: CHEN, Dawei, GUO, Zhiyan, DU, Fanglin
54: PREPARATION METHOD OF ORDERED TRANSITION METAL HYDROXIDE NANOSHEET BASED ON MAGNETIC FIELD INDUCTION AND USE
00: -
The present disclosure provides a preparation method of a transition metal hydroxide lamellar structure supported by a synthetic foamed NiFe alloy based on magnetic field induction.

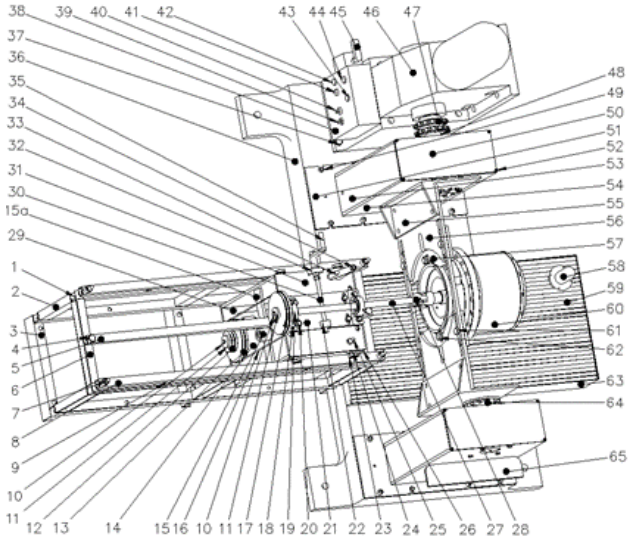


21: 2022/00235. 22: 2022-01-04. 43: 2022-03-09
51: F04B
71: QINGDAO NUCLEAR INDUSTRY MACHINERY CO., LTD
72: LI, Wei, MA, Wenxia, SU, Hongyan, HU, Naifa, LIU, Yonggang, REN, Zengbin, LUAN, Caiqiang, SUN, Zhen
33: CN 31: 202111358318.3 32: 2021-11-16
54: REDUCER TURNING TEST MACHINE
00: -
The present disclosure, relating to the technical field of reducer test machine tooling, provides a reducer turning test machine. The reducer turning test machine includes an adjustable centering seat and a turning table. The adjustable centering seat includes a bracket portion and a transmission portion. The turning table includes a power portion and a turning portion. According to the present disclosure, the adjustable centering seat and the turning table may be mounted together, and the reducer may be quickly mounted using the turning table; by quick turning of the turning table, an input shaft of the reducer is adjusted such that the input shaft is maintained horizontal, which is conducive to quick joint with a transmission shaft; the bracket portion of the adjustable centering seat is capable of adjusting up and down positions of the transmission shaft, and is supported by a positioning sleeve screw, achieving high stability and being less liable to invite damage; and the transmission portion of the adjustable centering seat is capable of adjusting left and right, and front and rear positions of the transmission shaft, such that efficiency and success rate of coaxiality adjustment between the transmission shaft and the input shaft of the reducer

are greatly improved. The reducer turning test machine according to the present disclosure is capable of quickly and efficiently carrying out test for the reducer, and is applicable to tests on small to medium-scale reducers.

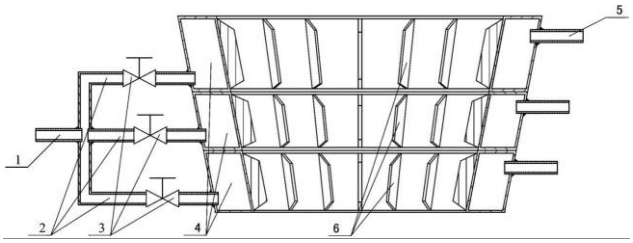


21: 2022/00235. 22: 2022-01-04. 43: 2022-03-09
51: F04B
71: QINGDAO NUCLEAR INDUSTRY MACHINERY CO., LTD
72: LI, Wei, MA, Wenxia, SU, Hongyan, HU, Naifa, LIU, Yonggang, REN, Zengbin, LUAN, Caiqiang, SUN, Zhen
33: CN 31: 202111358318.3 32: 2021-11-16
54: REDUCER TURNING TEST MACHINE
00: -
The present disclosure, relating to the technical field of reducer test machine tooling, provides a reducer turning test machine. The reducer turning test machine includes an adjustable centering seat and a turning table. The adjustable centering seat includes a bracket portion and a transmission portion. The turning table includes a power portion and a turning portion. According to the present disclosure, the adjustable centering seat and the turning table may be mounted together, and the reducer may be quickly mounted using the turning table; by quick turning of the turning table, an input shaft of the reducer is adjusted such that the input shaft is maintained horizontal, which is conducive to quick joint with a transmission shaft; the bracket portion of the adjustable centering seat is capable of adjusting up and down positions of the transmission shaft, and is supported by a positioning sleeve screw, achieving high stability and being less liable to invite damage; and the transmission portion of the adjustable centering seat is capable of adjusting left and right, and front and rear positions of the transmission shaft, such that efficiency and success rate of coaxiality adjustment between the transmission shaft and the input shaft of the reducer are greatly improved. The reducer turning test machine according to the present disclosure is capable of quickly and efficiently carrying out test for the reducer, and is applicable to tests on small to medium-scale reducers.



21: 2022/00242. 22: 2022-01-05. 43: 2022-03-09
51: F27D
71: Shandong University of Technology
72: Zheng Bin, Zhang Kai, Sun Peng, Meng Jian, Zhang Zhongliang, Wang Yunfei, Dai Xiangjun, Gao Tengfei, Wang Mingchao
54: MULTI-STAGE PARALLEL FINNED COOLING DEVICE FOR HIGH-TEMPERATURE CALCINED COKE OF POT CALCINER
00: -
The invention relates to a multi-stage parallel finned cooling device for high-temperature calcined coke of pot calciner, which comprises a water inlet system and annular cooling water jackets, and is characterized in that: there are a plurality of cooling water jackets, and the plurality of cooling water jackets are overlapped and fixedly connected; the outer wall of the inner side of each cooling water jacket is uniformly provided with a plurality of fins; the fins on the plurality of cooling water jackets are all correspondingly arranged in rows, and each row

of fins is located on the same vertical plane; the water inlet system comprises a water inlet main pipe and a plurality of water inlet branch pipes which are communicated with the water supply system, and each water inlet branch pipe is provided with a regulating valve; one end of each cooling water jacket is provided with a water outlet pipe, and the other end is connected with a water inlet branch pipe, and the water outlet pipe and the water inlet branch pipe are separated from both ends of the cooling water jacket. The invention has the advantages of large heat exchange area, high cooling speed of calcined coke at high temperature, controllable cooling water quantity, low discharge temperature, high working reliability and the like.



21: 2022/00243. 22: 2022-01-05. 43: 2022-03-09
51: G01F; G01G
71: Institute Of Water Resources for Pastoral Area.MWR
72: Li Jinrong, Wang Jian, Ge Nan, Dong Lei, Rong Hao, Miao Henglu, Cheng Bo, Guo Jianying, Li Hongfang, Liu Hu, Li Yingkun, Wang Ru, Luo Xiangying, Han Zhaoen, Bao Lili

54: A SOIL WIND EROSION MEASURING DEVICE AND ITS METHOD FOR MEASURING THE SOIL WIND EROSION

00: -

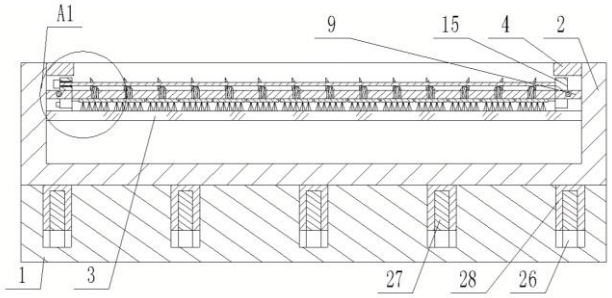
The present invention relates to a soil wind erosion measuring device and its method for measuring the soil wind erosion. The soil wind erosion measuring device includes a square measuring frame, measuring rods, two longitudinal sliding blocks, a vertical measuring scale and a horizontal sliding scale; at least one of the sides of the square measuring frame in the longitudinal direction is the longitudinal measuring scale; and the two sides in the longitudinal direction are respectively installed with the longitudinal sliding block, and the horizontal sliding scale is fixedly connected with the upper portions of the two longitudinal sliding blocks, and can move along the longitudinal direction with the longitudinal sliding blocks; the vertical measuring scale is perpendicular to the horizontal sliding scale, and the sliding connector can move along the lengthwise direction of the horizontal sliding scale to drive the horizontal movement of the vertical measuring scale; the sliding connector is provided with a through hole along the vertical direction, and the vertical measuring scale passes through the through hole and can move in the through hole along the vertical direction. The present invention has the advantages of no electric drive, easy portability, simple installation, simple operation, etc..

21: 2022/00244. 22: 2022-01-05. 43: 2022-03-09
51: B08B; G09F
71: Zhengzhou University of Aeronautics
72: Liu Ying, Zhao Rongqin, Zhang Longyu, Yang Jintao, Shen Minghao, Yu Jiaqian, Zhao Wei, Li Mengyi

54: URBAN PLANNING LAYOUT DISPLAY DEVICE WITH CLEANING FUNCTION

00: -

The invention discloses an urban planning layout display device with cleaning function, which comprises a base, wherein the top of the base is provided with a display shell, the top surface of the base is provided with a plurality of lifting mechanisms, the top of the inner cavity of the display shell is fixedly connected with a shielding rectangular ring, the top surface of a positioning plate is fixedly connected with a driving mechanism, the bottom surface of the positioning plate is provided with a plurality of cleaning mechanisms, two sides of the cleaning mechanism are respectively provided with a dust collecting mechanism, and two ends of the cleaning cavity are respectively provided with dust collecting mechanisms.



21: 2022/00245. 22: 2022-01-05. 43: 2022-03-09
51: A01B

71: Institute Of Water Resources for Pastoral Area.MWR
72: Tian Xiumin, Wang Jian, Dong Lei, Ge Nan, Abi Yasi, Miao Henglu, Li Jinrong, Liu Hu, Cheng Bo, Li Hongfang

54: A LOW-LAND REPLANTING METHOD AMONG NITRARIA TANGUTORUM NEBKHAS IN FAMILY PASTURES IN DESERTIFIED GRASSLAND AREAS

00: -

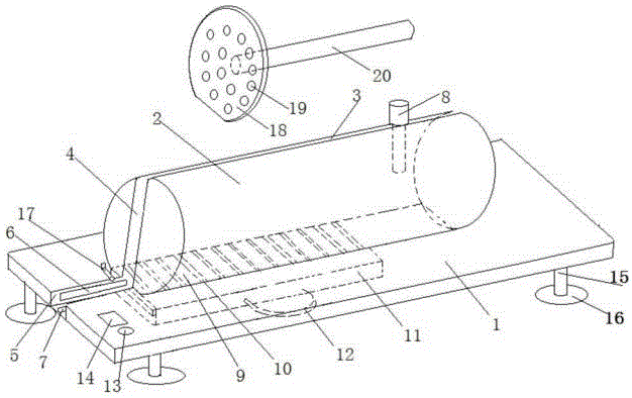
The invention discloses a low-land replanting method among nitraria tangutorum nebkhas in family pastures in desertified grassland areas, comprising the following steps: S1, selecting seeds, germinating seeds in seedbeds; S2, raising seedlings, raising germinated Ceratoides arborescens seeds in sandy loam; S3, preparing the land, digging planting holes in the low-land among the nitraria tangutorum nebkhas to be replanted, and burying a watering pipe next to the planting holes in each row with a watering hole on the pipe connected to each planting hole in the row; installing a water injection pipe with one end connected to the watering pipe, wherein the other end of the water injection pipe protrudes from the surface of the sand and connects to the water storage tank placed on top of nitraria tangutorum nebkhas on a flat surface; S4, transplanting; S5, field management; the present invention can ensure the survival rate of seedlings after replanting by raising seedlings first before transplanting; and by setting up a watering pipe connected to the planting hole, the underground can be watered to avoid the waste of water resources during surface spraying.

21: 2022/00246. 22: 2022-01-05. 43: 2022-03-09
51: A61D
71: The Fifth People's Hospital of Wuxi
72: Yan Yan, Qiu Yuanwang

54: EFFICIENT MOUSE TAIL VEIN INJECTION DEVICE

00: -

The invention discloses an efficient mouse tail vein injection device, which comprises a support leg, a fixing plate and a fixing chamber which are connected in sequence. The fixed chamber is a cavity structure with an open front end and a closed back end, the fixed chamber is provided with a first slit, and the rear end face of the fixed chamber is provided with a second slit communicated with the first slit; the fixing plate is provided with an accommodating groove communicated with the second slit, and an electric heating device and a light-transmitting lamp are arranged in the accommodating groove; the fixed room is movably provided with a baffle which is connected with a grip bar and provided with a plurality of air holes; the first slit internal thread is connected with the limit post; through holes are arranged at the corresponding positions of the fixing chamber bottom and the fixing plate, a plurality of cross bars are arranged in the through holes, a collecting box inserted in the bottom of the fixing plate is arranged at the bottom of the through holes, and a fixing mechanism is arranged on the fixing plate, which integrates fixing, heating and light transmission observation, can improve the accuracy of resolution and injection and work efficiency; reduce the damage to mice, save energy, be efficient, easy to learn and operate; Reduce the error rate and low energy consumption.



21: 2022/00247. 22: 2022-01-05. 43: 2022-03-09
51: G01F
71: Institute Of Water Resources for Pastoral Area.MWR
72: Li Jinrong, Dong Lei, Ge Nan, Tian Xiumin, Gao Yong, Song Wenjuan, Han Yanlong, Dang Xiaohong, Wang Jian, Abi Yasi, Cheng Bo, Luo Xiangying, Wang Ru, Han Zhaoen, Li Yingkun, Bao Lili

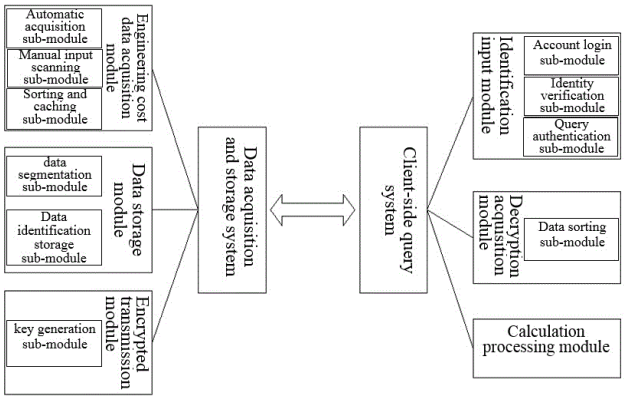
54: A ROTATABLE SAND SAMPLER FOR MEASURING WIND-DRIFT SAND FLOW AND SAND TRANSPORT FLUX ON ICE SURFACES

00: -

The invention discloses a rotatable sand sampler for measuring wind-drift sand flow and sand transport flux on ice surfaces, comprising a wind vane that rotates freely with the wind direction, a rotation shaft, a base and a base shield; the rotation shaft is vertically placed, the wind vane is mounted on the

top of the rotation shaft, and when a wind-drift sand flow comes, the wind vane drives the rotation shaft to rotate; the bottom end of the rotation shaft is fixed in the base; the bottom end of the base is mounted in the base shield; several the sand collection device fixed supports are mounted along the direction of the rotation shaft; the middle of each sand collection device fixed support is fixed on the rotation shaft; a sand collection device is mounted on each end of the sand collection device fixed support; the material of the base shield is nylon; the invention features simple structure, accurate measurement, easy installation on the ice surface, and easy operation and it is an indispensable instrument for studying the process of wind-blown sand transport on the ice surface.

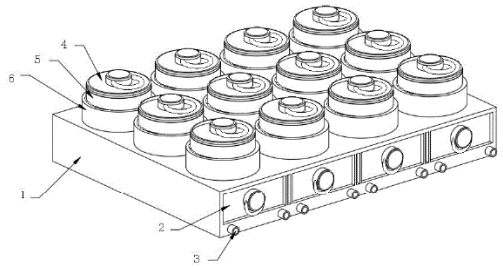
21: 2022/00248. 22: 2022-01-05. 43: 2022-03-09
51: G06F
71: Zhengzhou University of Aeronautics
72: Yang Ruojing, Zhang Weihua, Zhang Haiyan, Zhao Wenguang, Lyu Yonggang, Wang Yanlin
54: ENGINEERING COST DATA MANAGEMENT SYSTEM
00: -
The invention discloses an engineering cost data management system, which comprises a data acquisition and storage system and a client inquiry system. The data acquisition and storage system includes an engineering cost data acquisition module, a data storage module and an encryption transmission module; the client inquiry system includes an identification input module, a decryption acquisition module and a calculation processing module. According to the invention, the data sources of cost data are effectively expanded through various acquisition methods of engineering cost data, the cost data are more accurate and effective, and the data are encrypted and decrypted by using randomly generated keys, so that the transmission safety of the cost data is increased, and there is no need to worry about data theft and loss; Furthermore, estimating the cost of the project based on the deep learning model can effectively avoid unnecessary extra expenses during the project construction, save the project funds and ensure the quality of the project, thus providing an intelligent system platform for the project construction.



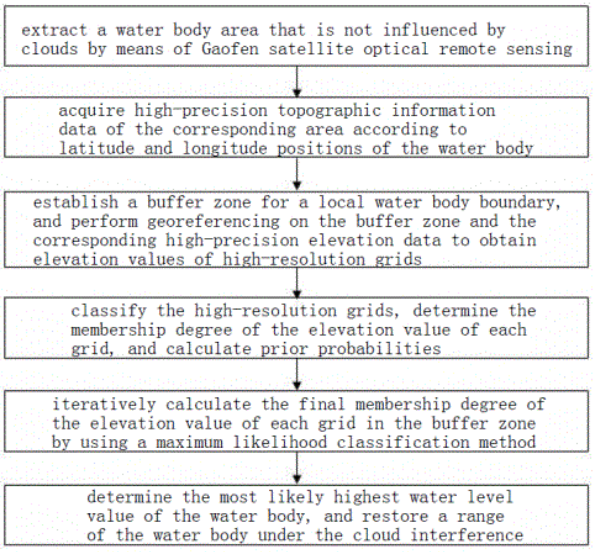
21: 2022/00249. 22: 2022-01-05. 43: 2022-03-09
51: G06F; G08B
71: Anhui University of Science And Technology
72: Wang Xiaogang, Zhang Pingsong
54: INTELLIGENT ANALYSIS AND EARLY WARNING SYSTEM FOR MOUNTAIN FLOOD DISASTERS
00: -
The invention discloses an intelligent analysis and early warning system for mountain flood disasters, which comprises a data acquisition module used for positioning and acquiring real-time change data of weather, geological landforms and stream hydrological characteristics in the positioning area; the analysis module uses the deep learning model to adaptively judge the possibility of mountain flood disaster caused by the acquired data; the warning module is used for positioning and alarming the areas where mountain torrents may occur; the data storage module is used to store the real-time data information and location information of the mountain flood disaster area. According to the invention, the analysis and judgment module based on the deep learning model is used for early warning of mountain flood disasters, and effective early warning information can be adaptively sent out in time according to different geological and geomorphic analysis data, which is not affected by geological and geomorphic features and has a wide application range. The system can also judge according to the changing trend of the acquired data, and the early warning time can be advanced, leaving enough time for local residents to evacuate or take protective measures, thus greatly reducing casualties and property losses.

21: 2022/00250. 22: 2022-01-05. 43: 2022-03-09
51: C12N; C12P
71: Institute of Biology, Gansu Academy of Sciences
72: Wei Yaqin, Mao Ting, Niu Yongyan, Wang Zhiye
54: PRODUCTION METHOD OF ENDOGLUCANASE BY FERMENTATION OF COARSE FODDER FROM A NATURALLY SYMBIOTIC MIXED CULTURE
00: -
The invention relates to the technical field of biotechnology renewable energy, in particularly to a production method of endoglucanase by fermentation of coarse fodder from a naturally symbiotic mixed culture. The described mixed culture YakQH5, consisting of Neocallimastix frontalis and Methanobrevibacter gottschalkii, can degrade different coarse fodder and produce endoglucanases with high enzymatic activity. In particular, the endoglucanase activity produced by the degradation of wheat hulls can reach 1170 mU, which has obtained remarkable results. The addition of compound antibiotics during the fermentation process also helps to prevent the mixed culture YakQH5 from bacterial contamination during the fermentation process and further improves the efficiency of anaerobic fermentation. The mixed culture used in the present invention can be conserved in vitro for survival and subculture, which facilitates the dissemination and production.

21: 2022/00251. 22: 2022-01-05. 43: 2022-03-09
51: C12M
71: Guizhou Institute of Pratacultural
72: ZENG, Qingfei, WEI, Xingdi, OU, Erling, WEI, Xin, JI, Yuyu, LI, Yajiao
54: SCREENING METHOD AND CULTIVATION STRUCTURE OF PLANT DISEASE BIOLOGICAL CONTROL STRAIN
00: -
The present disclosure discloses a screening method and a cultivation structure of plant disease biological control strain.



21: 2022/00255. 22: 2022-01-05. 43: 2022-03-07
51: G06K; G06T
71: Hohai University
72: ZHANG, Ke, WU, Nan, LIU, Linxin, ZHANG, Qinuo, FAN, Yazhou
33: CN 31: 202110172257.5 32: 2021-02-08
54: OPTIMIZED WATER BODY EXTRACTION METHOD USING HIGH-PRECISION TOPOGRAPHIC INFORMATION TO ELIMINATE CLOUD INTERFERENCE
00: -
Disclosed is an optimized water body extraction method using high-precision topographic information to eliminate cloud interference, including: obtaining an image of a water body locally interfered by clouds by Gaofen satellite optical remote sensing, and extracting a partial water body area that is not influenced by the clouds; acquiring corresponding DEM data; establishing a buffer zone for a local water body boundary obtained under cloud influence, and obtaining elevation values of high-resolution grids after grids in the buffer zone are refined; classifying the high-resolution grids in the buffer zone into a water body type and a non-water body type, determining the membership degree of each grid, and calculating prior probabilities of the two types; iteratively calculating the final membership degree of each grid to the two types by a maximum likelihood classification method; and restoring a range of the water body under cloud interference through the highest water level value.



21: 2022/00256. 22: 2022-01-05. 43: 2022-03-07
51: C04B
71: SHANDONG UNIVERSITY, CHINA POWER CONSTRUCTION MUNICIPAL CONSTRUCTION GROUP CO., LTD, JIHONGTAN RESERVOIR MANAGEMENT STATION OF OPERATION AND MAINTENANCE CENTER OF SHANDONG WATER TRANSFER PROJECT, NORTHEAST ELECTRIC POWER UNIVERSITY
72: YANG, Tao, WU, Ke, LI, Guodong, SUN, Jizheng, YANG, Hongna, FAN, Lianyong, BING, Qiangxing, ZHAO, Jiahui, LI, Yunpeng, XIAO, Wenbin, CHANG, Hao, LI, Fengting
54: IMPERMEABLE CONCRETE ADDED WITH POLYPROPYLENE FIBERS AND WASTE TIRE RUBBER PARTICLES AND PREPARATION METHOD THEREOF
00: -
The present disclosure relates to an impermeable concrete added with polypropylene fibers and waste tire rubber particles and a preparation method thereof. The impermeable concrete of the present disclosure comprises rubber particles, polypropylene fibers, cements, water, sands, broken stones and a water reducer. The preparation method comprises the steps of putting the rubber particles into an alkaline solution to be immersed for 30 min, taking them out and washing the immersed rubber particles with clear water, and drying in the air; pouring the cement into water, and sufficiently stirring using a cement stirring machine; uniformly mixing the polypropylene fibers with the rubber particles, introducing the obtained mixture into the cement stirred in advance, adding the water reducer, and sufficiently stirring using the cement stirring machine; and pouring the broken stones and the sands into the cement, and sufficiently stirring. In the disclosure, after the rubber particles are added, the roughness of the concrete is better, the lack of the tensile strength of the rubber particle itself can be compensated by the polypropylene fibers, and their advantages and disadvantages are mutually complemented, so that the concrete mixed with fibers achieves higher level in the aspects of tensile, toughness, impermeability and the like.

21: 2022/00257. 22: 2022-01-05. 43: 2022-03-07
51: C04B
71: SHANDONG UNIVERSITY, CHINA POWER CONSTRUCTION MUNICIPAL CONSTRUCTION GROUP CO., LTD, NORTHEAST ELECTRIC POWER UNIVERSITY
72: YANG, Tao, WU, Ke, LI, Guodong, CHEN, Rong, YANG, Hongna, HAO, Dongxue, ZHAO, Jiahui, CHANG, Hao, LI, Fengting, XIAO, Wenbin
54: HIGH-STRENGTH CONCRETE ADDED WITH PVA FIBER AND GRAPHENE AND PREPARATION METHOD THEREOF
00: -
The present invention relates to a high-strength concrete added with PVA fiber and graphene and a preparation method thereof. The high-strength concrete comprises: a PVA fiber, graphene, cement, water, sand, gravel and a water reducing agent. The preparation method is as follows: pouring the PVA fiber and the graphene into a part of the water and uniformly mixing; pouring the cement into the residual water and uniformly stirring with a grouting machine; pouring a mixed solution of PVA fiber and graphene into a uniformly stirred cement and then adding the water reducing agent, uniformly mixing to obtain a mixed solution A; and finally pouring the gravel and sand into the mixed solution A and uniformly mixing to obtain the high-strength concrete. The high-strength concrete provided by the present invention is applicable to reinforcement treatment of a construction structure and can greatly improve the strength index of the concrete.

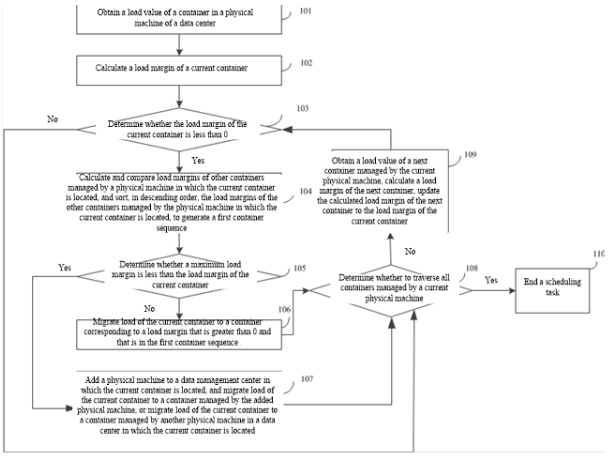
21: 2022/00258. 22: 2022-01-05. 43: 2022-03-07
51: G06F
71: GUANGDONG UNIVERSITY OF PETROCHEMICAL TECHNOLOGY

72: CUI, Delong, PENG, Zhiping, LI, Qirui, HE, Jieguang, ZHENG, Lizi

54: COOPERATIVE SCHEDULING METHOD AND SYSTEM FOR COMPUTING RESOURCE AND NETWORK RESOURCE OF CONTAINER CLOUD PLATFORM

00: -

The present invention discloses a cooperative scheduling method and system for a computing resource and a network resource of a container cloud platform. The method includes: obtaining a load value of a container in a physical machine of a data center; calculating a load margin of a current container; if the load margin of the current container is less than 0, generating a first container sequence; if the load margin of the current container is greater than 0, obtaining a load value of a next container managed by a current physical machine, calculating a load margin of the next container, and updating the calculated load margin of the next container to the load margin of the current container. According to the method and the system of the present invention, resource utilization can be effectively improved.



21: 2022/00259. 22: 2022-01-05. 43: 2022-03-07

51: C07F; C09K; C12Q; G01N

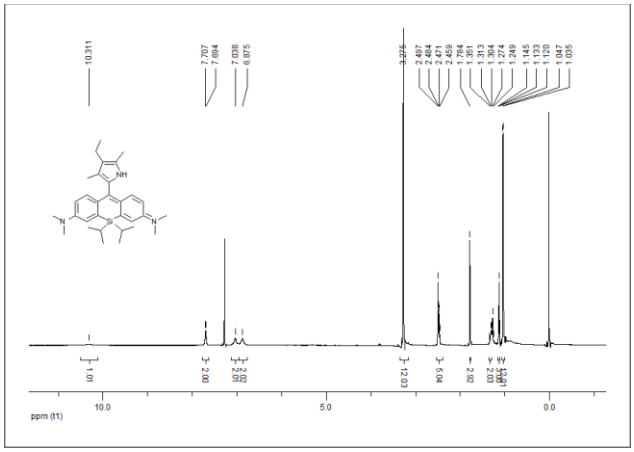
71: SHANXI UNIVERSITY

72: LIU, Jing, WANG, Jiaxin, ZHANG, Hongxing

54: METHOD FOR HIGH-CONTRAST DIAGNOSIS OF CANCER CELL/TISSUE AND PREPARATION METHOD OF FLUORESCENT PROBE

00: -

The present disclosure provides a method for high-contrast diagnosis of a cancer cell/tissue and a preparation method of a fluorescent probe for highly reactive oxygen species (hROS). The probe has a structure as follows: . In the present disclosure, reactive oxygen species (ROS) amplification is selectively induced in cancer cells using ß-lapachone (ß-Lap), to achieve a high-contrast fluorescence diagnosis of a tumor cell/tissue combined with a fluorescent probe PSiR3 synthesized in the present disclosure. The cancer cell and the normal cell have a ratio of an average fluorescence density of 15; and the cancer tissue and the normal tissue have a ratio of an average fluorescence density of 24, which far exceed a clinically acceptable threshold 2.0. Importantly, considering that inflammatory cells inherently have a high background ROS level, the PSiR3 and a PSiR3/ß-Lap combination proposed in the present disclosure can further distinguish a tumor tissue from an inflammatory tissue.



21: 2022/00260. 22: 2022-01-05. 43: 2022-03-07

51: A61K

71: YELLOW SEA FISHERIES RESEARCH INSTITUTE, CHINESE ACADEMY OF FISHERY SCIENCES, LANKUN MARINE BIOTECHNOLOGY (YANTAI) CO., LTD.

72: ZHAO, Ling, LIU, Lining, CAO, Rong, LIU, Qi, YU, Yanfei, LI, Ya, SUN, Huihui

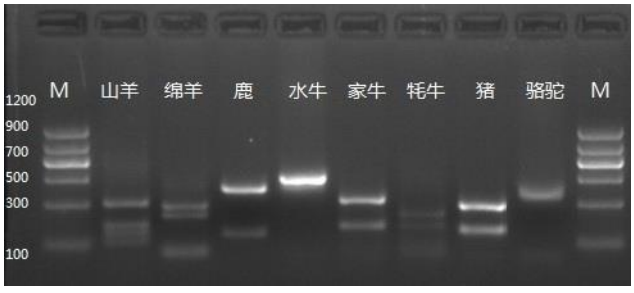
54: A METHOD FOR PREPARING FISH CARTILAGE COLLAGEN PEPTIDE

00: -

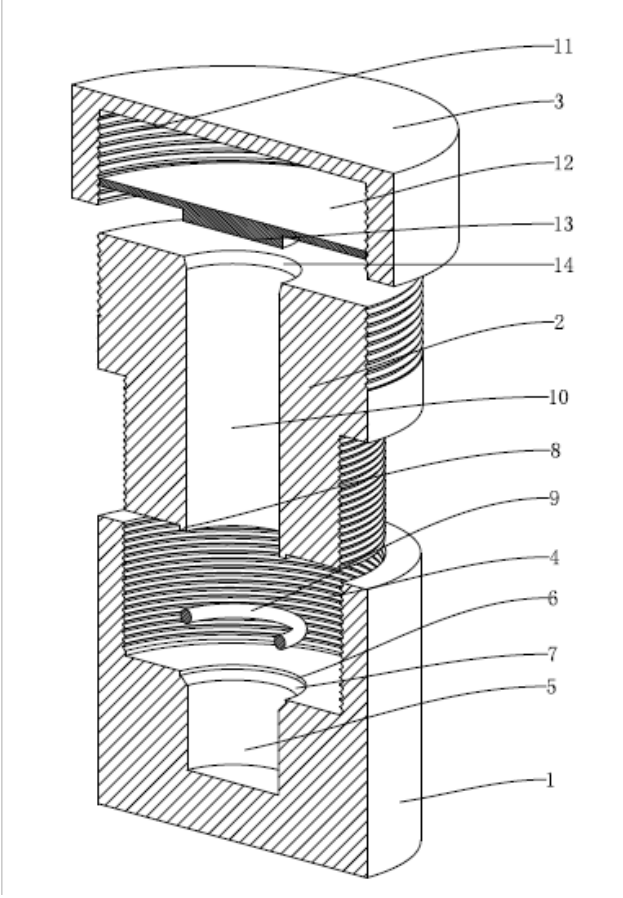
The present invention relates to the technical field of bioengineering, in particular to a method for preparing fish cartilage collagen peptide, which comprises the following steps: (1) Cartilage raw material pretreatment; (2) Cartilage desugarization; (3) On-line enzymolysis; (4) Hydrolysis; (5) Refining; (6) Drying. In the method of the present invention, alkaline protease aqueous solution is added during raw material grinding for on-line enzymolysis, which

shortens the time of grinding and enzymolysis. The heat generated during the grinding can promote the enzymolysis process, realizing the full and rational utilization of energy. Shorter grinding time can also reduce the wear of the bone grinding equipment, prolong its service life and consequently reduce the cost of production.

21: 2022/00261. 22: 2022-01-05. 43: 2022-03-07
51: C12Q
71: TAIZHOU FOOD INSPECTION AND TESTING CENTER
72: XIA, Huili, PAN, Yingqiu
54: A PCR METHOD FOR TRACEABILITY IDENTIFICATION OF 8 ANIMAL-DERIVED COMPONENTS
00: -
The present invention belongs to the technical field of detection of animal-derived components, including meats and their products, and specifically provides a pair of primers that can simultaneously detect components derived from 8 animals of goat, sheep, buffalo, domestic cattle, pig, deer, camel and yak in a single PCR reaction and a molecular identification technology for the operation process, as well as a kit containing the above primers and its application method. The nucleotide sequences of primers are shown as SEQ ID1 and SEQ ID3. Based on PCR technology, the present invention features simple operation, strong specificity, low equipment requirements, and, most importantly, detection of 8 animal-derived components in one PCR reaction. The present invention can be used for the adulteration detection of food meats and their products and the traceability identification of animal-derived components in feed. This simple and fast method improves the detection efficiency.



21: 2022/00293. 22: 2022-01-05. 43: 2022-03-09
51: C22C
71: SICHUAN JIARUI TECHNOLOGY CO., LTD.
72: ZHENG, Yu, LIU, Nian, CAO, Lijuan, LI, Weiming
33: CN 31: 202110086761.3 32: 2021-01-22
54: SEALED COBALT LEACHING DEVICE, REAGENT FOR COBALT LEACHING, METHOD USING DEVICE, USE OF METHOD
00: -
Disclosed are a sealed cobalt leaching device, a reagent for the cobalt leaching, a method using the device, and use of the method. The sealed cobalt leaching device includes a base, where a top of the base is provided with a first groove; a chemical solution holding tool is provided above the base; a bottom of the chemical solution holding tool is removably connected to the base; a holding through-hole penetrating up and down is formed inside the chemical solution holding tool; and a sealing cover is provided above the chemical solution holding tool. Beneficial effects of the present disclosure: Through the combination of the base, the chemical solution holding tool, and the sealing cover, the holding through-hole inside the chemical solution holding tool is sealed, thereby improving the cobalt leaching temperature and the cobalt leaching efficiency. Moreover, a polycrystalline diamond compact (PDC) is placed in the first groove, such that only a diamond layer of the PDC is in contact with a cobalt leaching reagent, thereby effectively protecting a metal alloy substrate and preventing environmental pollution and human body damage.

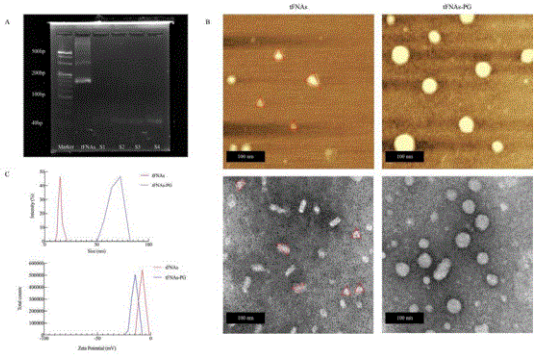


21: 2022/00351. 22: 2022-01-07. 43: 2022-02-18
51: C12N
71: Tobacco Research Institute of Chinese Academy of Agricultural Sciences (Qingzhou Tobacco Research Institute of China National Tobacco Company)
72: Jinguang YANG, Ming GE, Yubing JIAO, Ying LI, Wanhong ZHANG, Fenglong WANG, Lili SHEN, Liyun SONG

54: NOVEL USE OF PRODIGIOSIN LOADED BY FRAMEWORK NUCLEIC ACIDS FOR COMPREHENSIVE CONTROLLING COMMON VIRAL DISEASES IN SOLANACEAE PLANTS

00: -

The present invention belongs to the technical field of application of microbial secondary metabolites, and particularly relates to novel use of prodigiosin loaded by framework nucleic acids for comprehensive controlling common viral diseases in Solanaceae plants. The medicine for preventing and controlling TMV, PVY, CMV is a self-assembled DNA structure preparation containing prodigiosin. It is clarified that PG can be slowly released by tFNAs-PG. This approach could greatly reduce the cost and availability of prodigiosin for antiviral treatment. The encapsulation efficiency studies also showed that the formulation had a high encapsulation efficiency. Slow release of PG from tFNAs-PG has significant improvement for PVY, TMV, CMV disease control. Based on the above results, it is further clarified that PG functionalized tFNAs could act as an effective biocontrol reagent for plants and have immense potential for commercialization.



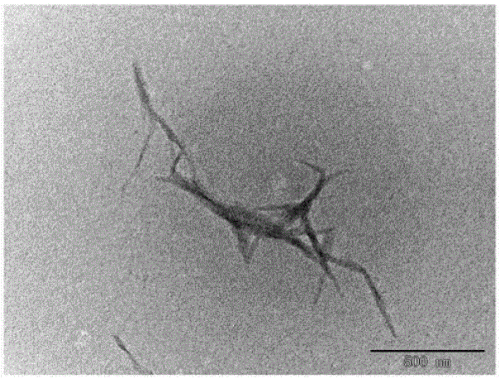
21: 2022/00352. 22: 2022-01-07. 43: 2022-02-18
51: C08B; D01F
71: Beijing Institute of Technology, Chongqing Lihong Fine Chemicals Co., Ltd., Beijing North Century Cellulose Technology Development Co., Ltd.
72: SHAO, Ziqiang, ZHOU, Yi, LIU, Yanhua, LI, Youqi, XIA, Yinfeng, WANG, Feijun, WANG, Jianquan

54: MODIFIED CELLULOSE NANOWHISKER, FIBER AND PREPARATION METHOD THEREOF

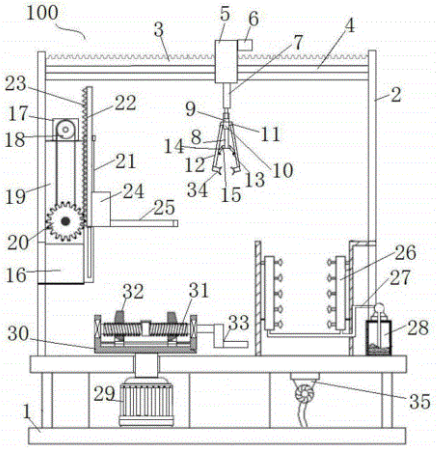
00: -

The present disclosure relates to a modified cellulose nanowhisker, a fiber and a preparation method thereof. The preparation method comprises the following steps: adding cellulose into a mixed aqueous solution of organic acid and hydrochloric acid, stirring and heating to obtain a solid dispersion, separating a filter cake and dispersing in water, washing to neutral and continuously centrifuging to obtain nanocellulose whisker dispersion, dispersing the residual solid in water and homogenizing to obtain a nanocellulose fiber dispersion; and standing the filtrate and recrystallizing to recover the organic acid solid. According to the present disclosure, a cellulose-containing material is used as a raw material, and cellulose nano-materials with two scales, namely nanowhisker and nanofiber, are quickly prepared with high yield; the application

space of the cellulose material is expanded, and the cellulose nano-material is prepared by quick hydrolysis and homogenization of the mixed acid of organic acid and hydrochloric acid.



21: 2022/00353. 22: 2022-01-07. 43: 2022-02-18
51: C21D
71: Liaocheng University
72: YIN, Yibin
54: METAL SURFACE HEAT TREATMENT DEVICE
00: -
The invention discloses a metal surface heat treatment device, comprising a base, a heating bin and a cooling bin, wherein the base top is connected with a rack cross-bar through a support pillar; a horizontal moving frame is movably disposed on the rack cross-bar 3; the heating bin comprises a heating assembly with a heating ring fixedly connected at a right bottom, and a clamping mechanism capable of rotating on the base is disposed below the heating ring; spray tubes are symmetrically disposed in parallel at two sides of the inner wall of the cooling bin, and the bottom of the spray tubes are fixedly connected with a cooling liquid tube with a cooling liquid tank fixedly connected at the bottom. Spray tubes are used for spraying and cooling metals during cooling, and the cooling liquid can be recycled after cooling, so that the invention has high cooling efficiency.



21: 2022/00355. 22: 2022-01-07. 43: 2022-02-18
51: A23L
71: Guangzhou City Polytechnic
72: Xun Tiejun, Huang Lihua
54: CRAYFISH DRIED MEAT FLOSS AND PREPARATION METHOD THEREOF
00: -
The invention discloses a crayfish dried meat floss, which contains the following raw materials by weight: 70-90 parts of crayfish meat, 8-10 parts of perilla leaves, 4-5 parts of orange peel, 2-3 parts of ginger; 3-4 parts of soy sauce, 2-3 parts of fennel, 4-5 parts of rice wine, 3-5 parts of white sugar, 5-8 parts of fine salt, 3-5 parts of ginger, 3-4 parts of green onions, 3-4 parts of cinnamons, 4-6 parts of star anise, 2-5 parts of honey, 3-7 parts of black pepper. The invention uses crayfish as the main raw material to make the dried meat floss products more tender and more nutritious than most dried meat floss products on the market. At the same time, the invention solves the problem of complicated eating of crabs, and enables consumers to supplement the nutrition of crayfish at any time.

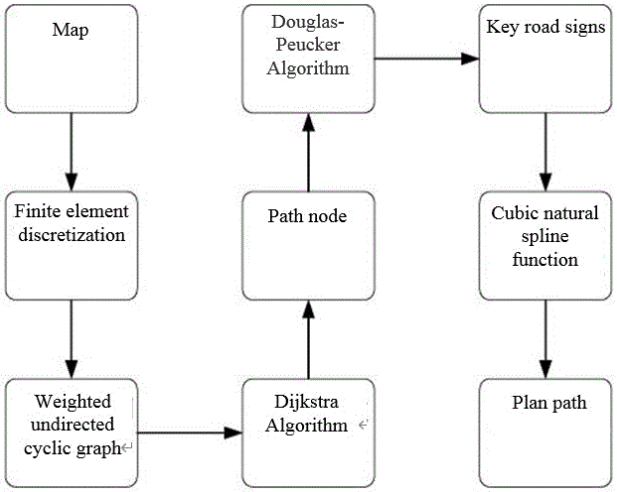
Item	Colour and lustre (25)	Exterior (25)	Smell (25)	Taste (25)	Total points (100)
Grading standards	Golden yellow, shiny (20-25)	Flocculent, fluffy, without aggregates (20-25)	Obvious crayfish flavor (20-25)	Outstanding umami taste, suitable for salty and sweet (20-25)	
	Golden yellow, dull (10-20)	Flocculent, fluffy, with agglomerates (10-20)	Lighter crayfish smell (10-20)	Light umami taste, suitable for salty and sweet (10-20)	
	Pale yellow, dull (1-10)	Flocculent, not fluffy, with agglomerates (1-10)	No crayfish smell (1-10)	Pale umami taste, not suitable for salty and sweet (1-10)	
Embodiment 1	23.3	22.2	23.4	22.4	91.3
Embodiment 2	23.1	22.1	23.3	22.5	91
Embodiment 3	22.8	23.4	24.3	21.9	92.4

21: 2022/00356. 22: 2022-01-07. 43: 2022-02-18
51: G01C
71: Anhui University of Science and Technology
72: Liu Yanbin, Jiang Yuanyuan

54: PATH PLANNING METHOD OF MOBILE ROBOTS WITH FINITE ELEMENT MAPS

00: -

The invention discloses a path planning method for a mobile robot with a finite element map, which comprises the following steps: firstly, dispersing a continuous feasible region into a limited unit combination, and establishing a weighted undirected cyclic graph by using a node set of the finite element map and a set of unit edges with unequal lengths; then, according to the weighted undirected cyclic graph, Dijkstra search algorithm is used to search all the target points from the starting position to the ending position, and DouglasPeucker algorithm is used to delete the edge nodes of non-corner points belonging to redundant nodes and extract key road signs; finally, cubic natural spline function is used to fit the extracted key road signs to get the moving path of the robot. The method of the invention can find the planned collision-free moving path of the robot according to the different positions of obstacles in the running environment where the robot is located, which is more in line with the reality, and is especially suitable for planning the moving path of the robot on the map of long and narrow passages.

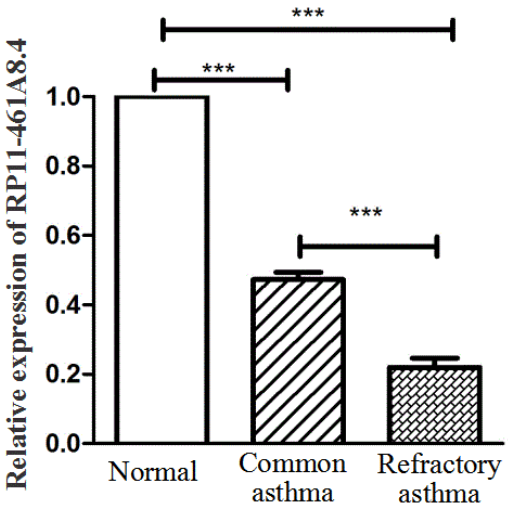


21: 2022/00357. 22: 2022-01-07. 43: 2022-02-18
51: C12N; C12Q
71: The Affiliated Changzhou No.2 People's Hospital of Nanjing Medical University
72: Qian Zhang

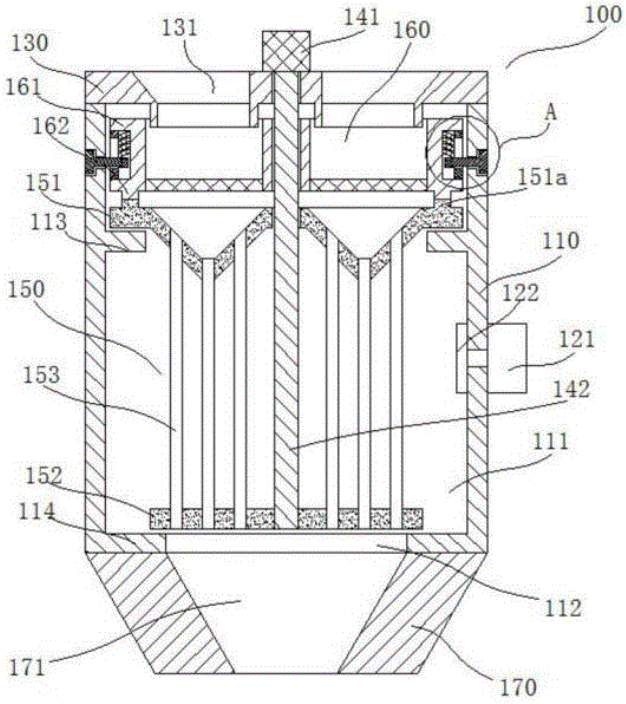
54: A BIOMARKER RELATED TO ASTHMA AND ITS APPLICATION

00: -

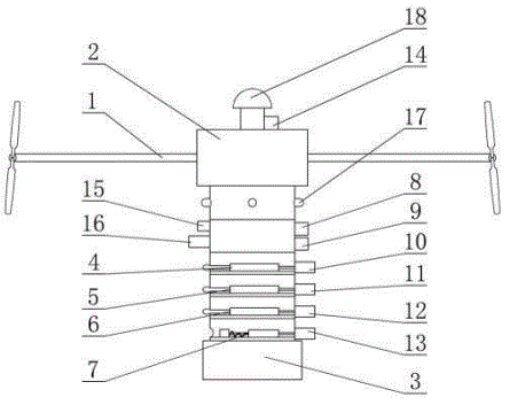
The invention discloses a biomarker related to asthma and application thereof, wherein the biomarker is RP11-461A8.4. According to the invention, the differential expression of RP11-461A8.4 in asthma patients is found for the first time by high-throughput sequencing, and it is further confirmed by QPCR that RP11-461A8.4 can effectively distinguish refractory asthma, common asthma and normal people, suggesting that RP11-461A8.4 can be used as a biomarker for clinical diagnosis of asthma.



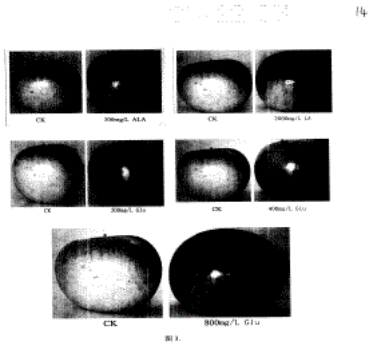
21: 2022/00358. 22: 2022-01-07. 43: 2022-02-18
51: C10L
71: Anhui University of Science And Technology
72: Ge Tao, Han Ping
54: COAL MICROWAVE DESULFURIZATION EQUIPMENT AND METHOD
00: -
The invention relates to the technical field of coal desulfurization, and relates to a coal microwave desulfurization equipment and method. The equipment comprises a reactor shell, a cover plate is arranged at the upper opening of the inner cavity of the reactor shell, a motor is arranged above the cover plate, the motor is used for driving a coal conveying device to rotate, the coal conveying device comprises an upper support plate and a lower support plate, and corresponding parts of the upper support plate, the lower support plate and the reactor shell jointly form a basically closed microwave emitting cavity; a microwave generator is arranged at the reactor shell, and the microwave generator comprises a microwave generating device arranged outside the reactor shell and a microwave emitting device arranged at the inner wall of the microwave emitting cavity; a plurality of coal conveying pipes are arranged between the upper support plate and the lower support plate, and the coal conveying pipes are communicated with the upper space of the upper support plate and the lower space of the lower support plate; the cover plate is provided with a feed port, and the bottom wall of the inner cavity of the shell is provided with a blanking port. The method is implemented based on the equipment. The method can better facilitate the industrial production of coal microwave desulfurization.



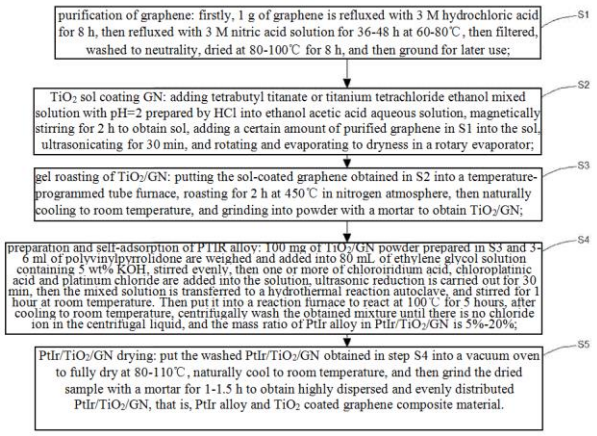
21: 2022/00359. 22: 2022-01-07. 43: 2022-02-18
51: B64C; G01R; G05D
71: Shandong Analysis and Test Center
72: LI, Qing, XIE, Wei, ZHANG, Jing, ZHAO, Lingxi, MA, Junjian
54: ELECTROMAGNETIC RADIATION DETECTION DEVICE AND METHOD BASED ON INTELLIGENT FLIGHT TRAJECTORY CONTROL OF UNMANNED AERIAL VEHICLE
00: -
An electromagnetic radiation detection device based on intelligent flight trajectory control of an unmanned aerial vehicle is provided. Composite detection on electromagnetic radiation of a plurality of frequency bands in a near-field area and a far-field area in spaces with different heights is achieved by using the electromagnetic radiation detection device and method provided by the present disclosure, and detection points of which the electromagnetic radiation exceeds the limitation of the Chinese Standard GB8702-2014 Controlling limits for electromagnetic environment are marked, and alarm information is generated.



21: 2022/00361. 22: 2022-01-07. 43: 2022-02-18
51: A01G
71: Nanjing Hejiachun Biological Technology Co., Ltd.
72: WANG, Liangju, QU, Yongmei, WANG, Wentao
54: METHOD FOR PROMOTING FRUIT COLORATION
00: -
The disclosure relates to a method for promoting fruit coloration, belonging to application of biochemical reagents in agricultural production, and is specially used for producing colored fruits such as apples, pears, peaches and grapes. The synthesis of anthocyanin of pericarp of apple fruits may be obviously promoted by externally applying 5-aminolevulinic acid (ALA), or levulinic acid (LA), or glutamic acid (Glu), so that the soluble solid content in the fruits is improved, and the titratable acid content of the apple fruits is reduced, thereby improving the internal and external quality and commodity performance of the apple fruits. The method may be applied to bagged fruit trees, and also may be applied to unbagged fruit trees.

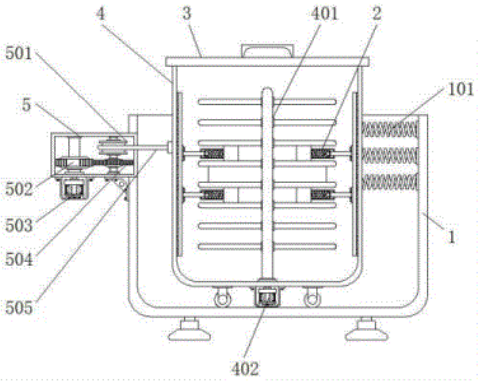


21: 2022/00362. 22: 2022-01-07. 43: 2022-02-18
51: B01J
71: Beijing Institute of Petrochemical Technology
72: Song Huanqiao, Zhang Shixin, Ma Haoran, Sun Yanlei
33: CN 31: 202110625458.6 32: 2021-06-04
54: PREPARATION AND APPLICATION OF PTIR ALLOY AND TIO2 COATED GRAPHENE COMPOSITE MATERIAL
00: -
The invention discloses a preparation method and application of a PtIr alloy and TiO2 coated graphene composite material, which relates to the fields of nano-material synthesis and electrochemical catalysis. A composite material of PtIr alloy and TiO2 coated graphene, which comprises graphene, PtIr alloy and TiO2. Firstly, TiO2 is uniformly coated on the surface of graphene by sol ultrasonic coating-gel baking method, and then used ultrasonic and hydrothermal chemical reduction method to continuously reduce to obtain PtIr alloy nanoparticles with uniform particle size, and the size distribution of the nanoparticles is 2-5 nm, and then PtIr/TiO2/GN catalyst with uniform distribution is dynamically adsorbed on TiO2/GN. The composite material of the invention can be used as an ethanol electro-oxidation catalyst, can greatly reduce the amount of Pt, and improve the catalytic stability and conversion efficiency of ethanol oxidation.



21: 2022/00363. 22: 2022-01-07. 43: 2022-02-18
51: B01F
71: LINYI UNIVERSITY
72: WEN, Zhenhao
54: DISSOLVING DEVICE FOR CHEMICAL MATERIAL PRODUCTION
00: -
The present disclosure discloses a dissolving device for chemical material production, which comprises

an accommodating box, a top cover, a dissolving box and a control panel, wherein the top end of the inner side of the accommodating box is fixedly connected with a first spring, one side of the first spring is movably connected with the dissolving box, both sides of the stirring shaft are fixedly connected with hollow blocks, the top end of the dissolving box is movably connected with the top cover, the top end of the inner side of the accommodating box is fixedly connected with a winding box, and the top end of the outer side of the dissolving box is installed with a control panel.

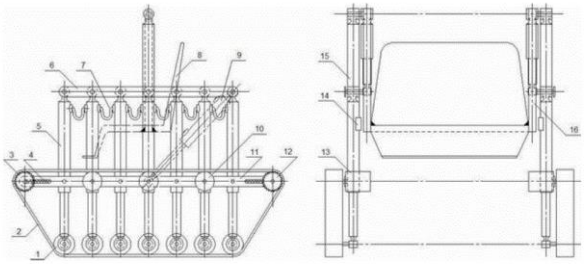


21: 2022/00364. 22: 2022-01-07. 43: 2022-02-18
51: A61G
71: Shandong University of Technology
72: YU, Wenqiang, LIN, Yuyi, WINHOLTZ, Robert Andrew

54: WHEELCHAIR TRAVELING MECHANISM CAPABLE OF AUTOMATICALLY ADAPTING TO ROAD CONDITIONS

00: -

A wheelchair traveling mechanism capable of automatically adapting to road conditions is provided, which is used for patients with physical disabilities and elderly people with mobility difficulties to go up and down stairs and travel daily instead of walking. The key components involved in the present disclosure comprise a crawler belt and drive system, seven interconnected load-bearing hydraulic cylinders, a balance adjusting hydraulic cylinder, a suspension seat position sensor and other components. The seven load-bearing hydraulic cylinders and upper and lower connecting rods form a plane motion mechanism. When the wheelchair tilts due to the uphill or downhill, the suspension seat is always vertically downward under the action of gravity. The sensor measures the relative displacement between the seat suspension rod and the support frame, and drives the balance adjusting hydraulic cylinders, so that the seven load-bearing hydraulic cylinders are always vertically downward, thus maintaining the balance of the system.



21: 2022/00365. 22: 2022-01-07. 43: 2022-02-18
51: A23K
71: Zouping Zhongjie Financial Consulting Co., Ltd.
72: ZHAO, Shoushan, MA, Chao, DONG, Jianzhong, HAN, Yaodong, SUN, Hongxia, LIU, Xiaoqing, YANG, Guang, WANG, Cuiping, FU, Zhaohui, XIE, Qiancheng, SONG, Chenxi

54: FUNCTIONAL FEED FOR POULTRY AND PREPARATION METHOD THEREOF

00: -

The present disclosure discloses a functional feed for poultry and a preparation method thereof, and belongs to the technical field of poultry feed. The functional feed for poultry comprises the following raw materials: corn, soybean meal, soybean lecithin, queen bee foetus lyophilized powder , beer yeast powder, vinasse, vinegar tortoise shell, cuttle bone, Ixeris denticulata, Herba Leonuri, Cyperus rotundus L., Eupatorium japonicum Thunb., Isatidis Folium, Gynostemma pentaphyllum, Eclipta prostrata, Portulaca oleracea, Allium sativum, Dioscorea polystachya skin, expanding blood meal, eel, Eupolyphoge sinensis, salt, calcium hydrogen phosphate, concentrated Chinese medicine powder, complex enzyme, multivitamin and compound trace element, Saccharomyces cerevisiae, Bacillus subtilis subsp. subtilis, Lactobacillus acidophilus.

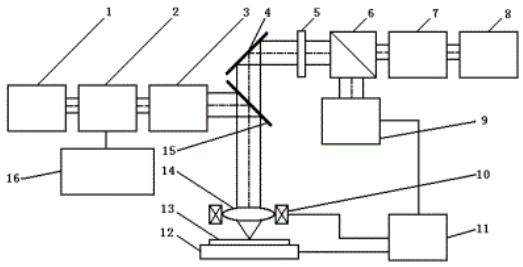
21: 2022/00366. 22: 2022-01-07. 43: 2022-02-18
51: G03F
71: Shandong University of Science and Technology
72: ZHANG, Shan, ZHANG, Shuqing, DONG, Junfeng

54: METHOD AND DEVICE FOR EACH SPEED SEGMENT OF SCANNING WORKING TABLE TO

PERFORM LASER DIRECT WRITING ON BINARY PATTERN

00: -

The present invention discloses a method and device for each speed segment of a scanning working table to perform laser direct writing on a binary pattern, dividing a binary image of an element to be processed in a two-dimensional space into mesh pixel points of equal size, and calculating an exposure time and an exposure intensity corresponding to each pixel point; plan a speed curve of the scanning working table; determining the pixel points in an acceleration segment, a uniform speed segment and a deceleration segment according to the speed curve and a size Dpp of the pixel points, and calculating a coordinate position of each pixel point corresponding to each scanning line of the element to be processed; compensating exposure data corresponding to the pixel points with all or part of boundary being located in the acceleration segment or the deceleration segment and the exposure intensity being non-zero.



21: 2022/00367. 22: 2022-01-07. 43: 2022-02-18
51: C22B; B03B
71: Guangxi University
72: Chen Jianhua

54: INTERFACE REGULATION METHOD FOR FLOTATION SEPARATION OF COPPER-MOLYBDENUM MIXED CONCENTRATE

00: -

The invention discloses an interface regulation method for flotation separation of a copper-molybdenum mixed concentrate. The method comprises the following steps: 1) adding 7-10 kg/t of a mixed electric potential regulator containing sodium sulfide and sodium dithionite, regulating mineral slurry electric potential to be -200 mV to -300 mV, and performing size mixing for 3 minutes; 2) adding 30-50 g/t of polydimethylsiloxane, and stirring for 3 minutes; 3) adding 4-5 kg/t of a hydrophilic inhibitor containing a thiourea functional group, stirring for 3 minutes, changing a copper mineral surface from being hydrophobic to being hydrophilic, decreasing a contact angle of chalcopyrite from 70 degrees to 10 degrees, maintaining the contact angle of molybdenite at 85 degrees; and 4) adding 40-60 g/t of polymer compound sodium polyacrylate to form an insulation layer on the surface of the chalcopyrite for eliminating electron transfer effect between copper minerals and the molybdenite, maintaining electrochemical difference between the chalcopyrite and the molybdenite, and promoting the separation action. Effective separation of the copper-molybdenum mixed concentrate is realized by mineral slurry electric potential regulation, foam viscosity regulation, mineral surface hydrophilic regulation, and galvanic action regulation among mineral particles.

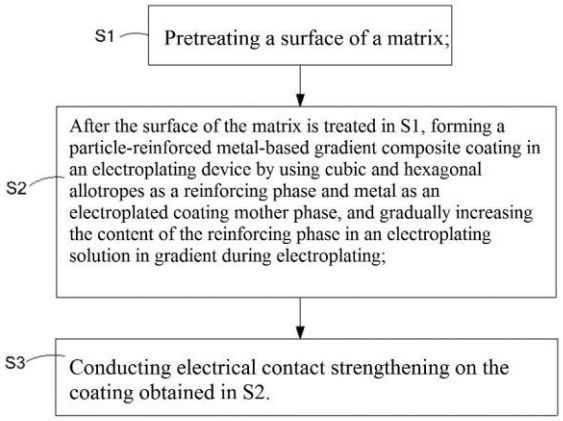
21: 2022/00368. 22: 2022-01-07. 43: 2022-02-18
51: C25D
71: Tongling University, Tongling Yuanyi Precision Machinery Co., Ltd.
72: WANG, Dongsheng, ZHOU, Yan, XU, Lifeng, QU, Guang, WANG, Qunyou, HUA, Mengzhang

54: METHOD FOR PREPARING NANO COMPOSITE CODEPOSITION REINFORCED METAL-BASED GRADIENT COATING

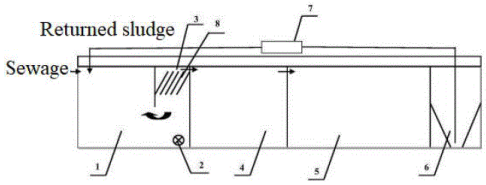
00: -

The disclosure herein discloses a method for preparing a nano composite codeposition reinforced metal-based gradient coating, including the following steps: S1: conducting pretreatment such as polishing, oil removal, and activation on a surface of a matrix; S2: after the surface of the matrix is treated in S1, forming a particle-reinforced metal-based gradient composite coating by using nano-scale cubic and hexagonal allotropes as a reinforcing phase and metal as an electroplated coating mother phase, and gradually increasing the content of the reinforcing phase in an electroplating solution in gradient during electroplating; and S3: conducting electrical contact strengthening on the coating obtained in S2. The coating has both wear-resistant and wear-reducing properties due to the high hardness of the cubic reinforcing phase and the laminar slip property of the hexagonal reinforcing phase. The properties of the metal-based composite

coating are greatly improved by the nano reinforcing phrase and the gradient distribution thereof. In addition, the coating is subjected to the electrical contact strengthening, thus the quality of the coating is improved and the binding force between the coating and the matrix is greatly increased.



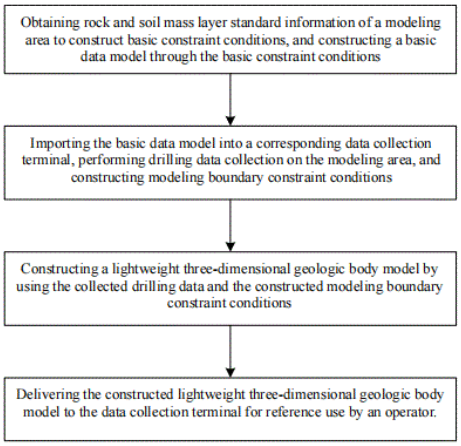
21: 2022/00369. 22: 2022-01-07. 43: 2022-02-18
51: C02F
71: Qingdao University of Technology
72: XIE, Jingliang, LIU, Yuming, YU, Liming, SUN, Yuanjie
54: BIOLOGICAL PHOSPHORUS AND NITROGEN REMOVAL DEVICE BASED ON AAO PROCESS
00: -
A biological phosphorus and nitrogen removal device based on an AAO (anaerobic-anoxic-oxic) process is provided. A main body structure of the device comprises an anaerobic zone, a submerged stirrer, an inclined plate sedimentation zone, an anoxic zone, an aerobic zone, a secondary sedimentation tank, a sludge return system, and inclined plates, wherein the inclined plate sedimentation zone is arranged at a tail end of the anaerobic zone, and the bottom of the inclined plate sedimentation zone is butted and communicated with the anaerobic zone; the submerged stirrer is arranged in the anaerobic zone and at a bottom end below the inclined plate sedimentation zone; the anaerobic zone, the anoxic zone, the aerobic zone and the secondary sedimentation tank are sequentially communicated through pipelines, and the secondary sedimentation tank is communicated with the anaerobic zone through the sludge return system.



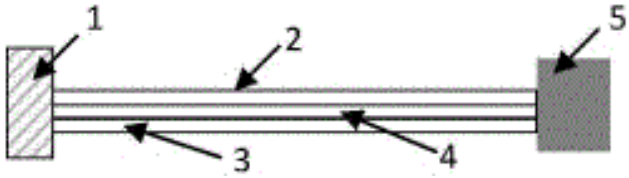
21: 2022/00370. 22: 2022-01-07. 43: 2022-02-21
51: A23K
71: Shanxi Agricultural University
72: Meng Dongxia, Liu Xiaodong, Ma Zhengyu
54: PURE NATURAL PLANT-DERIVED FEED ADDITIVE FOR PREVENTING WEANING STRESS OF LAMBS
00: -
The invention discloses a pure natural plant-derived feed additive for preventing weaning stress of lambs, belonging to the technical field of animal feed additives. The additive comprises the following raw materials in parts by weight: 8-15 parts of Dahlia pinnata Cav. tubers, 10-20 parts of Thymus mongolicus Ronn, 5-10 parts of Alpinia officinarum Hance, 4-6 parts of Origanum vulgare L. and 40-55 parts of starch. All the raw materials are sun-dried and crushed, mixed evenly, and then subjected to alcohol extraction to obtain alcohol extract; the alcohol extract is filtered and concentrated to obtain plant extract; mixing the plant extract with starch, drying and crushing to obtain the pure natural plant-derived feed additive. The preparation method of the feed additive of the invention is simple, the raw materials are all plant-derived substances, which are safe and non-toxic, and are more suitable for intensive production and breeding; and the feed additive of the invention only needs to add 1-3 kg of the feed additive of the invention per 100kg of feed, and the prevention of weaning stress reaction of lambs can be realized under the condition of small dosage.

21: 2022/00371. 22: 2022-01-07. 43: 2022-02-18
51: G06T
71: Military-Civilian Integration Geological Survey Center of China Geological Survey
72: HAO, Ming, LIU, Huan, XIE, Dan, XU, Bin
54: METHOD FOR QUICKLY CONSTRUCTING THE LIGHTWEIGHT THREE-DIMENSIONAL GEOLOGIC BODY MODEL IN REAL TIME
00: -

The invention relates to the technical field of geological survey, in particular to a method for quickly constructing a lightweight three-dimensional geologic body model in real time. The method comprises the steps of, S1, obtaining rock-soil mass layer standard information of a modeling area to construct basic constraint conditions and basic data model through the basic constraint conditions; S2, importing the basic data model into a corresponding data collection terminal, collecting drilling data and constructing modeling boundary constraint conditions in the modeling area; S3, constructing the lightweight three-dimensional geologic body model with the collected drilling data and the constructed modeling boundary constraint conditions; S4, pushing the constructed lightweight three-dimensional geologic body model to data collection terminal for reference use by an operator. According to the method, the lightweight three-dimensional geologic body model can be quickly constructed in real time, and the constructed model is delivered to an operator for use.



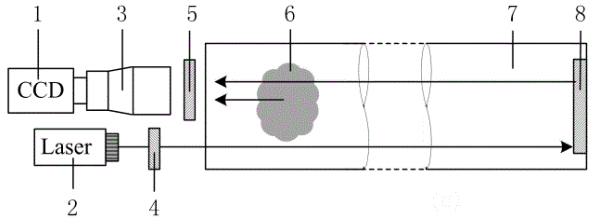
21: 2022/00372. 22: 2022-01-07. 43: 2022-02-18
51: H02N
71: Anhui University of Science and Technology
72: Liu Yanbin, Jiang Yuanyuan, Xin Yuanfang
54: EQUAL-STRENGTH BEAM PIEZOELECTRIC VIBRATION ENERGY COLLECTOR
00: -
The invention provides an equal-strength beam piezoelectric vibration energy collector, which consists of a base, an equal-strength piezoelectric laminated beam and a mass block. The piezoelectric cantilever beam of the vibration energy collector adopts the design of equal-strength piezoelectric laminated beam, and the section modulus in bending of the equal-strength piezoelectric laminated beam changes with the change of bending moment, with a larger section at the larger bending moment and a smaller section at the smaller bending moment; the maximum normal stress of each section of the equal-strength piezoelectric laminated beam is equal and equal to the allowable stress of piezoelectric material. The invention can make full use of piezoelectric materials, improve the energy density of the vibration energy collector, and is simple in structure and very convenient to manufacture and install.



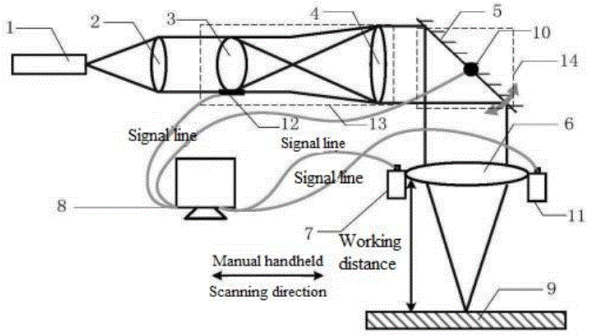
21: 2022/00373. 22: 2022-01-07. 43: 2022-02-18
51: B03D; C22B
71: Guangxi University
72: Chen Jianhua
54: FLOTATION METHOD FOR INTERFACE COMPLEXING ZINC SULFIDE ORES
00: -
The invention relates to a flotation method for interface complexing zinc sulfide ores. A mixed reagent prepared by copper sulfate and trisodium citrate in a certain ratio is used for replacing copper sulfate added in beneficiation to serve as a collector. The flotation method comprises the following steps: (1) adding the crushed raw ores into a flotation stirring barrel for roughing, adding 300-400 g of the mixed reagent into every 1000 kg of the raw ores in the roughing process, and obtaining roughed ore concentrate and roughed first tailings; (2) further scavenging zinc components in the tailings after 100-140 g of the mixed reagent is added into every 1000 kg of ore pulp for the roughed first tailings, and obtaining roughed second tailings; (3) adding 50-70 g of the mixed reagent into every 1000 kg of ore pulp for the roughened second tailings, and further scavenging the zinc components in the tailings. By adopting the flotation method for interface complexing zinc sulfide ore, the recovery rate of the lead zinc ore in the lead sulfide ore flotation can be increased, the dosage of the activator is reduced,

beneficiation cost is reduced, and environmental pollution is reduced.

21: 2022/00374. 22: 2022-01-07. 43: 2022-02-18
51: G02B; G03B; H04N
71: Qingdao University of Technology
72: SHAO, Jing, HAN, Suli, LIN, Haibo, CHEN, Chengjun, SUN, Shufeng
54: SHORT COHERENT ILLUMINATION AND POLARIZATION COMBINED UNDERWATER LONG-RANGE OPTICAL IMAGING DEVICE AND METHOD
00: -
Disclosed in the present invention are a short coherent illumination and polarization combined underwater long-range optical imaging device and method. The device includes a short coherent laser, an optical imaging system, a polarizer and an analyzer, wherein the polarizer is arranged at an image side end of the short coherent laser, the analyzer is arranged at an object side end of the optical imaging system, laser emitted by the short coherent laser arrives, through the polarizer, at an imaging target which is positioned in a water environment, and a light beam reflected by the imaging target is transmitted to the optical imaging system via the analyzer.

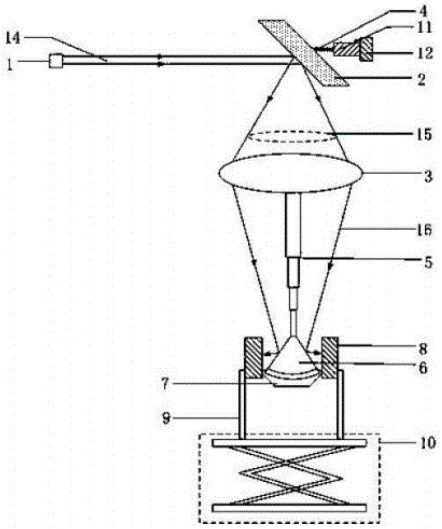


21: 2022/00375. 22: 2022-01-07. 43: 2022-02-21
51: B08B
71: Qingdao University of Technology
72: SHAO, Jing, SUN, Shufeng, HAN, Suli, DONG, Hao, LI, Zhuo, WANG, Yingming
54: DYNAMIC COMPENSATION DEVICE FOR HANDHELD LASER CLEANING
00: -
Disclosed is a dynamic compensation device for handheld laser cleaning, including a laser emitter, a collimating lens, a zoom lens group, a galvanometer and an f-theta lens, wherein laser outputted by the laser emitter sequentially passes through the collimating lens, zoom lens group, galvanometer and f-theta lens, and the f-theta lens converges a laser beam to a to-be-cleaned workpiece; a distance sensor is mounted on an f-theta lens shell; the zoom lens group includes a zoom lens and a fixed lens arranged in parallel, and the zoom lens is connected with a first power device to form a distance compensation system; and the distance sensor is connected with a controller, and the controller is connected with the first power device, receives distance information from the distance sensor and feeds the distance information back to the first power device, to enable automatic adjustment of a focusing distance.

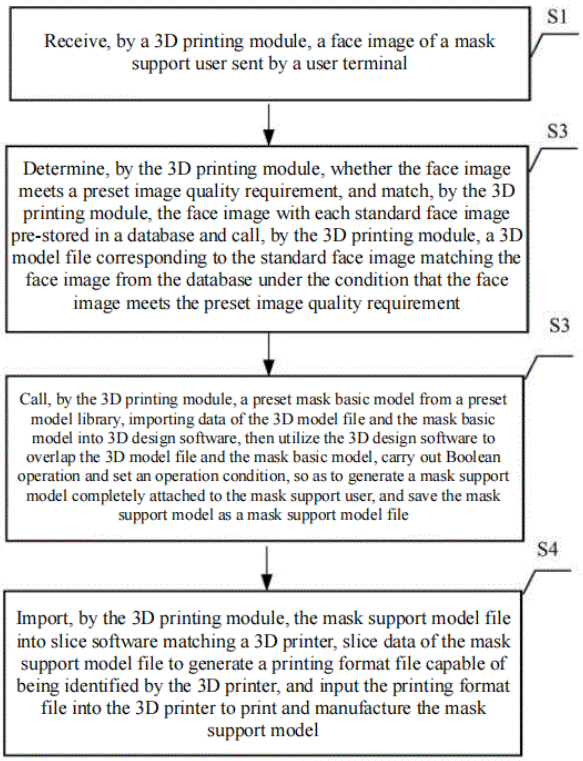


21: 2022/00376. 22: 2022-01-07. 43: 2022-02-21
51: B08B
71: Qingdao University of Technology
72: SHAO, Jing, HAN, Suli, LIN, Haibo, SUN, Shufeng, LI, Zhuo, WANG, Yingming, DONG, Hao
54: LASER CLEANING DEVICE SUITABLE FOR HOLES WITH VARIOUS DIAMETERS AND TYPES
00: -
Disclosed is a laser cleaning device suitable for holes with various diameters and types, including a deflectable reflector, a field lens, a telescopic support, a high-precision conical reflector, an electric motor, a clamp and a lifting mechanism, wherein the telescopic support is connected with the field lens and the conical reflector, the conical reflector is fixed below the field lens. The conical reflector can better reflect a laser beam to converge it onto an inner wall of a perforated workpiece and better clean small holes. The present invention features the beneficial effects that a telescopic conical reflector structure is used, holes with various diameters and types can be cleaned by vertical movement of the conical reflector, and a circular laser scanning system is combined with the conical reflector structure to lower cleaning cost, solve the problem of difficult cleaning

of small holes, improve cleaning quality and reduce resource waste.



21: 2022/00377. 22: 2022-01-07. 43: 2022-02-21
51: A41D; G06K; G06T; B33Y
71: Dongguan University of Technology
72: CHEN, Shenggui, ZHOU, Zirong, LI, Nan
54: METHOD FOR PREPARING PERSONALIZED THREE DIMENSIONAL (3D) PRINTING MASK SUPPORT
00: -
Disclosed is a method for preparing a personalized three dimensional (3D) printing mask support. The method includes: S1, receiving, by a 3D printing module, a face image of a mask support user; S2, determining, by the 3D printing module, whether the face image meets a preset image quality requirement, matching, by the 3D printing module, the face image with each standard face image pre-stored in a database and calling, by the 3D printing module, a 3D model file corresponding to the standard face image matching the face image from the database under the condition that the face image meets the preset image quality requirement; S3, generating a mask support model completely attached to the mask support user ; and S4, printing and manufacturing the mask support model. The present invention can rapidly customize a protective mask support, thereby improving comfort of use.

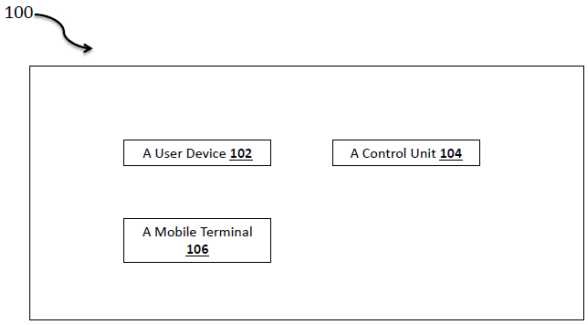


21: 2022/00378. 22: 2022-01-07. 43: 2022-02-21
51: A01G
71: HUANG, Zhimin
72: HUANG, Zhimin, ZHAO, Mufeng, WANG, Yan, LIANG, Yixin, WANG, Xiujuan, MA, Hongjun, ZHANG, Xueqin, HUANG, Ziteng, YUAN, Xinzheng, HAN, Zhiqiang
54: METHOD FOR TREATING SEEDLINGS BEFORE FIELD PLANTING OF PAEONIA SUFFRUTICOSA ANDR
00: -
The present disclosure relates to the technical field of the forestry and fruit industry, and particularly relates to a method for treating seedlings before field planting of Paeonia suffruticosa Andr.. The method comprises the following steps: selecting seedlings: when purchasing high-quality seedlings before planting, selecting the Paeonia suffruticosa Andr. seedlings which are loose, breathable, good in drainage and free of underground pest damage and grow for two years on nursery soil; digging seedlings: digging the Paeonia suffruticosa Andr. seedlings by using a large digging machine; airing seedlings: after turning out the Paeonia suffruticosa Andr. seedlings, airing the Paeonia suffruticosa

Andr. seedlings in the field, and then organizing manual picking; and treating the seedlings.

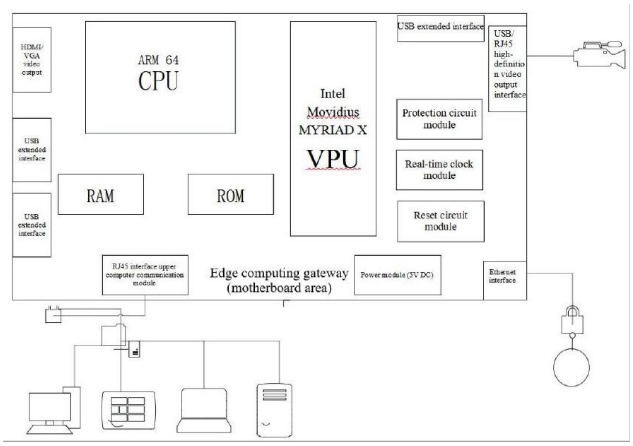
21: 2022/00379. 22: 2022-01-07. 43: 2022-02-21
51: A01C
71: HUANG, Zhimin
72: HUANG, Zhimin, ZHANG, Na, LIU, Bing, SHAO, Qingliang, HUANG, Ziteng, FU, Xiao, CUI, Liya, LI, Wen, ZHAO, Lu, HAN, Ningjing
54: METHOD FOR ACCELERATING GERMINATION OF LARGE-SCALE SEEDLING-CULTURING SEEDS OF PAEONIA SUFFRUTICOSA ANDR
00: -
The present disclosure relates to a method for accelerating the germination of large-scale seedling-culturing seeds of Paeonia suffruticosa Andr. The method comprises the steps of: seed harvesting: harvesting follicle fruits with brown yellow or brown shells and milk yellow or reddish brown seeds; seed treatment: after harvesting, spreading the follicle fruits in a shady, cool and ventilated room for after-ripening without being exposed to the sun, turning over the follicle fruits once every 1-2 days, wherein fruit pods gradually become brown or black after 10-15 days, most fruit pods automatically crack, seeds are popped out; germination accelerating before sowing: soaking the seeds with clear water for germination accelerating before sowing so as to soften seed coats and enable the seed coats to absorb water to expand and prone to sprouting; and sowing: the sowing amount per mu is 80-100 kg.

21: 2022/00380. 22: 2022-01-07. 43: 2022-02-21
51: H04W
71: SAPKALE, Pallavi Vasant, KOLEKAR, Uttam, JADHAV, Vaishali Satish, MUKHEDKAR, Moresh, BANSAL, Payal, DONGRE, Manoj, KADAM, Sujata
72: SAPKALE, Pallavi Vasant, KOLEKAR, Uttam, JADHAV, Vaishali Satish, MUKHEDKAR, Moresh, BANSAL, Payal, DONGRE, Manoj Kadam, Sujata
54: A HANDOVER DECISION SYSTEM AND METHOD FOR NEXT GENERATION
00: -
The present invention generally relates to a handover decision system for next generation comprises a user device allows a user to request one of a communication service or a handover request; and a control unit comprises a handover decision technique to promote handoff with selection of one of a plurality of networks using a mobile terminal. The mobile terminal is checked whether it enters in one of the LTE or WiMAX, wherein the control unit compares a received signal strength (RSS) for both (LTE and WiMAX) and computes the RSS, bandwidth, SNR and Wi-Fi performance, if the mobile terminal uses LTE and WiMAX networks at the same time.

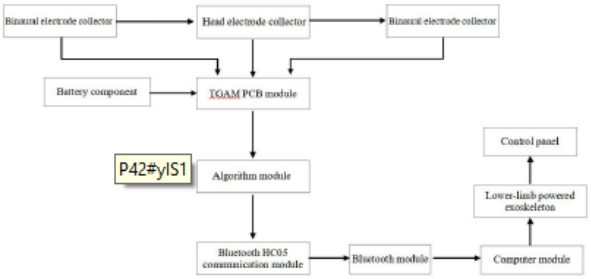


21: 2022/00381. 22: 2022-01-07. 43: 2022-02-21
51: G08B
71: QILU UNIVERSITY OF TECHNOLOGY, JINAN SHIMENG SCIENCE AND TECHNOLOGY DEVELOPMENT CO., LTD.
72: LENG, Jiancai, WANG, Yuandong, YANG, Qingbo, LI, Han, ZHU, Jianqun, YU, Xin, CHEN, Xinyi, DING, Xu
33: CN 31: 202110065705.1 32: 2021-01-19
54: EMBEDDED GATEWAY FOR FLAME DETECTION USING YOLOV5 AND OPENVINO AND DEPLOYMENT METHOD THEREOF
00: -
The present invention relates to the field of edge computing technologies, and in particular, to an embedded gateway for flame detection using YOLOv5 and OpenVINO. The embedded gateway includes a central processing unit (CPU), a visual processing unit (VPU), an upper computer communication module, an Ethernet interface, a High-Definition Multi-media Interface(HDMI)/Video Graphics Array (VGA) video output, a USB extended interface, a random access memory (RAM), a read-only memory (ROM), a protection circuit module, a real-time clock module, and a reset circuit module. The CPU uses a lightweight 64-bit ARM architecture platform. The VPU is an Intel Movidius MYRIAD X low-power and high-performance VPU vision processing unit. The VPU is used as a co-processor for deep learning and artificial intelligence vision application acceleration.Here machine vision is used

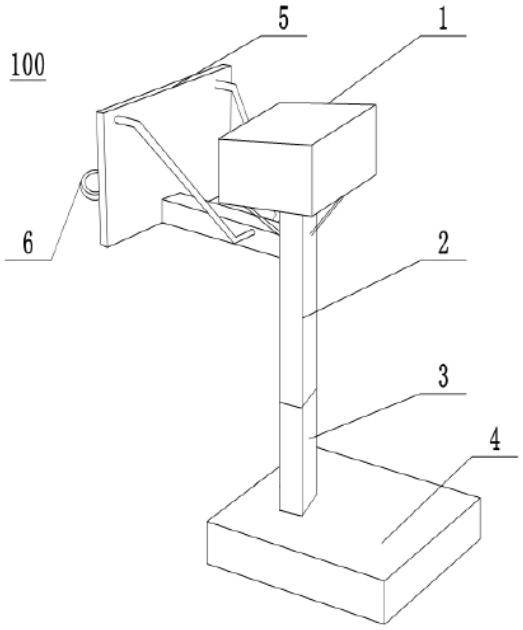
to accelerate the powerful acceleration of the inference of the robotic arm motion video stream.The present inventionoftheinvention uses a deep learning method to construct a flame recognition model and algorithm suitable for gateway deployment by usingtheYOLOv5 network and model optimization deployment tool OpenVINO,which can achieve a good effect and realize flame recognition in a complex environment.



21: 2022/00382. 22: 2022-01-07. 43: 2022-02-21
51: A61B
71: QILU UNIVERSITY OF TECHNOLOGY, QILU HOSPITAL, CHEELOO COLEGE OF MEDCINE, SHANDONG UNVERSITY, JINAN SHIMENG SCIENCE AND TECHNOLOGY DEVELOPMENT CO., LTD.
72: XU, Fangzhou, DONG, Gege, LI, Jincheng, YAN, Yihao, WANG, Chongfeng, ZHAO, Jinzhao, LIU, Ming, YUE, Shouwei, ZHANG, Yang, DING, Xu
33: CN 31: 202120138447.0 32: 2021-01-19
54: STROKE REHABILITATION TRAINING SYSTEM BASED ON MIND-CONTROLLED POWERED EXOSKELETON
00: -
The present utility model discloses a stroke rehabilitation training system based on a mind-controlled powered exoskeleton, including a ThinkGear Asic Module (TGAM) printed circuit board (PCB) module. An output terminal of the TGAM PCB module is electrically connected to an algorithm module. An output terminal of the algorithm module is electrically connected to a Bluetooth HC05 communication module. The external configuration of the TGAM PCB module includes a computer module and a lower-limb powered exoskeleton. An output terminal of the computer module and the lower-limb powered exoskeleton are connected by an Ethernet API. In the present utility model, the trouble that a conductive paste needs to be used for conventional electroencephalography (EEG) acquisition device is avoided. The cost is reduced to a certain extent. A stroke patient is allowed to control the lower-limb powered exoskeleton to assist in walking so that the patient uses the mind to control the lower-limb powered exoskeleton. The patient is assisted in performing rehabilitation training of an affected limb so that the stroke patient is provided with one more option for assisted rehabilitation. In addition, the cost is relatively low, the extensibility is high, the system is stable, and the use method is more convenient and faster.



21: 2022/00383. 22: 2022-01-07. 43: 2022-02-21
51: A63B
71: LINYI UNIVERSITY
72: ZHANG, Jie
54: BASKETBALL STAND
00: -
The present disclosure discloses a basketball stand, and relates to the technical field of sports equipment. The basketball stand comprises a main frame, a basketball hoop, a traveling element, a counterweight element, and a lifting element; the lifting element and the basketball hoop are all mounted on the main frame, and the lifting element can drive the basketball hoop up and down; the counterweight element is fixed to the lower end of the main frame, the traveling element is mounted at the lower end of the main frame, and the traveling element can drive the main frame to move; the traveling element is further provided with a locking element, and the locking element can prevent the traveling element from rotating. The basketball stand disclosed by the present disclosure can adapt to people of different heights and is excellent in overall flexibility.



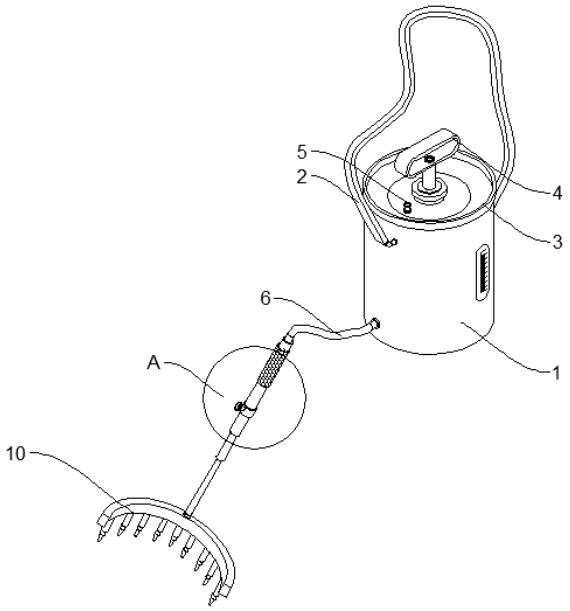
21: 2022/00384. 22: 2022-01-07. 43: 2022-02-21
51: A01G; A01N; A01P
71: FENG, Xiaocun
72: FENG, Xiaocun
33: CN 31: 202111332381.X 32: 2021-11-11
33: CN 31: 202111356903.X 32: 2021-11-16
54: ANTI-CRACKING AGENT FOR FRUITS AND APPLICATION THEREOF
00: -
The present disclosure discloses an anti-cracking agent for fruits and an application thereof, belonging to the technical field of crop growth regulators. The anti-cracking agent for fruits provided in the present disclosure comprises the following components in parts by weight: 10 parts of a compound amino acid, 0.12-0.18 part of gibberellin A4+7 or gibberellin A3, 0.7-1.3 parts of vitamin D3, and 0.015-0.15 part of 6-benzylamino adenine, wherein the compound amino acid is a mixture of tyrosine and lysine. The anti-cracking agent was sprayed to a whole plant before the fruit swelling period. The agent can effectively prevent fruit cracking diseases of melons and fruits. The combination of vitamin D3 and compound amino acids in the agent formula can effectively improve the skin toughness of melons and fruits, showing a good anti-cracking effect.

21: 2022/00385. 22: 2022-01-07. 43: 2022-02-21
51: C12Q
71: YELLOW SEA FISHERIES RESEARCH INSTITUTE, CHINESE ACADEMY OF FISHERY SCIENCES
72: ZHAO, Ling, LIU, Qi, CAO, Rong, SUN, Huihui, WEN, Jinli
54: A METHOD FOR RAPID DEHYDRATION OF FRESH JELLYFISH
00: -
The present invention relates to a method for rapid dehydration of fresh jellyfish, which belongs to the technical field of aquatic product storage and processing. The said method is to separate the heads and umbrellas of the caught fresh jellyfish, clean and shred them; put the shredded jellyfish into a marinating tank, start the mixer, add the salt-alum mixture, mix them, take out and drain the shredded jellyfish, dehydrate them through microwave heating at a dehydration rate of 82%-88%, and cool and drain them; soak the shredded jellyfish in brine for preservation. The method of the present invention greatly shortens the dehydration time of fresh jellyfish, and solves the existing problems of time-consuming dehydration, high aluminum residue in finished products caused by heavy usage of alum, and environmental pollution from aluminum-containing wastewater.

21: 2022/00418. 22: 2022-01-10. 43: 2022-02-21
51: A61K
71: INNER MONGOLIA AGRICULTURAL UNIVERSITY, ANIMAL DISEASE PREVENTION AND CONTROL CENTER OF INNER MONGOLIA AUTONOMOUS REGION
72: XU, XIAOJING, ZHOU, WEIGUANG, WANG, JIANLONG, PENG, XUESONG, XIE, MENGYUAN
54: NANO KIT AND PRIMERS FOR SIMULTANEOUSLY DETECTING BVDV-1, BVDV-2 AND BVDV-3
00: -
The present invention relates to the field of virus detection, and particularly relates to a nano kit and primers for simultaneously detecting BVDV-1, BVDV-2 and BVDV-3. The nano kit contains primers for detecting BVDV-1, BVDV-2 and BVDV-3. The primers are respectively shown as SEQ ID NO:1-SEQ ID NO:6; and the 3' end of each segment of the primer is modified with a locked nucleic acid, thereby preventing appearance of a nonspecific band,

increasing amplification efficiency and ensuring high amplification specificity. The present invention has the technical advantages of simplicity and convenience in operation, high specificity, high sensitivity, excellent repeatability and low equipment requirements.

21: 2022/00419. 22: 2022-01-10. 43: 2022-02-21
51: A01N
71: INSTITUTE OF INDUSTRIAL CROPS, HEILONGJIANG ACADEMY OF AGRICULTURAL SCIENCES
72: YAO, YUBO
54: DRUG APPLICATION DEVICE FOR PREVENTION AND CONTROL OF SOYBEAN ROOT ROT
00: -
The present invention provides a drug application device for prevention and control of soybean root rot, which relates to the technical field of drug application devices. The drug application device comprises a drug barrel; a hose is installed at one side of the bottom end of the drug barrel through a fixing piece, the other end of the hose is connected with a drug application rod, the other end of the drug application rod is provided with a semicircular drug application rack, and the bottom end of the semicircular drug application rack is provided with a plurality of groups of drug application guide pipe mechanisms. The drug application guide pipe mechanism comprises a pipe body; a pair of supporting rods, a transmission shaft rod, a plurality of fixing seats, spiral blade rods, and miniature brushes.



21: 2022/00426. 22: 2022-01-10. 43: 2022-02-21
51: D06P
71: Wuhan Textile University, Anqing Hanyi Information Technology Service Co., Ltd.
72: CAO, Genyang, XIA, Yahui, SHAO, Xiru, LV, Xiaojing, SHENG, Dan, WANG, Yunli, PAN, Heng, XIA, Honghui, XU, Weilin, GUO, Weiqi
54: METHOD FOR LOW-TEMPERATURE DYEING OF HIGH-PERFORMANCE FIBER
00: -
The present disclosure relates to a method for low-temperature dyeing of a high-performance fiber, belonging to the technical field of textile printing and dyeing. The method refers to use of a silicic acid gel generated by sodium silicate through hydrolysis in the dyeing process of high-performance fibers. N, N-dimethylacetamide is enriched in the silicic acid gel, and meanwhile, the silicic acid gel is adsorbed on the surface of a fiber. Under a condition of 50-70oC, the N,N-dimethylacetamide opens part of hydrogen bonds between macromolecules on the surface of a high-performance fiber, then the surface roughness and the porosity of the fiber are improved. Subsequently, under the action of sodium hydroxide, the silicic acid gel adsorbed on the surface of the high-performance fiber dissolves to release the N,N-dimethylacetamide.

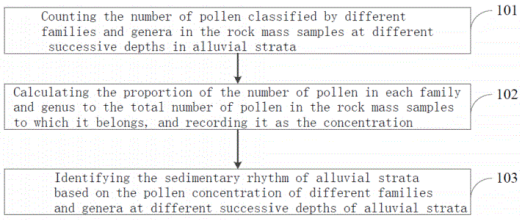
21: 2022/00427. 22: 2022-01-10. 43: 2022-02-21
51: G06K
71: Henan University

72: LIU, Dexin, GU, Lei, MA, Jianhua, WU, Pengfei, LI, Chengxi, WEI, Yafei

54: METHOD AND SYSTEM FOR IDENTIFYING STRATIGRAPHIC RHYTHM

00: -

The present invention discloses method and system for identifying stratigraphic rhythm, the method comprising counting the number of pollen of different families and genera in rock samples at different depths in alluvial strata; calculating the proportion of the number of pollen in each family and genus to the total number of pollen in the rock mass sample to which it belongs, and recording it as the concentration; identifying the sedimentary rhythm of the alluvial strata based on the pollen concentration of different families and genera at different successive depths of alluvial strata. The method and system for identifying stratigraphic rhythm provided by the present invention use the concentration and type of pollen as an alternative indicator for the identification of sedimentary rhythm of alluvial strata, and can more accurately identify the sedimentary rhythm, and are more suitable for the identification of the rhythm of strata disturbed by human beings.



21: 2022/00428. 22: 2022-01-10. 43: 2022-02-21

51: A61K

71: Hospital of Chengdu University of Traditional Chinese Medicine

72: Li Xinrong, Liu Yang, Jing Ran, Jiang Mingjun, Feng Shenglan, Zhang Hui, Zhang Jianfeng, Li Jiulin

54: TRADITIONAL CHINESE MEDICINE AROMATHERAPY PRODUCT FOR RELIEVING THE SYMPTOMS OF ALLERGIC RHINITIS

00: -

The invention discloses a traditional Chinese medicine aromatherapy product for relieving the symptoms of allergic rhinitis, and belongs to the technical field of traditional Chinese medicine. It comprises the following raw materials in parts by mass: 8-11 parts of Flos magnoliae, 3-5 parts of Acacia catechu, 8-10 parts of Radix saposhnikoviae, 10-20 parts of Radix astragali, 6-10 parts of Radix angelicae dahuricae, 5-7 parts of Fructus xanthii, 7-9 parts of Mentha haplocalyx, 6-11 parts of Fructus kochiae and 5-15 parts of Folium artemisiae argyi. The traditional Chinese medicine aromatherapy product can relieve the symptoms of allergic rhinitis and can be used in the daily treatment of allergic rhinitis, and can effectively clear the nose, diminish inflammation, reduce swelling, ventilate lung and eliminate phlegm, so that pathogenic wind can be quickly eliminated from the hair orifices. It has the characteristics of safety, health, simple treatment method and good curative effect.

21: 2022/00429. 22: 2022-01-10. 43: 2022-02-21

51: A01D

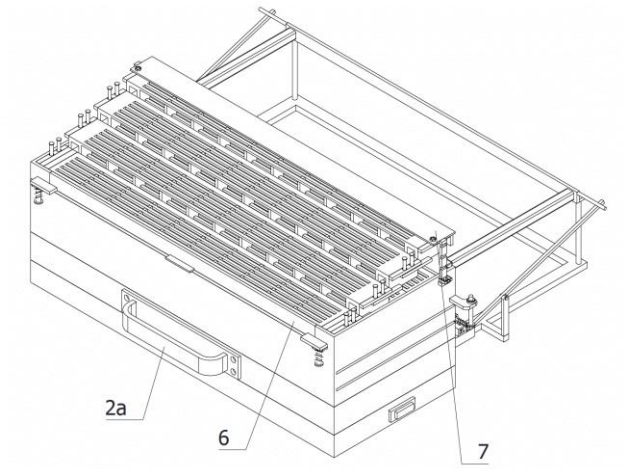
71: Nanjing Institute of Environmental Sciences, Ministry of Ecology and Environment

72: Hu Yaping, Ge Xiaomin, Wang Le, Wu Yanqing

54: PORTABLE COLLECTING DEVICE FOR FIELD COLLECTION OF FRUITING BODY OF MACRO FUNGI

00: -

The invention relate to that field of fungus fruiting collection, and in particular to a portable collection device for field collection of fruiting body of macro fungi, which comprises a portable box, a layer changing mechanism, a bacteria adding gate, two connectors, a pushing and lifting mechanism, a plurality of layer collectors and a fixed-height lifting mechanism. The device collects the fungi through several collectors, and then drains the moisture on the fungi through a suction fan, thus solving the problems of incomplete morphology, easy decay and hydration of the fungi.



21: 2022/00430. 22: 2022-01-10. 43: 2022-02-23
51: C09K
71: Zhengzhou University of Aeronautics
72: Tian Ximin, Xu Junwei, Xu Kun, Ding Pei, Du Yinxiao
33: CN 31: 202111354808.6 32: 2021-11-16
54: DUAL-MODE SIMULTANEOUS FOCUSING META-LENS BASED ON PHASE CHANGE MATERIAL THAT CAN BE DYNAMICALLY TUNED WITH ARBITRARY POLARIZATION
00: -
This invention provides dual-mode simultaneous focusing meta-lens based on phase change material that can be dynamically tuned with arbitrary polarization that is characterized in that the meta-lens includes a CaF2 substrate layer and a meta-surface layer that is made of a phase change material Ge2Sb2Se4Te1 for realizing transmission phase modulation. The meta-surface layer is composed of multiple rectangles with the same height and an azimuth angle of 0° or 90°. The nanopillars are arranged in a rectangular nanopillar array along the x-y plane with a period p on the upper surface of the substrate layer, which can achieve high-efficiency convergence of incident light in any polarization state by adjusting the phase and intensity of the transmitted wave. Thanks to the strong robustness of the phase dispersion of the meta-surface unit structure, the meta-structure lens of the invention can achieve effective focusing in the mid-infrared 4000~4500 nm bandwidth, and the focusing efficiency can reach 70%, moreover, by adjusting and controlling the phase state of the phase change material Ge2Sb2Se4Te1, the focusing effect can realize the dynamic switching between "ON" and "OFF", reasonably setting the excitation wavelength. The invention can also realize the simultaneous and efficient focusing of "reflection" and "transmission" dual modes for stronger practicability.

21: 2022/00431. 22: 2022-01-10. 43: 2022-02-21
51: C04B
71: Jiangsu Vocational Institute of Architectural Technology
72: LIN, Lijuan, TIAN, Guohua, LIU, Wei, WANG, Guoan, MIAO, Zhengkun, FANG, Jianbang
54: METHOD FOR PREPARING HEAT STORAGE CONCRETE BY USING SMELTING STEEL SLAG
00: -
The present invention discloses a method for preparing heat storage concrete by using smelting steel slag. The heat storage concrete is prepared by mixing the following raw materials in parts by weight: 34 to 36 parts of basalt, 32 to 34 parts of smelting steel slag, 6 to 10 parts of silicate cement, 15 to 18 parts of slag micro powder, 3 to 5 parts of graphite powder, 3 to 4 parts of silicon micro powder and 0.9 to 1.2 parts of a water reducing agent. The method has the advantage that local resources can be excellently utilized, so that industrial wastes such as smelting steel slag and smelting mineral slag are converted into valuable resources.

21: 2022/00432. 22: 2022-01-10. 43: 2022-02-21
51: C01B; B82Y
71: Shanghai University
72: ZHEN, Qiang, BU, Naijing, LI, Rong, ZHENG, Feng, XIAO, Nan
54: METHOD FOR PREPARING NANOCRYSTALLINE VANADIUM NITRIDE POWDER
00: -
The present disclosure relates to a method for preparing nano vanadium nitride, belonging to the technical field of vanadium alloys and nano materials. According to the method, ammonium metavanadate powder is used as a raw material, a crucible containing the raw material is placed into a high-temperature furnace with controlled atmosphere, and a synthesis reaction is performed under a high temperature condition in the flowing ammonia atmosphere, wherein the synthesis temperature is 900-1,100 Celsius degree, and the temperature is kept for 2-10 hours. After the reaction

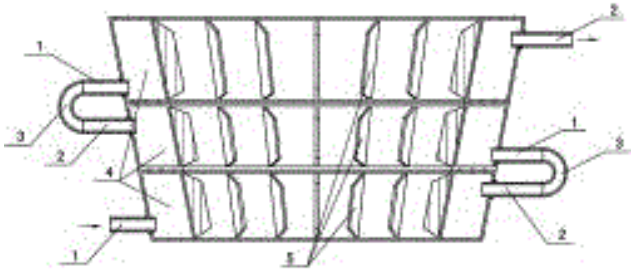
ends, the product is cooled to a room temperature in the flowing ammonia atmosphere, then taken out, and sufficiently grounded and dispersed. Finally, a single-phase vanadium nitride powder with a grain size of 100nm or less is obtained.

21: 2022/00433. 22: 2022-01-10. 43: 2022-02-21
51: F25D
71: Shandong University of Technology
72: ZHENG BIN, SHEN YINGKAI, ZHANG ZHONGLIANG, SUN PENG, WANG YOUTANG, LV JINSHENG, SHI JUNRUI, QIU CHENXI, HU JINGBIN

54: TANK CALCINER HIGH TEMPERATURE POST-CALCINER MULTI-STAGE TANDEM FINNED COOLING DEVICE

00: -

The invention relates to a tank calciner high temperature post-calciner multi-stage tandem finned cooling device, including an inlet pipe, an outlet pipe and an annular cooling water jacket, wherein: the cooling water jacket is a plurality, multiple cooling water jackets are superimposed and fixedly connected, each cooling water jacket is uniformly provided with a plurality of fins on the inner outer wall, the fins on multiple cooling water jackets are correspondingly arranged in columns, and each column of fins is located on the same vertical plane; the two ends of each cooling water jacket are equipped with inlet and outlet pipes, except for the outlet pipe located at the uppermost cooling water jacket and the inlet pipe located at the lowermost cooling water jacket, and the outlet and inlet pipes of adjacent cooling water jackets located at the same end are connected by connecting pipes. The invention has the advantages of large heat exchange area, fast cooling speed of high temperature calcined coke, low discharge temperature and high working reliability.

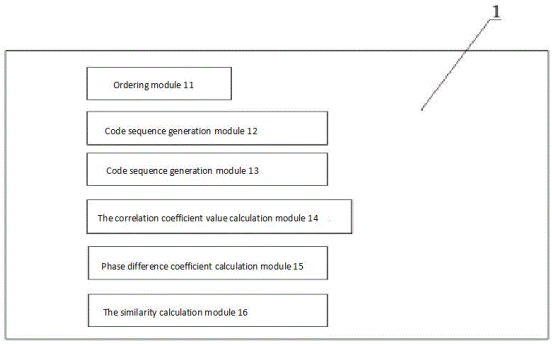


21: 2022/00434. 22: 2022-01-10. 43: 2022-02-21
51: G06F
71: City College of Dongguan University of Technology, Ruan Chunyan, Dongguan Polytechnic, Luo Jianfeng
72: Ruan Chunyan, Luo Jianfeng

54: INTELLIGENT CALCULATION METHOD, SYSTEM, EQUIPMENT AND MEDIUM FOR APPEARANCE SIMILARITY OF TWO ENGLISH WORDS

00: -

The invention relates to an intelligent calculation method, system, equipment and medium for appearance similarity of two English words, which comprises the following steps: (1) reordering 26 English letters and giving the codes and representative symbols of each letter; (2) according to the coding, get the coding sequence of two English words; (3) according to the permutation formula, get the permutation sequence of two English words; (4) according to the code arrangement sequence and the coding sequence, calculate the correlation coefficient value p of two English words; (5) Calculate the difference coefficient x between two English words; (6) Calculate the appearance similarity of two English words s=p+x, and calculate the numerical value based on the appearance similarity to judge the similarity of two English words. The method has the advantages that an objective similarity value is obtained based on the appearance similarity calculation of two English words with the same number of letters, and a neural network training method is not needed; At the same time, there is no need to store similar words, and the steps are short and limited, so it is convenient and effective.



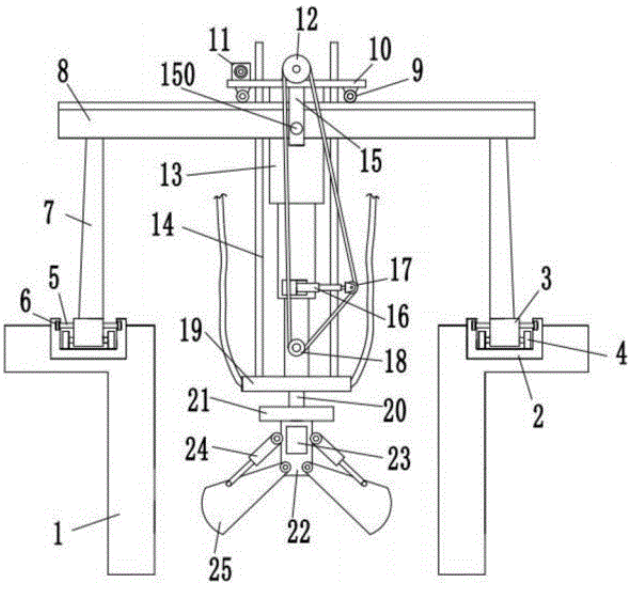
21: 2022/00435. 22: 2022-01-10. 43: 2022-02-21
51: G01V
71: Anhui University of Science And Technology

72: Wang Xiaogang, Zhang Pingsong

54: NUMERICAL CONTROL AUTOMATIC CONSTRUCTION DEVICE FOR LARGE-SCALE GEOPHYSICAL EXPLORATION TEST

00: -

The invention discloses a numerical control automatic construction device for large-scale geophysical exploration test in the technical field of numerical control automatic construction devices, which comprises two groups of model test side walls which are relatively parallel and vertically arranged, wherein rails are embedded in the tops of the two groups of model test side walls, the inner cavity of the rails is provided with moving bases, the left and right sides of the moving bases are provided with moving wheels through double-head motors, and the upper parts of the left and right sides of the moving bases are provided with straight rods; a first rotating shaft is rotated by a first chain transmission mechanism, a chain between a first gear, a third gear and thea second gear is tightened by an electric push rod, and the third gear rotates to make a bevel gear pair drive the rotating rod to rotate, so as to rotate grab buckets; at the same time, the hoist is used to move along with the moving plate and the L-shaped clamping block to carry the embedded abnormal body. The device can realize the excavation in the X, Y, Z directions and circle rotation, and is convenient to operate and practical.



21: 2022/00436. 22: 2022-01-10. 43: 2022-02-23

51: F16H

71: Zheng Zhou Research Institute of Mechanical Engineering CO., LTD.

72: Shidang, Yan, Zhongming, Liu, Weiwei, Miao, Jiqiang, Li, Jing, Wu, Hongyan, Zhao, Lubing, Shi, Youhua, Li

33: CN 31: 202111532680.8 32: 2021-12-15

54: DYNAMIC SEALING DEVICE FOR THE SHAFT END OF GEARBOX

00: -

The invention discloses a dynamic sealing device for the shaft end of gearbox, which comprises a gear box base and a shaft installed on the gear box base. A labyrinth sealing mechanism is arranged between the gear box base and the shaft. The labyrinth sealing mechanism comprises an oil filling hole. The labyrinth sealing mechanism is provided with a first labyrinth part, a second labyrinth part connected end to end on the inner side of the gear box base The third labyrinth part and the fourth labyrinth part. The labyrinth sealing mechanism is provided with a fifth labyrinth part, a sixth labyrinth part, a seventh labyrinth part and an eighth labyrinth part connected end to end on the outer side of the gearbox base. The first labyrinth part, the third labyrinth part, the sixth labyrinth part and the eighth labyrinth part are arranged longitudinally, and the second labyrinth part, the fourth labyrinth part, the fifth labyrinth part and the seventh labyrinth part are arranged transversely, The oil filling hole is located between the fourth labyrinth part and the fifth labyrinth part, and the first labyrinth part is connected with the oil circuit of the gearbox. The invention can improve the shortcomings of the prior art and further improve the dynamic sealing effect of the gearbox.

21: 2022/00437. 22: 2022-01-10. 43: 2022-02-21

51: G02B

71: Zhengzhou University of Aeronautics

72: Xu Junwei, Tian Ximin, Du Yinxiao, Ding Pei, Xu Kun

33: CN 31: 202110028835.8 32: 2021-01-11

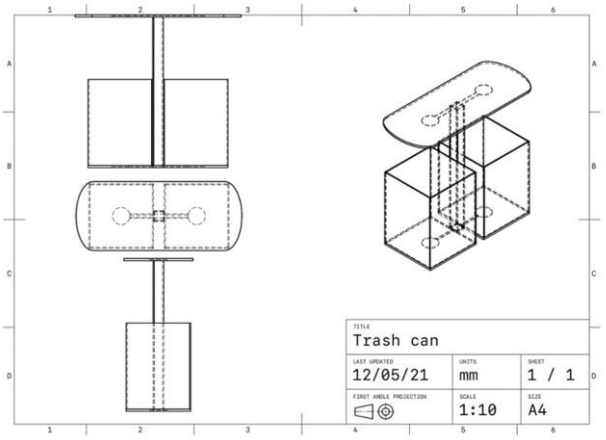
54: RECONFIGURABLE META-SURFACE INVISIBILITY CLOAK BASED ON PHASE CHANGE MATERIAL GE2SB2TE5

00: -

This invention provides reconfigurable meta-surface invisibility cloak based on phase change material Ge2Sb2Te5. The invisibility cloak consists of W rows× V columns of reconfigurable meta-surface stealth units which are overlaid and fixed on the

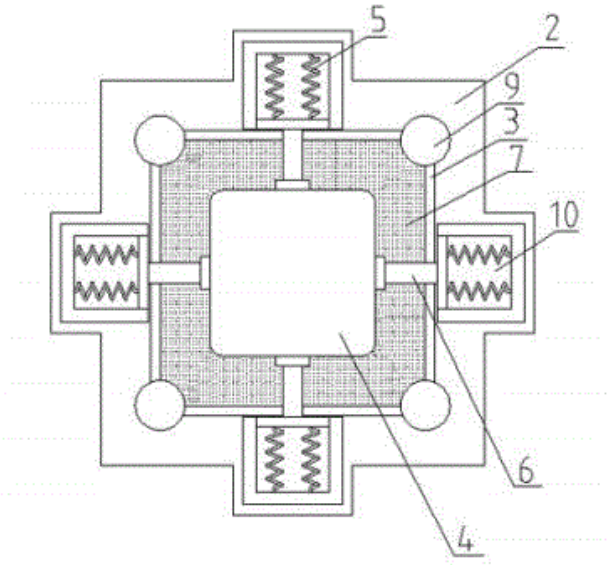
surface of the concealed object, and the adjacent reconfigurable meta-surface stealth units are seamlessly fixed and spliced. The reconfigurable meta-surface stealth unit comprises a lower square metal substrate layer with side length P, a middle dielectric layer and an upper gold nano antenna, and a plurality of groups of gold nano antennas that forms a W row×V column gold nano antenna resonant array. According to the invention, the surface plasmon resonance of gold nano resonant antennas with different sizes in the meta-surface structure is used to modulate the spatial distribution of reflected wave phase, so that the reconstruction of reflected wave front can be realized, and the effect of camouflage and invisibility can be achieved, the unique phase change characteristics of the Ge2Sb2Te5 film are used to tune the dielectric environment around the cloak, which can achieve continuous tuning and "ON" and "OFF" of the stealth performance. The meta-surface invisibility cloak of the present invention realizes the perfect stealth effect of wider working bandwidth, larger incident angle range, and dynamic tunable performance.

21: 2022/00438. 22: 2022-01-10. 43: 2022-02-21
51: B65F
71: Shanghai Maritime University
72: Yujie Shi, Guangnian Xiao, Bangping Gu, Yan Zhang, Mengying Yan
33: CN 31: CN202111611539.7 32: 2021-12-27
54: AN INTELLIGENT TRASH CAN
00: -
This design makes an improvement to the flaw and the insufficiency of public trash cans on the market. The goal is to design a public trash can with simple installation and easily available materials. The main functions of this design are as follows: Firstly, when the infrared sensors sense that the trash can is full, the garbage bags will be sealed with the heat-sealing technology. After that, through the remote communication functions of this system, the cleaners will be timely reminded to clean up the full trash can. And the self-locking device in this system ensures that cleaners could take out the sealed garbage bags without moving the trash can, for this trash can could automatically release garbage bags. What's more, the multi-attention mechanism with the temporal convolutional neural network structure is introduced to capture the date from different regions and analyze the temporal dependency, thus all the temporal association information for the data could be obtained. Based on a diffusion convolutional network model, spatial association model for a network of public trash cans forms. And by capturing the association information of nodes in the network, the parameters of the adjacency matrix are adaptively optimized to tap into the deep spatial association implied in the region, so the system could predict when the trash cans will be full and notify environmental health workers in advance. This invention has the advantages of high working efficiency, less resource consumption, few parameters and high prediction precision.



21: 2022/00439. 22: 2022-01-10. 43: 2022-02-21
51: E01D; E04B
71: Qingdao University of Technology
72: SUI, Jieying
54: NOVEL THREE-DIMENSIONAL SELF-RESETTING FRICTION SLIDING SEISMIC ISOLATOR
00: -
The present disclosure relates to the technical field of seismic isolation equipment for engineering structures, and in particular relates to a novel three-dimensional self-resetting friction sliding seismic isolator. In the seismic isolator, a steel sliding block 4 capable of sliding freely is arranged in the outer rectangular steel cylinder 3, the steel sliding block is fixedly connected to an upper steel plate 1, the outer rectangular steel cylinder 3 is fixedly connected to a lower steel plate 2, solid round steel columns 9 are arranged at four corners of the outer rectangular steel cylinder 3, and four self-resetting devices 10 are arranged on the periphery of the outer

rectangular steel cylinder 3; large-size shape memory alloy spiral springs 5 are arranged in each self-resetting device 10, and the large-size shape memory alloy spiral springs 5 are in contact with the inner steel sliding block 4 through a push rod 6.

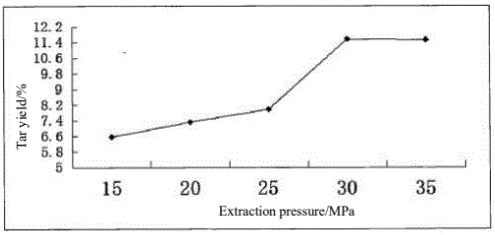


21: 2022/00440. 22: 2022-01-10. 43: 2022-02-21
51: A61K; C11B; A61P
71: Yulin University
72: LI, Xiao, ZHOU, Xiong, ZHANG, Zhaohong, LI, Yuyu, DOU, Qingmei, LI, Chunshan, REN, Guoyu, LIU, Xiaoju, MA, Xiangrong, LI, Jiao, MA, Xiao, WANG, Caiqin, ZHANG, Wan

54: METHOD FOR PREPARING BLACK SOYABEAN TAR BASED ON SUPERCRITICAL CARBON DIOXIDE EXTRACTION

00: -

A method for preparing black soyabean tar based on supercritical carbon dioxide (CO2) extraction includes the steps: black soyabeans are cleaned, dried and pulverized, and supercritical CO2 extraction is carried out under the conditions that the extraction pressure is 30 MPa, the extraction temperature is 45 degree Celsius, the extraction time is 180 min and the flow of CO2 is 20 L/h to obtain black soyabean tar. Black soyabean tar is prepared through the supercritical CO2 extraction technology, which reduces the original empyreumatic odor of black soyabean tar, so that black soyabean tar may be widely used by patients. Meanwhile, the original properties of burnt black and difficult applying are improved, the use is convenient, and a green and pure natural medicine is provided for patients suffering from skin diseases. Moreover, the method may realize large-scale and industrial production, is green and environmentally friendly, and is simple in medicine post-treatment.

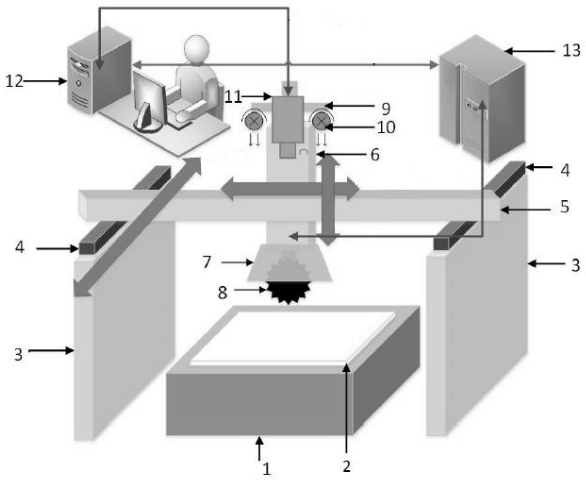


21: 2022/00443. 22: 2022-01-10. 43: 2022-02-21
51: B28D
71: LIAOCHENG UNIVERSITY
72: ZHANG, Laigang, XU, Lipeng, SUN, Qun, YANG, Kaidong

54: INTELLIGENT STONE CUTTING SYSTEM BASED ON MACHINE VISION

00: -

An intelligent stone cutting system based on machine vision. The intelligent stone cutting system comprises working bottom platform (1), industrial control computer (12) and PLC controller (13), wherein to-be-cut stones (2) are placed on the working bottom platform; a cutting machine edge beam (3) and a transverse beam guide rail (4)are arranged on each of two sides of the working bottom platform; a transverse beam (5) is arranged on two transverse beam guide rails; a longitudinal beam (6) is arranged on the transverse beam; the feeding suction cup manipulator (7) , cutting machine (8),support frame (9),light source (10) and industrial camera (11) are arranged on the longitudinal beam; the cutting machine, industrial camera and PLC controller are connected with the industrial control computer. The intelligent stone cutting system based on machine vision is capable of achieving intelligent, efficient, stable and reliable automatic cutting of stones.

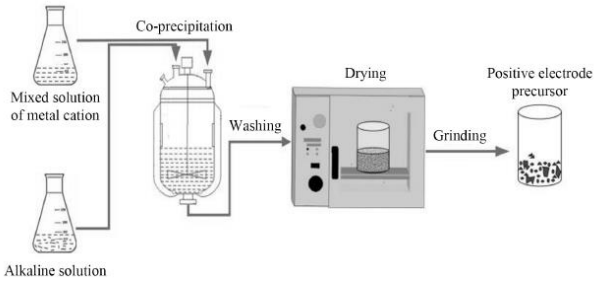


21: 2022/00444. 22: 2022-01-10. 43: 2022-02-21
51: C01G; H01M
71: LIAOCHENG UNIVERSITY
72: XU, Lipeng, TAO, Xiaodong, TIAN, Chongwang, ZHOU, Xiaoyan, WANG, Jin, LIU, Changcun, GUO, Anfu

54: METHOD OF PREPARING LITHIUM-ION BATTERY PRECURSORS AND USE THEREOF

00: -

A method of preparing lithium-ion battery precursors and use thereof. The following steps are included: preparing solutions: nickel salt, cobalt salt, and manganese salt solutions are mixed to form a metal cation solution; a complexing agent solution and an alkaline solution are prepared; mixing and stirring: the metal cation solution is mixed with the complexing agent solution, and then the mixed solution is mixed with the alkaline solution, and stirred with a controlled temperature and pH; the pH is alkaline; the phase is ß phase when the stirring temperature and pH are controlled to be high; the phase is a+ß phase when the stirring temperature and pH are controlled to be higher; the phase is a phase when the stirring temperature and pH are controlled to be low; aging and drying: the product, after the mixing and stirring, is aged and dried for a period of time.

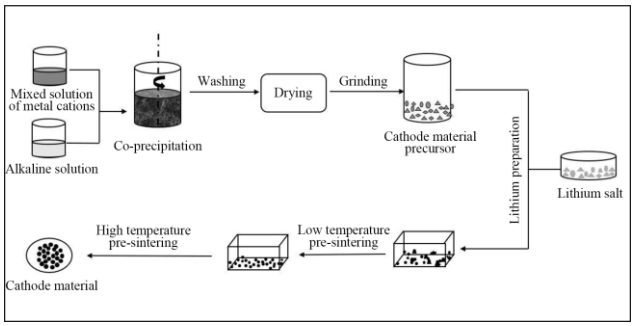


21: 2022/00445. 22: 2022-01-10. 43: 2022-02-21
51: C01G; H01M
71: LIAOCHENG UNIVERSITY
72: XU, Lipeng, TIAN, Chongwang, TAO, Xiaodong, ZHOU, Xiaoyan, WANG, Jin, LIU, Changcun, GUO, Anfu, BAO, Chunjiang

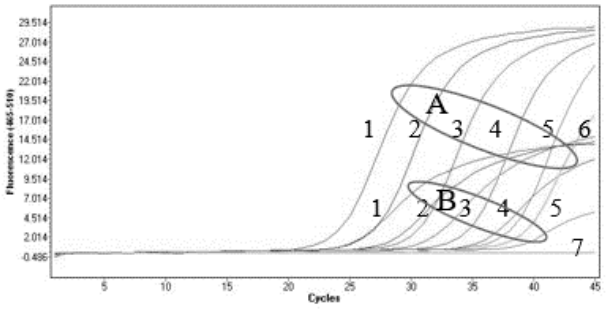
54: METHOD OF MODIFYING POSITIVE ELECTRODE MATERIALS FOR LITHIUM-ION BATTERIES BY CO-PRECIPITATION

00: -

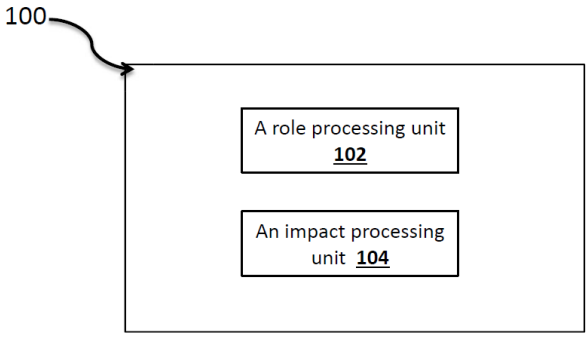
The present disclosure belongs to the technical field of positive electrode materials for lithium batteries, and relates to a co-precipitation method to modify positive electrode materials for lithium-ion batteries, and a preparation method and use. The specific steps are as follows: mixing an alkaline solution with a metal ion solution A, and a complexing agent solution B, and ageing the mixture to obtain a precipitate; washing the obtained precipitate, and drying to obtain a hydroxide precursor of (Ni0.6Mn0.2Co0.1Al0.1)(OH)2; mixing the hydroxide precursor, and sintering the mixture to obtain a positive electrode material Li(Ni0.6Mn0.2Co0.1Al0.1)O2 for lithium-ion batteries. The metal ion solution A is a metal ion solution containing a nickel salt, cobalt salt, manganese salt, and aluminum salt; the complexing agent solution B is citrate and glutamate. The obtained positive electrode material for lithium-ion batteries is improved with respect to the specific capacity and capacity retention rate of discharge cycles.



21: 2022/00446. 22: 2022-01-10. 43: 2022-02-21
51: C12N; C12Q; C12R
71: INSTITUTE OF ANIMAL HEALTH, GUANGDONG ACADEMY OF AGRICULTURAL SCIENCES, ZIJIN CENTER FOR ANIMAL DISEASE PREVENTION AND CONTROL, GUANGZHOU SINO-SCIENCE GENE TESTING SERVICE CO., LTD.
72: LI, Yan, DU, Liyin, CHEN, Shengnan, LI, Chunling, CHU, Pinpin, GOU, Hongchao, ZHANG, Jianfeng, CAI, Rujian, BIAN, Zhibiao
54: LOCKED NUCLEIC ACID PROBE-BASED FLUORESCENCE QUANTITATIVE PCR COMPOSITION FOR PORCINE EPIDEMIC DIARRHEA VIRUS AND DETECTION METHOD
00: -
The present disclosure relates to a primer-probe composition for detecting porcine epidemic diarrhea virus (PEDV) and a detection method, and belongs to the field of molecular biology. According to the primer-probe composition and the detection method provided by the present disclosure, a specific probe containing nucleic acids (LNAs) is designed by using characteristics of the LNAs. The probe has a strong recognition ability and a strong affinity to DNA, so as to be better used for accurate PEDV detection and improve the detection efficiency of the PEDV, providing a new detection method and a detection reagent for PEDV detection. Compared with the existing conventional detection methods, the primer-probe composition and the detection method provided by the present disclosure have advantages of strong specificity and high sensitivity, are particularly suitable for scientific research and clinical use, and possess better commercial application value.



21: 2022/00447. 22: 2022-01-10. 43: 2022-02-21
51: H04L
71: GUPTA, Suresh Chand, KAUR, Amrinder, SAINI, Sunil, GARG, Rachit, KUMAR, Jitendra, DHAMIJA, Deepika, WADHAWAN, Savita
72: GUPTA, Suresh Chand, KAUR, Amrinder, SAINI, Sunil, GARG, Rachit, KUMAR, Jitendra, DHAMIJA, Deepika, WADHAWAN, Savita
54: A SYSTEM FOR INVESTIGATING THE ROLE AND IMPACT OF CLOUD COMPUTING SYSTEM
00: -
The present disclosure relates to a system for investigating the role and impact of cloud computing system. In system comprises: a role processing unit; and an impact processing unit. The aim of the present disclosure is to study the various impact and role of cloud computing system. The present disclosure reveals that cloud computing system plays a major role in scalability, increasing the speed of service, and reducing the cost of operation by a significant number. The present disclosure shows that the use of cloud computing system provides a sustainable development.

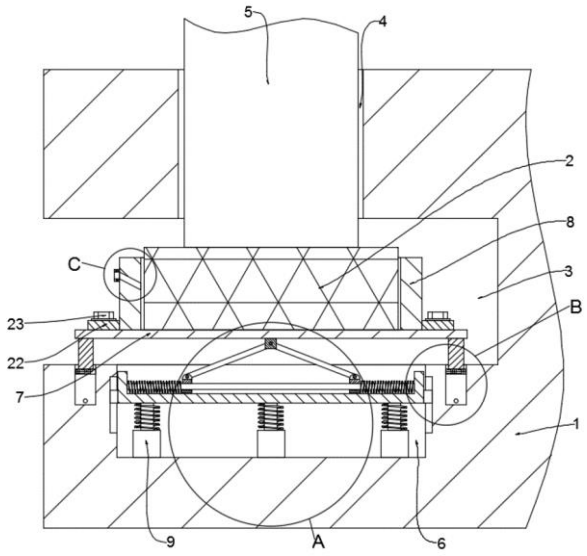


21: 2022/00448. 22: 2022-01-10. 43: 2022-02-22
51: F16H
71: Shandong Daozhisheng Information Technology Co., Ltd.
72: Qianqian MOU
33: CN 31: 2021100738114 32: 2021-01-20

54: THRUST SLIDING BEARING SUPPORTING MECHANISM OF VERTICAL MILL REDUCER

00: -

The present invention discloses a thrust sliding bearing support mechanism of a vertical mill reducer, including a body and a sliding bearing body, a left side wall of the body is provided with a rectangular slot, a top surface of the rectangular slot is provided with a circular straight slot, the circular straight slot is vertically penetrated with a rotation shaft, one end of the rotation shaft in the rectangular slot is fixedly connected to the sliding bearing body. According to the present invention, the hydraulic buffer and the pressure spring drive two rotating rods to cooperate with the U-shaped movable block to provide buffer for the bearing pad and the sliding bearing body, the bearing pad is forced to drive the fixed rod to cooperate with the sealing ring to compress the air in the circular groove, so that the compressed air is slowly discharged through the micro air hole, to further buffer the force on the sliding bearing body, avoid damage to the sliding bearing body and prolong the service life of the sliding bearing body. The annular gasket of the corrosion-resistant rubber product provided fitting the inclined oil injection hole is convenient to introduce lubricant into the sliding bearing body in the bearing seat.



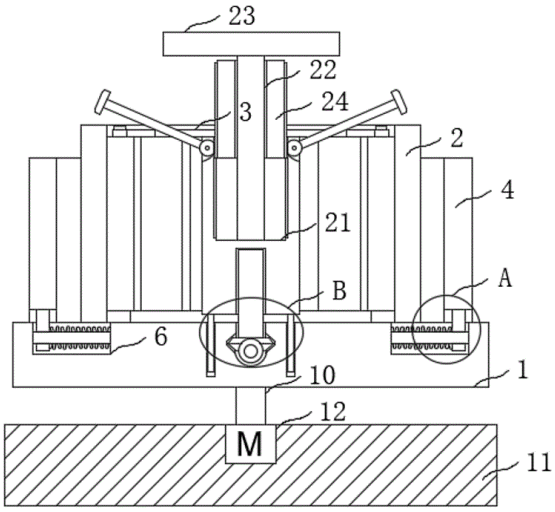
21: 2022/00449. 22: 2022-01-10. 43: 2022-02-22
51: B23P
71: Shandong Daozhisheng Information Technology Co., Ltd.

72: Xin YANG, Qianqian MOU
33: CN 31: 2021100737906 32: 2021-01-20

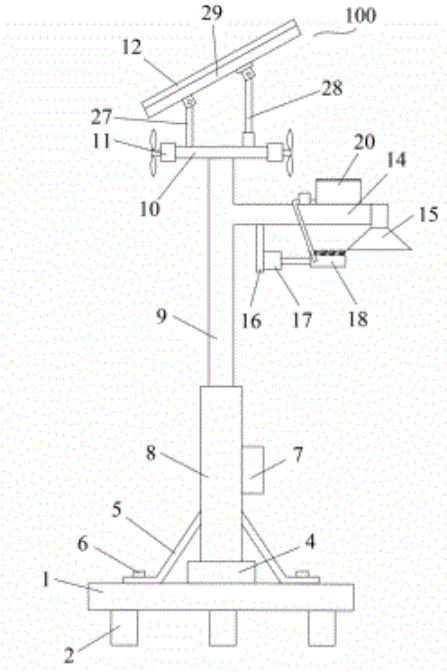
54: DEVICE FOR PREVENTING BEARING NYLON RETAINER FROM BEING DAMAGED DURING PRESS FITTING

00: -

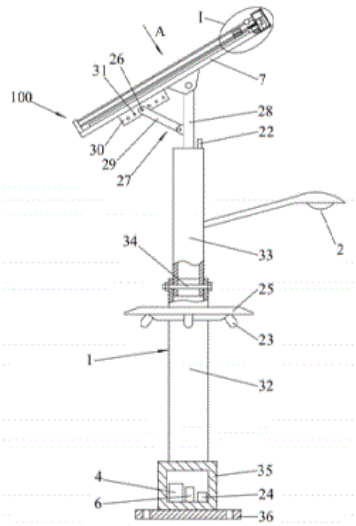
The present invention discloses a device for preventing a bearing nylon retainer from being damaged during press fitting. The device comprises a mounting seat and a bearing body, an annular retainer is placed on the bearing body, two arc-shaped clamping plates are mounted on the mounting seat, and two tensioning mechanisms are mounted between each of the two arc-shaped clamping plates and the mounting seat; and a rotating rod is rotationally and fixedly installed at a lower end of the mounting seat, a base is rotationally connected to the rotating rod, a motor is fixedly installed on the base, an output end of the motor is fixedly connected with the rotating rod, a mounting groove is formed on the mounting seat, and a lead screw is rotationally connected to the mounting groove. The device has the advantages of being capable of effectively fixing bearings of different sizes, and also being capable of positioning and fixing the annular retainer when the annular retainer is mounted to the bearing, thereby solving the problem that the annular retainer is damaged or the press-fitting effect is poor due to movement of the bearing or the annular retainer in the press-fitting process, and ensuring the use effect and the service life of the annular retainer after press fitting is completed.



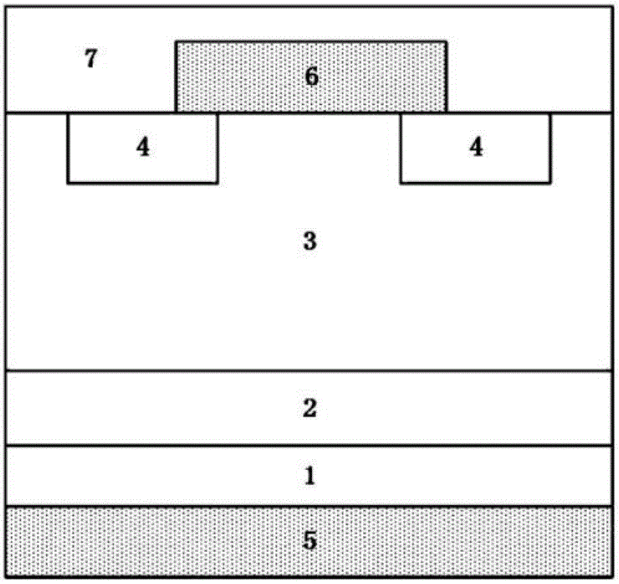
21: 2022/00474. 22: 2022-01-11. 43: 2022-02-18
51: F21S
71: North China University of Science and Technology
72: LIU, Dongmei, LIN, Ye, BO, Huifeng
54: ENVIRONMENT-FRIENDLY AND ENERGY-SAVING STREET LAMP
00: -
The present invention discloses an environment-friendly and energy-saving street lamp, and relates to the technical field of street lamps, which comprises a lamp holder, an adjustable lamp pole, a connecting piece, a locking assembly, a top plate, an angle adjustment assembly, a solar cell panel, a support plate, a head lamp, a cleaning assembly, a water supply assembly, a storage battery, a controller and a plurality of wind power generators, wherein the adjustable lamp pole comprises an upper lamp pole, a lower lamp pole and a driving assembly; and the environment-friendly and energy-saving street lamp provided in the present invention facilitates the maintenance or replacement of the head lamp, facilitates the cleaning of the head lamp, thereby ensuring the illuminating effect of the street lamp.



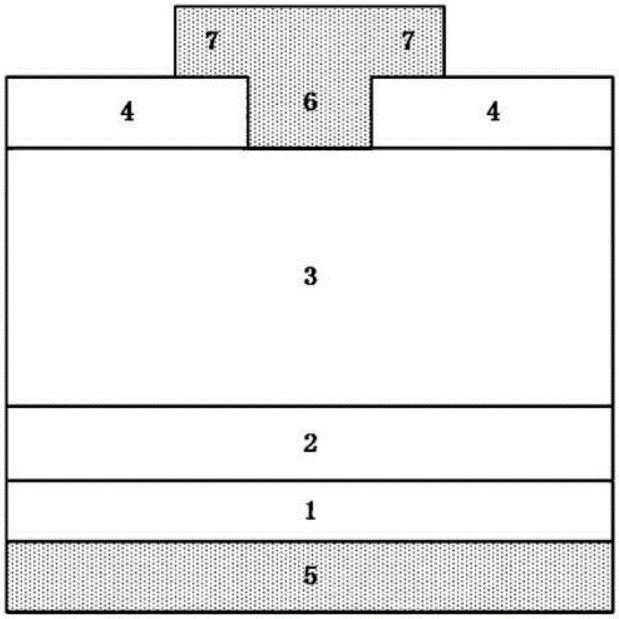
21: 2022/00475. 22: 2022-01-11. 43: 2022-02-18
51: F21S
71: North China University of Science and Technology
72: LIU, Dongmei, LIN, Ye, LIU, Tao
54: INDUCTIVE STREET LAMP
00: -
The present invention discloses an inductive street lamp, wherein a support plate is fixedly arranged on the top of a support pole, a solar cell panel is fixedly arranged on the upper surface of the support plate, a pressure sensing module which is communicatively connected to a controller is arranged on the solar cell panel, and a snow-scraping device is further arranged, a first scraper and a second scraper are both rotatably connected on the lower surface of a sliding seat and are arranged in a V shape, and the first scraper and the second scraper can maintain a state perpendicular to the solar cell panel under the action of a turnover driving device. The present invention can timely clean up the snow on the solar cell panel to avoid affecting the power generation performance of the solar cell panel.



21: 2022/00476. 22: 2022-01-11. 43: 2022-02-18
51: H01L
71: Xidian University
72: Shenglei Zhao, Xiufeng Song, Jincheng Zhang, Shuang Liu, Zhihong Liu, Chunfu Zhang, Yue Hao
54: VERTICAL ALN SCHOTTKY DIODE BASED ON ION IMPLANTATION EDGE TERMINAL AND MANUFACTURING METHOD THEREOF
00: -
The invention discloses a vertical AlN Schottky diode based on an ion implantation edge terminal. The vertical AlN Schottky diode mainly solves the problems that in the prior art, a breakdown voltageis low, and reliability is poor. The vertical AlN Schottky diode comprises a substrate (1), an n+ layer (2) and a drift layer (3) from bottom to top, a cathode (5) is arranged at the lower portion ofthe substrate (1), an anode (6) is arranged at the upper portion of the drift layer (3), a passivation layer (7) is arranged at the upper portions of the drift layer (3) and the anode (6), and an edgeterminal (4) is formed in the drift layer (3) at the lower portion of the anode (6) through ion implantation. As the substrate, the n+ layer and the drift layer are all made of the AlN material, andthe ion implantation edge terminal is adopted to reduce the peak value of the edge electric field below the anode, the breakdown voltage and reliability of the device are improved, and the device canbe used as a basic device for a high-power system and switch application.



21: 2022/00477. 22: 2022-01-11. 43: 2022-02-18
51: H01L
71: Xidian University
72: Shenglei Zhao, Shuang Liu, Jincheng Zhang, Xiufeng Song, Zhihong Liu, Shengrui Xu, Yue Hao
54: VERTICAL ALN SCHOTTKY DIODE BASED ON FIELD PLATE STRUCTURE AND MANUFACTURING METHOD THEREOF
00: -
The invention discloses a vertical AlN Schottky diode based on a field plate structure. The vertical AlN Schottky diode mainly solves the problems that in the prior art, a breakdown voltage is low, and reliability is poor. The vertical AlN Schottky diode comprises a substrate (1), an n+ layer (2), a drift layer (3) and a passivation layer (4) from bottom to top, a cathode (5) is arranged on the lower portion of the substrate (1), a groove is etched in the middle of the passivation layer (4), an anode (6) is arranged in the groove, and an anode field plate (7) connected with the anode (6) intoa whole is arranged on the upper portion of the passivation layer (4). As the substrate, the n+ layer and the drift layer are all made of the AlN material, and the anode field plate integrally connected with the anode is adopted, the peak value of an edge electric field below the anode is reduced, the breakdown voltage and reliability of the device are improved, and the vertical AlN Schottky diodecan be used as a basic device for a high-power system and switch application.

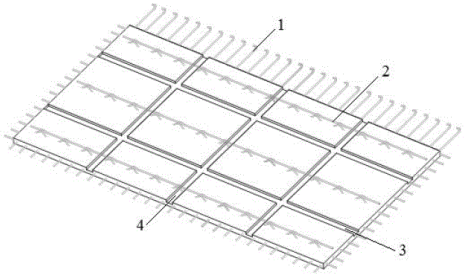


21: 2022/00478. 22: 2022-01-11. 43: 2022-02-18
51: B28B; C04B
71: Northeastern University, CHINA NORTHEAST ARCHITECTURAL DESIGN AND RESEARCH INSTITUTE CO., LTD, China Construction Technology Group Co, Ltd., Shenyang University of Technology, China West Construction Building Materials Science Research Institute Co., Ltd.
72: GU, Xiaowei, ZHANG, Xinlong, WANG, Hao, GAO, Yuxin, LI, Xiaohui, ZHANG, Weifeng, LI, Zhangmiao, LIU, Jianping, LIU, Qingdong, NING, Baokuan, LIU, Peng

54: SOLID WASTE LARGE-MIXING-AMOUNT CONCRETE PREFABRICATED LAMINATED SLAB AND PREPARATION METHOD THEREOF

00: -

The present disclosure relates to the technical field of solid waste recycling and fabricated buildings, and provides a solid waste large-mixing-amount concrete prefabricated laminated slab and a preparation method thereof. The solid waste large-mixing-amount concrete prefabricated laminated slab provided by the present disclosure comprises a prefabricated layer and a laminated layer. Transverse grooves and longitudinal grooves are formed in the surface of the prefabricated layer. During application, the grooves can be used for erecting pipelines, the contact area of the prefabricated layer and the laminated layer can also be increased, the combined effect of new concrete and old concrete is improved, the integrity of a floor slab is enhanced, and the effect of improving the overall stress capacity of the floor slab is achieved.

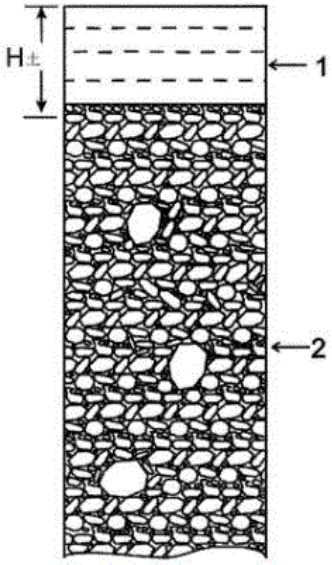


21: 2022/00479. 22: 2022-01-11. 43: 2022-02-18
51: E21C
71: ANHUI UNIVERSITY OF SCIENCE AND TECHNOLOGY
72: YAN, Jiaping, CHEN, Xiaoyang, XU, Liangji, GONG, Chuangang

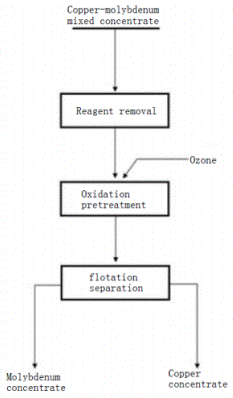
54: METHOD FOR DESIGNING TOPSOIL COVERING THICKNESS FOR COAL GANGUE FILLING AND RECLAMATION IN A COAL MINING SUBSIDENCE AREA

00: -

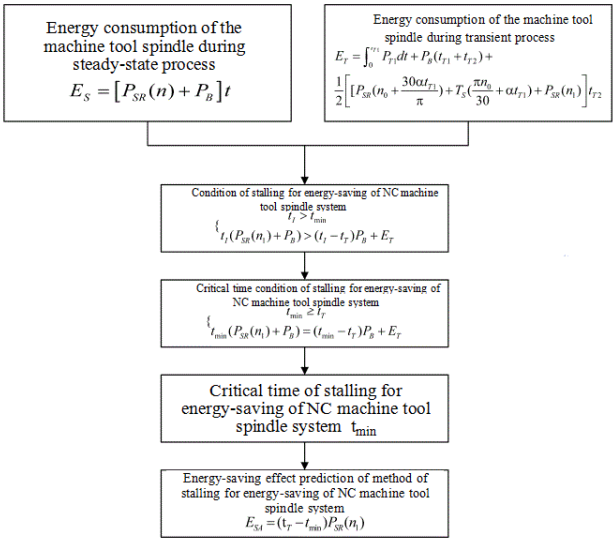
Disclosed is a method for designing a topsoil covering thickness for coal gangue filling and reclamation in a coal mining subsidence area, including the following steps: a. investigating and analyzing the lumpiness structure characteristics of coal gangue as a filling and reclamation material; b. designing a topsoil covering thickness based on differences in coal gangue lumpiness structures. The present invention features the following advantages: 1. the present invention reveals the influence of different coal gangue lumpiness structures on a topsoil covering thickness, and gives a quantitative relationship between the coal gangue lumpiness and topsoil covering thickness; 2. different topsoil covering thicknesses are designed based on differences in coal gangue lumpiness structures, so that soil in an entire reclamation area has the same capacity to preserve moisture and fertilizer; 3. the topsoil covering thickness of a coal gangue filling and reclamation area is designed reasonably.



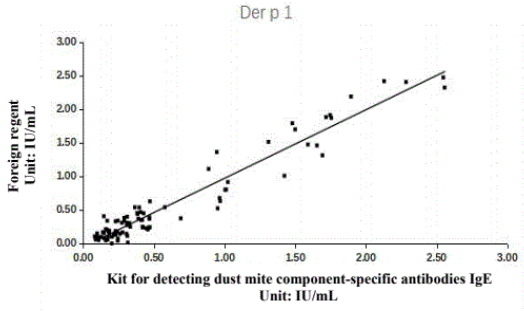
21: 2022/00481. 22: 2022-01-11. 43: 2022-02-18
51: B03D
71: Zhengzhou University
72: SONG, Xiangyu, ZHANG, Hongtao, ZHANG, Zhen, XU, Laifu, WANG, Wen, ZHAI, Xiaochen
54: PROCESS FOR FLOTATION SEPARATION OF COPPER-MOLYBDENUM MIXED CONCENTRATE BY OXIDATION
00: -
The disclosure relates to a process for flotation separation of copper-molybdenum mixed concentrate by oxidation, which allows flotation separation in the absence of an inhibitor by using a difference in surface hydrophobicity of molybdenite and copper pyrite under the action of ozone which is a strong oxidant. “CaO+O3+H2O” is used as an oxidation system; at a certain ore pulp concentration, doses of CaO and O3 are adjusted to regulate a pH value and an oxidation potential of an ore pulp system so as to promote surface oxidation of the copper pyrite; then, copper and iron elements change into hydrophilic copper hydroxide and ferric hydroxide, while sulfur changes into sulfate radicals to enter a solution; the sulfate radicals react with calcium ions to generate calcium sulphate precipitate, thereby promoting dissolution of the sulfur; and since the molybdenite has relatively high resistance to oxidation, the surface hydrophobicity is basically unchanged.



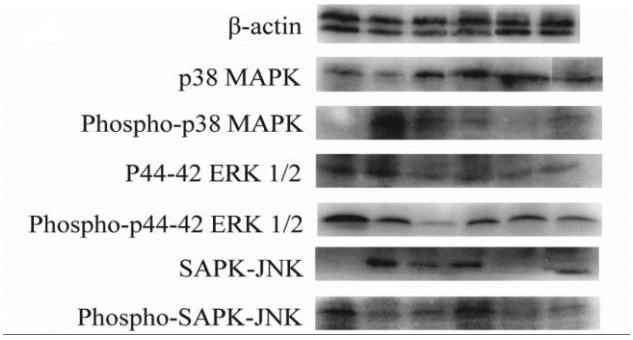
21: 2022/00482. 22: 2022-01-11. 43: 2022-02-18
51: G05B
71: Shandong University of Science and Technology
72: Jia Shun, Zhou Guangfeng, Yang Yang, Zhang Jingyan, Su Shengshuai, Ma Le, Chen Hong, Min Xiangpeng, Hou Tianyou, Wang Shang
54: CRITICAL TIME DETERMINATION AND ENERGY-SAVING METHOD OF STALLING FOR ENERGY-SAVING OF NC MACHINE TOOL SPINDLE
00: -
The invention disclose a critical time determination and energy-saving method of stalling for energy-saving of NC machine tool spindle. The method comprises the following steps: step 1, dividing the movement process of the NC machine tool spindle system into a steady-state process and a transient process; step 2, calculating the energy consumption of the NC machine tool spindle system during steady-state process; step 3, calculating the energy consumption of the NC machine tool spindle system during transient process; step 4, determining the satisfied condition for stalling for energy-saving of NC machine tool spindle; step 5, determining the the critical time of stalling for energy-saving of NC machine tool spindle meets the conditions; step 6, calculating the critical time for the spindle stalling skill of the NC machine tool; step 7, establishing the energy-saving prediction model for stalling for energy-saving of NC machine tool spindle method. The method provided by the invention is simple to operate and easy to popularize, can accurately calculate the critical time of stalling for energy-saving of NC machine tool spindle and evaluate the energy-saving effect, and has good guiding significance for energy-saving of the NC machine tool.



21: 2022/00483. 22: 2022-01-11. 43: 2022-02-18
51: G01N
71: Hangzhou Zheda Dixun Biological Gene Engineering Co., Ltd.
72: WU, Shandong, SHEN, Huahao, LIU, Yi, WU, Zhoujie, XU, Suling, LEI, Wei, WANG, Yifei, XU, Puyang, ZHOU, Xiandong, CAI, Weiyue, ZHU, Mingzhi, YANG, Xukai
33: CN 31: 202110409090.X 32: 2021-04-16
54: KIT FOR DETECTING DUST MITE COMPONENT-SPECIFIC ANTIBODIES
00: -
The present disclosure relates to a kit for detecting dust mite component-specific antibodies, and belongs to the technical field of antibody detection kits. The kit of the present disclosure includes: a biotin-polystreptavidin-biotin-dust mite antigen-coated nitrocellulose (NC) membrane, a washing solution, an alkaline phosphatase (ALP)-labeled secondary antibody solution for dust mite component-specific antibodies, and a substrate solution. The kit of the present disclosure has reliable performance, high sensitivity, and wide linear range, and may be used in combination with full-automatic instruments, which may improve detection sensitivity and reliability and reduce cost.

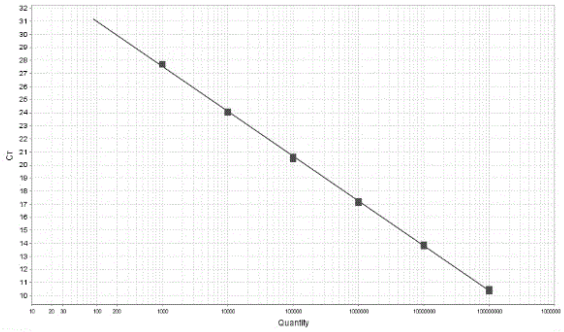


21: 2022/00484. 22: 2022-01-11. 43: 2022-02-18
51: A23K; A61K
71: Jilin Agricultural University
72: Li Yuting, Ivan Stève Nguepi Tsopmejio, Jin Zhouyu, Zhao Cong, Wei Jiali, Jing Bo, Diao Zipeng, Li Meng, Song Hui
54: ARONIA MELANOCARPA EXTRACT FOR RESISTING INFLAMMATORY BOWEL DISEASE
00: -
The invention discloses an anti-inflammatory bowel disease Aronia melanocarpa extract, which contains total flavonoids greater than or equal to 18.69 (±0.46) mg/g, procyanidins greater than or equal to 7.31 (±0.23) mg/g and polyphenols greater than or equal to 147.2 (±5.8) mg/g. Oral administration to colitis mice proves that the Aronia melanocarpa extract can alleviate the pathological symptoms of intestinal tissue in colitis mice, reduce the levels of inflammatory cytokines and oxidative stress factors, regulate the expression of transcription factor protein of intestinal barrier integrity, regulate the intestinal flora by increasing the production of short-chain fatty acids, reverse the intestinal ecological imbalance effect of colitis mice, and have the functional activity of improving the intestinal pathological changes of colitis mice. It can be used as a dietary supplement and drug substitute for treating inflammatory colitis.

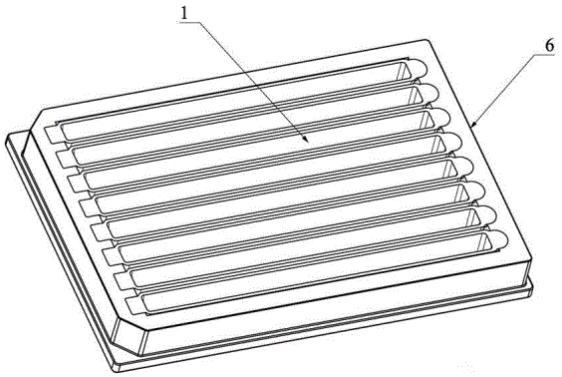


21: 2022/00485. 22: 2022-01-11. 43: 2022-02-18
51: C12N; C12Q

71: Hangzhou Zheda Dixun Biological Gene Engineering Co., Ltd.
72: WU, Shandong, LIU, Yi, WU, Zhoujie, JIANG, Xuehan, WANG, Jiping, WANG, Meijie, YANG, Xukai
33: CN 31: 202110891576.1 32: 2021-08-04
54: PRIMER PROBE SET FOR HUMAN HISTAMINE RECEPTOR HRH1 MRNA DETECTION, KIT AND USE
00: -
The present disclosure provides a primer probe set for human histamine receptor HRH1 mRNA detection, a kit and use, and relates to the technical field of biological detection. In the present disclosure, the primer probe set includes a HRH1-F, a HRH1-R and a probe H1-Probe; where the HRH1-F has a nucleotide sequence shown in SEQ ID NO. 1, the HRH1-R has a nucleotide sequence shown in SEQ ID NO. 2, and the probe H1-Probe has a nucleotide sequence shown in SEQ ID NO. 3. The present disclosure provides a kit including the primer probe set and a detection method. An expression level of the HRH1 mRNA can be detected using an RNA one-step method. The present disclosure provides a detection method with high accuracy, wide detection range and high sensitivity for detection of HRH1 proteins.

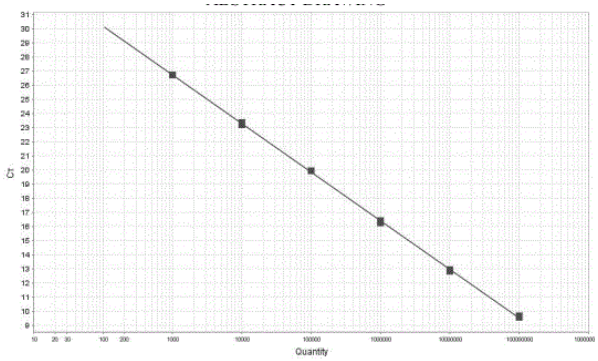


21: 2022/00486. 22: 2022-01-11. 43: 2022-02-18
51: G01N
71: Hangzhou Zheda Dixun Biological Gene Engineering Co., Ltd.
72: WU, Zhoujie, LIU, Yi, WU, Shandong, SHEN, Huahao, CHEN, Shanshan, WU, Shaochang, WANG, Yifei, ZHU, Mingzhi, WANG, Meijie, CHEN, Chuhan
33: CN 31: 202110409320.2 32: 2021-04-16
54: KIT FOR QUANTITATIVE DETECTION USING FLUORESCENT MICROARRAY
00: -
The present disclosure relates to a kit for quantitative detection using a fluorescent microarray, and belongs to the technical field of protein detection. The kit of the present disclosure includes a detection plate and a detection antibody coupled with fluorescent microspheres, where the detection plate is provided with a plurality of reaction chambers; the reaction chamber is provided with an opening, and an inner bottom surface of the reaction chamber is provided with a plurality of detection sites that are arranged side by side along a length direction of the reaction chamber at an interval.



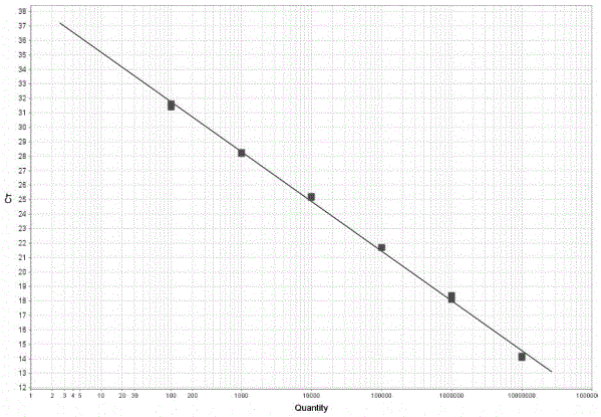
21: 2022/00487. 22: 2022-01-11. 43: 2022-02-18
51: C12N; C12Q
71: Hangzhou Zheda Dixun Biological Gene Engineering Co., Ltd.
72: LIU, Yi, WU, Zhoujie, WU, Shandong, JIANG, Xuehan, WANG, Jiaofeng, LEI, Wei, QIAN, Lei
33: CN 31: 202110890788.8 32: 2021-08-04
54: PRIMER PROBE SET AND KIT FOR RT-PCR DETECTION OF HUMAN LEUKOTRIENE RECEPTOR CYSLTR1 MRNA
00: -
The present disclosure relates to a primer probe set and a kit for reverse transcription-polymerase chain reaction (RT-PCR) detection of a human leukotriene receptor CYSLTR1 mRNA, belonging to the technical field of biological detection. In the present disclosure, the primer probe set includes a primer CysLTR1-F, a primer CysLTR1-R and a probe C1-Probe; where the primer CysLTR1-F has a nucleotide sequence shown in SEQ ID NO. 1, the primer CysLTR1-R has a nucleotide sequence shown in SEQ ID NO.2, and the probe C1-Probe has a nucleotide sequence shown in SEQ ID NO.3. The primer probe set of TaqMan real-time fluorescence quantitative one-step RT-PCR detection is established for a human CysLTR1, and the primer

probe set provides a detection method with high accuracy, wide detection range and high sensitivity for the CysLTR1 protein.



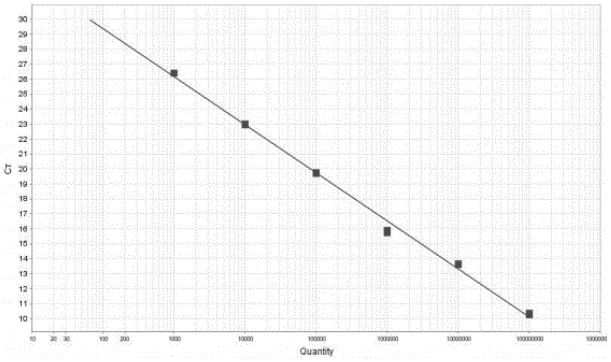
21: 2022/00488. 22: 2022-01-11. 43: 2022-02-18
51: C04B
71: Shanghai Road and Bridge (Group) Co., Ltd.
72: Wu Weijun, Tu Zhiqin, Wang Hongguang, Chen Bailiang, Chen Shijia, Xie Xiangyang, Li Di, Yan Hongfei
54: HIGH CORROSION RESISTANCE PPF CONCRETE AND ITS PREPARATION METHOD
00: -
The invention discloses a PPF concrete and a preparation method thereof. The PPF concrete comprises the following raw materials in parts by weight: 1 part of cement, 0.3 part of mineral admixture, 0.23 part of fly ash, 0.7 part of water, 3.24 parts of fine aggregate, 0.81 part of stone chips, 6.07 parts of stones and 0.0045 part of fiber. The preparation method of PPF concrete includes the following steps: weighing, first mixing and second mixing. The PPF concrete has excellent working performance, simple preparation process, strong corrosion resistance and easy construction, and is suitable for manufacturing sewage pipes.

21: 2022/00489. 22: 2022-01-11. 43: 2022-02-18
51: C12N; C12Q
71: Hangzhou Zheda Dixun Biological Gene Engineering Co., Ltd.
72: WU, Shandong, CHENG, Lei, LIU, Yi, WU, Zhoujie, JIANG, Xuehan, LEI, Wei, WANG, Jiping
33: CN 31: 202110890718.2 32: 2021-08-04
54: PRIMER PROBE SET AND KIT FOR RT-PCR DETECTION OF HUMAN TRYPTASE BETA (TPSB) MRNA
00: -
The present disclosure relates to a primer probe set and a kit for reverse transcription-polymerase chain reaction (RT-PCR) detection of a human tryptase beta (TPSB) mRNA, belonging to the technical field of biological detection. In the present disclosure, the primer probe set includes a primer TPSB-F, a primer TPSB-R and a probe T-Probe, where the primer TPSB-F has a nucleotide sequence shown in SEQ ID NO. 1, the primer TPSB-R has a nucleotide sequence shown in SEQ ID NO.2, and the probe T-Probe has a nucleotide sequence shown in SEQ ID NO.3. The primer probe set of TaqMan real-time fluorescent quantitative one-step RT-PCR detection is established for a human TPSB, and the primer probe set provides a detection method with high accuracy, wide detection range and high sensitivity for the TPSB protein.

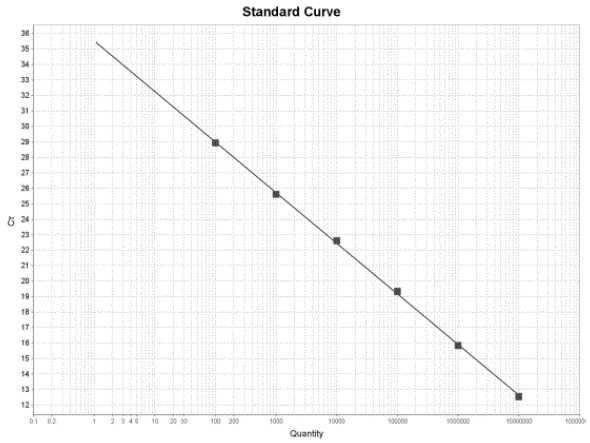


21: 2022/00490. 22: 2022-01-11. 43: 2022-02-18
51: C12N; C12Q
71: Hangzhou Zheda Dixun Biological Gene Engineering Co., Ltd.
72: WU, Shandong, LIU, Yi, WU, Zhoujie, JIANG, Xuehan, YANG, Xukai, WANG, Meijie, CAI, Weiyue
33: CN 31: 202110890787.3 32: 2021-08-04
54: REAGENT FOR DETECTING EXPRESSION LEVEL OF HUMAN HISTAMINE RECEPTOR HRH4 MRNA, KIT AND USE
00: -
The present disclosure provides a reagent for detecting an expression level of a human histamine receptor HRH4 mRNA, a kit and use. In the present disclosure, the reagent includes a specific primer and a probe for a human histamine receptor HRH4, the specific primer includes an HRH4-F and an HRH4-R, and the probe includes an H4-Probe; and the HRH4-F has a nucleotide sequence shown in SEQ ID NO. 1, the HRH4-R has a nucleotide sequence shown in SEQ ID NO. 2 and the H4-Probe

has a nucleotide sequence shown in SEQ ID NO. 3. In the present disclosure, a kit for one-step detection based on the reagent is prepared, and the expression level of the HRH4 mRNA can be one-step quantitatively detected with simple operation and short detection time. The present disclosure provides a kit product that can guide the medication and accurately quantify the efficacy for H4 antihistamines.



21: 2022/00491. 22: 2022-01-11. 43: 2022-02-18
51: C12N; C12Q
71: Hangzhou Zheda Dixun Biological Gene Engineering Co., Ltd.
72: WU, Zhoujie, WU, Shandong, LIU, Yi, JIANG, Xuehan, YANG, Xukai, LI, Shidan, QIAN, Lei
33: CN 31: 202110891433.0 32: 2021-08-04
54: PRIMER PROBE SET AND KIT FOR RT-PCR DETECTION OF HUMAN LEUKOTRIENE RECEPTOR CYSLTR2 MRNA
00: -
The present disclosure relates to a primer probe set and a kit for reverse transcription-polymerase chain reaction (RT-PCR) detection of a human leukotriene receptor CYSLTR2 mRNA, belonging to the technical field of biological detection. In the present disclosure, the primer probe set includes a primer CysLTR2-F, a primer CysLTR2-R and a probe C2-Probe; where the primer CysLTR2-F has a nucleotide sequence shown in SEQ ID NO. 1, the primer CysLTR2-R has a nucleotide sequence shown in SEQ ID NO.2, and the probe C2-Probe has a nucleotide sequence shown in SEQ ID NO.3. The primer probe set of TaqMan real-time fluorescence quantitative one-step RT-PCR detection is established for a human CysLTR2, and the primer probe set provides a detection method with high accuracy, wide detection range and high sensitivity for the CysLTR2 protein.



21: 2022/00492. 22: 2022-01-11. 43: 2022-02-18
51: C05G
71: Henan Agricultural University
72: Li Xiao, Duan Jian Zhao, He Li, Liu Bei Cheng, Feng Wei
54: STRESS-RESISTANT AND HIGH-YIELD NUTRIENT SOLUTION FOR WHEAT AND ITS APPLICATION
00: -
This invention relates to stress-resistant and high-yield nutrient solution for wheat and its application, in order to solve the bottleneck problem exists in wheat production yield. The nutrient solution consists of the following components: 8-12ml of 12%-37.5% pyraclostrobin, 4-6ml of 0.005%-0.1% brassinolide, 18-25g of water-soluble high potassium fertilizer with 35-50% potassium content, 25-35g of 8%-12% amino acid water-soluble fertilizer and 15-30kg of water. The application method is: apply the stress-resistant and high-yield nutrient solution of wheat at an amount of 15-30 kg/667 m2 during at least one stage of the jointing stage, head sprouting stage and irrigating stage of wheat, and the combined application of the three stages has the best effect. The invention not only promotes the growth and development of wheat, simultaneously increase the number of grains per spike and thousand-grain weight, but also has the effect of preventing adverse adversity such as drought, freezing damage, dry-hot wind and diseases, and achieves the goal of wheat resistance and high yield, with less investment, quick effect and remarkable economic and social benefits.

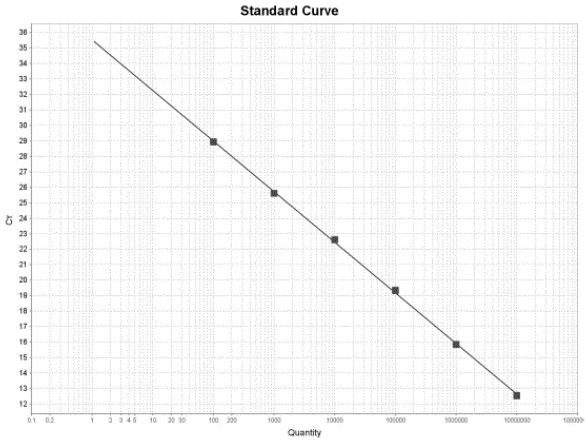
21: 2022/00493. 22: 2022-01-11. 43: 2022-02-18

51: C12N; C12Q
71: Hangzhou Zheda Dixun Biological Gene Engineering Co., Ltd.
72: CHENG, Lei, SHEN, Huahao, WU, Shandong, LIU, Yi, WU, Zhoujie, JIANG, Xuehan, WANG, Jiaofeng, WANG, Yifei
33: CN 31: 202110891409.7 32: 2021-08-04

54: PRIMER SET FOR DETECTION OF EXPRESSION OF HUMAN EOSINOPHIL CATIONIC PROTEIN (ECP) MRNA AND KIT

00: -

The present disclosure provides a primer set for detection of an expression of a human eosinophil cationic protein (ECP) mRNA and a kit, and relates to the technical field of biological detection. In the present disclosure, the primer set includes an ECP-F, an ECP-R, a GAPDH-F and a GAPDH-R; where the ECP-F has a nucleotide sequence shown in SEQ ID NO. 1, the ECP-R has a nucleotide sequence shown in SEQ ID NO. 2, the GAPDH-F has a nucleotide sequence shown in SEQ ID NO. 3, and the GAPDH-R has a nucleotide sequence shown in SEQ ID NO. 4. The present disclosure further provides a kit including the primer set, and the kit can one-step quantitatively detect an expression level of the human ECP mRNA. The present disclosure provides a detection method with high accuracy, wide detection range and high sensitivity for the ECP protein.



21: 2022/00494. 22: 2022-01-11. 43: 2022-02-18
51: A01C; A01G
71: Shandong Academy of Agricultural Sciences
72: CHI, Baojie, DONG, Hezhong, ZHANG, Yanjun, ZHANG, Dongmei, DAI, Jianlong

54: SIMPLIFIED CULTIVATION METHOD WITH DOUBLE CROPPING IN ONE YEAR FOR COTTON AND GARLIC

00: -

A simplified cultivation method with double cropping in one year for cotton and garlic is disclosed. A traditional mode of interplanting of spring cotton in garlic field about one month before harvesting of garlic or seedling raising and transplanting of spring cotton after harvesting of cotton is changed into a mode of direct sowing of short-season cotton after harvesting of garlic, and mechanical sowing of cotton is realized,. For direct sowing of short-season cotton, pruning cultivation is not needed, and the number of labor is only about 2/mu. A nitrogen (N)-potassium compound fertilizer is applied once (20 kg/mu) from the full bud stage to the initial flowering stage, thus labor is saved, and pollution by chemical fertilizers is reduced. When boll opening of cotton reaches 30-50 %, manual harvesting is carried out once, cotton bolls without boll opening are harvested by a maize harvesting machine, and garlic is mechanically harvested.

21: 2022/00495. 22: 2022-01-11. 43: 2022-02-18
51: A61K; C08B; A61P
71: ZHEJIANG UNIVERSITY
72: CHEN, Jianle, CHENG, Huan, YE, Xingqian, CHEN, Shiguo, TIAN, Jinhu, PAN, Haibo, ZHOU, Shengyi, LIU, Donghong

54: PREPARATION METHOD OF A HIGHLY-BRANCHED WOLFBERRY PECTIC POLYSACCHARIDE

00: -

The present disclosure discloses a preparation method of a highly-branched wolfberry pectic polysaccharide. The highly-branched wolfberry pectic polysaccharide is prepared via alkaline extraction at low temperature; and monosaccharides of the highly-branched wolfberry pectic polysaccharide comprises arabinose, galactose, galacturonic acid, rhamnose, mannose, glucuronic acid, glucose, and fucose, wherein a ratio of the arabinose to the galactose to the galacturonic acid to the rhamnose to the mannose to the glucuronic acid to the glucose to the fucose is 37.26: 22.23: 14.53: 7.66: 4.11: 1.61: 6.18: 6.43. The pectic polysaccharide contains two primary components, with molecular weights being 183.9 kDa and 316 kDa respectively; and polydispersity indexes are

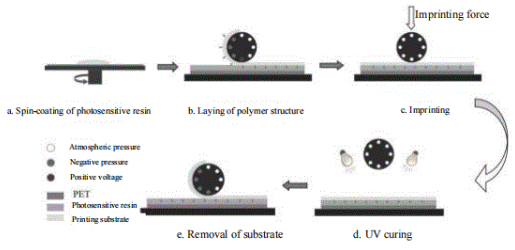
2.793 and 1.411, and molecular radii of gyration are 17.5 nm and 37.3 nm respectively. Upon structural analysis, it is found that the pectic polysaccharide is primarily composed of pectic polysaccharide with an RG-I structure.

21: 2022/00496. 22: 2022-01-11. 43: 2022-02-18
51: G06F
71: QINGDAO UNIVERSITY OF TECHNOLOGY
72: ZHU, Xiaoyang, ZHANG, Houchao, LAN, Hongbo, LI, Hongke, SUN, Luanfa

54: METAL GRID STRETCHABLE TRANSPARENT ELECTRODE FOR SHELL-CORE STRUCTURE, PREPARATION METHOD THEREFOR, AND APPLICATION

00: -

The disclosure relates to a metal grid stretchable transparent electrode of a shell-core structure and preparation method therefor, and an application. A transparent electrode, comprising a flexible substrate, a base material, a metal layer and a polymer layer, wherein the base material is provided with a groove structure, the metal layer is arranged on the inner side wall of the groove, the metal layer is in the shape of the groove, and the polymer layer is filled in the metal layer. The disclosure provides a transparent flexible electrode with different structures, and the preparation method comprises the steps of 3D printing of a sub-micro-scale polymer structure, electroless plating of a polymer structure surface layer and preparation of an embedded electrode through transfer printing. The preparation of the ultra-fine and large-aspect-ratio ordered structure of any shape has excellent electrical conductivity and mechanical properties.



21: 2022/00497. 22: 2022-01-11. 43: 2022-02-18
51: G06F
71: Henan Agricultural University
72: Li Xiao, He Li, Heng Ya Rong, Duan Jian Zhao, Feng Wei

54: CONSTRUCTION METHOD OF CEREAL CROP GROWTH MEASUREMENT MODEL

00: -

This invention relates to construction method of cereal crop growth measurement model, which comprises that select a one-meter double-row sample area in the cereal crop field, measure the instantaneous photosynthetically active radiation PAR0 at the top position of the cereal crop canopy corresponding to the sample area, and measure it at the ground center line position corresponding to the cereal crop in the sample area instantaneous photosynthetically active radiation PARm, measure the instantaneous photosynthetically active radiation PARn at the root position of the cereal crops in the sample area, record the corresponding growth period of the cereal crops and crop growth parameters P (leaf area, nitrogen content, leaf nitrogen pool) at the time of this measurement; obtain this Yield data Y corresponding to the one-meter double-row sample area, thus the cereal crop growth measurement model corresponding to the growth period is Y(P)=a(PARm-PARn)/(2*PAR0-PARm-PARn)+b, use statistical methods to measure multiple times to obtain the corresponding coefficient a and constant b. It can measure the growth of cereal crops without the need for laboratory analysis, rather with high efficiency and low cost.

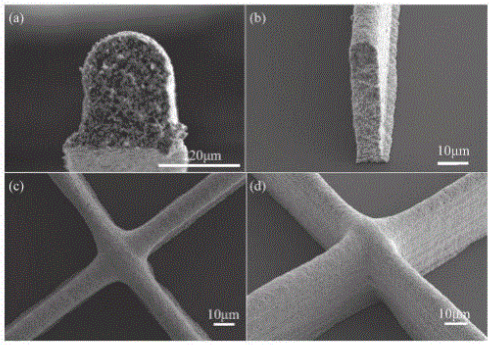
21: 2022/00498. 22: 2022-01-11. 43: 2022-02-18
51: H01B
71: QINGDAO UNIVERSITY OF TECHNOLOGY
72: ZHU, Xiaoyang, LI, Hongke, SUN, Luanfa, QI, Ximeng, LAN, Hongbo, LI, Zhenghao

54: HIGH-PERFORMANCE LARGE-AREA FLEXIBLE TRANSPARENT ELECTRODE, PREPARATION METHOD AND APPLICATION THEREOF

00: -

The disclosure relates to a high-performance large-area flexible transparent electrode, a preparation method and an application thereof. Specific steps are: 1) by the electric-field driven jet micronano 3D printing technology and a metal nanometer paste used as a printing material, printing a metal patterned structure on a printing substrate through a micronano 3D multi-layer printing method, then curing and sintering the metal patterned structure; 2) transferring a PDMS concave die; 3) transferring a

UV photoresist convex die; 4) preparing a composite soft die; 5) preparing an embedded flexible transparent conducting thin film. Manufacturing of a microstructure with a diameter of 10-15 micrometers and a height-width ratio of 0.5-4.0 is achieved to prepare a transparent electrode structure with high light transmittance and low square resistance.

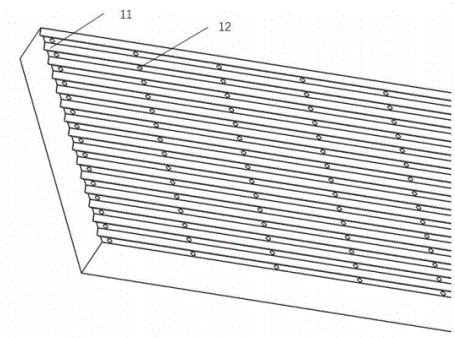


21: 2022/00500. 22: 2022-01-11. 43: 2022-02-18
51: B63B; B63G
71: Ocean University of China
72: ZHANG, Kaisheng, ZHANG, Jing, ZHANG, Yitong, DU, Kailin, LI, Chaoyang, XIAO, Cong, JIANG, Wantao, LI, Jing, LI, Guihao, ZHANG, Baocheng, ZHAO, Bo, WANG, Qiang

54: BIONIC DRAG REDUCTION STRUCTURE FOR UNDERWATER VEHICLES AND SURFACE SHIPS

00: -

The present disclosure discloses a bionic drag reduction structure for underwater vehicles and surface ships, and relates to a technical field of drag reduction methods. The bionic drag reduction structure is composed of a bionic outer skin structure, a surface ship and underwater vehicle, and a water-immersed surface of the surface ship and underwater vehicle; the bionic outer skin structure includes a bionic groove, a bionic mucus hole and a flexible soft material, and a surface of the bionic outer skin structure is evenly arranged with the bionic groove and the bionic mucus hole, an outer surface of the bionic outer skin structure is provided with the flexible soft material; an outer surface of the flexible soft material is detachably connected to the water-immersed surface of the surface ship and underwater vehicle.

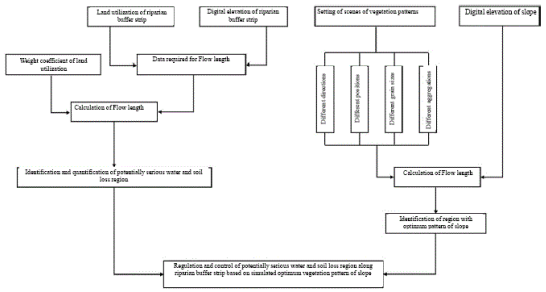


21: 2022/00501. 22: 2022-01-11. 43: 2022-02-18
51: G06Q
71: Henan University
72: ZHAO, Qinghe, CAO, Zihao, ZHANG, Yifan, DING, Shengyan, XU, Shanshan
33: CN 31: 202110516399.9 32: 2021-05-12

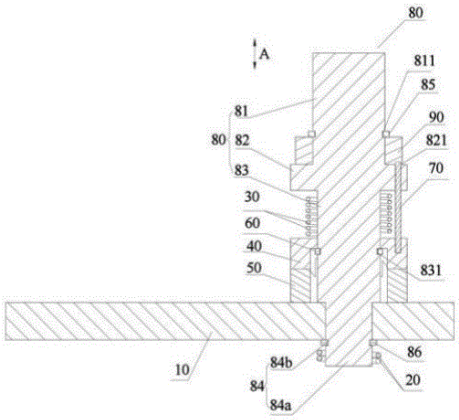
54: HYDROLOGICAL CONNECTIVITY-BASED REGULATION AND CONTROL METHOD FOR WATER AND SOIL CONSERVATION OF RIPARIAN BUFFER STRIP

00: -

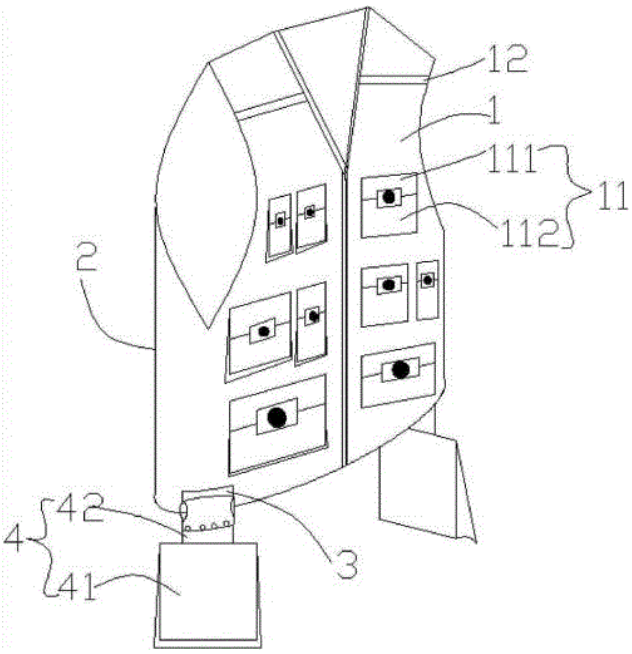
Disclosed is a hydrological connectivity-based control method for water and soil conservation of a riparian buffer strip. S1, acquiring and processing data, that is, downloading DEM (Digital Elevation Model) and Landsat (land satellite) remote-sensing image data of the riparian buffer strip in a survey region on geospatial data cloud platform, vectorizing the Landsat remote-sensing image data manually, and obtaining a landscape configuration map; S2, calculating a hydrological connectivity index, that is, a Flow length index; S3, identifying and extracting a potentially serious water and soil loss region; S4, setting scenes of vegetation patterns; S5, selecting the optimum vegetation pattern; and S6, controlling based on the optimum vegetation pattern. Problems of high costs, time and energy wastes, and limits to operability in the existing method are solved. Therefore, the present disclosure is easy to operate, short in time consumption, small in error, and high in controllability.



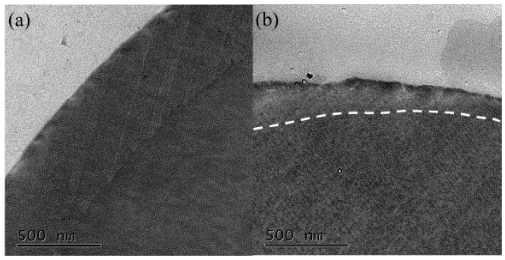
21: 2022/00502. 22: 2022-01-11. 43: 2022-02-18
51: E05D; E05F
71: Dongguan Jiesheng Hardware Industry Co., Ltd.
72: ZHANG, Bingli
54: HINGE MECHANISM FOR DOORS AND WINDOWS
00: -
A hinge mechanism for doors and windows. The hinge mechanism comprises a base, a rotating shaft, a torsional spring, a lower latch, an upper latch, a compression spring, a traction part and a knob lantern ring; the rotating shaft is axially arranged in the vertical direction of the base and rotates relative to the base; one end of the rotating shaft penetrates through the base to form an extending end; the extending end is sleeved with the torsional spring; the rotating shaft is sleeved with the lower latch, the upper latch, the traction part, the compression spring and the knob lantern ring; the lower latch is fixedly connected with the base; the upper latch and the lower latch are in tooth engagement fit; the knob lantern ring is arranged above the upper latch; the compression spring is arranged between the knob lantern ring and the upper latch.



21: 2022/00503. 22: 2022-01-11. 43: 2022-02-18
51: A41D
71: The Affiliated Hospital of Youjiang Medical University for Nationalities
72: Peng Hao
54: VEST-TYPE CONVENIENT FIRST AID CLOTHING
00: -
The invention belongs to the technical field of medical first aid equipment, and specifically discloses a vest-type convenient first aid clothing. The invention relates to a vest-type convenient first aid clothing, which comprises a front part and a back part which are connected with each other, wherein the front part comprises a front inner layer and a front outer layer which are sequentially arranged from inside to outside; the back part comprises a back inner layer, a back middle layer and a back outer layer which are sequentially arranged from inside to outside; a plurality of pockets are arranged on the front outer layer; a storage part is formed between the back middle layer and the back outer layer; physiological saline storage bags and oxygen storage bags are correspondingly arranged in the storage part from top to bottom; it also comprises storage bags symmetrically arranged at the left and right hem of the first aid clothing, and the storage bags are detachably connected with the first aid clothing through through-holes arranged on the first aid clothing. The vest-type convenient first aid clothing of the invention is convenient to carry and use, has good comfort and multiple functions, is beneficial to improving the efficiency and effect of rescue work, and simultaneously meets the needs of first aid and self-help.



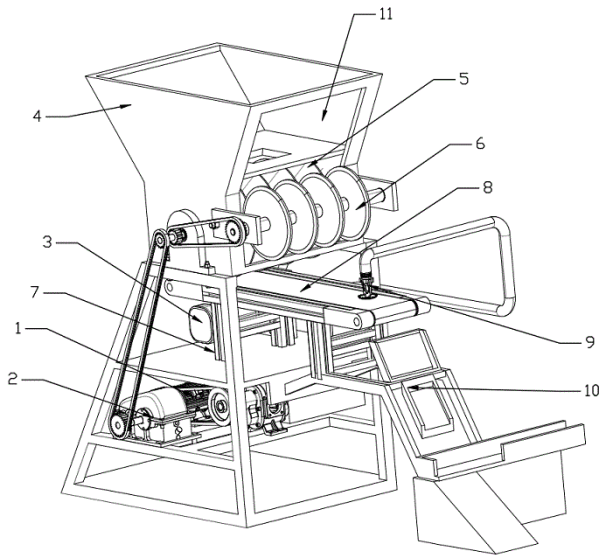
21: 2022/00504. 22: 2022-01-11. 43: 2022-02-18
51: D06P
71: WUHAN TEXTILE UNIVERSITY, Anqing Hanyi Information Technology Service Co., Ltd.
72: CAO, Genyang, XIA, Honghui, CHEN, Xin, SHENG, Dan, PAN, Heng, WANG, Yunli, XU, Weilin, GUO, Weiqi
54: METHOD FOR DYEING HIGH-PERFORMANCE AROMATIC FIBER
00: -
The present disclosure provides a method for dyeing a high-performance aromatic fiber. On the basis of a traditional vat dye leuco acid dyeing method with sodium hydroxide and thiourea dioxide as reducing agents, ammonium dihydrogen phosphate and a carrier are sequentially added into a vat dye leuco solution. Under the action of the ammonium dihydrogen phosphate, a vat dye leuco body is converted into a vat dye leuco acid and connected to urea in the dyeing solution by a hydrogen bond. The carrier is separately connected to the vat dye, a phosphate radical and the urea by hydrogen bonds to form a carrier-phosphate radical-urea combination to coat a surface of the leuco acid.



21: 2022/00505. 22: 2022-01-11. 43: 2022-02-18
51: A01K
71: Institute of Plant Protection, Fujian Academy of Agricultural Sciences
72: CHEN, Xia, SUN, Li
54: METHOD FOR INDUSTRIALIZED PRODUCTION OF PROPRIOSEIOPSIS ASETUS USING ARTIFICIAL ALTERNATIVE FEED
00: -
The present disclosure discloses a method for industrialized production of Proprioseiopsis asetus using an artificial alternative feed. According to method of the present disclosure, Proprioseiopsis asetus can survive normally at 8 to 38 degree, and at the temperature of 15 to 35 degree, Proprioseiopsis asetus can grow and develop, and reproduce normally, and the amount of eggs laid is much higher than that of thrips, pollen, spider mite and acaroid mites, with prolonged lifespan and egg-laying period. The method of the present disclosure has the advantages of easy-to-obtain feed, low cost in finished products, and simple operation. After insects are put in proportion in one time, there is no need to add any raw materials during the cultivation process. The density of Proprioseiopsis asetus can reach 250 to 600/gram.

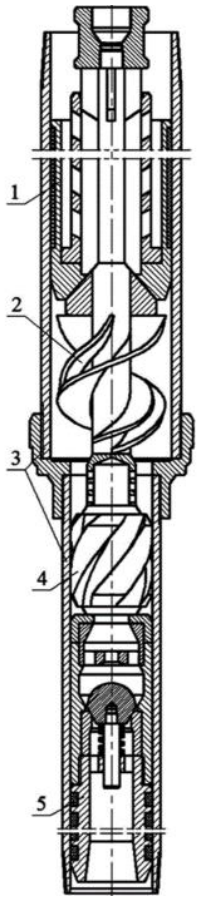
21: 2022/00506. 22: 2022-01-11. 43: 2022-02-18
51: B26D
71: Hainan University, Qingdao Agricultural University
72: Yang Ranbing, Zhang Jian, Pan Zhiguo, Shang Shuqi, Zhang Huan, Wu Hongzhu, Wang Bingjun
54: A POTATO SEED CUTTING MACHINE
00: -
The present invention relates to a potato seed cutting machine, characterized in that: it includes a frame body, said frame body includes the upper layer and the lower layer, the inside of the frame body on the upper layer is provided with a conveying device in a fixed way, the inside of the frame body on the upper layer is provided with a conveying

device in a fixed way, the inside of the frame body on the lower layer is provided with a motor I, the output shaft end of said motor I connects to a two-step reduction gear, the upper end of said frame body is provided with a blanking hopper, the bottom of the inside of said blanking hopper is provided with a feeding opening, the lower part of said feeding opening is provided with cylinder rollers, the central axis of said cylinder rollers connects to the inner wall of the blanking hopper in a rotatory way, the front of said cylinder rollers is provided with a disc cutter, the central axis of said disc cutter is fixed onto the front side plate of the blanking hopper, the output shaft ends of said two-step reduction gear connect to the central axis of the cylinder roller and the disc cutter in a rotatory way respectively, the place right below said cylinder roller and disc cutter is provided with a conveying device. The present invention overcomes existing technical defects and provides a potato seed cutting machine with a reasonable structure and diversified functions. This potato seed cutting machine can finish cutting, drug spraying and collection.



21: 2022/00507. 22: 2022-01-11. 43: 2022-02-18
51: E21B; F04B
71: Qingdao University of Technology
72: LIU, Xinfu, WU, Jianjun, LIU, Guoqiang, LI, Bo, ZHANG, Shousen, HE, Hongming
54: PLUG-VALVE INTEGRATED PUMP OF DOUBLE-CYLINDER, DOUBLE-PLUG AND DOUBLE-ACTION VALVE TYPE
00: -

The present invention provides a plug-valve integrated pump of a double-cylinder, double-plug and double-action valve type, which adopts double long pump cylinders, double action plungers, double action hydraulic valves, a turbine stirring centralizer, a rotary-tooth axial-flow desander cylinder, and an integrated structure of the plungers and the hydraulic valves, to effectively prevent pump blocking by sand and leakage loss of the hydraulic valves, and realize self-centralizing of the plungers and the pump cylinders, smooth opening and closing of the double action hydraulic valves, smooth discharge of sand particles in the pump and integrated operation of injection and production of a heavy oil well.



21: 2022/00508. 22: 2022-01-11. 43: 2022-02-18
51: A01N
71: Qingdao Agricultural University
72: GAO, Ruiyuan, ZHAO, Yongda, WEI, Jiahui, MA, Xuan, XU, Xiaoyu, DONG, Caichao

54: EXTERNAL PREPARATION OF IMIDACLOPRID, PREPARATION METHOD AND USE THEREOF

00: -

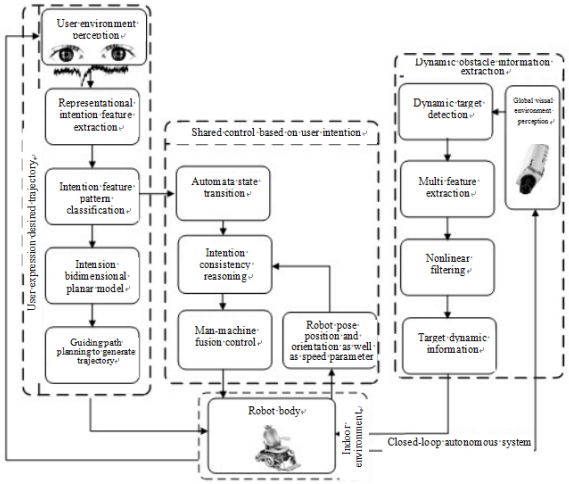
Disclosed are an external preparation of imidacloprid, a preparation method and use thereof, which relates to the technical field of veterinary drugs. The present disclosure uses alcohol solvent as the dispersion medium of imidacloprid techinical, which can ensure the stability of imidacloprid techinical; The present disclosure uses one or more of dibutyl hydroxytoluene, hydroxymethyl, propyl hydroxybenzoate and butylated hydroxyanisole as the antioxidant, which can effectively prevent the oxidation of imidacloprid techinical and prolong the preservation time of external preparations of imidacloprid; The present disclosure uses one or more of propylene carbonate, povidone and copovidone as the stabilizer, which can reduce the volatility of the solvent and maintain the stability of the dispersion system. At the same time, the adjuvants used in the present disclosure have the advantages of safety, no skin irritation, low cost, and are suitable for market promotion and application.

21: 2022/00509. 22: 2022-01-11. 43: 2022-02-18
51: G06F
71: Xi'an Technological University
72: Lei Sun, Yan Cao

54: SHARED CONTROL METHOD FOR SERVICE ROBOT BASED ON ELECTROOCULAR SIGNAL INTENTION EXPRESSION

00: -

The invention discloses a shared control method for service robot based on electroocular signal intention expression, including the following steps: extraction of motion parameter of dynamic obstacle based on global visual environment; global path planning using artificial potential field method based on the guidance by the electroocular signal; extraction of waveform feature based on electroocular signal; control based on electroocular signal, as well as a number of research programme and feasibility analysis. The described method can improve the accuracy of target tracking and reduce the burden for the user to operate the system.

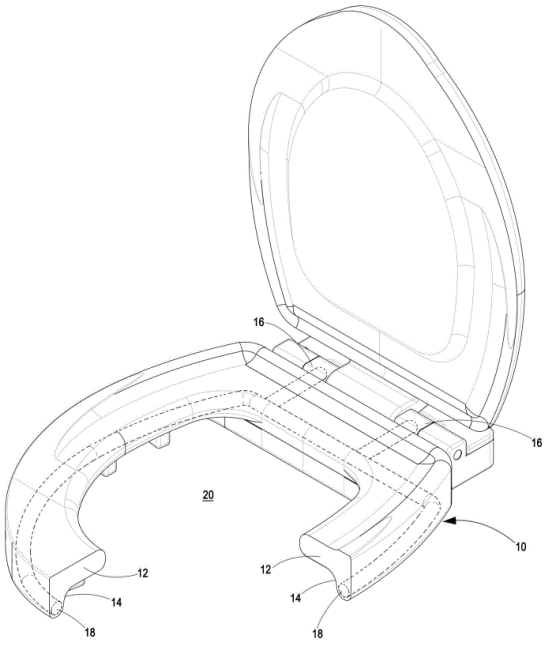


21: 2022/00510. 22: 2022-01-11. 43: 2022-02-18
51: A47K
71: PAGEL, Deon Erich
72: PAGEL, Deon Erich
33: ZA 31: 2021/00538 32: 2021-01-26

54: TOILET SEAT

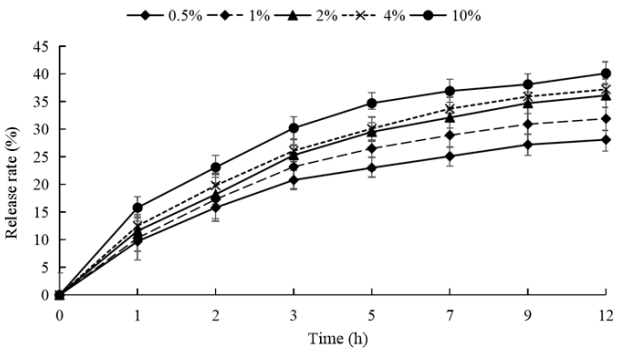
00: -

A toilet seat includes: a body that defines an aperture; a flange extending partially about the body; and a reinforcing element that extends at least partially along, and within the flange.



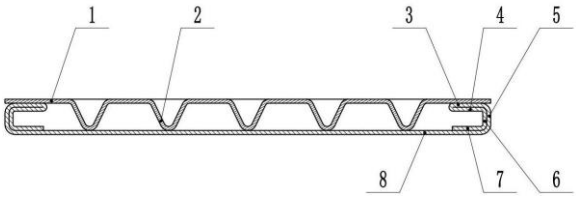
21: 2022/00515. 22: 2022-01-11. 43: 2022-02-18
51: B09C
71: QINGDAO UNIVERSITY OF TECHNOLOGY
72: LIU, Sen, DU, Yuxin, QIN, Jingze, FANG, Junhe, QI, Ruowen, YUAN, Qingyun, GUO, Xiaomeng
54: REMEDIATION AGENT OF OIL-CONTAMINATED COASTAL SOIL AND APPLICATION THEREOF
00: -
Provided herein is a remediation agent of oil-contaminated coastal soil, the remediation agent includes: vermiculite, perlite, a plant ash, cement, a pine needle soil, a distiller's grain, a plant straw, a fungus, a humectant and animal manure. The components of the disclosure are coordinated and cooperated to efficiently realize a remediation of oil-contaminated coastal soil. The remediation agent provided by the present disclosure is particularly suitable for an actual situation of the oil-contaminated soil in the coastal mountain environment and can be used to remediate the oil-contaminated coastal soil in high-salt, high-alkali and high-humidity environment below 37°C.

21: 2022/00516. 22: 2022-01-11. 43: 2022-02-18
51: C08K; C08L
71: QINGDAO AGRICULTURAL UNIVERSITY
72: ZHANG, Shuangling, DU, Dehong, CHANG, Guijuan, JIANG, Wenli, ZHAO, Haiyan
54: CORN STARCH FILM CONTAINING RUTIN COMPOSITE NANOPARTICLES AND PREPARATION METHOD THEREOF
00: -
The present disclosure provides a corn starch film containing rutin composite nanoparticles and a preparation method thereof. The composite nanoparticles in the starch film are prepared by embedding rutin in zein. The composite nanoparticle film has the performance of slowly releasing the rutin, so that the film prepared by the method has long-acting antioxidant properties. Results show that after the rutin composite nanoparticles are added to the corn starch film, the property of the corn starch film is improved to some extent. Through determination of the property of the composite film, it is found that hydrogen bonds and electrostatic interaction can be formed by the rutin composite nanoparticles and a starch substrate, the property of the starch film is strengthened to a certain degree, and the starch film is enabled to have a certain slow-release ratio and stronger antioxidant properties.

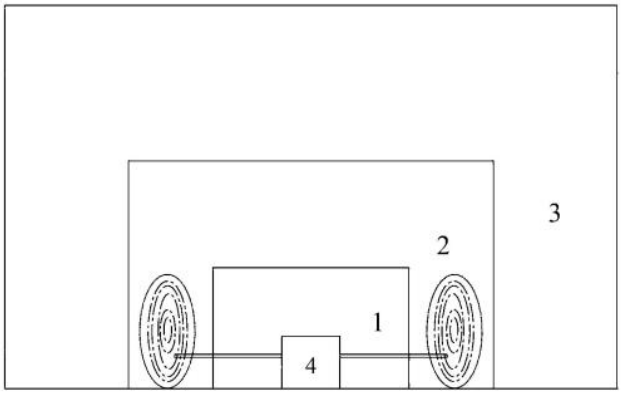


21: 2022/00517. 22: 2022-01-11. 43: 2022-02-18
51: F28F
71: TAI'AN FUXING AUTO PARTS CO., LTD.
72: SONG, Honggang, AN, Haibo
54: REINFORCED RADIATING TUBE AND PROCESSING PROCESS
00: -
The present disclosure relates to a reinforced radiating tube, including a tube body defined by a half tube body and a cover body, where the half tube body includes a flat plate having reinforced flanges symmetrically arranged on both sides, and the reinforced flange includes a first bending edge perpendicular to the flat plate, a second bending edge perpendicular to the first bending edge and extending inward, a third bending edge tightly

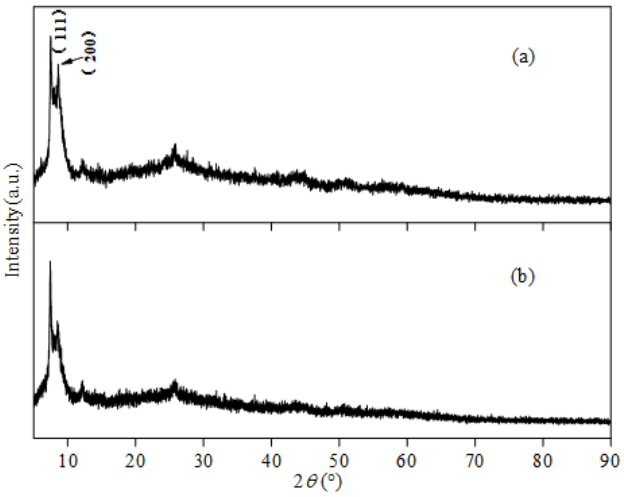
attached to the inner side of the second bending edge, a fourth bending edge perpendicular to the third bending edge and tightly attached to the inner side of the first bending edge, and a fifth bending edge tightly attached to the inner side of the flat plate that are formed by making five bends in sequence.



21: 2022/00518. 22: 2022-01-11. 43: 2022-02-18
51: E21D
71: HENAN DAYOU ENERGY CO., LTD., CHINA UNIVERSITY OF MINING AND TECHNOLOGY
72: YANG, Yunfeng, GAO, Mingshi, LI, Dequan, HE, Yongliang, XU, Dong, YU, Xin
54: METHOD FOR FORMING ROADWAY ANTI-IMPACT SOFT STRUCTURE LAYER BY REPEATED COAL-ROCK DRILLING FRACTURING
00: -
The invention discloses a method for forming a roadway anti-impact soft structure layer by repeated coal-rock drilling fracturing. A designated position is drilled by using a drilling machine. Coal and rock mass is repeatedly rotated and fractured to form a roadway anti-impact soft structure layer. Energy released by rock burst is absorbed. The coal and rock mass on both sides of a roadway is fractured by drilling, a steel pipe of 6-12 m is sleeved with a drilled hole, and the coal and rock mass can be fractured and depressurized repeatedly for many times through the steel pipe without damaging a roadway supporting layer. Meanwhile, a soft structure layer is formed in the steel pipe of 6-12 m due to repeated drilling, and energy of rock burst is absorbed. Under the premise of effectively protecting the roadway supporting layer, the energy of rock burst can be effectively absorbed.



21: 2022/00547. 22: 2022-01-12. 43: 2022-03-07
51: A61K
71: SHANDONG JIANZHU UNIVERSITY
72: LI, Hui, CHU, Huijun, GUO, Min, ZHANG, Wenke, CUI, Ping, ZHOU, Shoujun, YU, Mingzhi
33: CN 31: 202110043315.4 32: 2021-01-13
54: HIGH–STABILITY SOLID ACID BASED ON METAL ORGANIC FRAMEWORK WITH PREPARATION METHOD AND APPLICATION
00: -
The invention relates to high–stability solid acid based on metal organic framework with preparation method and application, vesting to the technical field of catalyst preparation. The invention comprises the following steps: the 2, 5–dimercaptoterephthalic acid (DMH2BDC) is adopted as organic ligand to prepare UiO–66–SH, in which sulfhydryl group (–SH) in organic ligand is oxidized and acidulated with hydrogen peroxide and acidified with inorganic acid, further acquiring sulfonic acid group (–SO3H). In addition, sulfonic acid groups in catalyst are connected in the ligand structure through covalent bonds and have excellent stability in catalytic esterification.

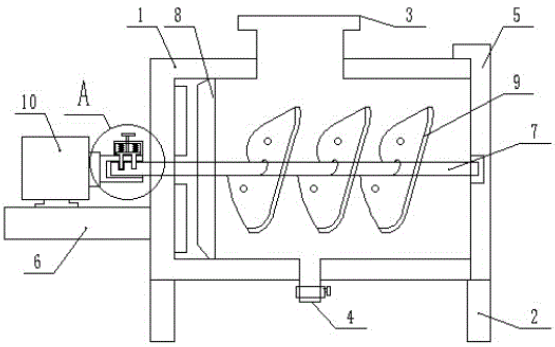


21: 2022/00549. 22: 2022-01-12. 43: 2022-03-04
51: B03D
71: Guangxi University
72: Chen Jianhua, Chen Ye
54: PREPARATION METHOD OF PYRITE ACTIVATOR
00: -

A preparation method of pyrite activator, It includes the following steps: (1) dissolve copper sulfate in water at 95degree Celsius, and stir appropriately until copper sulfate is completely dissolved; (2) add copper sulfate pentahydrate and ammonium sulfate to the completely dissolved copper sulfate solution according to the weight ratio of copper sulfate pentahydrate: ammonium sulfate of 1:1.6, dissolve completely and react for 5-10 minutes; (3) after the reaction is complete, cool down and precipitate to about 40 degree Celsius, pour out the upper layer of liquid, namely the tail liquid, and dry the precipitated solid to obtain light blue crystals; (4) the obtained light blue crystals and sodium fluorosilicate are subjected to a solid phase mixing reaction for 30 minutes at a weight ratio of 35:65 to obtain a light blue powder product. The activator can realize the activation of pyrite under the condition of high alkalinity caused by lime.

21: 2022/00550. 22: 2022-01-12. 43: 2022-03-04
51: E04G
71: Qingdao Agricultural University
72: Sun Xiuli
54: MIXING HEATING DEVICE FOR RECYCLED CONCRETE
00: -

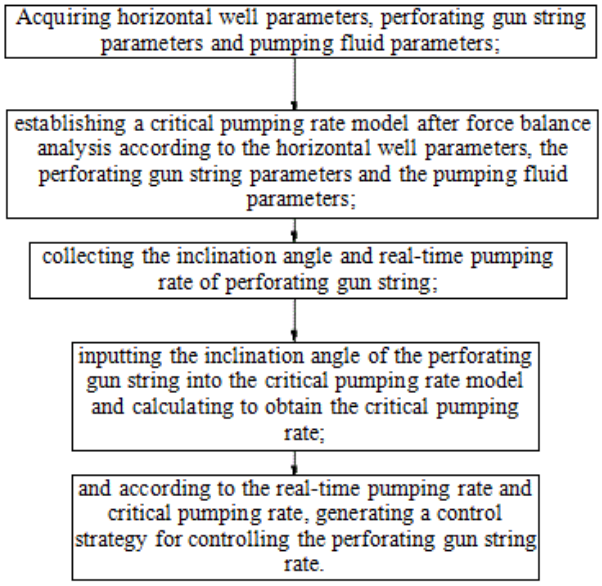
The invention discloses a mixing heating device for recycled concrete, which comprises a main tank and a side plate; a support column is installed at the bottom of the main tank; a feed hopper is installed in the center of the top of the main tank; the bottom of the main tank is provided with a discharge port; a side plate is detachably installed on one side of the main tank; the outer side wall of the main tank far away from the side plate is fixedly provided with a driving assembly; the driving assembly is in transmission connection with a stirring shaft; the stirring shaft is horizontally placed in the center of the main tank, and one end of the stirring shaft is installed in the center of the side plate; the stirring shaft is provided with a scraper and stirring blades; a heating assembly is installed on the inner side wall of the main tank near the driving assembly. The device can disassemble the stirring shaft from the side plate, and at the same time, the scraper is used to remove the residue in the inner cavity of the main tank, which is convenient to disassemble and clean up the residue in the inner cavity of the main tank at the same time; through the clamping structure of the driving device, one end of the stirring shaft and the connecting rod are limited and installed, so that the operation is simple and the connection is stable; The heating assembly continuously heats the inner cavity of the main tank, which is beneficial to the mixing of recycled concrete and effectively increases the temperature conduction efficiency.



21: 2022/00551. 22: 2022-01-12. 43: 2022-03-04
51: B03D
71: Guangxi University
72: Chen Jianhua, Chen Ye
54: PREPARATION METHOD OF COPPER-ARSENIC FLOTATION SEPARATION INHIBITOR FOR COMPOUND COPPER ORE

00: -
A preparation method of copper-arsenic flotation separation inhibitor for compound copper ore comprises the following steps: (1) preparing a sulfuric acid solution with a mass concentration of 15 percent, heating the water area to 35 degrees, adding the prepared mixed starch according to the solid-liquid ratio of 1:5, stirring and reacting at a constant temperature for 1.5 hours, (2) adding sulfuric acid into the reaction solution to adjust the pH to 6.0, adding thiourea according to the mass ratio of thiourea to starch of 1: 3, further raising the temperature of the solution to 90 degrees, stirring and reacting for 45 minutes, and after the reaction, the solution is colorless transparent liquid; (3) adding sodium hydroxide into the liquid obtained in step (2) to adjust the pH to 8.5, stirring for 30 minutes, concentrating and purifying with microfiltration membrane, and drying at 50 degrees to obtain white powder products. The inhibitor can inhibit arsenopyrite ore and arsenic-containing pyrite in the flotation of copper sulfide ore of secondary copper ore under the condition of moderate alkalinity without cyanide and oxidant.

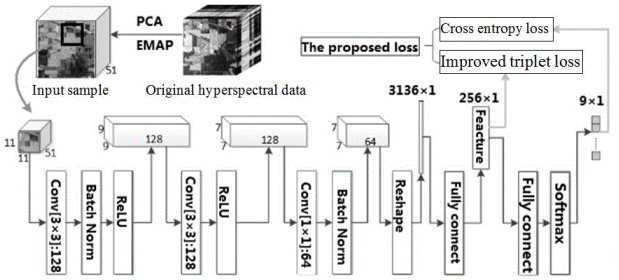
21: 2022/00552. 22: 2022-01-12. 43: 2022-03-04
51: G06N
71: Chongqing University of Science & Technology
72: Jiao Guoying, Wang Jun
54: METHOD, SYSTEM AND TERMINAL FOR CONTROLLING AND ANALYZING CRITICAL PUMPING RATE OF HORIZONTAL WELL PUMPING PERFORATION
00: -
The invention discloses a method, system and terminal controlling and analyzing critical pumping rate of horizontal well pumping perforation, and relates to the technical field of oil and gas field development. The key point of the technical scheme are as follows: acquiring horizontal well parameters, perforating gun string parameters and pumping fluid parameters; establishing a critical pumping rate model after force balance analysis according to the horizontal well parameters, the perforating gun string parameters and the pumping fluid parameters; collecting the inclination angle and real-time pumping rate of perforating gun string; inputting the inclination angle of the perforating gun string into the critical pumping rate model and calculating to obtain the critical pumping rate; and according to the real-time pumping rate and critical pumping rate, generating a control strategy for controlling the perforating gun string rate. The invention comprehensively considers the influence of casing size, properties of pumping fluid and the shape of perforating gun string, and can quickly and accurately calculate the required minimum pumping rate, that is, the critical pumping rate, thus effectively ensuring the relatively stable and uniform advance of perforating gun string in the horizontal section, and simultaneously reducing the deviation and calculation amount of deviation adjustment.



21: 2022/00553. 22: 2022-01-12. 43: 2022-03-04
51: A01G; A01N; C05G
71: Institute of biology, Gansu Academy of Sciences, China
72: Ji Bin, Peng Yinan, Wang Zhiye, Liang Yan, Ye Ze, Qi Hongshan, Du Jinhao, Zeng Yang
54: COW DUNG-BASED PLANT GROWTH-PROMOTING CULTIVATION SUBSTRATE AND ITS PREPARATION METHOD
00: -
The invention relates to the technical field of cultivation matrix preparation, and discloses a dung-based plant growth-promoting cultivation substrate and a preparation method thereof. The basic carrier of the matrix comprises the following raw materials in percentage by mass: 60%-65% of cow dung, 10%-15% of corn straw, 5%-10% of vermiculite and 5%-10% of perlite; among them, cow dung and corn

straw are first fermented by composting, and then the basic carrier after fermentation and decomposition is compounded with growth-promoting bacteria, plant nutrient elements and humic acid. The growth-promoting bacteria in the matrix is a compound microbial growth-promoting microbial agent composed of dozens of microorganisms and biological enzymes, which is composed of Azotobacter:Burkholderia=1:1, and the effective viable bacteria number is more than 8 billion cuf/g. It can promote plant growth by secreting auxin, dissolving phosphorus, enhancing plant disease resistance, resisting stress and other aspects. The invention can solve the pollution problem of cow dung and corn straw, has low production cost, less occurrence rate of diseases and insect pests, good seedling raising quality, reduced damage to high-quality farmland and wide application range.

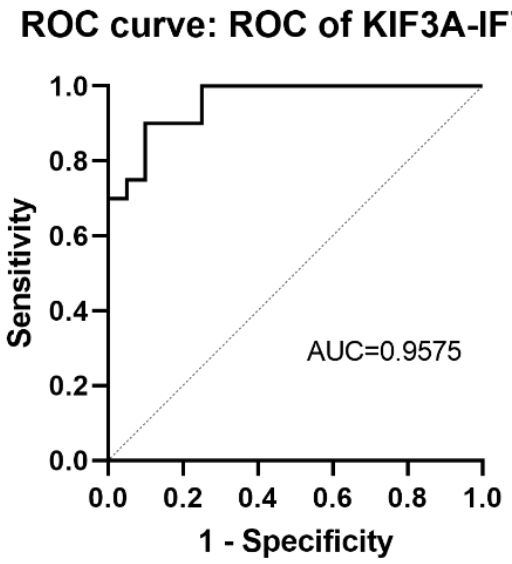
21: 2022/00554. 22: 2022-01-12. 43: 2022-03-09
51: G06K
71: Jiaying University
72: Huang Kekun
54: HYPERSPECTRAL IMAGE CLASSIFICATION METHOD BASED ON TRIPLET LOSS AND CONVOLUTIONAL NEURAL NETWORK
00: -
The invention discloses a hyperspectral image classification method based on triplet loss and convolutional neural network, which relates to hyperspectral technology. Aiming at the problem of low success rate of classification in the prior art, this method is proposed, which is mainly realized by constructing an improved triplet loss from the first several similar samples and different samples that are most difficult to classify. The method has the advantages that all the information of limited training samples is fully utilized while some insignificant intra-class or inter-class information is filtered out, especially the samples which are difficult to classify are paid attention to, and the influence of abnormal samples is suppressed. The invention also designs a convolutional neural network structure suitable for hyperspectral classification, which can not only extract features with sufficient depth, but also learn network parameters with limited training samples, and simultaneously extract spatial and spectral features jointly. The method of the invention only uses hundreds of training samples to obtain good results, and the classification accuracy is obviously better than other latest methods with rapid training speed.



21: 2022/00555. 22: 2022-01-12. 43: 2022-03-09
51: G05B
71: Edge corner Intelligent Technology Shanghai Co., Ltd
72: Zheng Huaping
54: METHOD AND DEVICE FOR LOGISTICS DISTRIBUTION MANAGEMENT
00: -
The invention relates to a logistics distribution management method and device, which includes receiving waybill information sent by the terminal of the pickup personnel, in which the waybill information includes the information of origin, destination and goods form ; at least one candidate transport vehicle is determined based on the origin information and destination information ; the optical transportation vehicle is determined from at least one candidate transport vehicle according to the cargo form information; send the vehicle order to the vehicle terminal of the optical transportation vehicle. The technical scheme provided by the invention can make full use of the storage space of each delivery vehicle, improve the utilization rate of delivery vehicle and logistics delivery rate, and optimize the allocation of logistics distribution resources.

21: 2022/00556. 22: 2022-01-12. 43: 2022-03-09
51: C12Q
71: North China University of Science and Technology
72: Li Shifeng, Cai Wenchen, Liu Shupeng, Xu Hong, Gao Xuemin, Li Gengxu, Fan Yuhang, Chen Si
54: MRNA DETECTION PRIMER SET, PROBE, KIT AND APPLICATION FOR EARLY SCREENING OF PNEUMOCONIOSIS PATIENTS
00: -

The invention discloses an mRNA detection primer set, probe, kit and application for early screening of pneumoconiosis patients, belonging to the technical field of medicine. The invention provides a primer set and probe for detecting mRNA for early screening of pneumoconiosis patients, including one or more of the followings: (1) the primer set and probe for detecting mRNA expression level of KIF3A gene; (2) primer set and probe for detecting the mRNA expression level of IFT88 gene; (3) the primer set and probe for detecting the mRNA expression level of ARL13B gene. The invention can prove that any one or more combinations of mRNA of primary cilia KIF3A, IFT88 and ARL13B can be used as detection markers of pneumoconiosis, and has the characteristics of objectivity, specificity and accuracy; meanwhile, the detection kit provided by the invention is of great significance for early screening of pneumoconiosis, and has great economic and social values.



21: 2022/00557. 22: 2022-01-12. 43: 2022-03-09
51: C07D; C08G; C10G
71: Northeast Petroleum University
72: WEI, Lixin, LI, Da, ZHANG, Lin, LIU, Yang, CHEN, Shuangqing, JIA, Xinlei, LI, Zhe, LU, Mengzhen, DENG, Haiping, CHAO, Meng, ZHAO, Jian, DONG, Hang
54: METHOD FOR PREPARING MODIFIED PERFLUOROALCOHOL POLYOXYETHYLENE ETHER HEAVY OIL DEMULSIFIER
00: -

Disclosed is a method for preparing a modified perfluoroalcohol polyoxyethylene ether heavy oil demulsifier. The method includes: (1) putting perfluorobutyl ethanol and a catalyst, potassium hydroxide, into a high-pressure reaction kettle, replacing air in the reaction kettle with N2, then vacuumize the reaction kettle with a vacuum pump, introducing ethylene oxide into the reaction kettle, and finally performing a polymerization reaction at 140°C, to generate polyether A; and (2) adding the polyether A into a trisection flask, then putting potassium hydroxide into the trisection flask, heating in a water bath, and slowly and dropwise adding epoxy chloropropane, to modify the polyether A and generate a novel fluorine-containing polyether demulsifier. The present invention has the beneficial effects of simple preparation, a low cost, desirable water solubility, oil separation cost reduction, a high demulsification speed, a desirable surface activity, and a better demulsification effect compared with a common demulsifier.

21: 2022/00558. 22: 2022-01-12. 43: 2022-03-07
51: C07K; C12P
71: Zhejiang Wanli University
72: CAO, Shaoqian, QI, Xiangyang, YANG, Hua, MA, Danni, ZHAO, Zhenzhen, WANG, Zhengdong
54: LOW-VALUE-FISH-ORIGINATED PEPTIDE WITH ACE INHIBITORY ACTIVITY AND PREPARATION METHOD THEREOF
00: -

The present invention relates to an ACE-inhibiting collagen peptide from a low-value fish source, wherein an amino acid sequence of the collagen peptide is Gly-Val-Gla, and a molecular ion peak given by UPLC-MS detection is [M]+ 329 m/z. The present invention also relates to a preparation method for the above-mentioned collagen peptide, which combines double-enzyme mixed hydrolysis, ultrafiltration and gel column chromatography techniques. The whole preparation process is simple, easy to control and high in enzymolysis efficiency. The resulting collagen peptide is safe without side effects and has a high ACE inhibitory activity and an excellent thermal stability, and the collagen peptide still has a high ACE inhibitory activity after being digested by a gastrointestinal digestive tract. In addition, the raw material used for preparing the collagen peptide herein is the fish skin

(a processed waste), so as to effectively avoid environmental pollution and improve a utilization rate of resources.

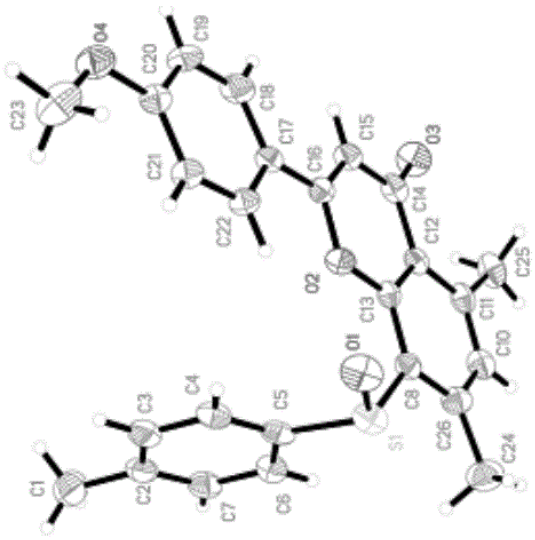
21: 2022/00559. 22: 2022-01-12. 43: 2022-03-07
51: C05G
71: Qinghai Academy of Agricultural and Forestry Sciences
72: LI, Yuemei, TALIN, Gewa, SONG, Mingdan
54: SPECIAL WATER-SOLUBLE FERTILIZER FOR LYCIUM CHINENSE IN THE FLOWERING AND FRUITING STAGES
00: -
The present disclosure discloses a fertilizer for Lycium chinense in the flowering and fruiting stages and relates to the technical field of fertilizers for soil testing and formulated fertilization; specifically, the present disclosure relates to a special water-soluble fertilizer for Lycium chinense in the flowering and fruiting stages, comprising greater than or equal to 50 wt% of effective elements N+P2O5+K2O, greater than or equal to 0.4 wt% of trace elements and 0.05-0.10 wt% of a plant growth regulator, wherein the contents of effective elements are: 18.0-23.0 wt% of nitrogen, 10.0-15.0 wt% of phosphorus pentoxide, and 20.0-25.0 wt% of potassium oxide; the trace elements and the contents thereof are: 0.1-0.5 wt% of boron, 0.1-0.5 wt% of iron, 0.1-0.5wt% of zinc, 0.1-0.5 wt% of molybdenum.

21: 2022/00560. 22: 2022-01-12. 43: 2022-03-07
51: B01J
71: Shanlong Antai Environmental Protection Technology Co., Ltd., Qingdao University of Science and Technology
72: Dai Chunlong, Wang Lei, Lai Jianping, Zhang Huadong, Kang Yan, Li Bin
54: SELENIZED SURFACE MODIFIED RUTHENIUM DIOXIDE NANOPARTICLE CATALYST, AND ITS PREPARATION METHOD AND APPLICATION
00: -
The invention belong to that technical field of new energy materials and electrochemical catalysis, and it discloses a selenized surface modified ruthenium dioxide nanoparticle catalyst, and its preparation method and application. Carbon black is used as a carrier, and ruthenium dioxide is first fixed on the carrier through grinding, selenium was modified on the surface of ruthenium dioxide nanoparticles by high-temperature calcination. The present invention effectively increases its specific surface area by processing it into nano-particles, and relatively reduces the content of precious metals in it, thus reducing its cost. After 24 hours of long-term current test in 0.1M lithium sulfate solution, the stability has not obviously decreased, showing it has a good stability. Ruthenium dioxide catalyst with selenide surface modification is a new type of surface modification material, and has better nitrogen reduction reaction (NRR) activity, which makes it have obvious advantages over the current noble metal/non-noble metal nitrogen reduction catalyst nitrogen reduction reaction (NRR) activity, moreover, it is obviously better than the current heteroatom-doped carbon material/noble metal catalyst.

21: 2022/00561. 22: 2022-01-12. 43: 2022-03-07
51: A23B
71: Hainan Tropical Ocean University
72: Yu Shuchi, Li Ye
54: APPLICATION OF CACTUS FRUIT EXTRACT AS QUORUM SENSING INHIBITOR OF SHEWANELLA PUTREFACIENS AND TRACHINOTUS OVATUS PRESERVATIVE
00: -
The invention relates to an application of cactus fruit extract as a quorum sensing inhibitor of Shewanella putrefaciens and a Trachinotus ovatus preservative. The preparation method of cactus fruit extract takes ethanol aqueous solution as dissolving medium, uses ultrasonic-microwave synergistic extraction method to extract, filters and collects filtrate, and the filtrate is subjected to salt precipitation, acid dissolution, extraction, evaporation, concentration and drying by rotary evaporator to obtain the final product. The cactus fruit extract prepared by the invention has quorum sensing inhibitory activity at sub-inhibitory concentration, and the effective dose is low, which can significantly inhibit the formation of biofilm, extracellular enzyme protease activity, clustering, swimming mobility and other quorum sensing characteristics of the Shewanella putrefaciens, thereby inhibiting the putrefaction of the Shewanella putrefaciens, without affecting the growth of the Shewanella putrefaciens and generating drug resistance, and can be used as a quorum sensing inhibitor from natural sources.

21: 2022/00562. 22: 2022-01-12. 43: 2022-03-07
51: A23B
71: Southwest Minzu University, Aba Tibetan and Qiang Autonomous Prefecture Industrial Economy Research Institute (Aba Tibetan and Qiang Autonomous Prefecture SME Service Center)
72: HAO, Gang, CAI, Yinchuan
54: FORMULA OF ETHYL LAUROYL ARGINATE-CHITOSAN EDIBLE FRESH-KEEPING COATING FILM AND PREPARATION METHOD THEREOF
00: -
The present disclosure discloses a formula of an edible fresh-keeping coating film which takes ethyl lauroyl arginate (LAE) as a main antibacterial component and chitosan (CS) as a film-forming agent, and a method for preparing the coating film. The coating film formula and the preparation method provided by the technical solution are suitable for being applied to foods such as fruits, cheese and meat products, can obviously inhibit the aging of the fruits, obviously inhibit the growth of microorganisms, and obviously delay the time for the growth of bacteria to reach the maximum growth speed, improve the fresh-keeping capability and prolong the shelf life of commodities.

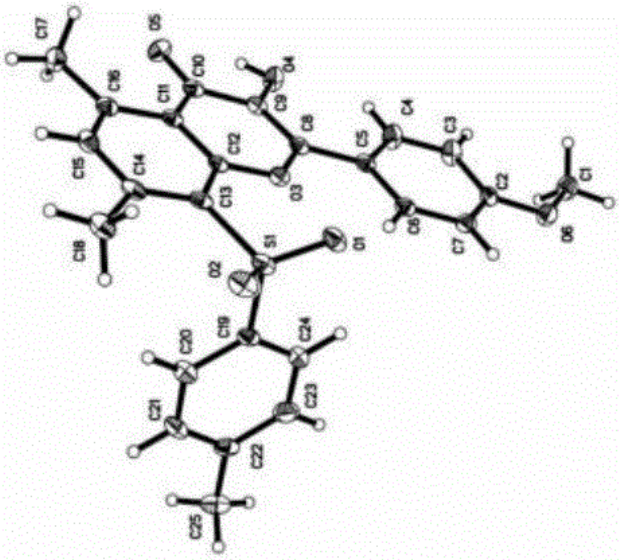
21: 2022/00563. 22: 2022-01-12. 43: 2022-03-07
51: C07D
71: Jiangnan University
72: Lianghua Zou, Kailing Zhang, Hao Qin, Yuhao Cheng, Cong Zhao
54: PREPARATION METHOD OF SULFOXIDE FLAVONOIDS AND SULFONE FLAVONOIDS
00: -
The invention relates to a preparation method of sulfoxide and sulfone flavonoids, and belongs to the technical field of organic chemistry. The structural formula of the sulfoxide flavonoids is represented by a Formula I, and the structural formula of sulfone flavonoids is represented by a Formula III, wherein R1 comprises unsubstituted C6-10 aryl, halogen, alkyl or alkoxy substituted aryl; and R2 comprises an alkoxy group or a cyano-substituted aryl group. The used raw materials are low in price, green and environment-friendly, and simple to operate, and the synthesized derivatives have the effect of inhibiting the biological activity of tumor cells.



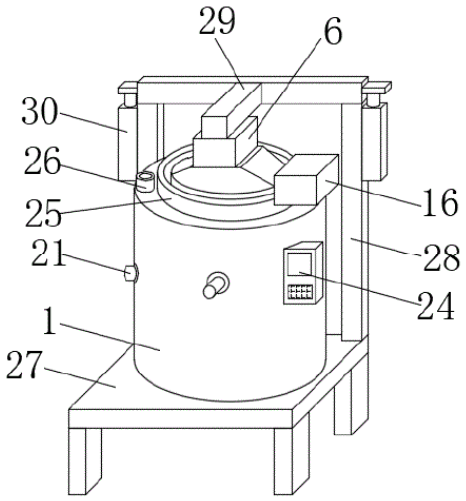
21: 2022/00564. 22: 2022-01-12. 43: 2022-03-07
51: D06N
71: SHANDONG UNIQUES TECH.CO., LTD
72: ZHONG, Lanxi, GUO, Xiao, SHAO, Yanqing, LIU, Yingying, MA, Yunfeng, SUI, Lei, SUN, Shanfeng
54: BLANK BLANKET COATING GLUE FORMULA AND BLANK BLANKET PRE-COATING PROCESS
00: -
The present disclosure provides a blank blanket coating glue formula and a blank blanket pre-coating process. The blank blanket coating glue formula comprises the following components in parts by weight: 90-110 parts of VAE latex, 110-130 parts of a calcium carbonate filler, 1-3 parts of a sodium succinate sulfonate penetrating agent, 1-3 parts of a sodium polyacrylate thickening agent and 60-100 parts of water, wherein the VAE latex contains 55% of a copolymer of vinyl acetate and ethylene and 45% of water. According to the technical solution of the present disclosure, the pre-coating treatment of the blank blanket has the effect of effectively preventing fluffing, and the problem of fluffing on the surface of the spliced carpet is greatly reduced.

21: 2022/00565. 22: 2022-01-12. 43: 2022-03-02
51: A61P
71: Jiangnan University
72: Lianghua Zou, Kailing Zhang, Hao Qin, Yuhao Cheng, Cong Zhao
54: PREPARATION METHOD OF 8-BENZENESULFONYL SUBSTITUTED FLAVONE GLUCOSIDE

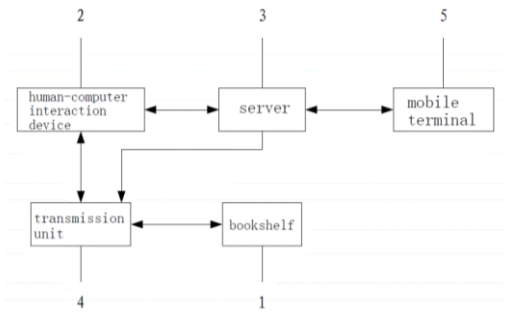
00: -
The invention relates to 8-benzenesulfonyl substituted flavone glucoside and a preparation method thereof, and belongs to the technical field of organic chemistry. The 8-benzenesulfonyl substituted flavonoid glucoside has the structure shown in the specification, wherein R1 comprises an unsubstituted C6-10 aryl group, a halogen, an alkyl group, or an alkoxy substituted aryl group; R2 includes alkoxy-substituted aryl. The raw material used in the invention is low in price, green and environment-friendly, and simple to operate, and the synthesized derivative has the effect of inhibiting the biological activity of tumor cells.



21: 2022/00566. 22: 2022-01-12. 43: 2022-03-02
51: C12M
71: Crop Research Institute, Shandong Academy of Agricultural Sciences
72: CHEN, Lirong, LIU, Kaichang, WANG, Xingya, GONG, Kuijie, GUO, Yuqiu
54: WHEAT BRAN-FERMENTING APPARATUS FOR PROCESSING WHOLE WHEAT FLOUR
00: -
The present invention discloses a wheat bran-fermenting apparatus for processing whole wheat flour, which comprises an outer cylinder and a fermentation tank, wherein the fermentation tank is located inside the outer cylinder, and the fermentation tank is rotatably connected to the outer cylinder via a bearing; wheat bran is fermented in the interior of the fermentation tank by providing a fermentation tank, and a spiral stick is provided in the interior of the fermentation tank, and during the fermentation, the spiral stick is driven to rotate together by starting a first motor via a control panel, so that the spiral stick stirs the wheat bran in the interior of the fermentation tank.



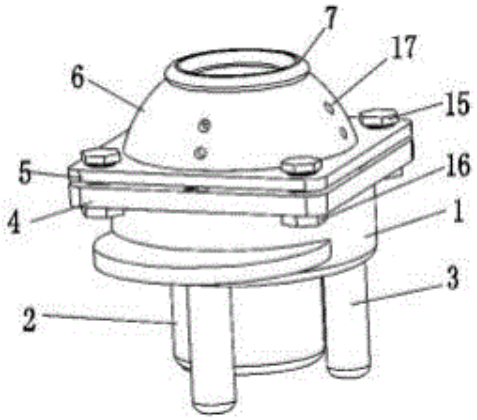
21: 2022/00567. 22: 2022-01-12. 43: 2022-03-02
51: G07G
71: North China University of Science and Technology
72: LAN, Tian, WANG, Chonghao
54: LIBRARY SELF-SERVICE SYSTEM
00: -
The present invention relates to a library self-service system, which comprises a bookshelf for placing books according to positions; a human-computer interaction device for verifying identity information about a user and interacting with the user, wherein the human-computer interaction device generates interaction information when interacting with the user; a server for generating a control instruction according to the interactive information; and a transmission unit for transmitting books between the human-computer interaction device and the bookshelf according to the control instruction. The system of the present invention can provide users with book borrowing or book returning services in real-time, while reducing labor and protecting privacy of the user.



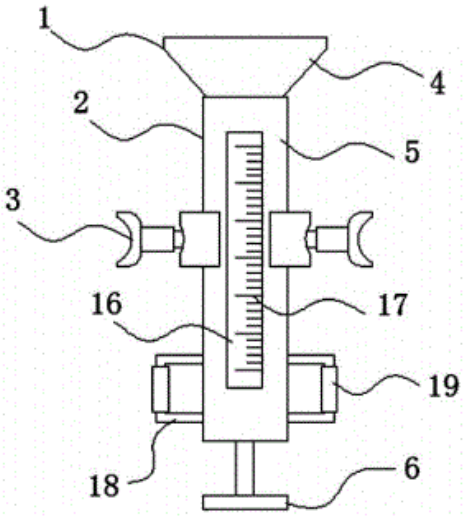
21: 2022/00568. 22: 2022-01-12. 43: 2022-03-02
51: C04B
71: Hebei University of Architecture, Desheng (Zhangbei) Industrial Group Co., Ltd.
72: SUN, Jing, WANG, Hailong, LIU, Hongbo, DONG, Yi, WANG, Jun, ZHOU, Kai, ZHANG, Shaoyun, LIU, Yongzhi, HONG, Junzhe
54: ENVIRONMENT-FRIENDLY LIGHTWEIGHT AGGREGATE CONCRETE AND PREPARATION METHOD THEREOF
00: -
The present disclosure discloses environment-friendly lightweight aggregate concrete and a preparation method thereof. The environment-friendly lightweight aggregate concrete is prepared from the following raw materials in parts by weight: 1 part of cement, 1.796-1.908 parts of pumice coarse aggregate, 0.356-0.796 part of iron tailing sand, 0.382-0.823 part of pumice sand, 0.005-0.015 part of an admixture and 0.315-0.45 part of water. Pumice is subjected to hole sealing treatment, and a hole sealing method comprises the following steps: enabling the surface of the pumice to be in full contact with a hole sealing material, and enabling the hole sealing material to seal external opened holes in the surface of the pumice, wherein the hole sealing material is prepared by uniformly mixing common river sand with the particle size of not greater than 1.18 mm and cement according to a mass ratio of 1: 1.

21: 2022/00569. 22: 2022-01-12. 43: 2022-03-02
51: B32B
71: ZIBO ZHONGNAN PHARMACEUTICAL PACKAGING MATERIALS CO., LTD.
72: WANG, Huanyu, LIU, Cheng, ZHAO, Junfeng, MU, Xize, GONG, Xiaohan
33: CN 31: 202110261294.3 32: 2021-03-10
54: PET/PE COMPOSITE SHEET FOR ENCAPSULATION OF NUCLEIC ACID DETECTION REAGENTS AND PREPARATION METHOD THEREOF
00: -
The present disclosure relates to a technical field of medicine packaging materials, and more particularly to a PET/PE composite sheet for encapsulation of nucleic acid detection reagents and a preparation method thereof. The PET/PE composite sheet for encapsulation of nucleic acid detection reagents comprises a polyethylene terephthalate hard sheet and a low-density polyethylene film compounded on the surface of the PET hard sheet through a solvent-free glue compounding process; the thickness of the polyethylene terephthalate hard sheet ranges from 0.20 to 0.35 mm; the thickness of the low-density polyethylene film ranges from 0.03 to 0.05 mm. For the PET/PE composite sheet for encapsulation of nucleic acid detection reagents provided in the present disclosure, solvent-free glue is adopted for compounding, thus environmental pollution is reduced; moreover, polyethylene terephthalate and polyethylene are compounded at a high speed, thus the productivity is improved.

21: 2022/00571. 22: 2022-01-12. 43: 2022-03-02
51: A61H; A61K; A61M; A61P
71: The Second Affiliated Hospital of Shandong First Medical University
72: WANG, Peng
54: STEAM MEDICATED BATH DEVICE FOR TREATING GENERAL SURGERY DEPARTMENT ANORECTAL HEMORRHOID AND FISTULA
00: -
Disclosed is a steam medicated bath device for treating general surgery department anorectal hemorrhoid and fistula, including a main cylinder, wherein a bottom cylinder and supporting legs are arranged at a bottom of the main cylinder, a lower cover plate is fixed at a top of the main cylinder, an upper cover plate is installed at a top of the lower cover plate, an upper cylinder is fixed at a top of the upper cover plate, a washer is fixed at a top of the upper cylinder, a partition is arranged in an inner cavity of the main cylinder, four groups of connecting plates are fixed to a side wall of the partition, and a grid is placed at a connection between main cylinder and bottom cylinder. The present invention treats anorectal hemorrhoid and fistula through a way of hip bath steam featuring easy operation and excellent use comfort.



21: 2022/00572. 22: 2022-01-12. 43: 2022-03-02
51: A61B
71: The Second Affiliated Hospital of Shandong First Medical University
72: ZHANG, Yingzi
54: SUCKER-ASSISTED DELIVERY DEVICE FOR OBSTETRICS
00: -
Disclosed is a sucker-assisted delivery device for obstetrics. The sucker-assisted delivery device for obstetrics includes a delivery-assisting device, where the delivery-assisting device consists of a suction device and an expansion device, the suction device consists of a delivery-assisting sucker, a negative pressure cylinder and a piston rod, the piston rod consists of a piston, a connecting rod and a pressure control handle, a slideway is provided inside the negative pressure cylinder, and the expansion device consists of an expansion blade, a reset spring and a positioning block. The sucker-assisted delivery device for obstetrics can assist pregnant women in delivery by arranging the suction device, can adjust a position of the expansion device by arranging a sliding groove and a sliding block, and can expand a pelvic floor by arranging the expansion device, thereby reducing resistance of the pelvic floor to a fetal head and relieving pressure on the fetal head.



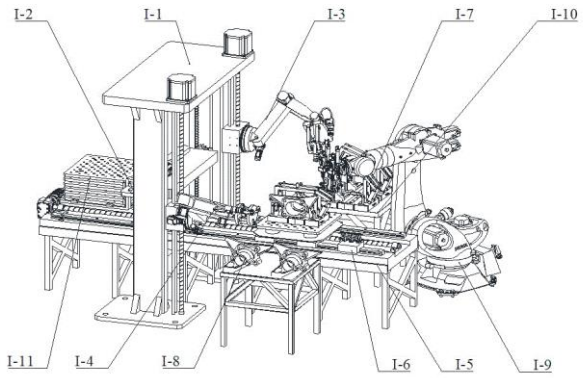
21: 2022/00574. 22: 2022-01-12. 43: 2022-03-02
51: A23K
71: Hefei Technology College, Shanghai Xinshangrun Biotechnology Co., Ltd.
72: ZHENG, Xuebin, WANG, Anmin, MA, Xiliang
54: 10% PROBIOTIC NUTRITIVE PREMIX FEED FOR GROWING AND FATTENING PIGS
00: -
10% probiotic nutritive premix feed for growing and fattening pigs consists of the following components in parts by weight: 12 parts of compound organic mineral premix feed for pigs, 2.5 parts of multi-vitamin premix feed for pigs, 7 parts of choline chloride, 15 parts of L-lysine hydrochloride, 3 parts of phytase, 1 part of a complex enzyme, 1 part of compound microecologics for pigs, 150 parts of limestone powder, 60 parts of calcium hydrophosphate, 40 parts of sodium chloride, 8 parts of sodium bicarbonate, 300 parts of extruded soybeans, 2.5 parts of tea polyphenols, 50 parts of rice chaff powder and 348 parts of zeolite powder. The disclosure relates to the technical field of pig feed. The disclosure can supplement the nutritive elements required in a weight gaining process for growing and fattening pigs; the health of pigs and human body is protected as well.

21: 2022/00575. 22: 2022-01-12. 43: 2022-03-02
51: A23K
71: Hefei Technology College, Shanghai Xinshangrun Biotechnology Co., Ltd.
72: ZHENG, Xuebin, WANG, Anmin, MA, Xiliang
54: 8% PROBIOTIC NUTRITIVE PREMIX FEED FOR PIGLETS

00: -
8% probiotic nutritive premix feed for piglets, which relates to the technical field of pig feed, is prepared from the following components in parts by weight: 10-20 parts of compound organic mineral premix feed for pigs, 2-10 parts of multi-vitamin premix feed for pigs, 10-20 parts of 70% choline chloride, 1-10 parts of threonine, 20 parts of 98% L-lysine hydrochloride, 1-10 parts of an enzyme group, 1-8 parts of compound microecologics for pigs, 300-500 parts of an additive, 20-100 parts of sodium chloride, 200-400 parts of a feed carrier, 2-20 parts of a swelling agent, 20-80 parts of whey powder and 1-8 parts of tea polyphenols. The disclosure provides a better taste for the premix feed and necessary nutrients required for piglets, which is more conducive to piglet growth; the disclosure can achieve gastrointestinal improvement for piglets, and reduce the possibility of piglet disease.

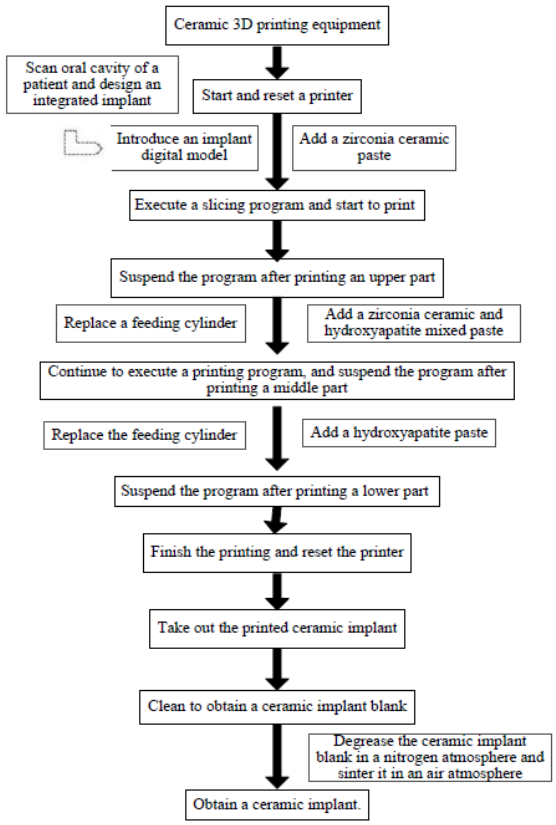
21: 2022/00576. 22: 2022-01-12. 43: 2022-03-02
51: A23K
71: Hefei Technology College, Shanghai Xinshangrun Biotechnology Co., Ltd.
72: ZHENG, Xuebin, WANG, Anmin, MA, Xiliang
54: 5% PROBIOTIC NUTRITIVE PREMIX FEED FOR PEAK EGG-LAYING PERIOD OF LAYING HENS
00: -
5% probiotic nutritive premix feed for a peak egg-laying period of laying hens is prepared from the following components in parts by weight: 100-400 parts of a nutritive additive, 50-200 parts of a non-nutritive additive, 1-10 parts of compound microecologics for chickens, 200-600 parts of a diluent and 20-100 parts of a feed carrier. A preparation method of the 5% probiotic nutritive premix feed for the peak egg-laying period of laying hens comprises the following steps: firstly weighing various raw material components according to a formula, and then mixing them in a mixing machine. The nutritive additive comprises an amino acid additive, a mineral additive and a vitamin additive. The disclosure rich in insect protein can meet the nutrition requirement of the laying hens in the peak egg-laying period, and has the advantages of high feed conversion rate, effective disease prevention, laying hen growth promotion, better taste and lower cost.

21: 2022/00577. 22: 2022-01-12. 43: 2022-03-02
51: B23K
71: Qingdao University of Technology, Qingdao Kaws Intelligent Manufacturing Co., Ltd.
72: Liu Dewei, Li Changhe, Qin Aiguo, Fan Hanqi, Li Min, Li Junting, Jiang Tao, Zhou Zongming, Wu Qidong, Lu Bingheng, Liu Bo, Chen Yun, Cao Huajun, Mao Cong, Ding Wenfeng, Xu Xuefeng
54: PROCESS SYSTEM OF FOLLOWER FIXTURE FOR TANK MOVING SUPPORT AND AUTOMATIC PROCESSING PRODUCTION LINE THEREOF
00: -
A process system of a follower fixture for tank moving support is provided and includes a conveying table slidably provided with a bearing platform through a screw slide rail assembly and provided with an outer frame assembly; a lifting platform is slidably installed in the outer frame assembly; positions of the lifting platform and the bearing platform are corresponded up and down; the outer frame assembly is slidably provided with a robot component; both sides of the conveying table are provided with loading platforms; workpieces are placed on one loading platform, and a fixture system is placed on the other loading platform; the fixture system and the workpieces are both placed in the moving range of the robot component, and positions of the fixture system and the workpieces are corresponded. problems including processing flexibility cannot be realized can be solved.



21: 2022/00578. 22: 2022-01-12. 43: 2022-03-02
51: A61C; B28B; G06F; B33Y
71: DONGGUAN UNIVERSITY OF TECHNOLOGY
72: CHEN, Shenggui, LI, Tao, YE, Yanyuan, LI, Nan
54: CERAMIC DENTAL IMPLANT AND MANUFACTURING METHOD
00: -

The present disclosure relates to the technical field of oral implantology, in particular to a ceramic dental implant and a manufacturing method. The present disclosure has the beneficial effects as follows: (1) an additive manufacturing technology is adopted to integrally and quickly manufacture an implant; gradient manufacturing of three parts can be realized; complex steps of embedding implant nails first and then installing the implant crowns in a traditional implantation method are simplified; and the implant can be directly and integrally implanted without step-by-step installation through integrated manufacturing; and (2) a manufacturing method of manufacturing a dental implant with a high-solid-content ceramic additive manufacturing technology is proposed, which solves the problem that a porous structure in an implant body area of the implant is difficult to machine in a traditional manufacturing method.



21: 2022/00579. 22: 2022-01-12. 43: 2022-03-04
51: C12Q
71: LIAOCHENG UNIVERSITY
72: WANG, Changfa, MIAO, Xinyao, ZHU, Xiaoyang, GAO, Jiayang, ZHANG, Ruitao, LI, Yuhua, LIU, Guiqin, LIU, Wenqiang, ZHAN, Yandong, CHAI, Wenqiong

54: SNP MARKERS FOR DISCRIMINATING DONKEY BREEDS, PRIMER SET AND REAGENT KIT THEREOF

00: -

SNP makers for discriminating donkey breeds, a primer set and a reagent kit thereof are provided, specifically a donkey SNP marker and use thereof are provided, and particularly a primer set for amplifying the SNP marker, a reagent kit, a genotyping method and a genotyping system are provided, which relate to the field of biological information determination. Primer pairs provided can realize coamplification of loca and realize multiple PCR amplification of each of the loca at the same time. SEQ ID NO:1-SEQ ID NO:20 include 10 pairs of primers, which respectively correspond to S01 to S10. When different primer sets are connected with different detectable markers, situations of different SNP sites are reflected through detecting corresponding markers. Further, a method and device for discrimination of donkey individuals and affinity identification are provided.

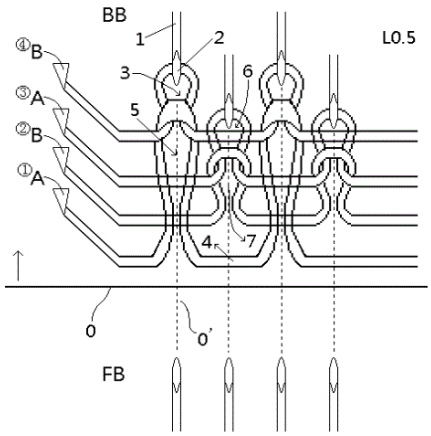
21: 2022/00599. 22: 2022-01-12. 43: 2022-03-04
51: D04B
71: INNER MONGOLIA KING DEER CASHMERE CO., LTD
72: Xinquan WANG, Wenshan NIE, Ruilan DONG, Hui DING, Jiancheng QIAO, Jianli GUO
33: CN 31: 202010588392.3 32: 2020-06-24

54: IMITATION CARVED KNITTED FABRIC AND KNITTING METHOD THEREOF

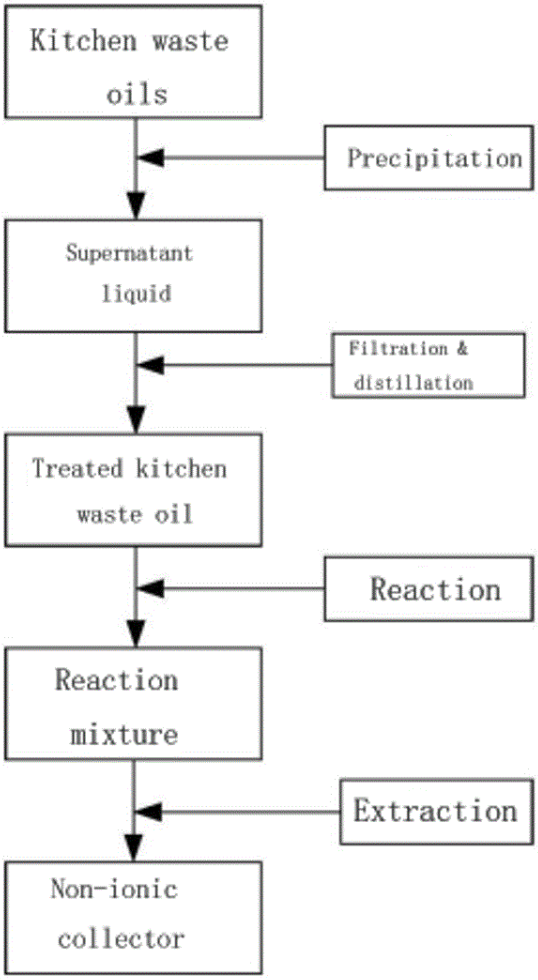
00: -

The invention discloses an imitation flower-carving knitted fabric and a weaving method thereof. The imitation flower-carving knitted fabric comprises the following steps: linkage of a floating wire and a counter-needle coil, weaving a bird-eye interwoven coil with an A-color yarn and a B-color yarn on a rear plate needle bed BB, wherein the needle position of the needle bed is aimed at a needle, and the needle bed is woven into a first knitted fabric; the four-flat coil and the front bed coil are woven with the A-color yarn, the floating wire and the counter-needle coil are woven with the B-color yarn, and the needle position of the needle bed is aimed at a tooth, and the needle bed is woven into a second knitted fabric. The invention also discloses an imitation flower

knitted fabric. The invention has the advantages of simple design, convenient weaving, novel carved pattern, strong three-dimensional sense of pattern, and can be completely copied or replaced by manual sewing and embroidery machine sewing.

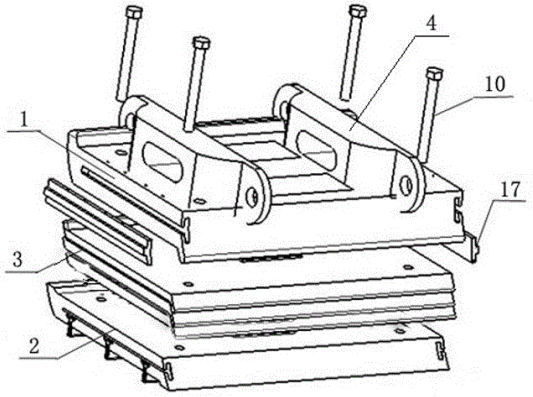


21: 2022/00711. 22: 2022-01-14. 43: 2022-03-07
51: B03D
71: Qingdao Agricultural University
72: GUO, Yuanxin, KONG, Zhe, LI, Qiuyi, ZHENG, Shidong
33: CN 31: 202110286281.1 32: 2021-03-17
54: NON-IONIC COLLECTOR, PREPARATION METHOD AND APPLICATION THEREOF
00: -
The present invention discloses a preparation method of a non-ionic collector for fly ash flotation, including following steps of: Step 1-taking supernatant liquid of kitchen waste oils, filtering out impurities, removing volatiles, and obtaining a treated kitchen waste oil; Step 2-mixing the treated kitchen waste oil with absolute ethanol and concentrated sulfuric acid and stirring at 60~100C until the reaction goes to completion, and obtaining a reaction mixture; and Step 3-extracting the reaction mixture with an extraction agent, taking a supernatant liquid after extraction, and removing the extraction agent from the supernatant liquid to obtain a non-ionic collector. The present invention also provides a non-ionic collector and the application thereof, and a method for flotation of high carbon fly ash by using the above-mentioned non-ionic collector.

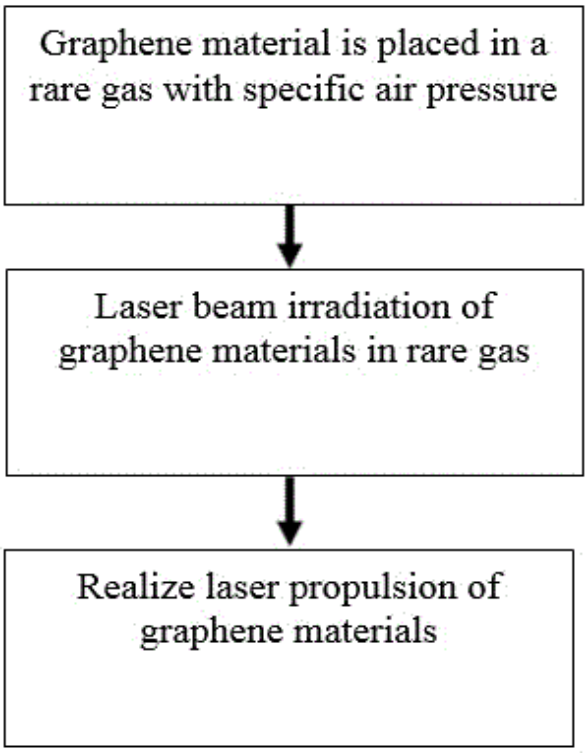


21: 2022/00746. 22: 2022-01-17. 43: 2022-03-02
51: E01B
71: Taiyuan University of Science and Technology
72: Meng Wenjun, Zhao Zhangda, Yan Bijuan, Ren Hong, Sun Zhengyu, Zhang Biao
54: MODULAR COMBINED ADJUSTABLE VIBRATION DAMPING TRACK
00: -
The purpose of the invention is to provide a modular combined adjustable vibration damping track. The track plate comprises a top plate, a vibration damping structure and a bottom plate with fixing holes on the left and right sides, wherein the top plate, the vibration damping structure and the bottom plate are stacked in turn from top to bottom to form a track plate; the top plate, the vibration damping structure and the bottom plate are cloud trapezoidal; the top plate is fixed with damping link; a plurality of slots are equally arranged on the bottom plate parallel to the long side; the slots are matched with

gear shapers; and the damping links on adjacent track plates are connected by pin shafts with damping sleeves to form a track; the pin shaft is in small clearance fit with the damping sleeve. Through the modularized track structure, the track type can be quickly adjusted according to the road condition, and the track can be arbitrarily assembled according to the operation needs, and the damage repairing can be quickly carried out. At the same time, the track can reduce the impact vibration caused by the road surface, reduce the vibration and noise, and avoid the fault caused by vehicle body resonance.



21: 2022/00747. 22: 2022-01-17. 43: 2022-03-02
51: F03H
71: Qingdao University of Science and Technology
72: Wang Lei
54: LASER PROPULSION METHOD OF GRAPHENE IN RARE GAS
00: -
The invention belongs to the technical field of laser, and relates to a laser propulsion method of graphene in rare gas. According to the method, graphene material is placed in a rare gas with a pressure of not higher than 103 Pa, and the graphene material in the rare gas is irradiated with a laser beam to realize laser propulsion of the graphene material in the rare gas; laser irradiation is used to directly push graphene materials in rare gas by laser beam, and other materials can also be directly pushed by graphene as a carrier, so that the non-contact push of graphene or other related objects can be realized without any fuel, and the driving force is far greater than light pressure (radiation pressure). The whole process of this method is simple, efficient, environmentally friendly and has a broad application prospect.



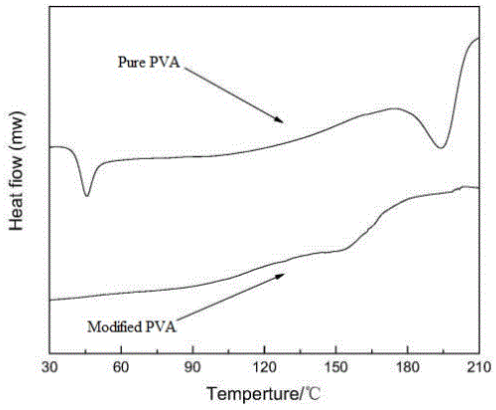
21: 2022/00748. 22: 2022-01-17. 43: 2022-03-02
51: C04B; C08J
71: Qingdao Comprehensive Administrative Law Enforcement Department For Development And Reform, Qingdao University
72: Zhou Dexing, Zhang Chen
54: FLAME RETARDANT THERMAL INSULATION MATERIAL AND PREPARATION METHOD THEREOF
00: -
The invention discloses a flame retardant thermal insulation material and a preparation method thereof, belonging to the technical field of flame retardant materials. The flame-retardant thermal insulation material comprises the following components in parts by weight: 80-120 parts of polymer base material, 20-35 parts of modified polyurethane, 40-56 parts of composite flame retardant, 12-28 parts of paraffin wax, 5-10 parts of antioxidant and 0.1-1 part of dispersant. According to the invention, polyvinyl chloride and/or polyethylene and paraffin wax, which are polymer substrates with heat preservation performance, are selected, so that the material has double heat preservation performance, and modified

polyurethane is added to improve the compatibility between the composite flame retardant and the polymer substrate, and the addition of antioxidant can reduce the thermal oxidation decomposition of paraffin wax and polymer substrate during heating. The material prepared by the method has excellent flame retardant performance, strong tensile strength, simple preparation method and suitability for large-scale production.

21: 2022/00749. 22: 2022-01-17. 43: 2022-03-02
51: A23B
71: Ludong University
72: Wang Xiaotong, Lin Ting, Wang Xiaona, Wei Lei, Huang Baoyu, Liu Yaqiong, Zhang Meiwei, Han Yijing, Song Hongce, Xie Chaoyi
54: PROCESSING METHOD OF OYSTER INSTANT FOOD
00: -
The invention discloses a processing method of oyster instant food, which comprises the following steps: selecting fresh and healthy oysters with high fullness; Take out the soft part, remove the visceral mass of oyster, clean it, add sucrose solution containing 100ml of water and 2.5g of sucrose, fully soak it, freeze it, mash it and drain it, add 100ml of yeast solution containing 1.00-1.50 g of yeast powder and the weight ratio of oyster meat to oyster meat is 1.2-3: 1, fully soak it, add glutinous rice flour with the weight ratio of oyster meat to glutinous rice flour of 3: 1, mix well, add salt, and make blending. Drying and controlling the moisture content; Pour the homogenate into a mold, puffing for 2 minutes and 20 seconds at 700W power, drying the puffed oyster chips twice, and vacuum packaging. The preparation method of the invention is simple and easy to operate, and the prepared oyster slices are unique in flavor and convenient to eat, which enriches the eating methods of oysters and is beneficial to industrial development.

21: 2022/00750. 22: 2022-01-17. 43: 2022-03-02
51: C02F
71: Guangxi University
72: Chen Jianhua, Chen Ye
54: PREPARATION METHOD OF A HEAVY METAL TRAPPING AGENT FOR MINERAL PROCESSING WASTEWATER
00: -
The invention discloses a preparation method of heavy metal trapping agent for mineral processing wastewater, belonging to the technical field of wastewater treatment, which comprises the following steps: mixing alkaline heavy metal trapping agent and stabilizer, stirring uniformly, adding acidic flocculant, and stirring uniformly to obtain white solid, that is, heavy metal trapping agent for mineral processing wastewater; The mass percentage of alkaline heavy metal catcher is 75-85%, the mass percentage of stabilizer is 5-10%, and the balance is acidic flocculant. The method can realize the efficient treatment of copper, lead, zinc, cadmium and mercury in wastewater, simplify the removal steps of heavy metals, and complete the reaction at room temperature, with low energy consumption and high removal rate of heavy metals, and the treated wastewater can meet the discharge requirements.

21: 2022/00752. 22: 2022-01-17. 43: 2022-02-28
51: C08G; C08K; C08L
71: Shenyang University of Technology
72: LI, Fenghong
54: POLYVINYL ALCOHOL (PVA) MODIFIED WITH DEGRADABLE COMPOUND PLASTICIZER AND PREPARATION METHOD THEREFOR
00: -
Disclosed are polyvinyl alcohol (PVA) modified with a degradable compound plasticizer and a preparation method therefor. The modified PVA includes 100 parts of PVA and 20-30 parts of compound plasticizers according to a mass ratio. The compound plasticizer has a mass ratio as follows: glycerol:epsilon-caprolactone (epsilon-CL)=(15-30):(2-5). The preparation method includes: carrying out ring opening polymerization on glycerol and epsilon-CL to obtain the compound plasticizer; taking PVA as a matrix material, dropwise adding the compound plasticizer, uniformly mixing same, and leaving the same to stand to obtain mixed and swollen PVA; and carrying out internal mixing and forming to obtain the modified PVA. An existing plasticizer has the problems of complex preparation, subsequent pollution, etc. A compound plasticizer blend prepared in the present invention requires no post-processing or generate a waste liquid. Moreover, the compound plasticizer has a simple formula, a simple and efficient preparation method and degradability.

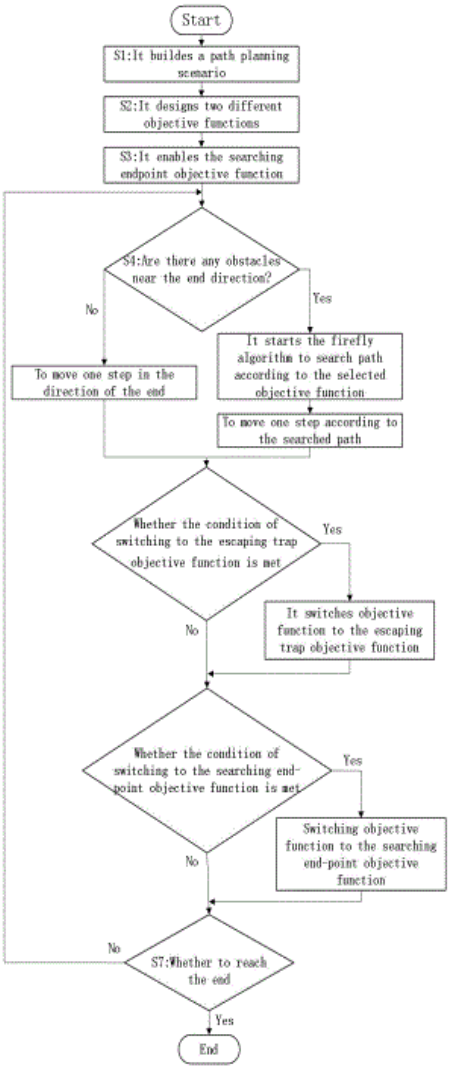


21: 2022/00753. 22: 2022-01-17. 43: 2022-02-28
51: G05D
71: Changsha University of Science and Technology
72: LI, Fengling, FAN, Xingjiang, HOU, Zhixiang, YOU, Qingru, YIN, Zheng'an, TIAN, Xiao, CHENG, Wei
33: CN 31: 202110636332.9 32: 2021-06-08

54: A ROBOT MOVING METHOD BASED ON FIREFLY OPTIMIZED PATH WITH VARIABLE OBJECTIVE FUNCTION

00: -

A robots moving method based on firefly optimized path with variable objective function, includes the following steps: S1,It builds a path planning scenario. S2,It designs two different objective functions. S3,It enables the searching endpoint objective function. S4,It judges whether there are any obstacles in the end direction of the robot.If there are no obstacles, the robot moves directly to the end.If there are obstacles, the robot starts firefly algorithm to search the position. S5,It judges whether the mobile robot satisfies the condition of enabling the escaping trap objective function. S6,It judges whether the mobile robot meets the condition of enabling the searching end-point objective function, if yes, it enables the searching end-point objective function, if not, it keeps the objective function unchanged. S7,It judges whether the robot has reached the end point.



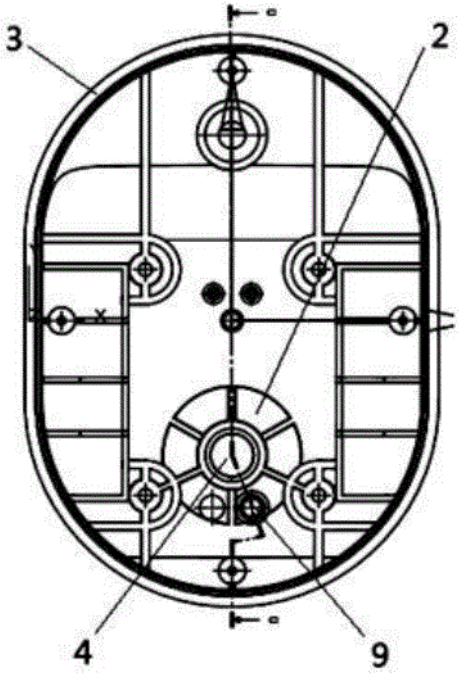
21: 2022/00754. 22: 2022-01-17. 43: 2022-02-28
51: F16K
71: ShanDong JiaoTong University, Shandong Feikong Information Technology Co., Ltd.
72: LIU, Yonghui, TAO, Lili, ZHOU, Changfeng, LIU, Haishen, LEI, Xingmao

54: VALVE BODY SEPARATION ALARM SYSTEM FOR NON-MAGNETIC TEMPERATURE CONTROL VALVE AND CONTROL METHOD THEREOF

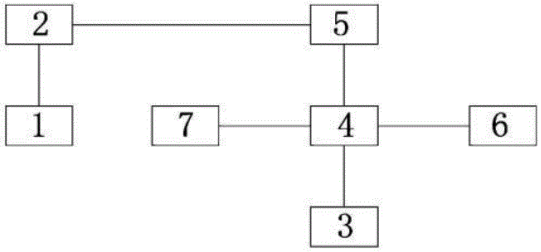
00: -

The present invention discloses a valve body separation alarm system for a non-magnetic temperature control valve and a control method thereof. The system structurally includes: a temperature control valve, an actuator, and a non-magnetic signal sensor including an LC oscillating circuit. Both ends of a capacitor are respectively electrically connected to a comparator or a charging input end. The actuator includes a controller that

charges and oscillates the non-magnetic signal sensor through a control circuit. A remote transmission device is connected to a control platform server through a wireless network. A combination or separation state of a temperature control valve body and an actuator is sensed by a non-magnetic signal sensing technology. When the separation state is generated, the separation state is indicated by a state indicator lamp of the actuator and sent to a control platform server through a remote transmission device.



21: 2022/00755. 22: 2022-01-17. 43: 2022-02-28
51: F24D
71: ShanDong JiaoTong University, Shandong Feikong Information Technology Co., Ltd.
72: LIU, Yonghui, ZHOU, Changfeng, TAO, Lili, LEI, Xingmao, LIU, Haishen
54: INTELLIGENT TEMPERATURE CONTROL SYSTEM BASED ON FLOW CONTROL AND CONTROL METHOD THEREOF
00: -
The present invention discloses an intelligent temperature control system based on flow control and a control method thereof, the structure of which comprises: an intelligent temperature control valve, an intelligent temperature control valve actuator, an ultrasonic heat meter, an upper computer system, a remote transmission system and a typical indoor temperature collector. The intelligent temperature control valve of the present invention forms a local control method according to a flow control threshold value; the upper computer system obtains the indoor temperature of the user in the building through the typical indoor temperature collector, judges whether the preset indoor temperature value is reached according to the minimum temperature, modifies the control threshold of the temperature control valve, and forms a remote secondary control scheme. Through the local and remote two-pole regulation scheme, all the users of the whole building can achieve heat balance and meet the requirements of heating.



21: 2022/00756. 22: 2022-01-17. 43: 2022-02-28
51: G01N
71: Liaoning Technical University
72: YU Yongjiang, WANG Zhenmeng, LIU Jingjing, WANG Pengbo, YANG Yuntao, ZHAO Shangqing
54: CREEP EXPERIMENT SYSTEM THAT AUTOMATICALLY CONTROLS THE NUMBER OF DISTURBANCES
00: -
This invention discloses creep experiment system that automatically controls the number of disturbances, which comprises the rheometer bracket, that middle and upper part of the left end of the vertical part of the rheometer bracket is respectively connected with the fixed end of the pressing rod and the reentrant lever, and the reentrant lever is arranged at the lower end of the pressing rod, the top of the pressing rod is provided with a disturbance loading system, a fulcrum is arranged between the bottom end of the pressing rod and the reentrant lever, and the bottom of the free end of the reentrant lever is provided with a pressure sensor. The output end of that pressure sensor is connected with the portable digital recorder, the bottom end of the pressure sensor is provide with a triaxial pressure chamber, and the

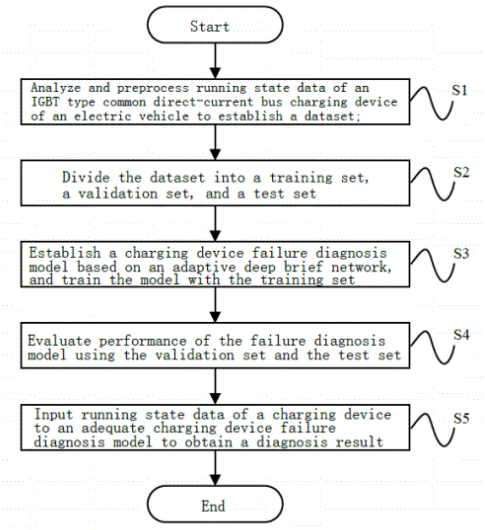
triaxial pressure chamber is arranged at the top of the horizontal part of the rheometer bracket, and the free end of the pressing rod is connected with weight plate through connecting rod. in the creep experiment system of the invention, the disturbance time can be accurately controlled through the time relay in the experiment process, and the disturbance load can be automatically applied through the disturbance loading system, so that the accuracy of the experiment is greatly improved.

21: 2022/00768. 22: 2022-01-17. 43: 2022-03-17
51: A23L
71: Xuzhou College of Industrial Technology
72: Chu Donghai, Zhang Xiaohong
54: BEVERAGE CONTAINING FRUCTUS TRICHOSANTHIS FRUIT EXTRACT AND ITS PREPARATION METHOD
00: -

The invention discloses a beverage containing Fructus trichosanthis fruit extract and a preparation method thereof, belonging to the technical field of beverage preparation. The beverage comprises that following raw material in parts by mass: 8-15 parts of Fructus trichosanthis fruit extract, 0.04-0.08 part of citric acid, 1-3 parts of gum acacia, 6-10 parts of white granulated sugar, 0.05-0.1 part of antioxidant, 0.2-0.4 part of emulsifier and the balance of water, wherein the total number of parts by mass of all ingredients is 100. According to the invention, the extract of Fructus trichosanthis fruit is added into the beverage, so that the nutritional value of Fructus trichosanthis fruit is fully utilized, and a Fructus trichosanthis beverage with rich nutrition and refreshing taste is prepared; and the beverage has good stability and good sensory effect, and can be used for relieving the symptoms of cough with lung heat and constipation and other symptoms.

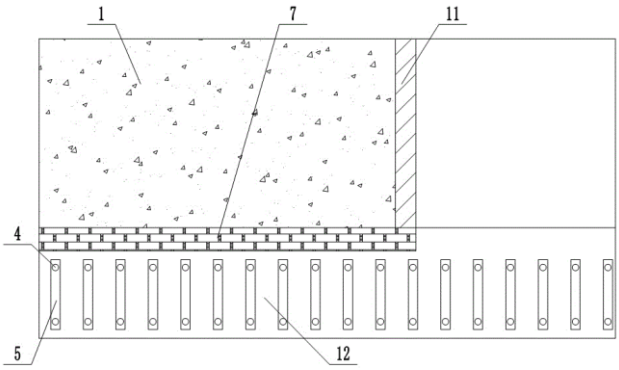
21: 2022/00769. 22: 2022-01-17. 43: 2022-03-07
51: G01R
71: Qingdao University of Science and Technology
72: GAO, Dexin, LIN, Xihao, YANG, Qing, ZHANG, Shiyu, ZHENG, Xiaoyu
54: DEEP-LEARNING-BASED FAILURE DIAGNOSIS METHOD FOR IGBT TYPE COMMON DIRECT-CURRENT BUS CHARGING DEVICE OF ELECTRIC VEHICLE
00: -

The invention designs a deep-learning-based failure diagnosis method for an Insulated Gate Bipolar Transistor (IGBT) type common direct-current bus charging device of an electric vehicle, which specifically includes: analyzing and preprocessing running state data of an IGBT type common direct-current bus charging device of an electric vehicle to establish a dataset; dividing the dataset into a training set, a validation set, and a test set; establishing a charging device failure diagnosis model based on an adaptive deep brief network, and training the model with the training set; evaluating performance of the failure diagnosis model using the validation set and the test set; and inputting running state data of a charging device to an adequate charging device failure diagnosis model to obtain a diagnosis result. The failure diagnosis accuracy may be improved effectively, and a basis may be provided for the daily maintenance and repair of the charging device.



21: 2022/00770. 22: 2022-01-17. 43: 2022-03-07
51: E21C; E21D
71: Anhui University of Science and Technology, China Coal Science and Industry Group Shenyang Research Institute Co., Ltd.
72: Hua Xinzhu, Li Chen, Liu Xiao, Chang Guanfeng, Wang Enqian
33: CN 31: 202111616105.6 32: 2021-12-27
54: METHOD FOR BLASTING-FREE ROOF CUTTING AND PRESSURE RELIEF OF GOB-SIDE ENTRY IN SOFT ROOF COAL SEAM
00: -

The invention disclose a method for blasting-free roof cutting and pressure relief of gob-side entry in soft roof coal seam, which comprise that following steps: Step 1, calculating the length of anchor cable and the depth of slit hole according to field conditions; Step 2, reinforcing the roadway roof by using bolt and cable combined anchoring on the roadway roof; Step 3, drilling a plurality of slit holes at the top of the reserved roadway near the goaf side; Step 4, temporary support is carried out in the reserved roadway; Step 5, pouring a concrete brick wall at one side of the reserved roadway near the goaf, wherein the top surface of the concrete brick wall is in contact with the roadway roof; Step 6, with the advancement of the working face, gradually dismantle the joint anchoring of the bolt and cable on the roof of the rear roadway; Step 7, with the advancement of the working face, the roof of the goaf collapses, and a gob-side entry is formed behind the temporary support. After the gob-side entry is stabilized, the temporary support is removed, and concrete is sprayed on the roof of the entry.

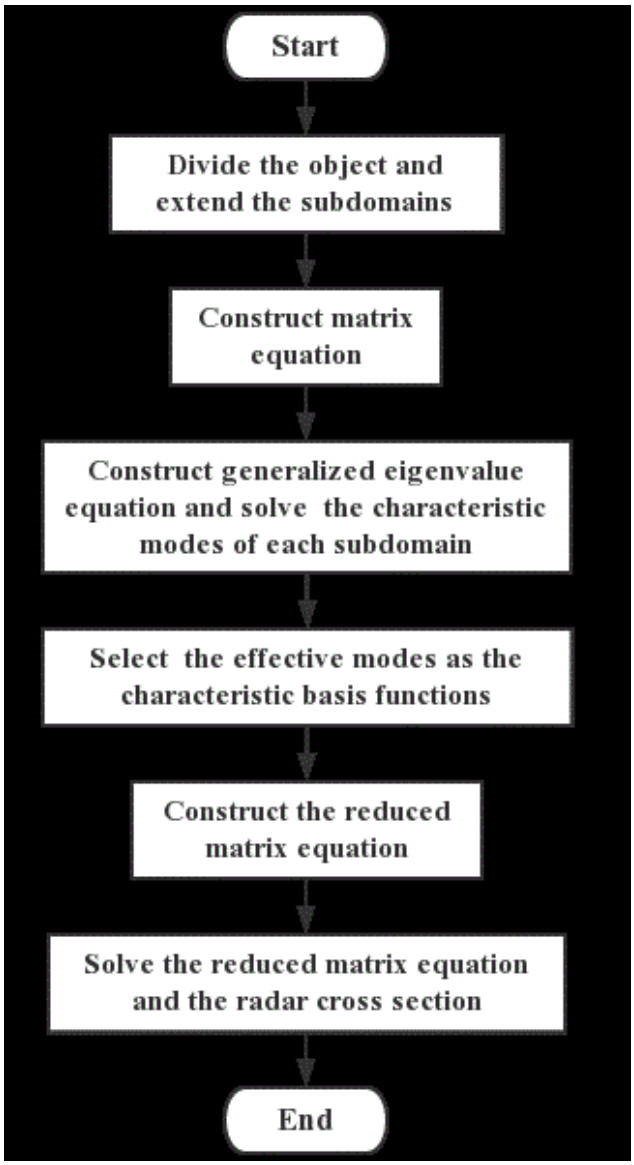


21: 2022/00771. 22: 2022-01-17. 43: 2022-03-07
51: G01B; H01L
71: Suzhou University
72: Gao Yalan, Fu Panpan, Jiang Fei, Qiu Huili, Wang Sheng, Tang Jiakang, Li Songzhou
33: CN 31: 202111521040.7 32: 2021-12-13

54: FAST METHOD FOR SOLVING WIDE ANGLE ELECTROMAGNETIC SCATTERING CHARACTERISTICS OF CONDUCTOR OBJECTS

00: -

The invention discloses a fast method for solving wide angle electromagnetic scattering characteristics of conductor objects, which relates to the field of electromagnetic numerical calculation, and can effectively accelerate the solution of the characteristic basis function method (CBFM) for wide angle electromagnetic scattering characteristics of electrically large conductor objects. Firstly, the generalized eigenvalue equation is constructed by the self-impedance matrix of the each extended subdomain, and the characteristic modes are obtained by solving the equation. And then, according to the modal significance, the effective modes are selected as characteristic basis functions (CBFs) to linearly express the surface current information of the object. The invention provides a new method for constructing the CBFs in the CBFM, which can improve the construction efficiency of the CBFs significantly, and accelerate the construction and solution of the reduced matrix equation by fewer CBFs.

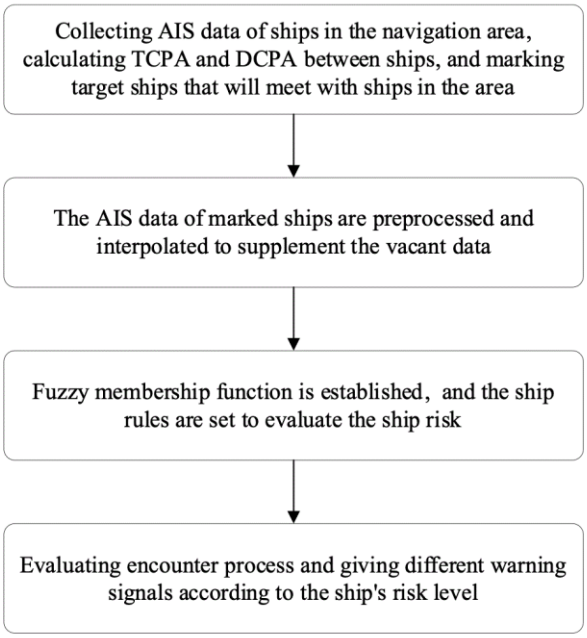


21: 2022/00772. 22: 2022-01-17. 43: 2022-03-07
51: G08G; G06Q
71: Shanghai Maritime University, Shanghai Ship and Shipping Research Institute
72: Xinqiang Chen, Feixiang Shi, Bangping Gu, Yongsheng Yang, Bing Han, Zhongdai Wu, Huafeng Wu, Chaofeng Li, Yang Sun, Xianglong Xu
33: CN 31: 202210007481.3 32: 2022-01-04

54: A METHOD FOR EVALUATING WATER TRAFFIC CONDITIONS BASED ON FUZZY RULES

00: -

The invention provides a method for evaluating water traffic conditions based on fuzzy rules, which is characterized in that: Firstly, CPA (Closest point of approach) of ships in the area is calculated through AIS(ship automatic identification system) data, and MMSI(Maritime Mobile Service Identify) code of ships meeting is marked; Secondly, the AIS data of the marked ship is preprocessed, and the data interpolation is completed; Then the fuzzy rules are established, and the fuzzy comprehensive evaluation method is used to quantify the risk degree of ship encounter situation; Finally, the risk assessment of ship navigation process is carried out, and the safety early warning is carried out based on the obtained risk value. The invention can effectively evaluate the ship safety risk degree under different traffic situations, and can provide data support for intelligent navigation decision-making and safety early warning of intelligent ships.



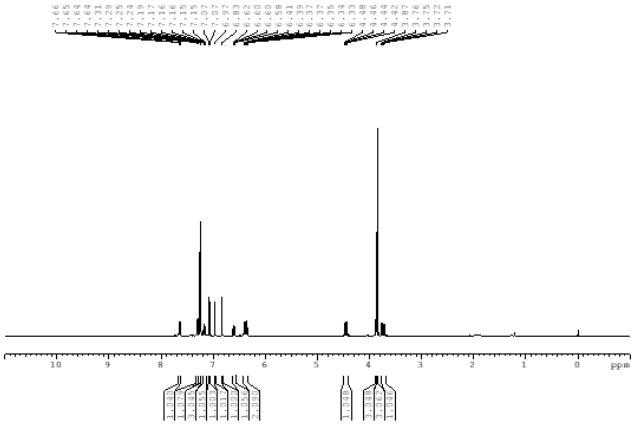
21: 2022/00774. 22: 2022-01-17. 43: 2022-02-28
51: C07D
71: SHIHEZI UNIVERSITY
72: LI, Shiwu, ZHAO, Zhifei, HUANG, Cheng, ZHAO, Yujie, LUO, Yujiao

54: PREPARATION METHOD OF 2-FORMATE INDOLIZINE COMPOUND

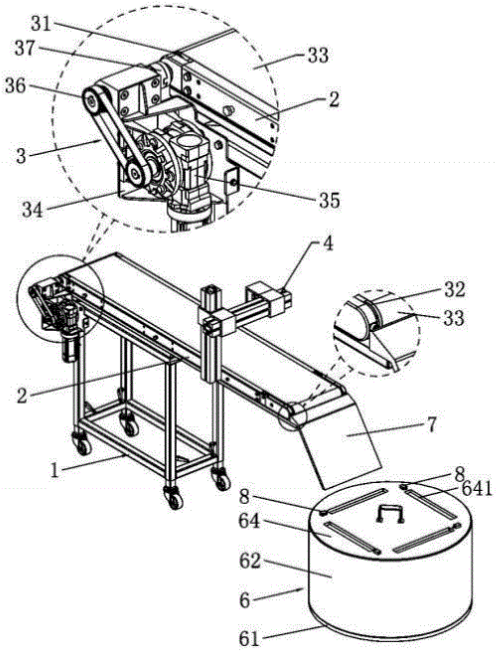
00: -

The disclosure provides a preparation method of a 2-formate indolizine compound, and relates to the technical field of chemistry. The method is simple and easy in operation, cheap and easily available in synthesis of raw materials, capable of being performed in various organic solvents, good in air

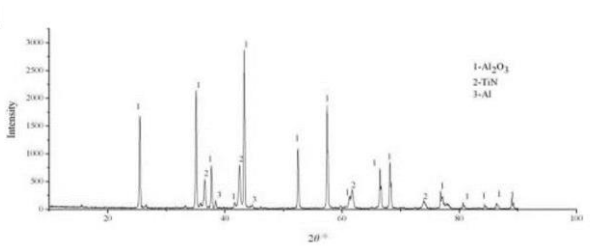
stability, wide in applicability, and good in compatibility for various substituent.



21: 2022/00796. 22: 2022-01-18. 43: 2022-02-17
51: B07C
71: Dongguan University Of Technology
72: CHEN, Shenggui, OU, Yongcong, ZHOU, Zirong, LI, Nan
54: AUTOMATIC DETECTION SYSTEM OF VISUAL DEFECTS
00: -
The present invention discloses an automatic detection system of visual defects, which has the advantages of novel structural design, and high automation degree, working efficiency and intelligence degree.

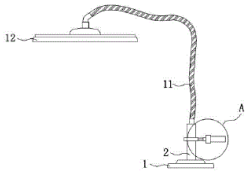


21: 2022/00797. 22: 2022-01-18. 43: 2022-02-17
51: C04B
71: Qingdao Agricultural University
72: FENG, Xiumei, XIN, Liguo, XIA, Xiaoliang, ZHANG, Huili
54: POROUS ALUMINIUM OXIDE-TIN CERAMIC MATERIAL AND PREPARATION METHOD THEREOF
00: -
The present invention discloses a porous Al2O3-TiN ceramic material and preparation method thereof. Preparation of the porous Al2O3-TiN ceramic materials requires following raw materials: coarse and fine particles of Al2O3; and fine (alpha)- Al2O3, TiO2 and Al powder. Firstly, putting the fine powders into a nylon ball grinding jar in proportions for dry mixing, adding the coarse and fine particles into phenolic resin and ethylene glycol in a forced action mixer for mixing and then shaping the mixture by mechanical pressing. Drying the pressed samples and sintering the same in situ at a normal pressure under flowing nitrogen to obtain the porous Al2O3-TiN ceramic materials. The present invention is novel in concept by adopting plate-shaped corundum particles as aggregates, so sufficient strength and hardness of the porous ceramic materials is promised, the TiN is generated by in-situ reactions between the TiO2 and the metal Al, and at the same time, uniform pore structure is formed by consumption of the metal Al and thermal explosions. The porous Al2O3-TiN ceramic materials are suitable for large scale production due to simple preparation process and equipment and low cost thereof.

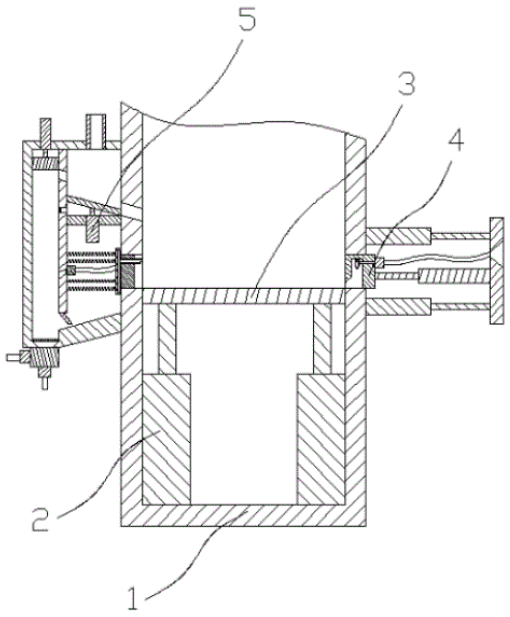


21: 2022/00798. 22: 2022-01-18. 43: 2022-02-17
51: A61N
71: The Second Affiliated Hospital of Shandong First Medical University
72: WANG, Peng
54: ULTRAVIOLET IRRADIATION DEVICE FOR ANORECTAL IRRADIATION
00: -

Disclosed is an ultraviolet irradiation device for anorectal irradiation. The device includes a base, where an upper surface of the base is fixedly connected to a support rod, an outer surface of the support rod is fixedly connected to a connection ring, an outer surface of the connection ring is fixedly connected to a rotary rod, one end of the rotary rod is movably connected to an operation plate through a rotary shaft, one side of the operation plate is fixedly connected to a fixed pipe, a friction member is arranged between the fixed pipe and the rotary rod, and an outer surface of the operation plate is fixedly connected to a slideway. An irradiation angle can be adjusted by rotating the rotary rod, and resistance generated by the friction member can prevent easy rotation of the rotary rod, thereby realizing convenient use and multiple functions.



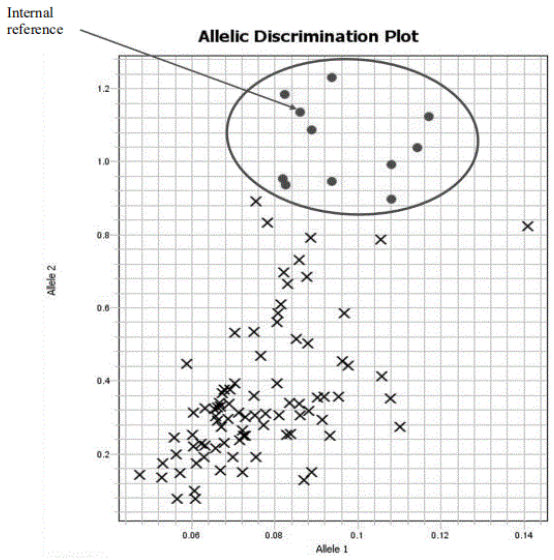
21: 2022/00799. 22: 2022-01-18. 43: 2022-02-17
51: B22F; B33Y
71: Dongguan University Of Technology
72: CHEN, Shenggui, SHANG, Xin, ZHOU, Zirong, LI, Nan
54: REUTILIZATION MECHANISM OF SLM PRINTER POWDER FOR CONFORMAL WATERWAY FORMING
00: -
The present invention relates to a reutilization mechanism of SLM printer powder for conformal waterway forming. The present invention integrates a discharging portion and a feeding portion, so that scraped powder collected by the discharging portion can be blown to the feeding portion to realize the direct reutilization of the powder, thereby greatly improving the utilization efficiency of the powder.



21: 2022/00800. 22: 2022-01-18. 43: 2022-02-17
51: C04B; B33Y
71: Dongguan University of Technology
72: LI, Tao, CHEN, Shenggui, YE, Yanyuan, LI, Nan
54: ZIRCONIA CERAMIC PASTE AND PREPARATION METHOD THEREOF
00: -
The present disclosure provides a zirconia ceramic paste and a preparation method thereof.

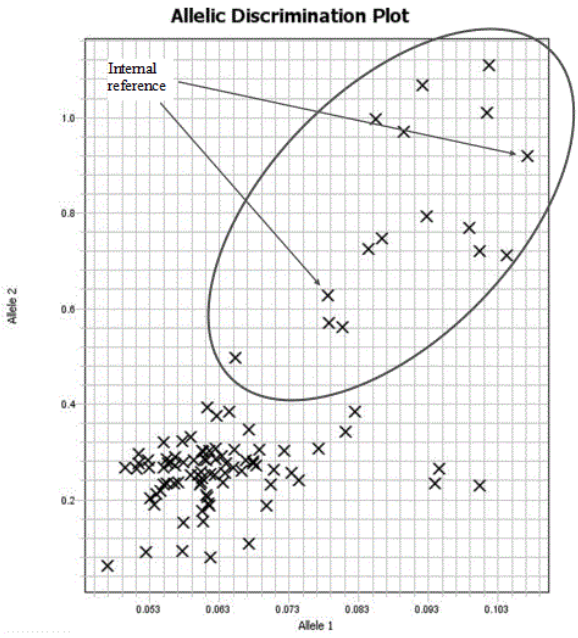
21: 2022/00801. 22: 2022-01-18. 43: 2022-02-17
51: C12N; C12Q
71: Ningbo Academy of Agricultural Sciences
72: JIAO, Yun, FANG, Congling, CHAI, Chunyan, GAO, Zhongshan, WANG, Guoyun, JIA, Huimin, SHU, Qiaoyun, ZHOU, Chaochao
33: CN 31: 202111072427.9 32: 2021-09-14
54: MOLECULAR MARKER PRIMER COMBINATIONS FOR RAPIDLY IDENTIFYING MYRICA RUBRA SUPER-LARGE FRUIT TYPE CHARACTER AND APPLICATION THEREOF
00: -
The present invention discloses a set of molecular marker primer combinations that can rapidly identify the super-large fruit type of Chinese bayberry (Myrica rubra Sieb. and Zucc.) and an application thereof, so as to be applied to early auxiliary selection of Chinese bayberry fruit size shape characters. The present invention provides a set of molecular marker primer combinations that can rapidly identify the fruit super-large fruit type Chinese bayberry, which is BS16-25856, and it is suitable for

high-throughput typing detection platforms such as a fluorescence quantitative PCR instrument, has short amplified fragments, and is time-saving and high in sensitivity. The present invention provides a method for auxiliary screening of excellent Chinese bayberry germplasm resources based on developed molecular marker primer combinations, which has important guiding significance in Chinese bayberry fruit shape prediction and cross-breeding work, and has the advantages of simple operation, high efficiency, rapidity, low cost, etc.

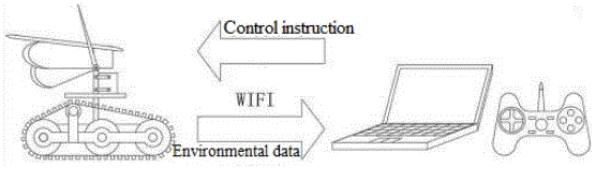


21: 2022/00802. 22: 2022-01-18. 43: 2022-02-17
51: D21D; D21F; D21H
71: Guangning Zhengda Special Paper Co., Ltd.
72: DONG, Fudian, DONG, Fu, DONG, Yeqing, FANG, Shangren
33: CN 31: 202110769773.6 32: 2021-07-07
54: NOVEL NON-HEAT-SEALABLE TEA FILTER PAPER AND PREPARATION METHOD THEREOF
00: -
Teabags are a most popular way to drink tea in the world, of which the sales volume has accounted for about 50% of the tea trade of the world at present. With the improvement of consumption levels of people, safety standards required by people in drinking tea are also increased. Provided is a simple and economical method for preparing non-heat-sealable tea filter paper. The method comprises steps of first slightly beating a cotton pulp and a hemp pulp with a long size, subsequently mixing with certain amounts of a wet strength agent and a reinforcing agent, finally coating an outer surface with a layer of a cross-linked cationic starch which is capable of adsorbing heavy metal ions, to prepare non-heat-sealable tea filter paper which is capable of filtering heavy metal ions. The method is simple in production process and low in production cost, and has a great market application prospect.

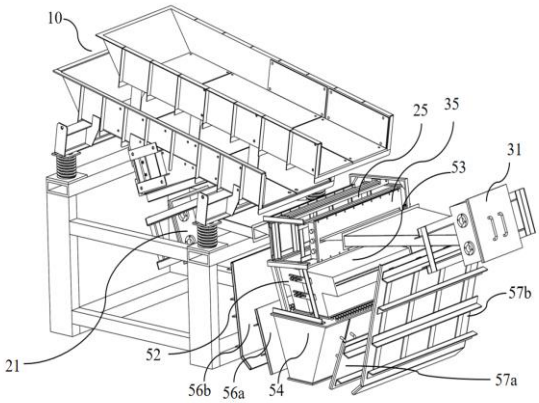
21: 2022/00803. 22: 2022-01-18. 43: 2022-02-17
51: C12N; C12Q
71: Ningbo Academy of Agricultural Sciences
72: JIAO, Yun, FANG, Congling, CHAI, Chunyan, GAO, Zhongshan, WANG, Guoyun, JIA, Huimin, SHU, Qiaoyun, ZHOU, Chaochao
33: CN 31: 202110778765.8 32: 2021-07-09
54: MOLECULAR MARKER PRIMER COMBINATIONS FOR RAPIDLY IDENTIFYING MYRICA RUBRA LEAF SHAPE CHARACTERS AND APPLICATION THEREOF
00: -
The present invention discloses a set of molecular marker primer combinations for rapidly identifying leaf shape characters in Chinese bayberry (Myrica rubra Sieb. and Zucc.) and applications thereof, so as to be applied to molecular marker auxiliary selection of the Chinese bayberry leaf shape characters. The present invention provides a set of molecular marker primer combinations that can rapidly identify the leaf shape characters in Myrica rubra, which is Y9766732, and it is suitable for high-throughput typing detection platforms such as a fluorescence quantitative PCR instrument, has high sensitivity, and can be used for early rapid identification of the Chinese bayberry leaf shape characters. The present invention provides a method for auxiliary screening of excellent germplasm resources of Chinese bayberry based on developed molecular marker primer combinations, which has important guiding significance in Chinese bayberry leaf shape character phenotype prediction, and has the advantages of simple operation, high efficiency, rapidity, low cost, etc.



21: 2022/00804. 22: 2022-01-18. 43: 2022-02-17
51: G01D; G01N
71: Tianjin Sino-German University of Applied Sciences, Boming Chuangneng (Tianjin) Technology Co., Ltd.
72: DU, Zhiqiang
54: SAMPLING AND DETECTION ROBOT FOR TOXIC ENVIRONMENTAL GAS
00: -
The present invention relates to the technical field of a robot, in particular to a sampling and detection robot for toxic environmental gas, including an intelligent sampling robot and a remote wireless control platform, wherein the intelligent sampling robot and the remote wireless control platform are connected through a high-power Wireless Fidelity (WIFI) to complete environmental data uploading and control instruction issuing. An intelligent robot technology is used, and a fixed wireless sensor is not required at a sampling site; the sampling site is more flexible, and the sampling solution design is more convenient, so that the mobile robot technology is increasingly and widely applied in the environmental sampling field.



21: 2022/00805. 22: 2022-01-18. 43: 2022-02-17
51: B07C
71: ANHUI UNIVERSITY OF SCIENCE AND TECHNOLOGY
72: GUO, Yongcun, HE, Lei, WANG, Shuang, HU, Kun, CHENG, Gang, ZHAO, Yanqiu, WANG, Xi
54: SMALL-SIZED WIDE PARTICLE SIZE COAL GANGUE SORTING DEVICE
00: -
The present disclosure relates to the technical field of dry coal preparation, in particular to a small-sized wide particle size coal gangue sorting device. The small-sized wide particle size coal gangue sorting device includes a protective housing; a double-layer vibrating material distributor is arranged in the protective housing; the double-layer vibrating material distributor is provided with a first material distribution track and a second material distribution track; coal gangue slide off from discharging ports of the first material distribution track and the second material distribution track and respectively form a first slide-off trajectory and a second slide-off trajectory; a first X radiation source and a second X radiation source are arranged in the protective housing; the first X radiation source detects coal gangue located in the first slide-off trajectory; the second X radiation source detects coal gangue located in the second slide-off trajectory; detection signals are transmitted to signal processors; and the signal processors process the signals and adjust air pumps located in the protective housing according to signal processing results. The small-sized wide particle size coal gangue sorting device can broaden a particle size range of materials processed by a single machine, and can quickly and efficiently sort materials in different particle size ranges.

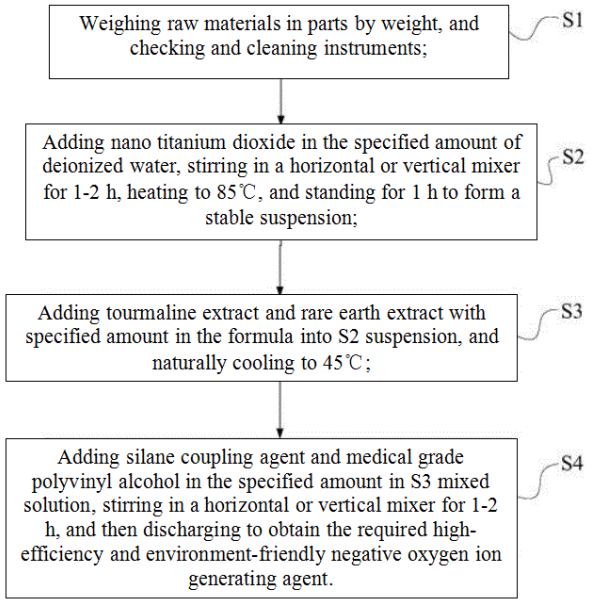


21: 2022/00806. 22: 2022-01-18. 43: 2022-02-17
51: C09D
71: Jiangxi Qingda high-end Technology Service Co. ,Ltd.
72: Zhang Xiaohao

54: EFFICIENT AND ENVIRONMENT-FRIENDLY NEGATIVE OXYGEN ION GENERATING AGENT AND PREPARATION METHOD THEREOF

00: -

The invention belongs to the technical field of building wall decoration materials, and particularly relates to an efficient and environment-friendly negative oxygen ion generating agent and a preparation method thereof. The invention relates to an efficient and environment-friendly negative oxygen ion generating agent, which comprises the following components in parts by weight: 45-55 parts of deionized water; 20-28 parts of tourmaline extract; 10-15 parts of rare earth extract; 8-12 parts of silane coupling agent; 1-2 parts of nano titanium dioxide; 0.5-1 part of polyvinyl alcohol. The negative oxygen ion generating agent finally obtained by the invention is colorless and transparent liquid with low viscosity, can be directly sprayed by a spray gun or a blue-light nano sprayer after diluted by deionized water when in use, is convenient to construct, water-resistant and wipe-resistant, adopts natural materials, does not contain formaldehyde, benzene, xylene and other volatile harmful substances, and is safer and more environment-friendly.



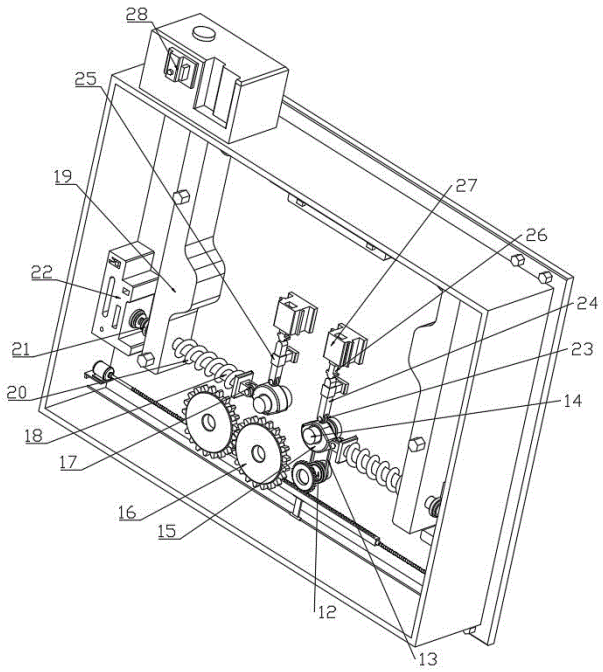
21: 2022/00807. 22: 2022-01-18. 43: 2022-02-17
51: G06F; G06Q
71: West Anhui University
72: Huang Xiaojiao, Cheng Junhui, Ji Tiantian, Zhao Jiangdong, Huang Ji, Wang Wenming

54: INTELLIGENT FINANCIAL SERVICE TERMINAL SYSTEM BASED ON INTERNET OF THINGS AND BIG DATA DUAL CHANNELS

00: -

The invention relates to an intelligent terminal device, in particular to an intelligent financial service terminal system based on Internet of Things and big data dual channels. Two groups of trigger mechanisms which are respectively matched with connectors on both sides are arranged in a box, and the two groups of trigger mechanisms are mutually linked, and one group of trigger mechanisms is connected with a power component; the terminal system is connected with the network through the two connectors which are respectively communicated with the network module and the database, and then with the database, real-time dual-channel communication can be realized, so as to obtain financial data quickly and accurately; the trigger mechanism can only be connected to one of the connectors, and has the function of free switching between single channel and double channel, which can quickly and accurately obtain the data queried by users in the dual channel communication, and can only communicate with the database in the single channel communication to

upload the transaction data of users, so as to prevent the data from being stolen or leaked.

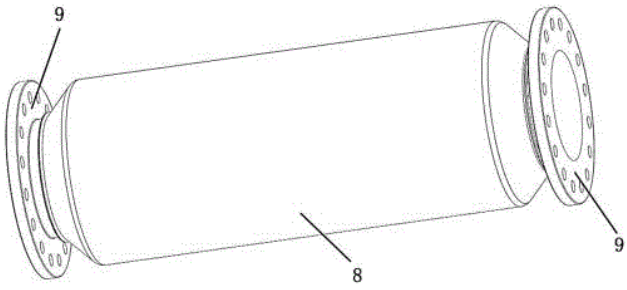


21: 2022/00808. 22: 2022-01-18. 43: 2022-02-17
51: B29C; F16L
71: Shenyang University of Technology
72: Liu Tongyu, Zou Xue, Shi Minghao, Guo Zhiqiang, Ren Yuyan, Li Yingmin, Liu Weihua, Kong Zhanqi, Zhang Yu, Liu Yunhe

54: MULTI-LAYER REINFORCED DREDGING PIPE AND MOLDING PROCESS THEREOF

00: -

The invention relates to the technical field of dredging engineering pipelines, and in particular to a multi-layer reinforced dredging pipe and molding process thereof, which comprises a pipe body and flanges at both ends of the pipe body, wherein the pipe body sequentially comprises a wear-resistant polymer layer, a warning polymer layer, a first composite reinforced layer, a steel thread reinforced layer, a steel thread filling layer, a second composite reinforced layer and an external polymer layer from inside to outside. The molding steps include mold preparation, laying of each functional layer, vulcanization molding and demoulding. Compared with the prior art, the invention has the beneficial effects that: 1) the rubber polymer material is combined with the wound steel thread reinforcing layer, so that on the one hand, the steel wire can be fixed, and on the other hand, the damage of the steel wire to the pipe body itself after the pipe body is deformed can be avoided; 2) by firmly connecting various functional layers with different mechanical structures into a whole, the pipe body can effectively avoid steel wire peeling under the long-term expansion, bending and torsion, so as to solve the problem that the dredging pipe body is constantly damaged by fatigue in harsh environment.

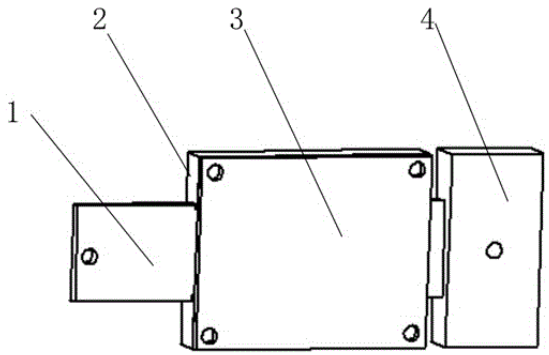


21: 2022/00809. 22: 2022-01-18. 43: 2022-02-17
51: B66B
71: Changshu Institute of Technology
72: Ge Yang, Yin Qihang, Zhang Fusheng, Xu Benlian, Qin Jiancong, Ma Lingyun, Ding Jianxin, Ren Yong, Ma Jiaxin, Liu Junjun

54: DEVICE, METHOD AND EARLY WARNING SYSTEM FOR MONITORING BLOCK BRAKE CLEARANCE OF ELEVATOR

00: -

The invention relates to an on-line monitoring device, method and early warning system of elevator brake clearance, belonging to the technical field of elevator detection. The device comprises a static grid, a moving grid base and a static grid base; a capacitive grating sensor module and a data processing and transmission module are installed in the movable grid base; the capacitive grid sensor comprises a moving grid, a static grid and a TM003 chip; the movable grid is provided with a plurality of emission electrodes and a receiving electrode; a plurality of emission electrodes are arranged in groups and arranged circularly. The measuring device, the data processing and transmission device and the background analysis system do not need to be connected to the elevator control system, work independently, and do not need manual on-site detection, which makes up for the defect that the elevator with the brake cannot measure the clearance size and change trend.

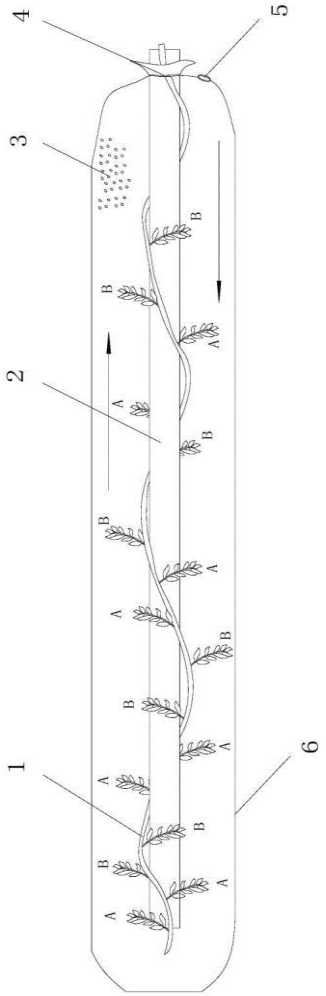


21: 2022/00810. 22: 2022-01-18. 43: 2022-02-17
51: A01G
71: Guangxi Academy of Agricultural
72: Han Jiayu, Shi Xiaofang, Cao Xiongjun, Zhang Ying, Lin Ling, Yu Huan, Xie Shuyu, Bai Xianjin, Li Hongyan, Pan Fengping, Zhou Yongmei, Chen Xiao, Guo Rongrong

54: A METHOD FOR IMPROVING THE NATURAL HYBRIDIZATION POLLINATION RATE OF GRAPES BY APPLYING A LIGHT-TRANSMITTING FILM

00: -

The invention relates to the technical field of application of agricultural tool , in particular to a method for improving the natural hybridization pollination rate of grapes by applying a light-transmitting film, in the present invention, different grape varieties with obvious different traits and the same or similar flowering period are grafted on adjacent branches, and the interval arrangement of "the first variety-the second variety-the first variety" is arranged on the main trunk of the grapes to form a regular and dense area of pollen in two varieties, a light-transmitting film is used to form a relatively closed space for grape pollination, and an internal single wind direction path is formed by setting an air intake pipe and the air vents arranged in conjunction with the air intake.



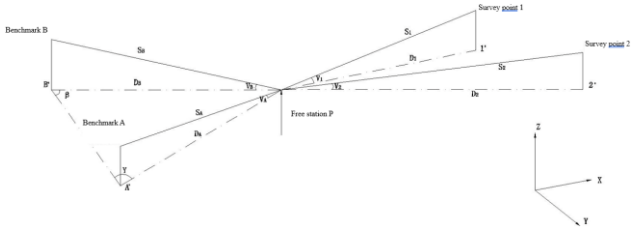
21: 2022/00813. 22: 2022-01-18. 43: 2022-02-17
51: E21D
71: NO.3 ENGINEERING COMPANY OF CHINA RAILWAY NO.8 ENGINEERING GROUP CO., LTD., CHINA RAILWAY NO.8 ENGINEERING GROUP CO., LTD.
72: GUO, Xiangwu, GONG, Sikun, WANG, Zhiyong, ZHAO, Zhi, TANG, Jianhe, MA, Wenrong, LIU, Jiayin, DENG, Cunjun, XIAN, Wenjiao, XI, Liping, LI, Jun, ZHAO, Daiqiang
33: CN 31: 202110061130.6 32: 2021-01-18

54: A METHOD FOR MONITORING THE SAFETY OF THE EXISTING INTERSECTING TUNNEL WHEN CONSTRUCTING AN UNDERCROSSING HIGH-SPEED RAILWAY TUNNEL

00: -

The present invention discloses a method for monitoring the safety of the existing intersecting tunnel when constructing an undercrossing high-speed railway tunnel, including monitoring the cracking of the existing intersecting tunnel, observing the structure settlement of the existing

intersecting tunnel, and monitoring the blast vibration of the existing intersecting tunnel. The purpose is to monitor the safety of the existing intersecting tunnel when constructing a new tunnel to timely obtain useful information about overall stability of surrounding rock of the existing tunnel, provide the basis and reference for safe construction of the new tunnel, and guarantee the construction safety of the new tunnel as well as the safety of the existing tunnel when constructing the new tunnel.



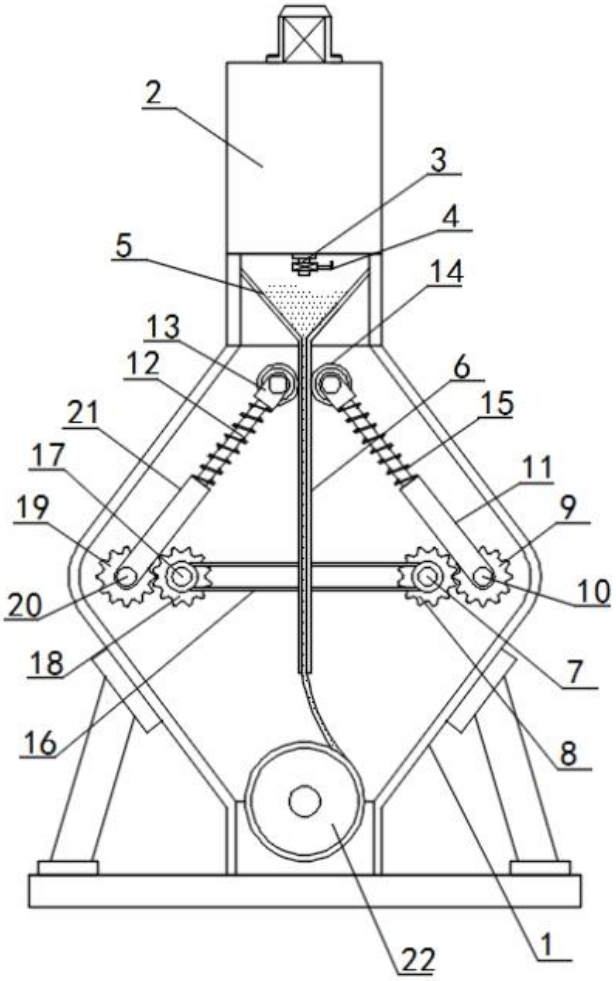
21: 2022/00814. 22: 2022-01-18. 43: 2022-02-17
51: H01L
71: INSTITUTE OF SOIL SCIENCE, CHINESE ACADEMY OF SCIENCES
72: SUN, Weixia, LIU, Guangming, WANG, Meiyan, SHI, Xuezheng
33: CN 31: 202111222358.5 32: 2021-10-20
54: A SEEDLING SUBSTRATE AND ITS PREPARATION METHOD AND APPLICATION
00: -
The present invention provides a seedling substrate and its preparation method and application, belonging to the field of seedling substrate technology. The seedling substrate provided in the present invention is prepared with raw materials of the following volume fractions: 20-50 fractions of garden waste fermentation products, 30-60 fractions of peats, 5-15 fractions of porous ceramic particles and 5-15 fractions of organic fertilizer; The seedling substrate of the present invention can be used for blueberries. The blueberry seedlings cultivated with the seedling substrate of the present invention feature vigorous growth, large ground diameter, greater stress resistance, and faster development into strong seedlings. The present invention speeds up the seedling process and improves the seedling establishment rate in the seedling base.

21: 2022/00815. 22: 2022-01-18. 43: 2022-02-17
51: C12N; C12Q
71: NORTHEAST AGRICULTURAL UNIVERSITY
72: HAN, Xue, QI, Zhaoming, CHEN, Qingshan, DU, Xiangyu
54: ACQUISITION METHOD FOR SOYBEAN PROTEIN CONTENT-RELATED QTL AND MOLECULAR MARKER, MOLECULAR MARKER, AND APPLICATION
00: -
The present disclosure provides a soybean protein content-related QTL, a molecular marker, an acquisition method for the molecular marker, and application thereof. The QTL is located on a linkage group N, with a genome location of a public map of 27.787 cM, which is positioned by a molecular marker Satt683; and a 5'-3' primer of the molecular marker Satt683 is shown in SEQ ID NO. 1, and a 3'-5' primer is shown in SEQ ID NO. 2. A corresponding soybean individual genome DNA is used as a template, the template is subjected to a PCR amplification with the 5'-3' primer and the 3'-5' primer, and after a product obtained by the PCR amplification is subjected to a separation of polyacrylamide gel electrophoresis, a target molecular marker is obtained. The molecular marker can be used for a molecular breeding of soybeans.

21: 2022/00816. 22: 2022-01-18. 43: 2022-02-16
51: G01N
71: SHANDONG PROVINCIAL LUNAN GEOLOGY AND EXPLORATION INSTITUTE (SHANDONG

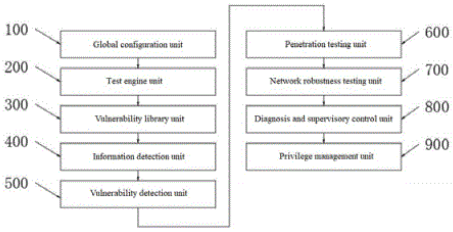
PROVINCIAL BUREAU OF GEOLOGY AND MINERAL RESOURCES NO. 2 GEOLOGICAL BRIGADE)
72: LI, Hongliang, TAN, Xianfeng, ZHANG, Yan, CHEN, Hongnian, ZHOU, Jianwei, YU, Sang, MENG, He, LU, Xiaowei, ZHANG, Jun, MA, Songmei
54: STEEP ROCK FACE WATER VAPOR CONDENSATION MONITORING METHOD
00: -
The disclosure discloses a steep rock face water vapor condensation monitoring method. The method comprises the following steps that, 1, a monitoring device is provided; 2, a filtrate structure is inserted into the monitoring device and connected to a water vapor condensation monitoring device by means of a wire; 3, a fixing structure is pre-installed on the rear side wall of a detection device, the supporting position is adjusted, and the detection device is fixed on the corresponding monitoring steep rock face by means of the fixing structure; 4, when the monitoring position environment meets the water vapor condensation condition, the monitoring device sets the monitoring time and frequency; and 5, the monitoring device obtains condensation data, and can perform remote control and data transmission with a terminal device.

21: 2022/00817. 22: 2022-01-18. 43: 2022-02-16
51: C08J
71: ANHUI SCIENCE AND TECHNOLOGY UNIVERSITY
72: WEI, Lanlan, ZHANG, Kaijing, ZHAI, Ligong, LI, Jingjun, ZHANG, Wangang, CHENG, Bin, YANG, Huan, ZHENG, Haibo, ZHU, Shuaijie, YANG, Yanyan, WU, Hang, YANG, Yuetian, XU, Danni, GONG, Zihan
54: METHOD AND APPARATUS FOR PREPARING FOOD GRADE NANOFIBER PRESERVATION FILM
00: -
The present invention discloses a method and apparatus for preparing a food grade nanofiber preservation film.



21: 2022/00855. 22: 2022-01-19. 43: 2022-02-25
51: G05B; G06F; H04L
71: Xiamen University of Technology
72: LIN, Ruijin, YE, Ruizhe, SUI, Tao
54: SECURITY TESTING SYSTEM AND METHOD FOR INDUSTRIAL CONTROL DEVICE
00: -
The present invention relates to the technical field of security testing, and in particular to a security testing system for an industrial control device, including a global configuration unit, a test engine unit, a vulnerability library unit, an information detection unit, a vulnerability detection unit, a penetration testing unit, a network robustness testing unit, a diagnosis and supervisory control unit and a privilege management unit, wherein security testing is performed on information, vulnerabilities,

penetration and network robustness of an industrial control system, and then, real-time supervisory control and diagnosis are performed on states of an industrial control networks and systems by the diagnosis and supervisory control unit to ensure operation security and that application programs are accessible only by users having system access privileges and only through corresponding gateways, including login or remote access to the system, thereby further ensuring security of the industrial control device.

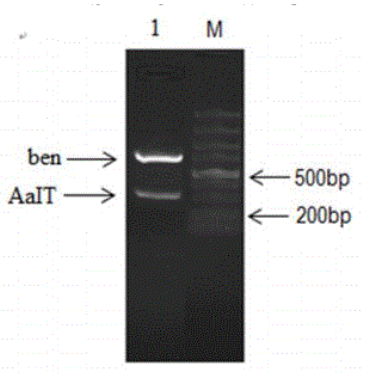


21: 2022/00856. 22: 2022-01-19. 43: 2022-02-25
51: C12N
71: Xuzhou University of Technology
72: LI, Tongxiang, SUN, Huigang, TIAN, Lin, TANG, Wei, HUANG, Tianzi, HOU, Jinhui, ZHANG, Na, GAO, Zhaojian, WANG, Tao

54: CONSTRUCTION METHOD OF INSECTICIDAL ENGINEERING STRAIN OF BEAUVERIA BASSIANA

00: -

A construction method of an insecticidal engineering strain of Beauveria bassiana: (1) design primers to amplify an Androctonus australis Hector insect toxin (AaIT) gene from a pUC57-AaIT vector by PCR; (2) conducting digestion and purification on the AaIT gene to construct a pbarGPEl-AaIT vector with pbarGPEl; (3) amplifying a GpdA-AaIT-TrpC expression cassette from the pbarGPEl-AaIT vector with the designed primers; (4) conducting single enzyme digestion on pGPS3Ben-bbchit1 with a Not1 and conducting dephosphorylation, ligating the pGPS3Ben-bbchit1 with GpdA-AaIT-TrpC digested with the Not1, and transforming and screening a ligated product to obtain a pGPS3Ben-bbchit1-AaIT expression vector; (5) introducing the pGPS3Ben-bbchit1-AaIT expression vector into Agrobacterium tumefaciens competent cells, to obtain a positive transformant colony; and (6) mixing a spore suspension of Beauveria bassiana (starting strain) with an Agrobacterium tumefaciens bacteria solution containing the pGPS3Ben-bbchit1-AaIT expression vector, and conducting co-cultivation and multiple screening to obtain a transformed engineering strain of the Beauveria bassiana.

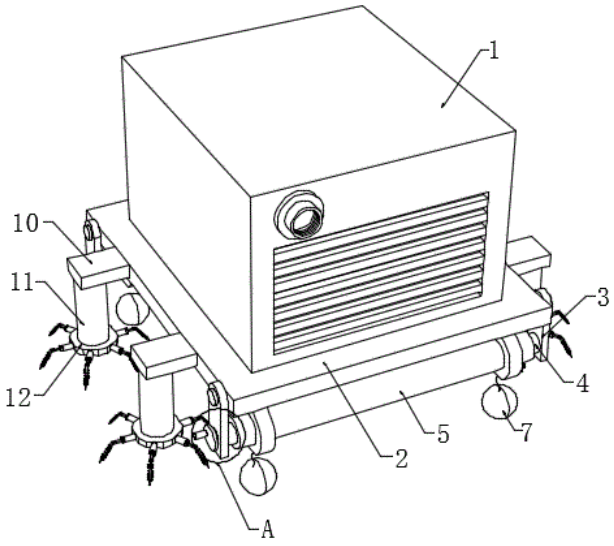


21: 2022/00857. 22: 2022-01-19. 43: 2022-03-01
51: C02F
71: Xi'an Jinshan Yinshan Technology Co., Ltd.
72: Tang Xiao, Sun Xin, Chai Duosheng

54: HIGH-EFFICIENCY NANO AERATION AND OXYGENATION DEVICE

00: -

The invention discloses a high-efficiency nano aeration and oxygenation device, which comprises a nano aeration and oxygenation device body, wherein the bottom end of the nano aeration and oxygenation device body is fixedly connected with a base, both ends of both sides of the base are fixedly connected with mounting rods, the bottoms of the adjacent sides of two adjacent mounting rods are rotatably connected with connecting shafts, the adjacent sides of two adjacent connecting shafts are fixedly connected with screw rods, and two counterweight sleeves are respectively sleeved on both sides of the outer wall of the screw rod; By rotating the screw rod, the screw rod converts the rotary motion into linear motion, which can drive two counterweight sleeves to move on the screw rod, thus achieving the effect of counterweight on the bottom of the nano aeration and oxygenation device body; The set counterweight ball has a certain weight, which can drive the body of the nano aeration and oxygenation device to descend rapidly and uniformly, thus avoiding the deviation and overturning caused by uneven weight of the body of the nano aeration and oxygenation device in the sinking process.

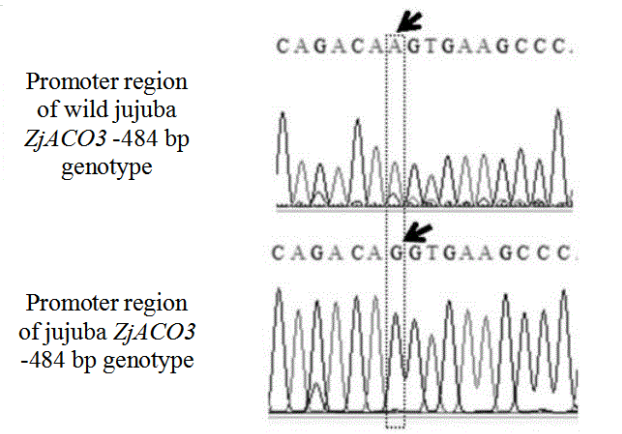


21: 2022/00858. 22: 2022-01-19. 43: 2022-03-03
51: C12N; C12Q
71: Shandong Agricultural University
72: Zhang Chunmei, Liu Hanxiao, Li Xingang, Zhang Yuewu, Wu Mengjia

54: SNP MOLECULAR MARKER RELATED TO JUJUBE CITRIC ACID AND ITS APPLICATION

00: -

The invention discloses a Single Nucleotide Polymorphisms (SNP) molecular marker related to citric acid content of jujube and wild jujube and its application. The SNP molecular marker is located in the promoter region of jujube ZjACO3 gene, and the mutation site is -484A>G mutation. According to the present invention, SNP molecular markers related to citric acid are developed by identifying the relationship between ZjACO3 promoter sequence and citric acid accumulation, and further, by Kompetive Allele Specific PCR (KASP) typing, direct and rapid genetic identification of seedlings can be realized, and Genomic Estimated Breeding Value (GEBV) can be predicted and estimated in early stage, which can be used for early evaluation of domestication and breeding of wild resources and related cross breeding, establishing a rapid breeding technical system and promoting the optimization and upgrading of variety structure.

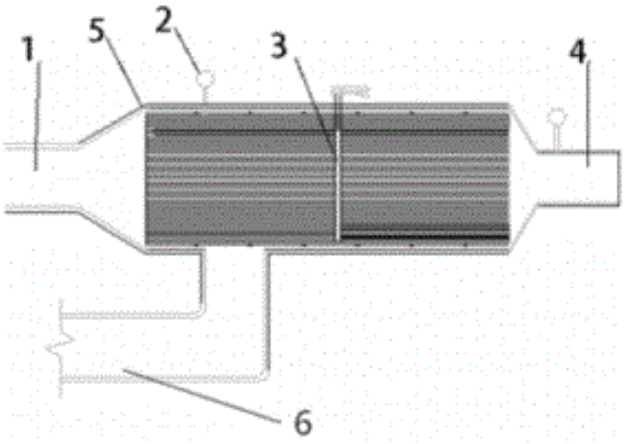


21: 2022/00859. 22: 2022-01-19. 43: 2022-03-03
51: B01D
71: Shihezi University
72: Liu Zhenji, Li Jie, Liu Dongdong, Yang Hao, Lei Chenyu, Zong Quanli, Lan Jun

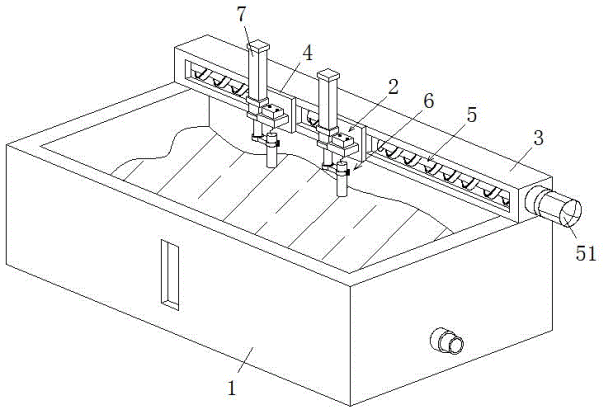
54: FLAP-NET FILTER, FILTRATION SYSTEM AND USING METHOD THEREOF

00: -

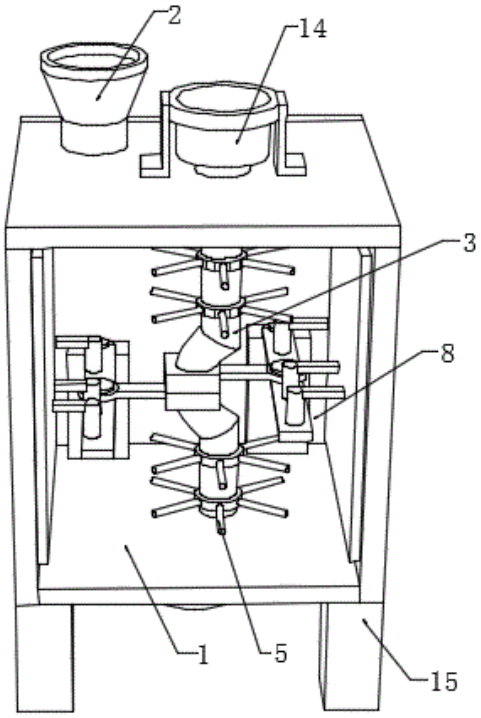
The invention discloses a flap-net filter, which comprises a filter shell, one end of the filter shell is a water inlet and the other end is a sewage outlet, and the bottom of the filter shell is provided with a water outlet; An annular cylindrical filter screen is arranged on the inner wall of the filter shell, a flap is arranged at the center of the annular cylindrical filter screen, the flap is integrated with the filter shell through a rotating shaft, and the handle on the rotating shaft is connected with and controlled by the solenoid valve. By adopting the flap-net filter of the invention, the blowdown time can be reduced to less than 1min under the working condition of 180m3/s, which greatly reduces the waste of water resources caused by too long blowdown time; At the same time, the cleanliness of blowdown is high, and 98% of the accumulated impurities can be discharged out of the filter; The invention adopts a new sewage discharge method, that is, the water flow is controlled by the opening and closing of the flap for hierarchical sewage discharge, which has simple operation and convenient use in practice.



21: 2022/00860. 22: 2022-01-19. 43: 2022-03-03
51: C12N
71: Xi'an Jinshan Yinshan Technology Co., Ltd.
72: Tang Xiao, Sun Xin, Zhao Fangli
54: DEVICE FOR IMPROVING BIOLOGICAL ACTIVITY OF FUNCTIONAL WATER-PURIFYING MICROORGANISMS BY MICRO-ELECTRIC FIELD
00: -
The invention discloses a device for improving biological ctivity of functional water-purifying microorganisms by micro-electric field, which comprises a treatment box and micro-electric field generating equipment; the upper end of the treatment box is fixedly connected with a mounting frame body, the front end of the mounting frame body is movably connected with a fixed mounting plate, a horizontal adjusting mechanism for driving the fixed mounting plate to move transversely is arranged between the fixed mounting plate and the mounting frame body; the front end of the fixed mounting plate is fixedly connected with an adjusting cylinder which drives the output end of the micro-electric field generating device to move up and down, and the movable end of the adjusting cylinder is fixedly connected with a fixed clamping piece for clamping the output end of the micro-electric field generating device. The micro-electric field device for improving biological activity of functional water-purifying microorganisms is convenient to integrally drive the micro-electric field generating equipment to move to a plurality of positions in the treatment box to form the micro-electric field to increase biological activity of water-purifying microorganisms, to ensure the overall good water purification effect, to integrally fix the output ends of micro-electric field generating equipment with different specifications, and to integrally install and disassemble.



21: 2022/00861. 22: 2022-01-19. 43: 2022-03-03
51: C12N
71: Xi'an Jinshan Yinshan Technology Co., Ltd.
72: Tang Xiao, Sun Xin, Shi Qingqing
54: PREPARATION DEVICE OF IMMOBILIZED MICROORGANISM PARTICLES FOR WATER REMEDIATION
00: -
The invention discloses a preparation device of immobilized microorganism particles for water remediation, which comprises a preparation box body, wherein a feed hopper fixedly penetrates through the top end of the preparation box body, a rotating rod is arranged inside the preparation box body, two connecting sleeves are sleeved in the middle of the rotating rod, two non-adjacent ends of the two connecting sleeves are fixedly connected with extension rods, two sides of the back of the bottom end inside the preparation box body are fixedly installed with fixed plates, and the top ends of the two fixed plates are rotatably connected with extension plates. The invention relates to a preparation device of immobilized microorganism particles for water remediation. Through the cooperation of the rotating rod, the collar and the stirring blade, the rotating rod rotates to drive the collar and the stirring blade to contact with the microorganism particles in the preparation box body, so that the microorganism particles fed into the preparation box body can be stirred and mixed evenly, and then the operation of the heating plate can heat the microorganism particles in the preparation box body.

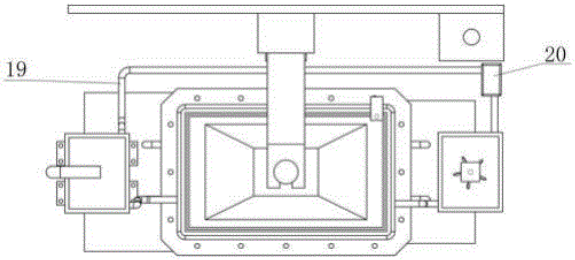


21: 2022/00862. 22: 2022-01-19. 43: 2022-02-25
51: B28B; C04B; B33Y
71: QINGDAO UNIVERSITY OF TECHNOLOGY
72: ZHANG, Guangming, JIANG, Jin, LAN, Hongbo, WANG, He, WANG, Zhi

54: CONTINUOUS DIGITAL LIGHT PROCESSING-BASED DEVICE FOR 3D PRINTING OF CERAMIC AND OPERATION METHOD THEREFOR

00: -

Disclosed is a continuous digital light processing-based device for three-dimensional (3D) printing of ceramic and an operation method therefor. Prior to printing, a raw material supply unit pours ceramic slurry into a window box, a water pump pumps out the ceramic slurry from a first slurry tank and conveys the ceramic slurry into a second slurry tank via a third slurry conveying pipeline, the ceramic slurry in the second slurry tank flows into a liquid storage tank of the window box via a second slurry conveying pipeline, the ceramic slurry in the liquid storage tank flows into the first slurry tank via a first slurry conveying pipeline, and the water pump achieves circular flow of the ceramic slurry in the first slurry tank, the liquid storage tank and the second slurry tank. A continuous digital light processing technology is applied for continuous formation of 3D printing of ceramic.



21: 2022/00863. 22: 2022-01-19. 43: 2022-02-25
51: C08K; C08L
71: Shandong Ruifeng Chemical Co., Ltd
72: LIU, Chunxin, FENG, Zhigang, ZHANG, Zhenguo, ZHANG, Haiyu, JIAO, Shuyuan, WANG, Xuan, ZHANG, Zhongchao, WANG, Houfu, ZHAI, Liguo
33: CN 31: 202110789146.9 32: 2021-07-13

54: NOVEL COMPOSITE BIODEGRADABLE PLASTIC MATERIAL FOR INJECTION MOLDING AND PREPARATION METHOD THEREFOR

00: -

The present invention belongs to the technical field of biodegradable materials, and in particular relates to a novel composite biodegradable plastic material for injection molding and a preparation method therefor. The novel composite biodegradable plastic material for injection molding in the present invention is prepared from the following components, in parts by weight, of 40-70 parts of poly(butyleneadipate-co-terephthalate) (PBAT), 10-25 parts of bamboo fibers, 1-10 parts of poly(butylene succinate) (PBS), 1-10 parts of polylactic acid (PLA), 1-5 parts of fillers, 0.5-3 parts of plasticizers, 2-7 parts of lubricants, 0.1-1 part of a chain extender and 1-5 parts of antioxidants. The present invention provides the novel composite biodegradable plastic material for injection molding, which has desirable biodegradability, low raw material cost, high yield and high production efficiency. The present invention further provides a preparation method for the novel composite biodegradable plastic material for injection moldin

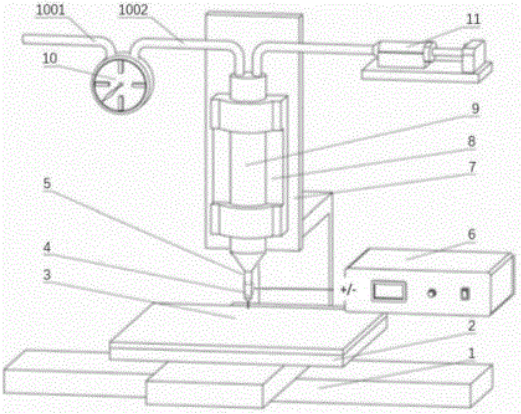
21: 2022/00864. 22: 2022-01-19. 43: 2022-02-25
51: B22F; B33Y; B82Y
71: QINGDAO UNIVERSITY OF TECHNOLOGY
72: ZHANG, Guangming, WANG, Zhi, LAN, Hongbo, HUANG, Hui, PENG, Zilong, ZHAO, Jiawei, SONG, Daosen

54: SELF-INDUCED ELECTROSTATIC FIELD DRIVEN JETTING DEPOSITION 3D PRINTING

DEVICE, WORKING METHOD AND USE THEREFOR

00: -

Disclosed is a self-induced electrostatic field driven jetting deposition 3D printing device. The entire system has only one electrode, a copper foil patch is connected to an alternating current power supply to serve as an extraction electrode and is tightly attached and wound around a shoulder of a glass nozzle, and a parameter of the copper foil patch is simulated and optimized by means of a finite element to provide an optimal electric field focusing effect, so as to obtain an electric field with enough strength under the condition of small voltage. The material is jetted only through electric field force formed by electrostatic induction, an entire printing process is free of interference from remaining charges, and stable printing with ultrahigh resolution is achieved. When high-viscosity nano-silver paste serves as a printing material, single-row directional arrangement of nano-silver particles is achieved, and a large height-width ratio is achieved.

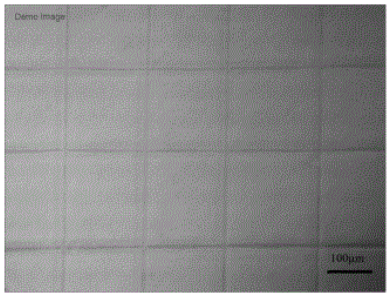


21: 2022/00865. 22: 2022-01-19. 43: 2022-02-25
51: B22F; B29C; B29L; H01B; B33Y
71: QINGDAO UNIVERSITY OF TECHNOLOGY
72: ZHANG, Guangming, LAN, Hongbo, ZHOU, Hefei, QIAN, Lei, XU, Quan, PENG, Zilong

54: PREPARATION METHOD FOR ULTRAFINE GRID TRANSPARENT ELECTRODE WITH HIGH-ASPECT-RATIO

00: -

Disclosed in the present invention is a preparation method for an ultrafine grid transparent electrode with a high-aspect-ratio, belonging to the technical field of additive manufacturing and electronic devices. The preparation method for an ultrafine grid transparent electrode with a high-aspect-ratio has a wide selectable range for a substrate material, and can be used for preparing the transparent electrode with high conductivity and high light transmittance, thereby achieving desirable popularization and application values.

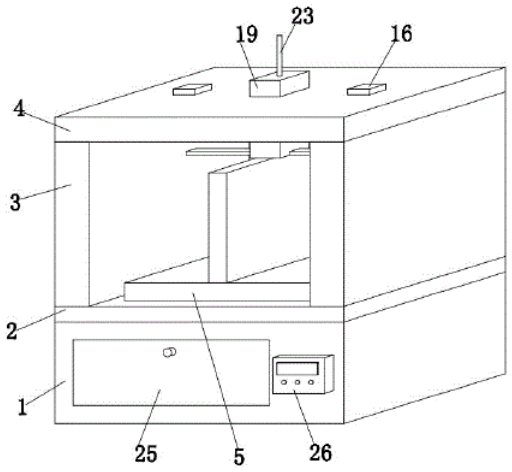


21: 2022/00868. 22: 2022-01-19. 43: 2022-02-25
51: G01N
71: North China University of Science and Technology
72: ZHOU, Yunlong, ZHANG, Hongyin, CHEN, Kaijiang, YANG, Zhinian, YOU, Zhiguo
33: CN 31: 202111458127.4 32: 2021-12-01

54: FIRE RESISTANCE TESTING DEVICE FOR HFRC (REPLACING RC) T-BEAMS

00: -

The present invention belongs to the field of fire resistance testing, and relates to a fire resistance testing device for HFRC (replacing RC) T-beams. To solve the problems of existing devices, the present invention proposes a solution that the device includes a box, a measurement structure and a locking structure, wherein an object carrier is fixed at a top of the box, two supporting blocks are fixed to a top of the object carrier, a top rack is fixed at tops of both supporting blocks, and the top of the object carrier contacts with a T-beam; the locking structure is arranged on the supporting blocks and the top rack; and the measurement structure is arranged on the top rack. With the device, the shear resistance data of T-beams can be read accurately, and T-beams can be fixed easily, accordingly ensuring the fire resistance testing results of T-beams are accurate.

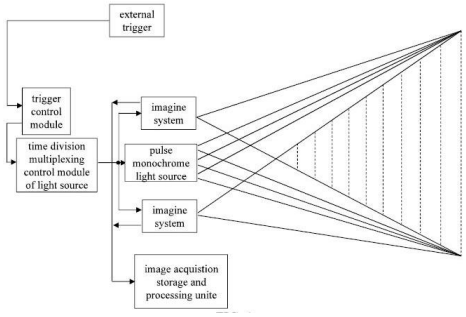


21: 2022/00870. 22: 2022-01-19. 43: 2022-02-24
51: G02B
71: NORTH UNIVERSITY OF CHINA
72: LIU, Ji, YU, Lixia, WANG, Hailiang, XIN, Jie, LI, Wen, WU, Jinhui

54: HIGH SPEED IMAGING METHOD FOR TIME DIVISION MULTIPLEXING ILLUMINATION OF MONOCHROMATIC NARROW PULSE ACTIVE LIGHT SOURCE

00: -

The invention discloses a high-speed lighting imaging method for time division multiplexing of monochrome narrow pulse active light source. The steps are as follows: 1. A system is constructed, including an external trigger, an imaging system, a pulse monochrome lighting source, a trigger control module, a time division multiplexing control module of lighting source, and an image acquisition, storage and processing unit; 2. The external trigger takes sound or light as signal source, converts and adjusts into level signal by sensor, and generates trigger signal and transmits it to trigger control module. Trigger control module obtains trigger signal, and synchronously controls imaging system and time division multiplexing module of pulse monochrome illumination; During the exposure time of the imaging system, the time division multiplexing module of pulsed monochromatic illumination controls the pulsed monochromatic illumination source for time-sharing illumination, and the imaging system obtains the color-coded images respectively. 3. The obtained monochromatic image is transmitted to the image acquisition, storage and processing unit to synthesize the original image. The invention improves the image capture efficiency and provides a theoretical basis and technical support for the application of special imaging in high-speed target testing.

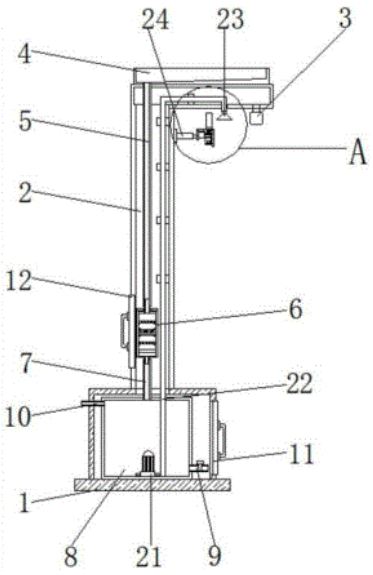


21: 2022/00871. 22: 2022-01-19. 43: 2022-02-28
51: A01G; B08B; E01H; E03B; F21S; F21V; F21W; F21Y
71: Shandong Shenshi Photoelectric Co., Ltd.
72: CHEN, Xiaodong, YIN, Xuejun, GUO, Laixin
33: CN 31: 202110219810.6 32: 2021-02-26

54: INTEGRATED CYLINDRICAL LED STREETLIGHT SOURCE

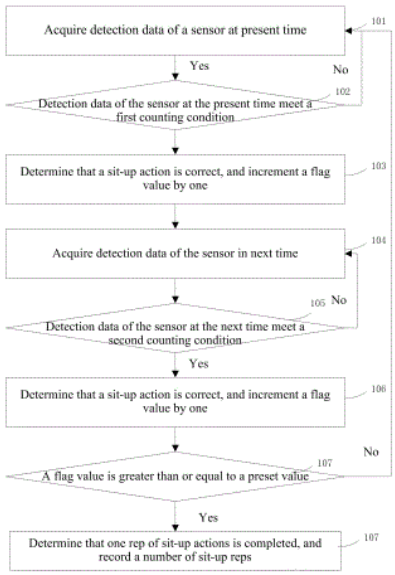
00: -

Disclosed is an integrated cylindrical light emitting diode (LED) streetlight source. The streetlight source includes a base, where a supporting column is welded to an outer wall of a top of the base, a top of the supporting column is provided with an LED lighting lamp, a water collection tank is fixed to an outer wall of the top of the supporting column, a bottom of the water collection tank is in communication with a water conduit, a bottom of the water conduit is in threaded connection with a filtering mechanism, a bottom of the filtering mechanism is in threaded connection with a connection pipe, and a collection box is welded to one end of the connection pipe. According to the present invention, the collected rainwater can be lifted to the top of the supporting column and sprayed, so as to water plants, and can be sprayed for dust fall.



21: 2022/00872. 22: 2022-01-19. 43: 2022-02-28
51: A23K
71: INSTITUTE OF BIOLOGY, GANSU ACADEMY OF SCIENCES
72: JI, Bin, PENG, Yinan, YE, Ze, WANG, Zhiye, QI, Hongshan, XI, Peng
33: CN 31: 202110522868.8 32: 2021-05-13
54: PROBIOTIC MILK REPLACER FOR CALVES AND PREPARATION METHOD THEREOF
00: -
The present disclosure relates to the technical field of milk replacers, and provides a probiotic milk replacer for calves, comprising the following raw materials in percentage by weight: 33-37% of whole milk powder, 18-22% of bean flour, 3-7% of corn flour, 10-14% of bran fine flour, 8-12% of wheat germ flour, 8-12% of rice flour, 0.1-0.4% of compound vitamins, 2% of probiotics and the balance of starch. The present disclosure also provides a method for preparing the probiotic milk replacer for calves. According to the present disclosure, by adding probiotics to replace antibiotics, the diarrhea of the calves is prevented and the problems of screening and residues of the antibiotics on pathogenic bacteria are reduced.

21: 2022/00873. 22: 2022-01-19. 43: 2022-02-28
51: A63B
71: Lingnan Normal University
72: MA, Xingzao, YANG, Yongzheng, SUN, Shiquan
33: CN 31: 202110073048.5 32: 2021-01-20
54: SIT-UP MOTION INFORMATION MANAGEMENT SYSTEM AND DETECTION METHOD BASED ON INTERNET OF THINGS
00: -
The present disclosure provides a sit-up motion information management system and detection method based on an Internet of things. The method includes: acquiring detection data of a sensor at present time; determining whether the detection data of the sensor at the present time meet a first counting condition, determining that a sit-up action is correct if yes, and incrementing a flag value by one; acquiring detection data of the sensor at next time; determining whether the detection data of the sensor at the next time meet a second counting condition, determining that a sit-up action is correct if yes, and incrementing a flag value by one; determining whether a flag value is greater than or equal to a preset value to obtain a third determination result; and determining, if the third determination result indicates yes, that one rep of sit-up actions is completed, and recording a number of sit-up reps.

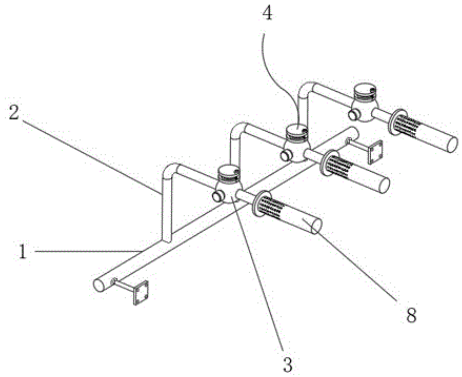


21: 2022/00874. 22: 2022-01-19. 43: 2022-02-28
51: B63C
71: ShanDong JiaoTong University
72: PAN, Dewei, WANG, Tao, WANG, Mingyu, ZHANG, Baihu, ZHOU, Zhaoxin, LI, Guangzheng, SUN, Yuqiang, ZHAO, Kangdi, LI, Qin, FENG, Wenhui, XU, Yu, KONG, Fanyi, ZHANG, Qiang
54: DEVICE FOR RESCUING PEOPLE FALLING INTO WATER
00: -

The present invention provides a device for rescuing people falling into water. A bottom of the rescue device is provided with a drive device; the rescue device is provided with a human body sensing device; the rescue device is provided with a control device and a signal receiving device; the signal receiving device controls the rescue device to search on the water; and when the human body sensing device detects a person falling into water, the control device controls the rescue device to stop, and the person falling into water grabs the rescue device and returns to a safety zone, so that the rescue efficiency is high, and the rescue difficulty is reduced.

21: 2022/00875. 22: 2022-01-19. 43: 2022-02-28
51: C06B
71: Hubei Institute of Aerospace Chemistry Technology, Qingdao Junxiang Technology Co., Ltd.
72: Wu Shixi, Cao Lan, Zhou Chongyang, Chen Luyang, Zang Xiaoyan, Zheng Lei, Wang Meng
54: RECYCLABLE AND DEGRADABLE COMPOSITE SOLID PROPELLANT, PREPARATION AND DEGRADATION METHOD THEREOF
00: -
The invention discloses a recyclable degradable composite solid propellant, a preparation method and a degradation method thereof, belonging to that technical field of composite solid propellant. The propellant of the invention comprises the following components in percentage by mass: 60.2%-72% of oxidant; Fuel: 16%-19%; Degradable adhesive: 8%-10%; 0.3-0.8% of modified hexamethylene polyisocyanate; Plasticizer: 3%-6%; Additives: 0%-2%. The preparation method of that recyclable degradable composite solid propellant can be conventional vertical mix or acoustic resonance mixing. The propellant of the present invention can keep its own performance stable in the conventional storage process, and when it needs to be destroyed, the crosslinking network can be hydrolyzed by acid/alkali solution, etc., so that the crosslinking network of the propellant can be rapidly disintegrated, the disposal risk of waste propellant can be significantly reduced, and the environmental pollution can be reduced.

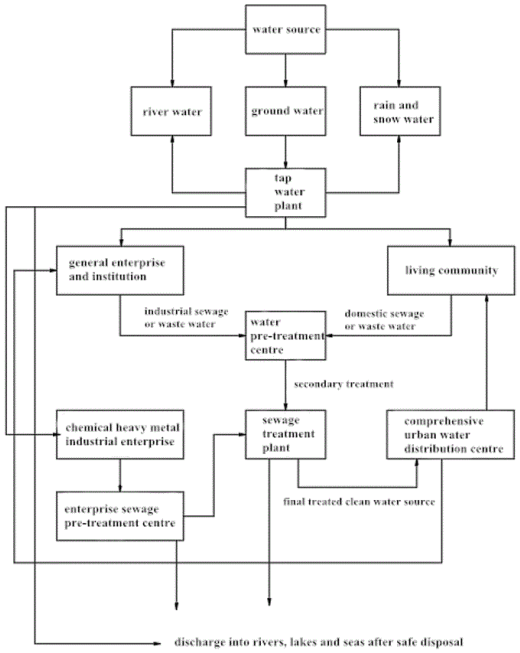
21: 2022/00876. 22: 2022-01-19. 43: 2022-02-28
51: E21B
71: Anhui University of Science and Technology, China Coal Science and Industry Group Shenyang Research Institute Co., Ltd., Shanxi Shiquan coal industry co., ltd., China Coal Science and Industry Group Chongqing Research Institute Co., Ltd.
72: Liu Xiao, Hua Xinzhu, Bai Peng, Niu Xingang, Fu Hongbo, Gao Wei, Li Chen, Chang Guanfeng, Yang Sen
54: GAS DRAINAGE DEVICE FOR COAL MINE GAS CONTROL AND APPLICATION METHOD THEREOF
00: -
The invention discloses a gas drainage device for coal mine gas control and a application method thereof, which comprises a main pipe, a branch pipe fixedly connected with the main pipe, a conducting shell fixedly connected with the branch pipe, a sealing assembly rotatably installed on the outer wall of the conducting shell, a barrier block attached to the inner wall of the conducting shell, the barrier block connected with the sealing assembly, so that the barrier block can rotate relative to the conducting shell driven by the sealing assembly, a detection port fixedly connected with the outer wall of the conducting shell. The two blocking blocks arranged at intervals with a preset length can not only block or conduct, but also conduct methane gas to the detection port between the blocking blocks while blocking the branch pipes. On the one hand, rapid methane concentration detection can be carried out, on the other hand, blocking the branch pipes can avoid the influence of detection operation on the extraction of the main pipes, reduce the occurrence of production accidents, and ensure that there will be no excessive methane leakage in the mine.



21: 2022/00877. 22: 2022-01-19. 43: 2022-02-28

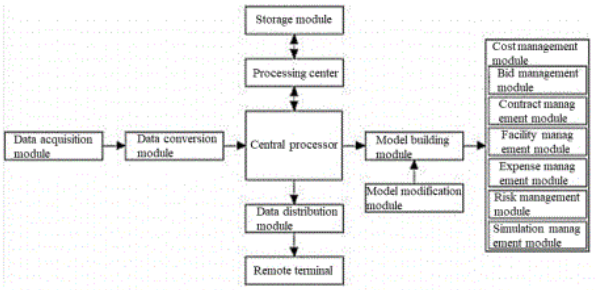
51: F16H
71: Hunan University of Science and Technology, Hunan KingRain Electro-Hydraulic Control System Co., Ltd
72: AN, Ying, GAO, Shuai, NI, Shilong, ZHU, Jianren
54: HYDRAULIC CONTROL SYSTEM FOR SELF-BALANCING OF SPEED RATIO OF DOUBLE METAL BELT TYPE CONTINUOUSLY VARIABLE TRANSMISSION (BCVT)
00: -
Disclosed is a hydraulic control system for self-balancing of a speed ratio of a double metal belt type continuously variable transmission (BCVT). The system includes an oil pump, a balance valve, a first actuating mechanism, a second actuating mechanism, a first driving oil cylinder and a second driving oil cylinder, where the balance valve includes a balance valve body and a balance valve element; an oil inlet channel on the balance valve body is connected to the oil pump; the balance valve element can adjust an orifice area when sliding; and one end of the balance valve element is connected to a wheel disc mounted on the first driving oil cylinder, and the other end of the balance valve element is connected to a wheel disc mounted on the second driving oil cylinder. The system is capable of balancing the speed ratio of the double metal BCVT.

21: 2022/00878. 22: 2022-01-19. 43: 2022-03-01
51: E03B
71: Henan University
72: CAI, Beiming
54: DUAL SUPPLY AND DUAL DISCHARGE CYCLE SYSTEM FOR THE COMPREHENSIVE USE OF URBAN WATER RESOURCES
00: -
The present invention discloses a dual supply and dual discharge cycle system for the comprehensive use of urban water resources, comprising a tap water plant module, a general enterprise and institution module, a living community module, a water pre-treatment centre module, a sewage treatment plant module, a chemical heavy metal industrial enterprise module and a comprehensive urban water distribution centre module, characterised in that: the water source of the tap water plant module comes from river water, ground water and rain and snow water; the tap water output end of the tap water plant module is connected to the general enterprise and institution module, the chemical heavy metal industrial enterprise module and the living community module through pipelines. The advantages of the invention compared with the prior art are: the system architecture is reasonably designed, the names of the functional modules, the architecture design, the connection method and the working method are reasonable, it has the advantages of effectively improving the utilization rate of water resources, reducing the amount of sewage discharged from the urban sewage network, reducing the pollution of the environment by urban sewage and protecting the ecological balance, it is functionally complete and has a number of humanized designs, it has good applicability and is easy to promote.



21: 2022/00879. 22: 2022-01-19. 43: 2022-02-28
51: G06Q
71: East China University of Technology, China Nuclear Huatai Construcion CO., LTD.
72: WANG, Zhenhua, WU, Bo, LI, Dongwei, LIU, Cong, YANG, Yang, JI, An
54: BIM PROJECT COST MANAGEMENT SYSTEM
00: -
Disclosed is a BIM project cost management system including a data acquisition module. An output end of the data acquisition module is electrically connected with input ends of a data conversion

module and a central processor which is electrically connected with a processing center bidirectionally. The processing center is electrically connected with a storage module bidirectionally. An output end of the central processor is electrically connected with input ends of a data distribution module, with an output end electrically connected with an input end of a remote terminal, and a model building module respectively. BIM technologies are employed to implement integration of building data, contract data and changed data during construction as well as management of cost estimation, target cost measurement and calculation and cost risk management, thereby realizing effective cost control and improving working efficiency and cost data accuracy.



21: 2022/00880. 22: 2022-01-19. 43: 2022-02-28
51: C10M; C10N
71: Shandong North Zite Special Oil Co., Ltd.
72: LUO, Gang, YANG, Naitang, HAO, Yuguo, SUN, Meijie, YANG, Wenhuan

54: HIGH AND LOW TEMPERATURE RESISTANT HYDRAULIC OIL AND PREPARATION METHOD THEREFOR

00: -

Disclosed in the present invention are high and low temperature resistant hydraulic oil and a preparation method therefor. The high and low temperature resistant hydraulic oil includes the following raw materials: base oil, an antioxidant, an antirust agent, a cleaning dispersant, a metal deactivator, a demulsifier and an anti-wear agent. The present invention has the beneficial effects in that raw materials of the high and low temperature resistant hydraulic oil are organically combined together, such that the high and low temperature resistant hydraulic oil has desirable high and low temperature resistance and a high flash point. The high and low temperature resistant hydraulic oil provided in the present invention has desirable viscosity, a high ignition point, a large use safety coefficient and long service life when being used within a wide temperature range.

21: 2022/00881. 22: 2022-01-19. 43: 2022-02-28
51: C10M; C10N
71: Shandong North Zite Special Oil Co., Ltd.
72: LUO, Gang, YANG, Naitang, HAO, Yuguo, SUN, Meijie, YANG, Wenhuan

54: MODIFIED GEAR OIL AND PREPARATION METHOD THEREFOR

00: -

Disclosed are modified gear oil and a preparation method therefor. The modified gear oil includes: base oil, an oxidation and corrosion inhibitor, an antirust agent, an extreme pressure anti-wear agent, a metal deactivator, a demulsifier, vegetable glue and a thickener. The modified gear oil is compounded from high-quality base oil and a novel environment-friendly gear additive, and has enough extreme pressure anti-wear property, optimal demulsification and desirable rust and corrosion resistance; in addition, viscosity of the modified gear oil is desirable, strength of an oil film is improved, and performance of the gear oil is enhanced; and bearing capacity of the gear oil is greatly improved, an influence of a traditional lead-containing formula on health of an operator is completely eradicated, service life of an oil product can be greatly prolonged, an oil changing frequency is reduced, and an enterprise cost is saved.

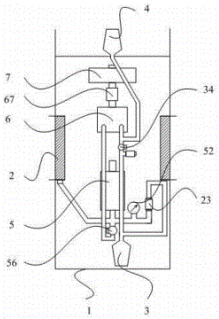
21: 2022/00882. 22: 2022-01-19. 43: 2022-02-28
51: F03G
71: Qingdao Agricultural University
72: LIANG, Zede

54: DEVICE FOR GENERATING POWER FROM OCEAN THERMAL ENERGY AND UNDERWATER DETECTOR

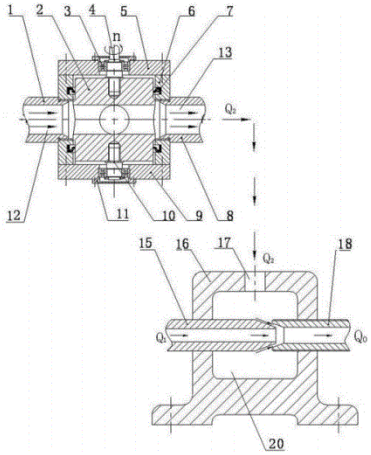
00: -

Disclosed are a device for generating power from ocean thermal energy and an underwater detector. The device includes a sealed housing, a phase-change heat exchanger, an inner bag, an outer bag, a high-pressure energy accumulator, a hydraulic motor and a generator, where the outer bag is located outside the sealed housing and connected to the hydraulic motor and the inner bag separately, a

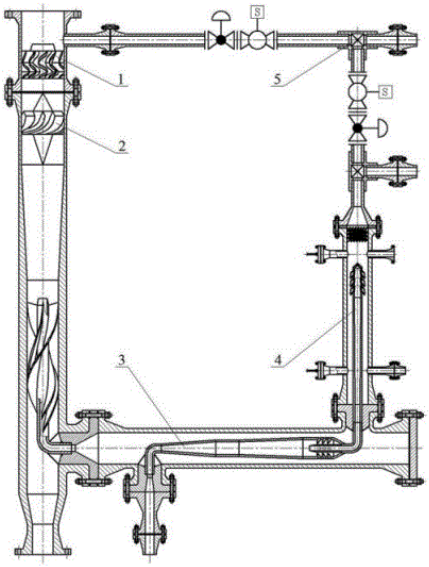
low-pressure solenoid valve is further arranged between the outer bag and the inner bag, the high-pressure energy accumulator is connected to the phase-change heat exchanger, the hydraulic motor and the inner bag separately, a check valve is arranged between the inner bag and the phase-change heat exchanger, and a high-pressure solenoid valve is arranged between the high-pressure energy accumulator and the hydraulic motor in driving connection with the generator. The device generates the power with the ocean thermal energy, thereby improving cruising ability of the underwater detector.



21: 2022/00883. 22: 2022-01-19. 43: 2022-02-28
51: B23B; B23Q
71: North University of China
72: DONG, Zhen, LI, Jiangbo, LUO, Shitong, ZHAO, Pengfei, LI, Jinghong, WANG, Caiping
54: NEGATIVE PRESSURE VARIABLE CHIP SUCTION DEVICE
00: -
The present disclosure belongs the technical field of chip suction during deep-hole working, and particularly relates to a negative pressure variable chip suction device. To achieve periodic change in a negative-pressure value with flow in a negative-pressure channel for improving chip breaking and removal abilities, the present disclosure provides a negative pressure variable chip suction device, including a negative-pressure chip suction device with a negative-pressure channel internally provided with a flow converter; pressure variable through holes in a rotary core is communicated with a cutting fluid channel periodically to make a flow rate at a jet orifice changed periodically with the flow in the negative-pressure channel, thereby making the negative-pressure value changed periodically in a negative-pressure zone, and then, pressure difference on two sides of chips in a cutting zone and suction force are changed. During clogging, chip breakage and removal effects can be improved by changing stress.

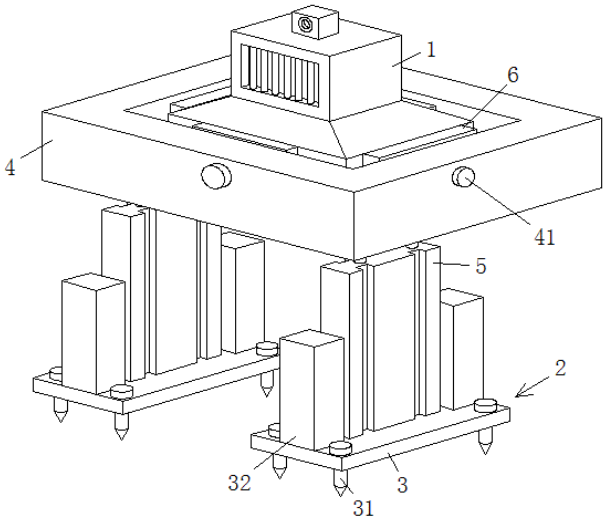


21: 2022/00884. 22: 2022-01-19. 43: 2022-02-28
51: B01D
71: China University of Petroleum (East China)
72: LIU, Chunhua, LIU, Xinfu, SHANG, Chao
54: TWO-STAGE AXIAL-FLOW TYPE ONLINE GAS-LIQUID SEPARATION DEVICE FOR UNDERWATER PIPELINE
00: -
The present disclosure provides an online gas-liquid separation device for an underwater pipeline, achieving an online installation and running of a pipeline. The device has characteristics of simplification in an oil-gas gathering and transportation process, reduction in an energy consumption of gathering and transportation, and compact structure.



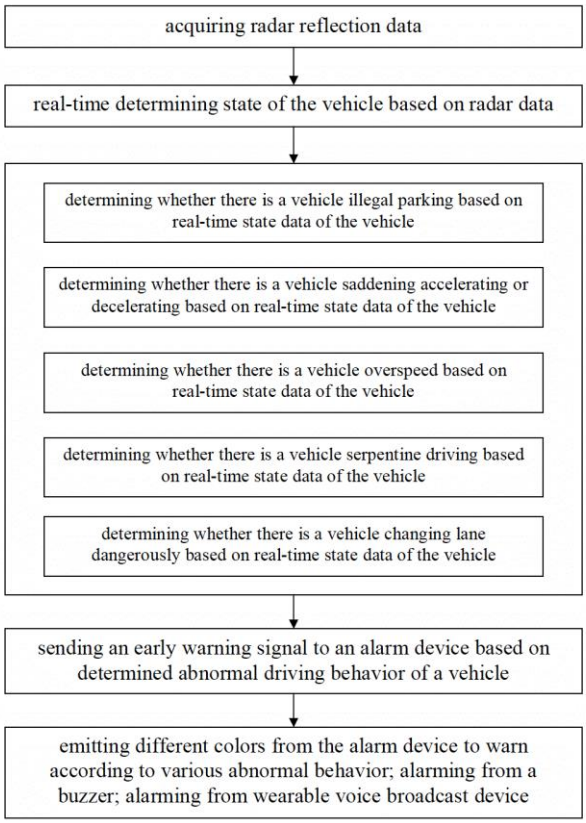
21: 2022/00885. 22: 2022-01-19. 43: 2022-03-01
51: E02D
71: Xi'an Jinshan Yinshan Technology Co., Ltd.
72: Tang Xiao, Sun Xin, Ma Yihua
54: DEVICE FOR CONTROLLING UPS AND DOWNS OF UNDERWATER FIXING EQUIPMENT
00: -

The invention discloses a device for controlling the ups and downs of underwater fixing equipment, which comprises an equipment body and a fixing mounting frame. The inside of the fixing mounting frame includes a fixing mounting plate for positioning and mounting; The upper end of the fixing mounting plate is movably connected with a fixed table body for mounting the equipment body; A hydraulic cylinder is arranged between the fixing mounting plate and the fixed table body to drive the fixed table body to move up and down; The inside of the fixing table body is movably connected with a pressing plate for fixing the equipment body; The inner side of the pressing plate and the outer side of the equipment body are mutually attached. According to the device for controlling the ups and downs of underwater fixing equipment, the hydraulic cylinder drives the underwater equipment to rise and fall, so that it is convenient for the whole underwater equipment to rise to the water surface for replacement and overhaul, and the difficulty of the whole replacement and overhaul is reduced; moreover, the device is inserted and fixed with the water bottom through a plurality of groups of fixed pins, which ensures the whole good installation effect and facilitates the whole installation and disassembly of equipment with different specifications.



21: 2022/00887. 22: 2022-01-19. 43: 2022-03-03
51: G08B; G08G
71: TONGJI UNIVERSITY
72: WANG Junhua, FU Ting, LUO Tianyang
33: CN 31: 202110073739.5 32: 2021-01-20
54: METHOD AND SYSTEM FOR EARLY WARNING OF VEHICLE INTRUSION EVENT IN CONSTRUCTION OPERATION AREA
00: -

The disclosure relate to a method and a system for early warning of a vehicle intrusion event in a construction operation area. the method includes following steps: acquiring millimeter wave radar reflection data of a vehicle and track data of the vehicle; acquiring real-time running state data of the vehicle by using the millimeter wave radar reflection data of the vehicle; further determining whether there is a vehicle abnormal driving behavior; and sending an early warning signal to an alarm device in the construction area for the determined abnormal driving behavior of the vehicle. In this disclosure, an active protection against life safety of operators in the construction area can be achieved, and an accident rate in the construction area can be reduced.

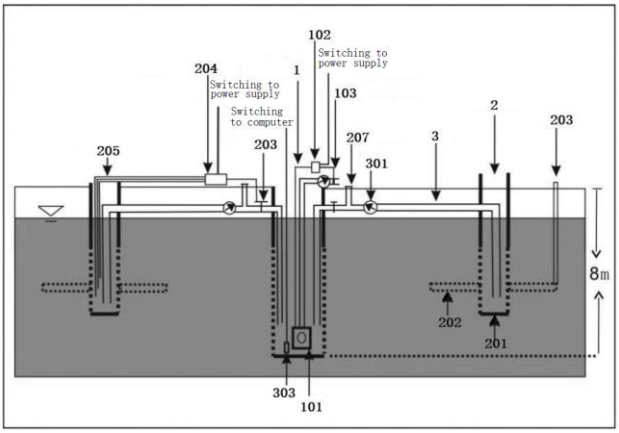


21: 2022/00888. 22: 2022-01-19. 43: 2022-03-01
51: E03B; G01D; G05D
71: INSTITUTE OF HYDROGEOLOGY AND ENVIRONMENTAL GEOLOGY, CHINESE ACADEMY OF GEOLOGICAL SCIENCES
72: LIU, Pengfei, LIU, Shaoyu, CUI, Shangjin, NIE, Zhenlong, WANG, Jinzhe, HU, Qi

54: SYSTEM FOR MONITORING AND CONTROLLING GROUNDWATER LEVEL

00: -

A groundwater level monitoring and control system is disclosed. The groundwater level monitoring and control system integrates the technologies of radiation wells and siphon wells in the groundwater level control region, and uses one main pumping well to siphon and communicate multiple radiation wells, which effectively increases the water output of a single well under power saving conditions, and achieves efficient control of the groundwater level from point to line to surface. Since each radiation well is provided with a separate liquid level relay signal line, an electromagnetic valve and a separate siphon control pipeline, it is possible to flexibly realize the control requirements of one pump pumping and different water levels in different zones according to the water level control requirements of each radiation well control zone.

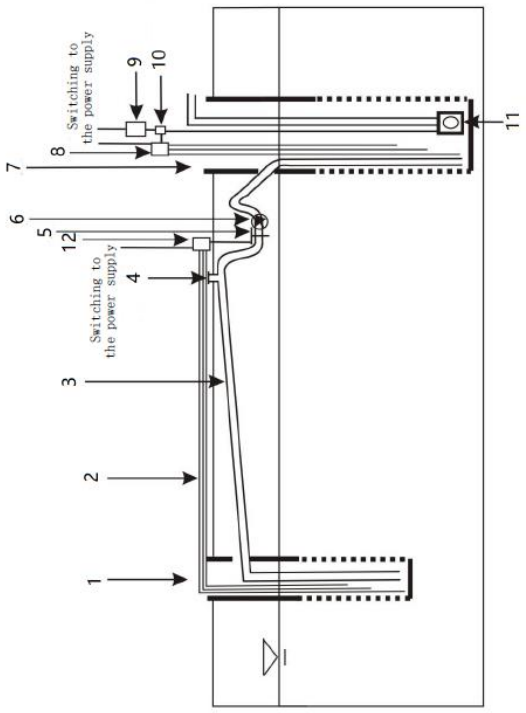


21: 2022/00889. 22: 2022-01-19. 43: 2022-03-01
51: E03B; F04D; F04F
71: INSTITUTE OF HYDROGEOLOGY AND ENVIRONMENTAL GEOLOGY, CHINESE ACADEMY OF GEOLOGICAL SCIENCES, CHINA UNIVERSITY OF GEOSCIENCES (BEIJING)
72: LIU, Pengfei, LIU, Min, CUI, Shangjin, LIU, Shaoyu, NIE, Zhenlong, ZHANG, Guanghui

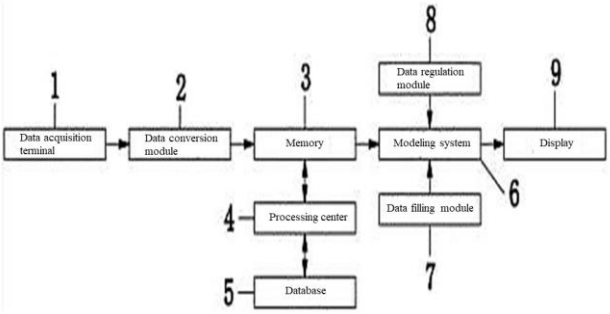
54: SIPHON DRAINAGE STRUCTURE AND USING METHOD THEREOF

00: -

Disclosed is a siphon drainage structure and a method of using the same, wherein the siphon drainage structure comprises a water source well, a water-collecting well, a siphon, an exhaust valve, an electric ball valve, a first level relay, a submersible pump, an alternating current contactor, a frequency converter and a second level relay. The siphon comprises a first vertical section, a connection section and a second vertical section, wherein the connection section comprises a first ascending section, a first descending section, a second ascending section and a second descending section successively connected in the direction from the water source well to the water-collecting well.



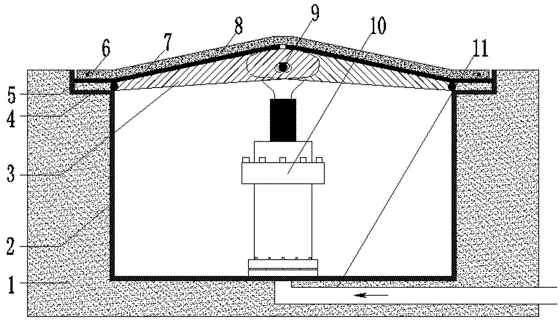
21: 2022/00890. 22: 2022-01-19. 43: 2022-03-01
51: G06F
71: EAST CHINA UNIVERSITY OF TECHNOLOGY, CHINA NUCLEAR HUATAI CONSTRUCTION CO., LTD.
72: WANG, Zhenhua, WU, Bo, LI, Dongwei, YUAN, Chang, LIU, Heng, HE, Jin
54: DEVICE FOR CONSTRUCTION SIMULATION USING BIM
00: -
Disclosed is a device for construction simulation using BIM in the technical field of construction simulation devices, which includes: a data acquisition terminal, a data conversion module, a memory, a processing center, a database, a modeling system, a data filling module, a data regulation module and a display. The data acquisition terminal is used for acquiring parameters in a construction site, acquired objects including geographic positions, construction points and construction execution images, with an output end coupled with an input end of the data conversion module. The device for construction simulation using BIM can perform subsequent adjustment and input operations in which its real-time states are made more accurate by means of data adjustment and input without affecting normal simulations, anticipate project durations, enable actual use by metering utilization conditions of materials, and perform storehouse complementation in real time.



21: 2022/01034. 22: 2022-01-24. 43: 2022-02-24
51: A01N; A01P
71: China Tobacco Guangxi Industry Co., Ltd., Yunnan Agricultural University
72: WEI, Jianyu, AO, Jincheng, ZHANG, Jili, JIN, Yabo, QIN, Shangzhong, HUANG, Chongjun, LI, Bo, ZHOU, Zhaofeng, JIA, Haijiang, YANG, Qigang, LI, Zhi, HE, Yuanlan, HE, Mingxiong, ZHANG, Weining, OU, Qinghua, ZHAO, Dongjie
54: TERBINAFINE AGENT AND APPLICATION THEREOF IN INCREASING SQUALENE CONTENT IN TOBACCO LEAVES
00: -
Disclosed are a terbinafine agent and an application thereof. The terbinafine agent includes the following ingredients based on a weight percentage: 10%-20% of terbinafine, 5%-8% of tris(laureth-4) phosphate, and a remaining amount of ethanol. The inventor has found that adding a certain amount of the terbinafine agent in the growing process of tobacco plants can increase a squalene content in tobacco leaves. Compared with a blank control group, after adding the terbinafine agent, a squalene content in tobacco leaves is significantly increased, and the economic value of tobacco leaves is improved.

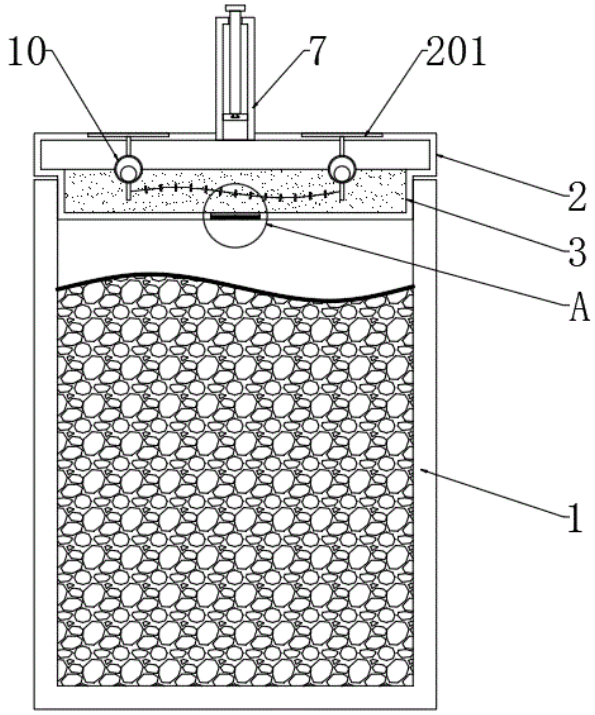
21: 2022/01036. 22: 2022-01-24. 43: 2022-02-24
51: E01F
71: Qingdao University of Technology
72: WEI, Jinli, LU, Liuying, ZHANG, Linhao, ZHOU, Jianwei
54: ADAPTIVE SPEED BUMP FOR SIGNALIZED INTERSECTION
00: -
The present disclosure discloses an adaptive speed bump for a signalized intersection. The speed bump

device comprises a speed bump, a decision control part and an energy recovery part. The speed bump comprises a rubber top cover, a double-wing-shaped supporting base, a hydraulic cylinder and a protective box. The tail of the double-wing-shaped base is movably hinged with the box, the free end of the head is provided with an engagement slot hole, the two wing-shaped bases are connected with the hydraulic cylinder through a connecting rod, the hydraulic cylinder drives the wing-shaped base to rotate, and the left and right wing-shaped bases are meshed into the plane state and the convex state, which meets the requirements of the lifting state of the speed bump.



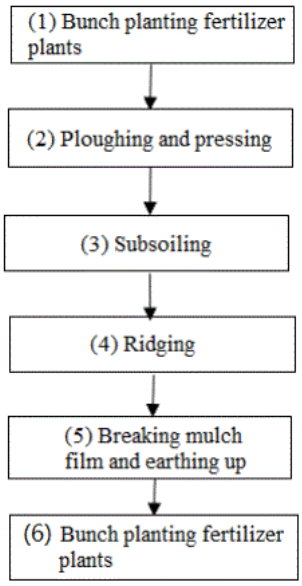
Rising state of a speed bump

21: 2022/01037. 22: 2022-01-24. 43: 2022-03-03
51: B65D
71: Qingdao Geo-Engineering Surverying Institute (Qingdao Geological Exploration Development Bureau), Key Laboratory of Geological Safety of Coastal Urban Underground Space, Ministry of Natural Resources, Qingdao Institute of marine geology, China Geological Survey
72: Zhao Yu Ting, Sun Jing, Qu Wan Long, Wang Zhong Sheng, Jia Shi Xiang, Mu Bin
54: A KIND OF STRATUM SOIL SAMPLE STORAGE DEVICE FOR GEOLOGICAL EXPLORATION AND USING METHOD THEREOF
00: -
This invention provides a kind of stratum soil sample storage device for geological exploration and using method thereof, belonging to the technical field of geological exploration, a kind of stratum soil sample storage device for geological exploration and using method thereof, according to the invention, the piston plate can be moved up along the inner wall of the buffer conduit by rotating the threaded rod, thereby reducing the air pressure in the built-in cavity, so that the residual air in the soil sample storage tank can push the rubber seal to enter into built-in cavity, the contact between the heating powder and the air can generate a large amount of heat. On the one hand, the possibility of gradual oxidation of the soil in the soil sample storage tank can be reduced by inhaling air, on the other hand, with the heat generated in the reaction process, the gas flow efficiency in the sealing plug cap can be improved, therefore, the absorption effect of the air in the soil sample storage tank can be improved, and the heating powder can be dispersed at the same time, thereby improving the reaction efficiency of the heating powder and the air, and increasing the consumption rate of the air.



21: 2022/01038. 22: 2022-01-24. 43: 2022-02-24
51: A01B; A01G
71: China Tobacco Guangxi Industry Co., Ltd., Yunnan Agricultural University
72: WANG, Zheng, AO, Jincheng, WEI, Jianyu, JIA, Haijiang, YANG, Qigang, LI, Bo, ZENG, Xiangnan, HUANG, Congguang
54: METHOD FOR CONSTRUCTION OF TOBACCO FIELD FERTILE PLOUGH LAYER OF RED SOIL SLOPING FARMLAND
00: -
Provided is a construction method of tobacco field fertile plough layer of red soil sloping farmland,

including: (1) bunch planting fertilizer plants; (2) ploughing and pressing; (3) subsoiling; (4) ridging; (5) breaking mulch film and earthing up; and (6) bunch planting fertilizer plants. The method of the present invention concentrates on two rounds of planting fertilizer plants, ploughing and pressing the fertilizer plants together with the addition materials from the external sources simultaneously and comprehensive techniques matching of a ploughing and pressing direction, a subsoiling direction, a ridging direction and mulch film breaking and earthing up, to effectively reduce water and soil erosion and nutrient leaching loss, increase the depth and nutrient content of the plough layer and the beneficial soil bacteria, thereby providing scientific guidance for the sustainable utilization of the red soil sloping farmland resources in the southern part of China and improving the availability of tobacco industry.

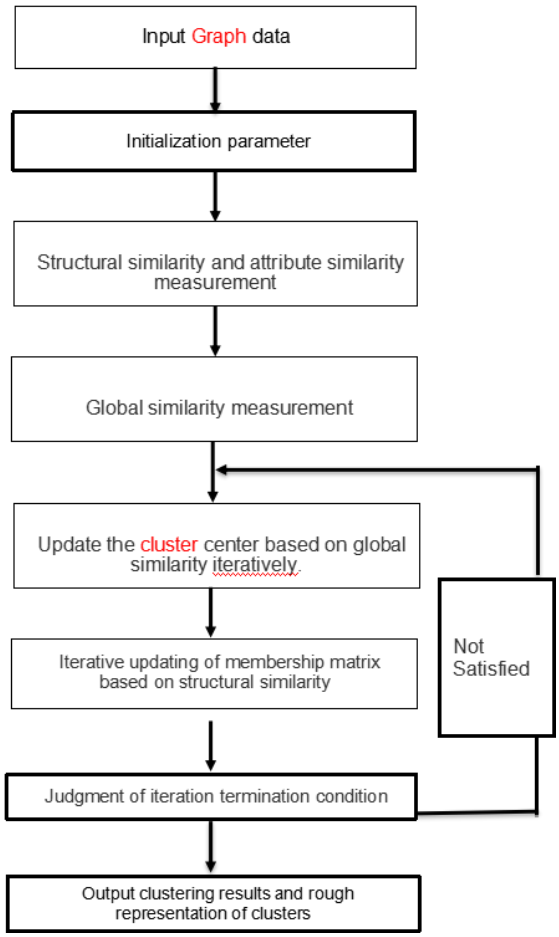


21: 2022/01039. 22: 2022-01-24. 43: 2022-03-03
51: G06K
71: Yunnan Minzu University
72: Liu ShiHu, He WenQian, Zhao YangYang

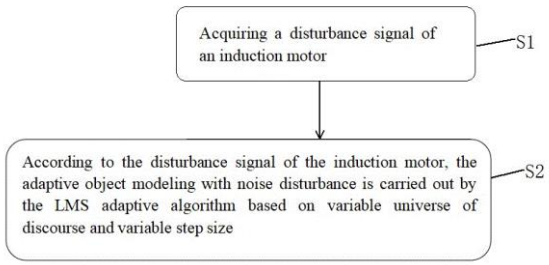
54: FUZZY CLUSTERING METHOD OF GRAPH DATA BASED ON ROUGH SET THEORY

00: -

This invention provides fuzzy clustering method of graph data based on rough set theory, which relates to the field of graph data technology field. The fuzzy clustering method of graph data based on rough set theory comprises the following steps: Step 1, judging whether there are edges between nodes, and then giving the structural similarity measure of nodes in graph data, Step 2, judging the attribute value relationship between nodes, and then giving the attribute similarity measure of nodes in the graph data, Step 3, selecting initial parameters, fusing structural similarity and attribute similarity, calculating global similarity of nodes, S4, building an objective function, S5, building a cluster center, S6, building a membership matrix. Through the cyclic iteration of membership degree and cluster center, so as to achieve the optimization of the objective function, optimize the driven clustering results, jump out of the trap described by fuzzy sets or classic sets in the past, and instead describe them by rough sets. The novelty lies in that the representation completely conforms to the cognitive law of human beings, and its practical significance is enormous.

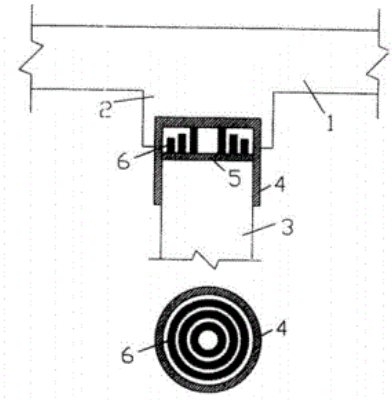


21: 2022/01040. 22: 2022-01-24. 43: 2022-03-02
51: G01R; H02P
71: Beihua University
72: Bai Jing, Bai Yan, Xu Yu, Xing Jisheng, Yang Yong, Feng Weidong, Zhang Jing
54: METHOD AND DEVICE FOR MODELING NONLINEAR TIME-VARYING OBJECT OF INDUCTION MOTOR VARIABLE FREQUENCY SPEED REGULATION SYSTEM
00: -
The invention discloses a method and a device for modeling a nonlinear time-varying object of an induction motor variable frequency speed regulation system, which comprise that following steps: acquiring a disturbance signal of an induction motor; according to the disturbance signal of the induction motor, the adaptive object modeling with noise disturbance is carried out by the LMS adaptive algorithm based on variable universe of discourse and variable step size. By adopting the technical scheme of the invention, the tracking ability of adaptive object modeling with noise disturbance of the induction motor variable frequency speed regulation system is improved.



21: 2022/01041. 22: 2022-01-24. 43: 2022-02-24
51: A01C; C05G
71: China Tobacco Guangxi Industry Co., Ltd., Guangxi Tobacco Company Hezhou Branch
72: WEI, Jianyu, JIN, Yabo, SHI, Baofeng, ZHANG, Deping, SHOU, Anfa, ZHANG, Jili, QIN, Shangzhong, SUN, Jiansheng, HUANG, Chongjun, JIA, Haijiang, YANG, Qigang, LIANG, Yongjin, HE, Yuanlan, OU, Qinghua, HE, Mingxiong, LI, Zhi
54: LIQUID MICROELEMENT FERTILIZER AND APPLICATION THEREOF IN INCREASING SQUALENE CONTENT IN TOBACCO LEAVES
00: -
Disclosed are a liquid microelement fertilizer and an application thereof in increasing a squalene content in tobacco leaves. The liquid microelement fertilizer includes the following ingredients based on a weight percentage: 0.2%-5% of EDTA-Zn, 0.5%-10% of ammonium phosphomolybdate, 5%-10% of ethanol and a remaining amount of water. The inventor has found that adding a certain amount of liquid microelement fertilizer during the growth of tobacco can increase the content of squalene in tobacco leaves. Compared with a blank control group, after adding the liquid microelement fertilizer, a squalene content in tobacco leaves is significantly increased, and the economic value of tobacco leaves is improved.

21: 2022/01042. 22: 2022-01-24. 43: 2022-02-24
51: E02D
71: Nanjing Tech University, China Construction Installation Group Co., Ltd.
72: ZHOU, Feng, ZHU, Rui, SONG, Zhu, ZHOU, Kezhang, ZHOU, Shilin, WANG, Xudong, ZHAO, Qingzhou
54: STIFFNESS ADJUSTMENT DEVICE FOR PILED RAFT FOUNDATION
00: -
Disclosed is a stiffness adjustment device for a piled raft foundation. The device includes a cylinder, a top plate and a stretchable element, where the top plate and the stretchable element are arranged in the cylinder, the stretchable element is located in a cavity defined by the cylinder and the top plate, and the stretchable element can use a stiffness adjustment steel plate standing between an inner end face of the cylinder and the top plate; and the stiffness adjustment steel plate is cylindrical, and can be composed of cylindrical steel plates in varying diameters. The present invention has the advantages that influence caused by settlement difference of a composite pile foundation is eliminated, a bearable load tends to be infinite upon the completion of preset stiffness, and stiffness of the pile top of the pile foundation of a building can be conveniently adjusted.

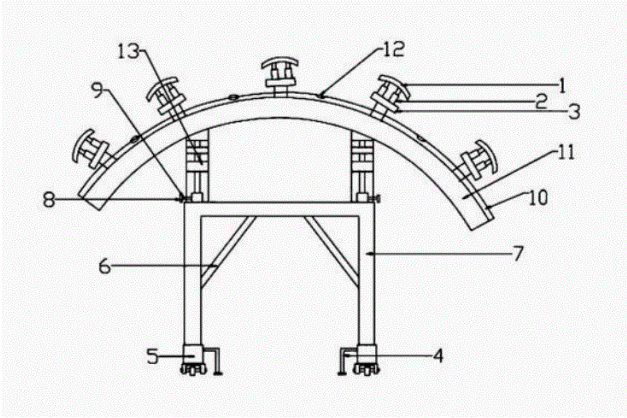


21: 2022/01043. 22: 2022-01-24. 43: 2022-02-24
51: E21D; E21F
71: Henan University of Urban Construction
72: WU, Xuyang, HOU, Haifang, LUO, Congshuang, LIANG, Geng, LIU, Heng, HE, Ruixia, WANG, Qingguo, HAN, Yang, REN, Mingyang, ZHAI, Panpan, CHU, Yapei, SHEN, Tong

54: FOUNDATION PIT SUPPORTING DEVICE FOR TUNNEL DRAINAGE IN CONSTRUCTION WORKS

00: -

Disclosed is a foundation pit supporting device for tunnel drainage in construction works, including small curved supporting plates, lifting platforms, bases, reinforced supporting legs, supporting columns, oblique supporting rods, a supporting body, adjusting knobs, a drain pipe, a large curved supporting plate and filter screens, wherein the supporting columns are fixed at the lower portion of the supporting body, and reinforced supporting legs are arranged on side walls of supporting columns. The present invention is reasonable in structure and convenient to use, and an overall height can be adjusted, so that the device can be applied to different heights and obstacles. The supporting body and supporting columns are combined with the reinforced supporting legs, so as to achieve a high supporting strength, and safe and reliable use. Filter screens are arranged on the drain pipe, water in a tunnel fault is introduced and discharged through both ends.

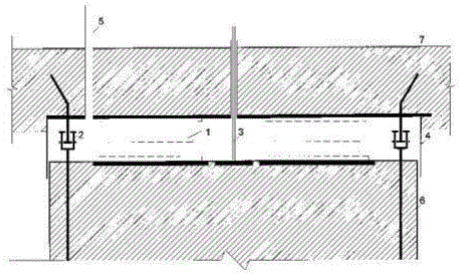


21: 2022/01044. 22: 2022-01-24. 43: 2022-02-24
51: E02D
71: Nanjing Tech University, China Construction Installation Group Co., Ltd.
72: ZHOU, Feng, ZHU, Rui, ZHOU, Kezhang, ZHOU, Shilin, SONG, Zhu, ZHAO, Qingzhou, WANG, Xudong

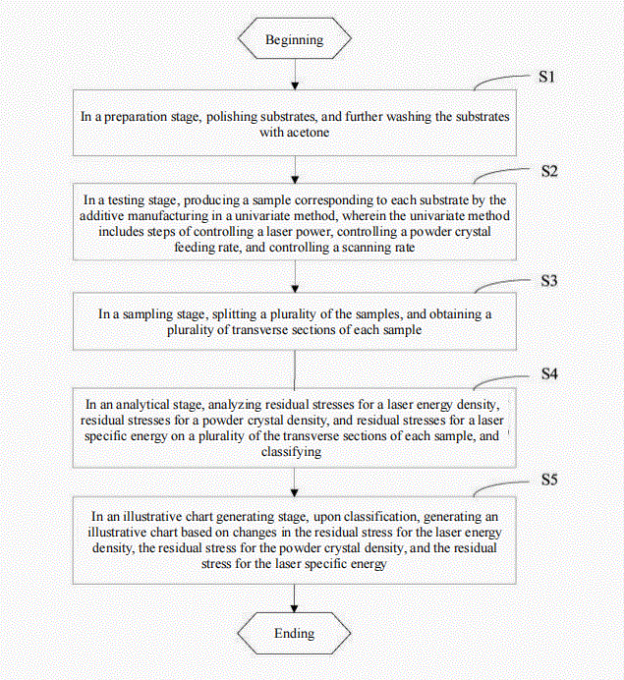
54: STRUCTURE AND CONSTRUCTION TECHNOLOGY OF PILED RAFT FOUNDATION WITH CONTROLLABLE STIFFNESS

00: -

Disclosed is a stiffness-controllable piled raft foundation structure. The structure includes a pile foundation, a raft, a displacement adjustment device and a deformation marker rod. The displacement adjustment device is arranged between the pile foundation and the raft to adjust relative deformation between the pile foundation and the raft. The deformation marker rod is used for measuring relative deformation between the pile foundation and the raft, a lower portion of the deformation marker rod being connected to a pile top, an upper portion thereof penetrating a steel pipe and being exposed out of the raft, and the steel pipe being embedded in the raft. The bearing-stiffness-adjustable piled raft foundation features freely-adjustable bearing stiffness on the premise of guaranteeing that bending resistance, with shearing resistance and pullout resistance of a piled raft joint being not lower than those of a conventional pile foundation, thereby enabling wide adaptability of the structure.

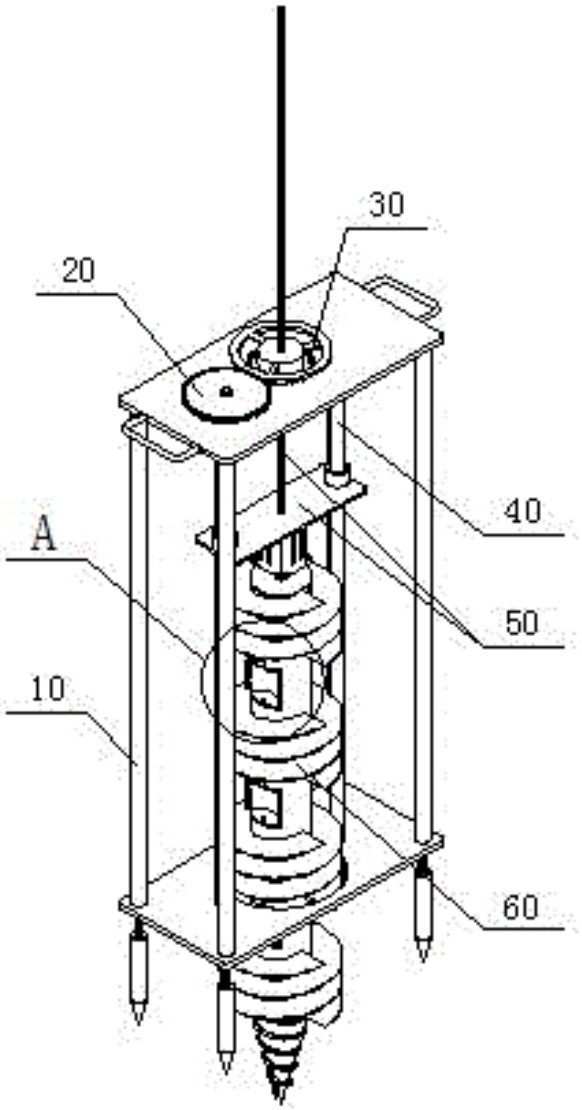


21: 2022/01045. 22: 2022-01-24. 43: 2022-02-24
51: G01L; G01N
71: Dongguan University of Technology, Institute of Advanced Science Facilities, Shenzhen
72: CHEN, Shenggui, XU, Jin, SHANG, Xin, LI, Nan, ZHOU, Zirong, ZHANG, Lijuan
54: ILLUSTRATIVE STRESS ANALYSIS METHOD FOR ADDITIVE MANUFACTURING
00: -
The present invention provides an illustrative stress analysis method for additive manufacturing. The method includes steps of: polishing substrates, and further washing the substrates with acetone; producing a sample corresponding to each substrate by the additive manufacturing in a univariate method; splitting a plurality of the samples, and obtaining a plurality of transverse sections of each sample; analyzing residual stresses for a laser energy density, residual stresses for a powder crystal density, and residual stresses for a laser specific energy on a plurality of the transverse sections of each sample, and classifying; upon classification, generating an illustrative chart based on changes in the residual stress for the laser energy density, the residual stress for the powder crystal density, and the residual stress for the laser specific energy, thereby achieving a technical effect of showing a residual stress curve during the additive manufacturing in an illustrative form.



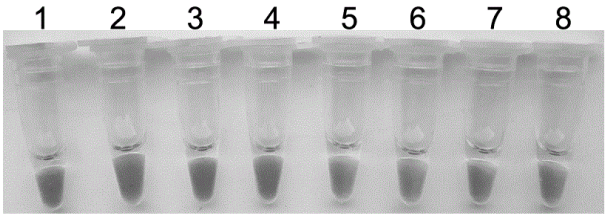
21: 2022/01046. 22: 2022-01-24. 43: 2022-03-03
51: G01N
71: Wanjiang University of Technology
72: Zhang Jun
54: GEOLOGICAL EXPLORATION SAMPLING DEVICE AND USING METHOD THEREOF
00: -
The invention discloses a geological exploration sampling device and a using method thereof, which comprises a supporting piece, wherein the bottom part is supported on the ground, and the top part is provided with two grasping parts; a first driving piece connected to the top of the supporting piece; a first gear connected to the top of the supporting piece and engaged with the first driving piece; guide rods connected in the supporting piece at intervals; one end of the screw rod is in clearance fit with the guide rod, and the other end passes through the first gear; and a rotary sampling piece connected to the wire rod piece; the bottom of the supporting piece is inserted into the ground and supported on the ground; the first driving piece is linked with the first gear to rotate, and the wire rod piece and the rotary sampling piece move downward along the first gear and the guide rod; the rotary sampling piece is continuously inserted into the ground, and the soil sample stays in the rotary sampling piece. It overcomes the technical problems that it is not possible to sample the soil in multiple positions at

the same time, the sampling efficiency is poor, it is difficult to take the soil samples out of the device after sampling, and the working intensity of operators is high.



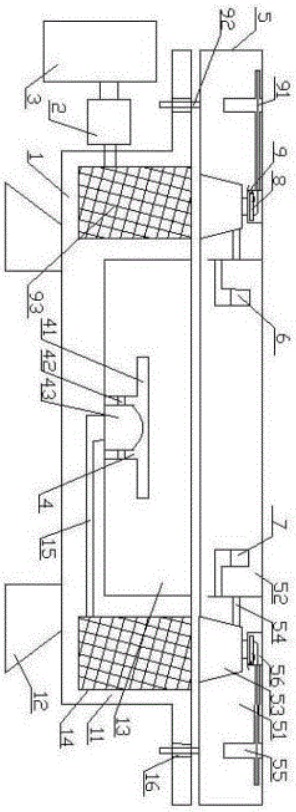
21: 2022/01047. 22: 2022-01-24. 43: 2022-03-03
51: C12N; C12Q
71: Institute of Animal Health, Guangdong Academy of Agricultural Sciences, Maoming Branch, Guangdong Laboratory for Lingnan Modern Agriculture
72: Gou Hongchao, Li Chunling, Bian Zhibiao, Cai Rujian, Zhai Shaolun, Chu Pinpin, Li Yan, Song Shuai, Jiang Zhiyong, Zhang Kunli, Yang Dongxia

54: LAMP PRIMER SET, KIT AND APPLICATION FOR DETECTING PORCINE CIRCOVIRUS TYPE 3
00: -
The invention discloses a LAMP primer set, kit and application for rapid detection of porcine circovirus type 3. The primer set comprises a primer set with nucleotide sequences as shown in SEQ ID NO.1-6; the kit comprises the primer set and the reaction reagent; the use method of the kit is as follows: firstly, a cross primer amplification reaction system is prepared; the products obtained from constant temperature reaction are directly interpreted by naked eyes: the positive result is yellow and the negative result is red. The kit has the advantages of simple operation, low cost, rapid response, good specificity, and easy observation of results, and is very suitable for export quarantine, food hygiene and field detection of livestock farms, and is easy to be widely popularized and applied.



21: 2022/01048. 22: 2022-01-24. 43: 2022-02-24
51: G01N
71: Tai'an Food and Drug Inspection and Testing Research Institute (Tai'an Fiber Inspection Institute)
72: LI, Haiyan

54: DEVICE AND METHOD FOR PROCESSING GLASS SLIDES CONTAINING CHINESE MEDICINAL MATERIALS
00: -
The present invention discloses an apparatus and method for processing glass slides containing Chinese medicinal material, wherein an overhead support for the glass slide is achieved by a supporting claw group, and a hot air surrounding treatment for the glass slide is achieved by a hot air source apparatus and a tray (5), thereby improving the detection accuracy of a sample of imaging medicine.



21: 2022/01049. 22: 2022-01-24. 43: 2022-03-03
51: G01N
71: Southwest Forestry University
72: Xiang Ping, Li Jingya, Gong Jing, Yang Danlei, Zhang Zhenning, Cui Daolei

54: A METHOD FOR RAPIDLY DETECTING THE CONCENTRATIONS OF ORGANOPHOSPHORUS FLAME RETARDANTS IN BODY FLUIDS

00: -

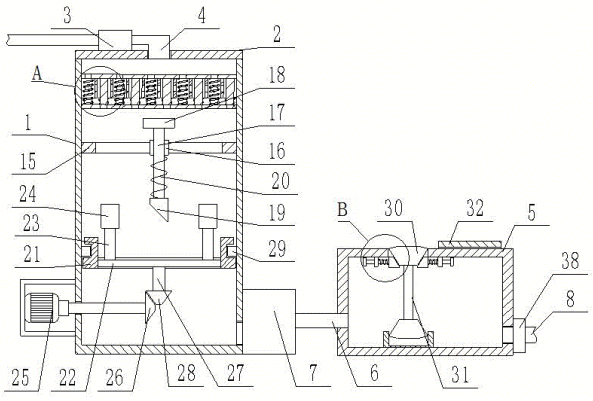
The invention discloses a method for rapidly detecting the concentrations of organophosphorus flame retardant in body fluids, and relates to the technical field of organic matter analysis and detection. In the invention, after the body fluid is mixed with the internal standard substance, acetonitrile is used for extraction, and the obtained supernatant is enriched and purified by a mixed-type anion exchange column, and then detected by LC-MS/MS. The invention provides a new method for detecting organophosphorus flame retardants in body fluids. The method is not limited to the type of body fluids, and can realize the rapid detection of various organophosphorus flame retardants in body fluids. The method has the advantages of low sample requirement, low sample volume, short time consumption and good operability.

21: 2022/01050. 22: 2022-01-24. 43: 2022-03-03
51: B01J
71: Yantai University
72: Sui Zhuyin, Zhou Jianping, Tan Dan, Xu Xiufeng, Li Yulin, Li Yongpeng

54: CONTINUOUS SEAWATER URANIUM EXTRACTION DEVICE

00: -

The invention discloses a continuous seawater uranium extraction device, which comprises a first recycling mechanism and a second recycling mechanism. The first recycling mechanism comprises a first mounting box; the top surface of the first mounting box is hinged with a box cover; a first recycling part is installed in the first mounting box. The top surface of the box cover is fixedly connected with a first water pump; the output end of the first water pump is fixedly connected with a water inlet pipe, and the water inlet pipe is correspondingly arranged with the first recycling part; the second recycling mechanism comprises a second mounting box; a second recycling part is installed in the second mounting box; a water outlet is arranged at the bottom end of the first mounting box; the water outlet is fixedly connected with a water outlet pipe which is communicated with the second mounting box; the water outlet pipe is provided with a second water pump, and the second mounting box is provided with a water outlet.

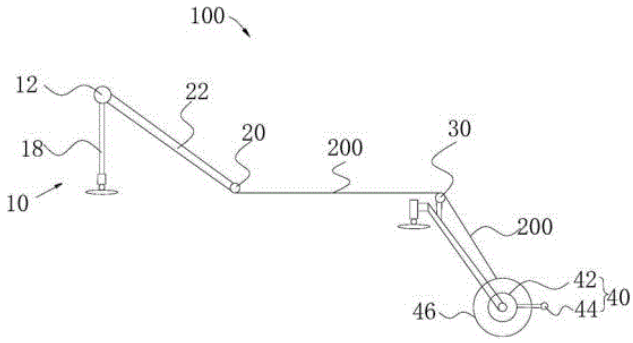


21: 2022/01051. 22: 2022-01-24. 43: 2022-03-03
51: A47B
71: The Fifth People's Hospital of Wuxi
72: Yan Yan, Fu Decai

54: LABORATORY TABLECLOTH AUTOMATIC REPLACEMENT DEVICE

00: -

The invention discloses a laboratory tablecloth automatic replacement device, which comprises a discharging part, a first guide rod, a second guide rod and a collection part. The first guide rod, the second guide rod and the collection rod are cylindrical, and the first guide rod, the second guide rod and the collection rod can rotate around the axial directions of the first guide rod, the second guide rod and the collection rod respectively. The laboratory tablecloth moves along the bottom end of the first guide rod to the top end of the second guide rod in turn and is collected on the collection rod. The first guide rod is arranged on the desktop, the second guide rod is arranged at the edge of the desktop, and the collection part is arranged below the desktop. The first guide rod, the second guide rod and the collection rod are parallel to each other and perpendicular to the moving direction of the laboratory tablecloth, and the axial directions of the first guide rod, the second guide rod and the collection rod are parallel to the desktop. The bottom end of the first guide rod, the top end of the second guide rod and the desktop are in the same plane. The laboratory tablecloth automatic replacement device of the embodiment of the invention improves the efficiency of spreading the laboratory tablecloth.



21: 2022/01054. 22: 2022-01-24. 43: 2022-02-24

51: B60L; G06N

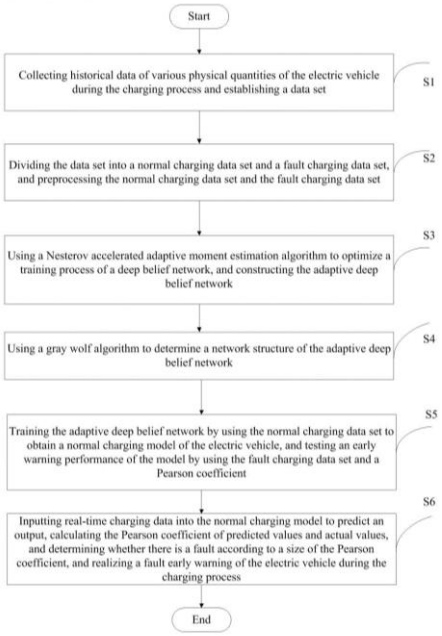
71: Qingdao University of Science and Technology

72: YANG, Qing, GAO, Dexin, WANG, Yi, ZHANG, Shiyu, ZHOU, Jili

54: FAULT EARLY WARNING METHOD OF AN ELECTRIC VEHICLE DURING A CHARGING PROCESS BASED ON AN ADAPTIVE DEEP BELIEF NETWORK

00: -

The present disclosure designs a fault early warning method of an electric vehicle during a charging process based on an adaptive deep belief network. Firstly, historical data of various physical quantities of the electric vehicle during the charging process are collected to establish a data set; secondly, the data set is divided into a normal charging data set and a fault charging data, and the normal charging data set and the fault charging data set are preprocessed; then a Nesterov accelerated adaptive moment estimation algorithm is used to optimize a training process of a deep belief network, and the adaptive deep belief network is constructed, whose network structure is determined by using a gray wolf algorithm; then the adaptive deep belief network is trained by using the normal charging data set to obtain a normal charging model of the electric vehicle.



21: 2022/01056. 22: 2022-01-24. 43: 2022-02-24

51: B01D; B01J

71: NANCHANG HANGKONG UNIVERSITY

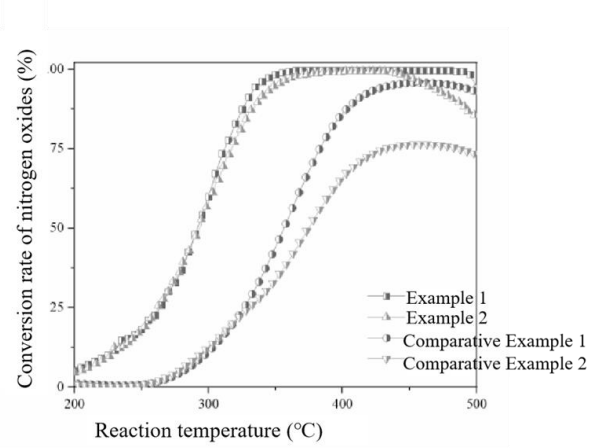
72: DAI, Weili, ZHANG, Jie, MA, Liang, FAN, Yixuan, ZHOU, Lei, XU, Yong, YANG, Lixia, FAN, Yuwang

54: OXYGEN-RICH MOTIOX CATALYST AND PREPARATION METHOD AND APPLICATION THEREOF

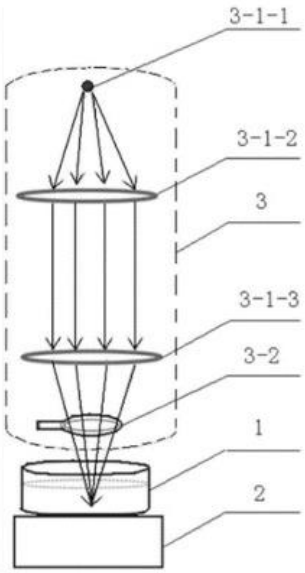
00: -

The present disclosure relates to an oxygen-rich MoTiOx catalyst and a preparation method and an application thereof, which relates to the technical

field of catalytic materials. The method for preparing the oxygen-rich MoTiOx catalyst of the present disclosure uses a molybdenum salt and TiOSO4 as raw materials to prepare the oxygen-rich MoTiOx catalyst through a coprecipitation method. The present disclosure uses TiOSO4 as a titanium source to coprecipitate with the molybdenum salt, so that the oxygen-rich MoTiOx catalyst obtained has a strong surface oxygen adsorption capacity, which is more conducive to performing the selective catalytic reduction. There is no complicated reactions and operation steps in the preparation process of the oxygen-rich MoTiOx catalyst. Thus, the preparation process is easy to operate and repeat. The oxygen-rich MoTiOx catalyst has good catalytic activity and stability.

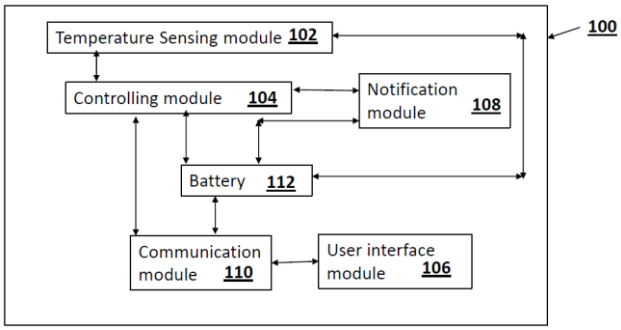


21: 2022/01057. 22: 2022-01-24. 43: 2022-02-24
51: B29C; B33Y
71: HARBIN INSTITUTE OF TECHNOLOGY, NORTHEAST FORESTRY UNIVERSITY
72: JIANG, Zaixing, HUANG, Yudong, DONG, Jidong, ZHANG, Dawei, BAI, Yongping, LI, Yangyang, XU, Lijuan, JI, Yuan, WANG, Xufeng, REN, Liping, ZHANG, Jichi, YANG, Ming, LIU, Yijie
54: CROSS-INTERFACE LIQUID 3D PRINTING DEVICE AND METHOD
00: -
A cross-interface liquid 3D printing device and method are provided, belonging to 3D printing equipment and method. The present disclosure is to solve the technical problem that an existing liquid 3D printing technology is hard to obtain gel, high in viscosity, slow in printing speed, low in printing precision and incapable of achieving cross-interface printing. The device comprises a printing liquid container, a motion control system, and a solidifying system, wherein the solidifying system is composed of an optical focusing system and a light path control switch; and a focal point of a focused beam produced by the optical focusing system is located in the printing liquid container. High temperature at a position of the focal position makes the liquid be solidified to achieve printing. The cross-interface printing of a component formed by combining various materials can be achieved.

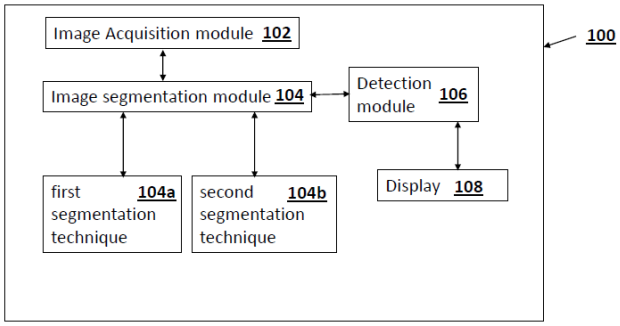


21: 2022/01061. 22: 2022-01-24. 43: 2022-03-03
51: A47J
71: SHAKYA, Achala, CHAKRAVERTI, Ashish Kumar, TRIPATHI, Gaurav, VERMA, Lalita, SINGH, Murari Kumar, NAND, Parma, MAHAPATRA, Satyasundara, SHARAD, Shwetav, CHAKRAVERTI, Sugandha, CHAUDHARY, Vikas
72: SHAKYA, Achala, CHAKRAVERTI, Ashish Kumar, TRIPATHI, Gaurav, VERMA, Lalita, SINGH, Murari Kumar, NAND, Parma, MAHAPATRA, Satyasundara, SHARAD, Shwetav, CHAKRAVERTI, Sugandha, CHAUDHARY, Vikas
54: A SMART CUTLERY FOR PREVENTING SCALDING DURING CONSUMPTION OF FOOD
00: -
A smart cutlery for preventing scalding during consumption of food, comprises of: a temperature sensing module embodied on wider surface of a cutlery to detect temperature; a controlling module associated with the temperature sensing module for comparing detected temperature with a threshold temperature to alert user, wherein if the detected temperature lies in the threshold temperature, the

food is considered to be idle for consumption; a user interface module associated with the controller via a communication module for adjusting the threshold temperature based on type of food and requirement of the user; and a notification module associated with controller to notify the user about the idle condition of food to eliminate scalding of mouth.



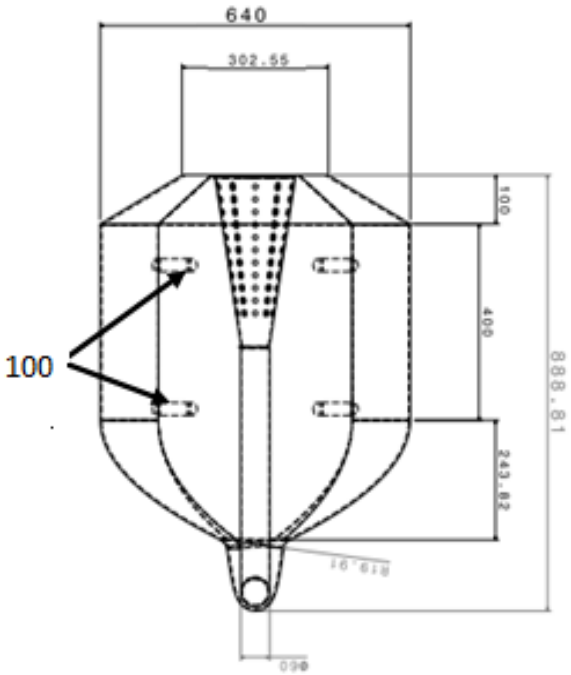
21: 2022/01062. 22: 2022-01-24. 43: 2022-02-24
51: G01N
71: JOSEPH, Georgina Binoy, GEORGE, Deepa Elizabeth, GEORGE, Neethu, VARGHESE, Deepa Mary, RAJESWARI, Dhanya
72: JOSEPH, Georgina Binoy, GEORGE, Deepa Elizabeth, GEORGE, Neethu, VARGHESE, Deepa Mary, RAJESWARI, Dhanya
54: A PORTABLE AND RAPID MALARIA DETECTING DEVICE
00: -
A device and a method for detection of malaria, comprises of: an image acquisition module (102) to capture image of blood samples of a patient; an image segmentation module (104) comprising of a first segmentation technique (104a) and a second segmentation technique (104b) associated with the image acquisition module (104) for dividing the captured image into a plurality of segments based on detecting protozoan parasites based on indices of the parasite; and a detection module (106) associated with the image segmentation module (104) for converting the plurality of segmented images into logical images, wherein if number of white pixels in the logical image identified is a non-zero number, then the blood sample is affected by the malaria.



21: 2022/01063. 22: 2022-01-24. 43: 2022-02-24
51: A01H
71: DHOBLE, Sanjay J., DHAPODKAR, Toshi S., KADAM, Abhijeet R., DESHMUKH, Radhika G., SHIRBHATE, Nayana S.
72: DHOBLE, Sanjay J., DHAPODKAR, Toshi S., KADAM, Abhijeet R., DESHMUKH, Radhika G., SHIRBHATE, Nayana S.
54: A HIGHLY EFFICIENT FAR RED EMITTING MG21CA4NA4(PO4)18: CE3+, EU3+ PHOSPHOR FOR PLANT CULTIVATION
00: -
The present invention relates to a highly efficient far red emitting Mg21Ca4Na4(PO4)18: Ce3+, Eu3+ phosphor for plant cultivation. In the proposed work, Ce3+, Eu3+ activated/ co-activated Mg21Ca4Na4(PO4)18 orthophosphate glasses have been prepared by melt quenching technique for the first time. XRD pattern of the proposed glass sample shows amorphous nature but most intense peak is get matched with the standard ICSD database of Mg21Ca4Na4(PO4)18 material. Vibrational feature if the proposed glass sample has been investigated using FT-IR analysis. Photoluminescence study of co-activated Mg21Ca4Na4(PO4)18 glass sample shows broad emission peaks under UV excitations which covers far red region. These all results of the proposed sample proving its worth in the WLEDs and plant cultivation applications.

21: 2022/01064. 22: 2022-01-24. 43: 2022-02-24
51: A01C
71: VISHWAKARMA INSTITUTE OF INFORMATION TECHNOLOGY
72: TATALE, Subhash Bhalu, KULKARNI, Atul Prabhakar, BHIRUD, Nivedita Satyajeet, SAKHARE, Sachin Rambhau
54: A PORTABLE SOLID FERTILIZER SPREADER
00: -

The present invention relates to a portable solid fertilizer spreader. The object of the proposed invention is to provide a cost-effective fertilizer spreader which can handle easily in any area such as plain or mountainous to reduce physical efforts of farmers. The proposed fertilizer spreader comprises of three components storage tank (102), flexible hosepipe (104) and conical spreader (101). The assembly of the fertilizer spreader involves a plastic tank with outlet coupling, one end of the hose pipe (104) is connected to the plastic tank and another end of hosepipe (104) is connected to the spreader (101) with coupling (103). The overall dimension of the proposed invention is 640 x 300 x 750 mm. It can carry 7 to 10 kg of fertilizer. Following invention is described in detail with the help of Figure 1 of sheet 1 illustrates the orthographic front views of the portable spreader.



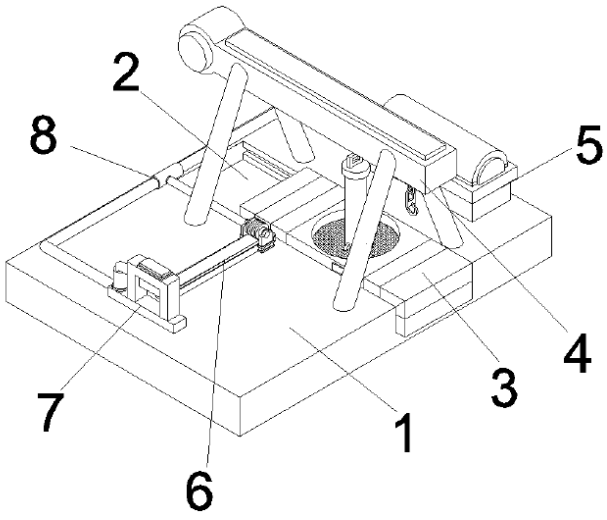
21: 2022/01065. 22: 2022-01-24. 43: 2022-02-24
51: E21B
71: VISHWAKARMA INSTITUTE OF INFORMATION TECHNOLOGY
72: GHATE, Krishna Rameshrao, CHAVHAN, Gajanan Himmatrao, PATIL, Milind Sahebrao, RAMTIRTHKAR, Chandrashekhar Ramesh, GAWANDE, Pravin G.
54: A MECHANICAL TIMER SWITCH
00: -

The present invention relates to a mechanical timer switch. The object of the proposed invention is to provide a mechanism which can be used manually as a normal switch and also automatic as timer switch which will turned off after preset time. The preferred embodiment provides an electric switch which can turn off after mechanical timer ends. The switch includes a mechanical spring and gears to set desired timer and this timer will make the switch normally open after timer is ended. This switch can be used as a normal switch also which can be turn on and off at users will and can be used as automatic with timer by just setting time.

21: 2022/01146. 22: 2022-01-25. 43: 2022-03-17
51: G09B
71: QINGDAO AGRICULTURAL UNIVERSITY
72: LI, Haimei, TIAN, Yuan, ZHU, Xu, SUN, Li, SUN, Yingkun, LIANG, Hong, LI, Shimei
33: CN 31: 202210009991.4 32: 2022-01-05
54: METHOD FOR SIMULATING ATMOSPHERIC NATURAL DUSTFALL
00: -

The present invention provides a method for simulating atmospheric natural dustfall by using different dust sources, and the method includes the following steps: (1) arranging an artificial dust raising chamber and placing a plant at the center of the dust raising chamber; (2) collecting atmospheric dustfall samples of different sources; (3) fixing four air blowers respectively on height-adjustable supports, and fixing four hard cards respectively at air outlets of the air blowers; (4) dividing the atmospheric dustfall samples equally into four parts after removing foreign matter, placing the four parts respectively at the air outlets of the four air blowers, turning on a power supply to make the air blowers simultaneously face a position of the plant to raise dust. The present invention accurately finds out precise data such as a raised dust amount, and a height, an angle, a distance and the like when dust is raised, and successfully simulates a state of atmospheric natural dustfall. The method is easy to operate and can be popularized and applied.

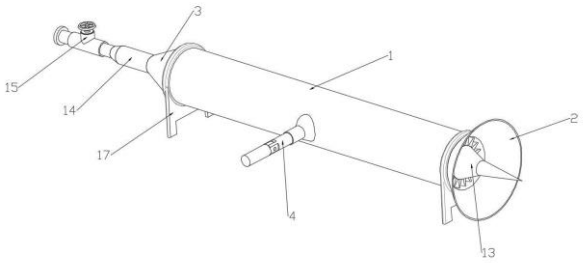
21: 2022/01147. 22: 2022-01-25. 43: 2022-03-17
51: B21D
71: STATE GRID SHANDONG ELECTRIC POWER COMPANY ZAOZHUANG POWER SUPPLY COMPANY, STATE GRID CORPORATION OF CHINA
72: LIU, Yujiao, KANG, Wenwen, DAI, Ergang, LI, Guoliang, YAN, Chongyang, HAN, Feng, YANG, Fengwen
33: CN 31: 202110415566.0 32: 2021-04-19
54: MOBILE LARGE-SCALE CABLE CUTTING DEVICE
00: -
Disclosed is a mobile large-scale cable cutting device, including a mounting connection plate, a slideway, a cable drum fixing device, an auxiliary traction bracket, a power supply motor, a cable conveying channel, a hydraulic cutting machine and a power transmission pipe; where the slideway is opened in the center of the mounting connection plate, and the cable drum fixing device is slidably connected inside the slideway; the auxiliary traction bracket is fixedly connected at both sides of the slideway, and the power supply motor is fixedly connected on the right of the slideway, and the cable conveying channel is fixedly connected in the left center of the slideway. The present disclosure is simple in structure and reasonable in design. Multiple devices are utilized to achieve the moving, fixing and cutting of the large-scale cable drums, which integrates with multiple processes and simplifies the operation procedure of cable installation, thereby bringing conveniences for workers.



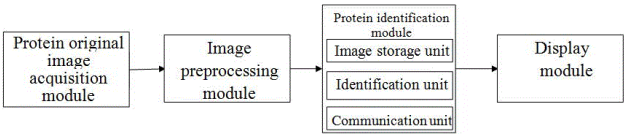
21: 2022/01148. 22: 2022-01-25. 43: 2022-03-17
51: B60P
71: PLANT PROTECTION RESEARCH INSTITUTE GUANGDONG ACADEMY OF AGRICULTURAL SCIENCES
72: ZHAO, Can, LI, Dunsong, XIA, Yue
54: LIVING BODY STORAGE TECHNOLOGY FOR ANASTATUS SP.
00: -
The present invention relates to the field of biological control of agricultural pests, and particularly relates to a living body storage method for Anastatus sp. A living body storage technology for Anastatus sp., comprising the following process steps: diapause induction treatment before cold storage of Anastatus sp.。Compared with the prior art, the present invention has the following advantages and effects:cold storage on diapausing Anastatus sp.; and development of stored Anastatus sp. Compared with the prior art, the present invention has the following advantages and effects:(1) the survival rate of Anastatus sp. after long-term storage is improved. the storage time of the Anastatus sp. is prolonged from 80 days to 12 months in the present invention by storing of diapausing mature larvae of Anastatus sp.

21: 2022/01185. 22: 2022-01-26. 43: 2022-03-01
51: B63H
71: Deyu Fang, Xuanyi Weng, Lilin Tan, Quan Zhang, Guangxi Qinzhou Suhang New Material Technology Co., Ltd.
72: Deyu Fang, Xuanyi Weng, Lilin Tan, Quan Zhang

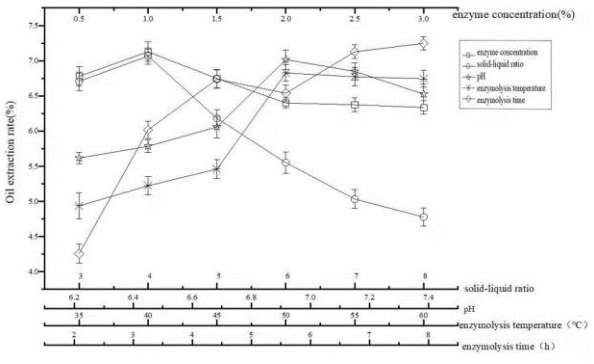
33: CN 31: 202111110090.6 32: 2021-09-23
54: A MARINE VESSEL PROPULSION DEVICE
00: -
The invention relates to the field of fluid machinery, in particular to a marine vessel propulsion device, comprising a casing and an outlet nozzle and an inlet nozzle arranged at both ends of the casing, the casing is provided with a drive shaft extending into the inside of the casing near the middle of the casing, one end of the drive shaft located inside the casing is equipped with a driving bevel gear, the driving bevel gear is in intermeshing connection with the first driven bevel gear and the second driven bevel gear respectively; the first driven bevel gear is axially connected to one end of the first roller arranged in the casing through a first transmission shaft, one end of the first roller near the inlet nozzle is provided with a first pyramid; the second driven bevel gear is axially connected to one end of the second roller arranged in the casing through a second transmission shaft, one end of the second roller near the outlet nozzle is provided with a second pyramid.



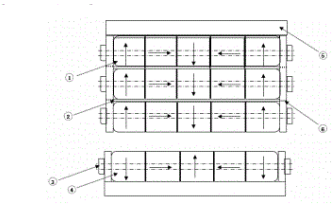
21: 2022/01186. 22: 2022-01-26. 43: 2022-03-01
51: G01N
71: Hunan University of Chinese Medicine, Hunan college of information
72: Li Peng, Ding Changsong, Min Hui, Chen Jiahao, Zhou Yongzhu, Qi Ting, Yang Yi, Chen Jiameng
54: PROTEIN IDENTIFICATION SYSTEM BASED ON CONVOLUTIONAL NEURAL NETWORK
00: -
The invention discloses a protein identification system based on convolutional neural network, which comprises a protein original image acquisition module, an image preprocessing module, a protein identification module and a display module, wherein the protein original image acquisition module is used for acquiring the protein original image; The image preprocessing module is used for preprocessing the original image of protein to obtain the image of protein to be identified; The protein identification module is used for analyzing the protein image to be identified by using convolutional neural network and identifying the type of protein; The display module is used for displaying the identified protein type. The invention can realize rapid and accurate identification of protein, and provide important basis for cell function research and disease diagnosis.



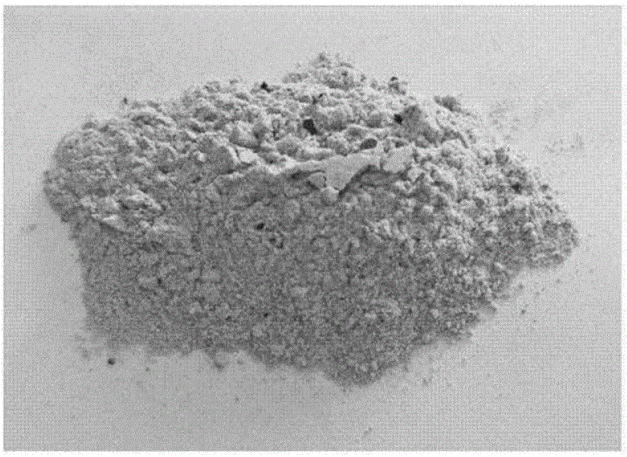
21: 2022/01187. 22: 2022-01-26. 43: 2022-03-01
51: B02C
71: Hunan Academy of Forestry, HI-TECH BIO-AGRO CO., LTD.
72: Yang Yan, Li Changzhu, Kuang Ding, Chen Jingzhen, Li Peiwang, Zhang Aihua, Li Dangxun, Xiao Zhihong
54: METHOD FOR EXTRACTING GARDENIA FRUIT OIL BASED ON UNIFORM DESIGN METHOD
00: -
The invention discloses a method for extracting gardenia fruit oil based on uniform design method, belonging to the technical field of gardenia fruit oil production. Enzymatic extraction of gardenia fruit oil includes the following steps: drying gardenia fruit, crushing, adding deionized water, heating, adding enzyme preparation, adjusting pH value with phosphoric acid buffer, enzymolysis reaction, heating up after the reaction, inactivating enzyme, centrifuging, and mixing the upper clear oils to obtain the gardenia fruit oil. The method for extracting gardenia fruit oil is simple, mild in conditions and non-toxic; DPS software is used for experimental design and data processing; quadratic polynomial stepwise regression analysis is carried out on the influence of various factors on gardenia fruit oil extraction rate to determine the best extraction process, so that the extraction rate of gardenia fruit oil is obviously improved.



21: 2022/01188. 22: 2022-01-26. 43: 2022-03-01
51: B60L
71: Jiangxi University of Science and Technology, Guorui scientific innovation Rare Earth Functional Materials (Ganzhou) Co., Ltd
72: YANG, Munan, ZOU, Zhenggang, ZHONG, Shuwei, LUO, Sangen, YANG, Bin
54: SYSTEM AND METHOD FOR REGULATING LEVITATION FORCE OF RARE-EARTH PERMANENT MAGNETIC LEVITATION RAIL
00: -
The present application provides a system and method for regulating levitation force of a rare-earth permanent magnetic levitation rail. According to the present application, a permanent magnetic rail magnet group in a permanent magnetic rail base is arranged thinner, while a vehicle-mounted magnet group in a magnet assembly support of a magnetically levitated train is arranged thicker. The vehicle-mounted magnet group is composed of several layers of magnet group units stacked in parallel, so as to enhance repulsive force between the vehicle-mounted magnet group and a rail, achieve stable levitation according to actual demand of a vehicle-mounted weight, guarantee traveling stability of a vehicle and reduce potential safety hazards.

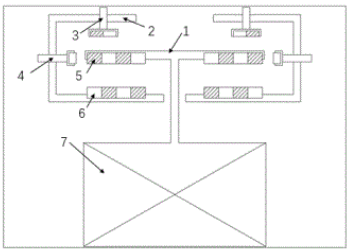


21: 2022/01189. 22: 2022-01-26. 43: 2022-03-01
51: A01N
71: Shihezi University
72: Wang Aiying, Li Guo, Fan Yongbin, Wu Chongdie
54: MICROBIAL AGENT FOR PREVENTING AND CONTROLLING PLANT DISEASES AND ENHANCING PLANT STRESS RESISTANCE, AND PREPARATION METHOD AND APPLICATION
00: -
The invention provides a microbial agent for preventing and controlling diseases and promoting cotton growth, a preparation method and application thereof, and belongs to the field of agricultural microbial fertilizer technologies. According to the invention, by compounding Bacillus tequilensis and Sphingobacterium sp., synergistic effect is shown on the bacteriostasis of plant diseases, and meanwhile, the stress resistance of plants is enhanced, the functions of microbial agents are diversified, and the multifunction effect of one dose is realized. The application of the microbial agent in preventing and controlling soil-borne disease of cotton and enhancing cotton stress resistance.



21: 2022/01191. 22: 2022-01-26. 43: 2022-03-01
51: B60L
71: Jiangxi University of Science and Technology, Guorui scientific innovation Rare Earth Functional Materials (Ganzhou) Co., Ltd
72: YANG, Munan, ZOU, Zhenggang, ZHONG, Shuwei, LUO, Sangen, YANG, Bin
54: SYSTEM AND METHOD FOR IMPROVING STABILITY OF RARE-EARTH PERMANENT MAGNETIC LEVITATION RAIL
00: -
The present application provides a system and method for improving stability of a rare-earth permanent magnetic levitation rail. A rail lug wall vertically arranged on an outer side of a C-shaped rail steel beam is used for mounting a lateral limiting magnet mounting frame, a top beam horizontally

arranged at a top of the steel beam is used for mounting a longitudinal limiting magnet mounting frame, and a lateral limiting magnet group and a longitudinal limiting magnet group are fixed through the lateral limiting magnet mounting frame and the longitudinal limiting magnet mounting frame respectively, so as to achieve accurate limiting, guarantee traveling stability of a vehicle and reduce potential safety hazards.

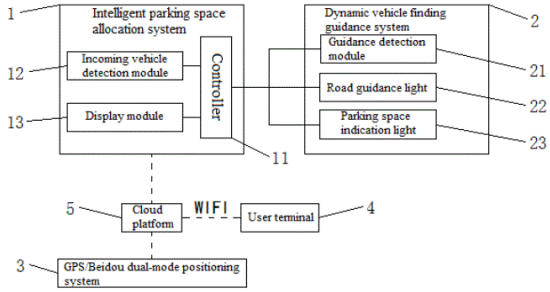


21: 2022/01192. 22: 2022-01-26. 43: 2022-03-01
51: G08G
71: Henan University of Urban Construction
72: WEI, Yannan, SONG, Minglei, CHEN, Shu, JIAO, Shuaiyang, LIU, Lihua, LI, Aizeng, XUE, Liyuan, XIA, Zhixiang, HOU, Yuqing

54: INTELLIGENT DYNAMIC GUIDANCE DEVICE FOR LARGE PARKING LOT BASED ON WIRELESS COMMUNICATION

00: -

Provided is an intelligent dynamic guiding device and method for large parking lot based on wireless communication, belongs to the technical field of intelligent control, the device includes an intelligent parking space allocation system including a controller provided with path optimization module and an incoming vehicle detection module; a dynamic vehicle finding guidance system including guidance detection modules, road guidance lights and parking space indication lights; a GPS/Beidou dual-mode positioning system for positioning the parking lot position and parking space information, and uploading them to the cloud platform; and a user terminal implementing data transmission through a cloud platform and the intelligent parking space allocation system. The guiding method includes: intelligent allocation; real-time dynamic guidance; reverse dynamic tracking. The device and method can achieve one-to-one "tracking" guidance for continuous vehicles, making the parking lot run dynamically, which improves operation efficiency, saves energy, has low cost and strong popularization.

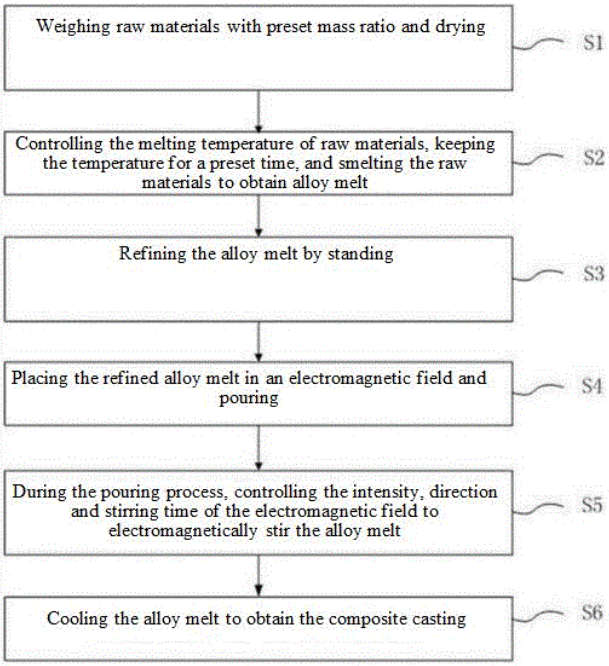


21: 2022/01193. 22: 2022-01-26. 43: 2022-03-02
51: C22C
71: Weifang University of Science & Technology
72: Ren Yuyan, Liu Tongyu, Chen Shengyuan, Li Yingmin, Liu Weihua

54: METHOD FOR PREPARING A COMPOSITE

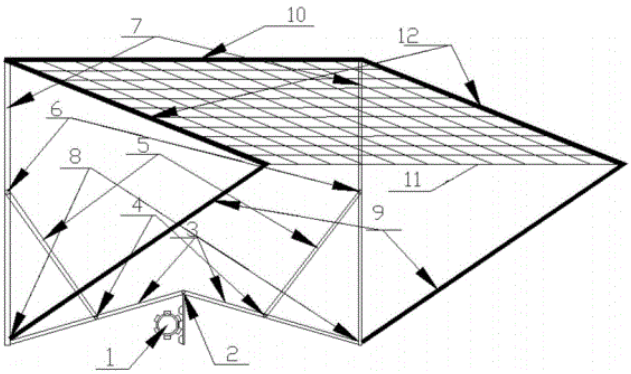
00: -

The embodiment of the invention discloses a method for preparing a composite material, which is characterized by comprising the following steps: weighing raw materials with a preset mass ratio and drying; Controlling the melting temperature of raw materials, keeping the temperature for a preset time, and melting the raw materials to obtain alloy melt; Standing the alloy melt for refining; Placing the refined alloy melt in an electromagnetic field and pouring; In the pouring process, the intensity, direction and stirring time of the electromagnetic field are controlled to electromagnetically stir the alloy melt; Cooling the alloy melt to obtain the composite casting. According to the method for preparing the composite provided by the invention, the electromagnetic stirring process is adopted, so that the compatibility between the matrix and the reinforcing phase is good, the interface bonding strength is high, and the effect of fine grain strengthening can be achieved; At the same time, the method is simple in operation process, low in cost and easy to realize industrialization.



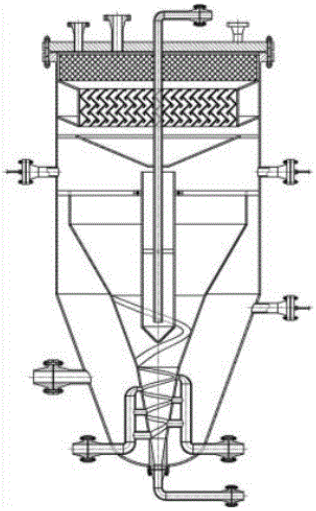
21: 2022/01194. 22: 2022-01-26. 43: 2022-03-02
51: H02S
71: Shihezi University
72: Lu Hongmei, Li Jie, Liu Zhenji, Li Xiaoxu
54: SEMI-AUTOMATIC SOLAR COLLECTOR PLATE INCLINATION ADJUSTING DEVICE
00: -

The invention relates to a semi-automatic solar collector plate inclination adjusting device, which comprises a gear mechanism; adjacent ends of two rails are connected; the gear mechanism comprises a fixing frame, a gear and a vertical rod; one side of the vertical rod is provided with a gear which meshes with the vertical rod; one end of the vertical rod of the gear mechanism is a free end, and the other end of the vertical rod is welded to the adjacent parts of the two rails; the bottom of the fixing frame is welded to the ground, and the top of the fixing frame is welded to the gear, and the fixing frame is clamped with the vertical rod; the other ends of the two rails are fixedly connected with the fixed ends of the vertical telescopic rods through movable rivetings; one end of the diagonal rod is fixedly connected with a rail to form a bolt hinge point, and the other end of the diagonal rod is fixedly connected with the telescopic end of the telescopic rod through a second welded joint; the vertical telescopic rod comprises a fixed end and a telescopic end; the fixed end is welded with the ground, and the telescopic end is welded with the bracket.



21: 2022/01195. 22: 2022-01-26. 43: 2022-03-02
51: C02F
71: China University of Petroleum (East China)
72: LIU, Chunhua, LIU, Xinfu, ZHANG, Ming
54: THREE-STAGE DECOMPRESSION TYPE V-SHAPED HYDROCYCLONE GAS FLOATING DEVICE
00: -

The disclosure provides a three-stage decompression type V-shaped hydrocyclone gas floating device, which has wide application range and can achieve efficient purification of production water, component self-flushing and gas self-cleaning functions and high automation, and the complete device is compact in structure, and easy to install, operate and maintain.



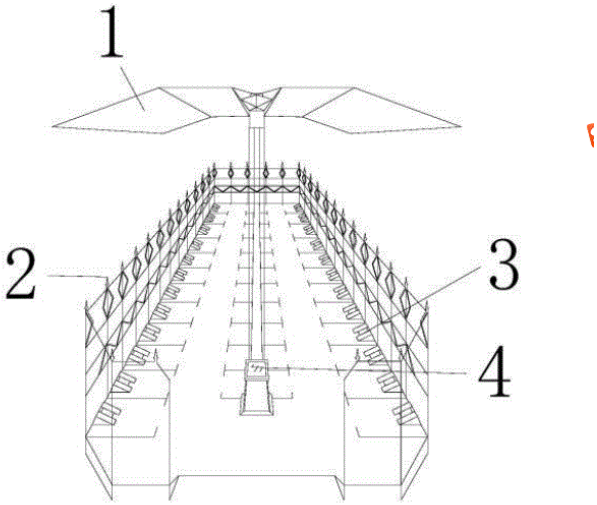
21: 2022/01198. 22: 2022-01-26. 43: 2022-03-03
51: E04H; G07C

71: HENAN UNIVERSITY OF URBAN CONSTRUCTION
72: LIU, Lihua, SONG, Minglei, WEI, Yannan, WANG, Yuhua, XIAO, Song, NIU, Caiqing, ZHU, Huifeng, LI, Aizeng, SONG, Xinsheng, SUN, Zhaoyu

54: SMART PARKING SYSTEM FOR NON-MOTOR VEHICLES BASED ON IPARK SMART LOCK

00: -

A smart parking system for non-motor vehicles based on an iPark smart lock. According to the smart parking system for non-motor vehicles based on an iPark smart lock, a solar canopy is fixedly connected to the ground through a fixed column, a fence is arranged outside the solar canopy, an iPark smart lock and a display platform are arranged within the fence, the two ends of a front fixing device are respectively connected to a left fixing device and a right fixing device, a motor is fixedly installed at the bottom of a placement area, a lock pin is fixedly installed on a connecting rod, and the iPark smart lock is controlled by the smart parking system for non-motor vehicles. With the display platform in cooperation with a display module, the use state of each parking device in the parking system is displayed through the display platform



21: 2022/01200. 22: 2022-01-26. 43: 2022-03-03
51: C05G
71: Ludong University, Shandong Institute of Sericulture, Qingdao Agricultural University
72: GUO, Xiaohong, WU, Nan, LI, Meng, SONG, Ningning, ZHAO, Huili, SONG, Bing, LI, Shurong, WANG, Xiaoya

54: CA/FE/GO/BIOMASS CHARCOAL, SPECIAL CHARCOAL-BASED SLOW RELEASE FERTILIZER FOR CORN AND APPLICATION THEREOF

00: -

The disclosure provides Ca/Fe/GO/biomass charcoal, a special charcoal-based slow release fertilizer for corn and application of the special charcoal-based slow release fertilizer for corn, and belongs to the technical field of fertilizers. The special charcoal-based slow release fertilizer for corn includes the following components in parts by weight: 15-20 parts of modified biomass charcoal, 5-8 parts of calcium cyanamide, 35-40 parts of calcium superphosphate, 20-30 parts of potassium salt, 6-9 parts of plant ash, 5-10 parts of bentonite, 1-5 parts of calcium sulfate, and 3-7 parts of composted mushroom dregs. The slow release fertilizer provided by the disclosure is not easy to break, the fertilizer effect is prolonged, when the slow release fertilizer is applied in the corn planting process, the yield is increased by 5% or above, and meanwhile, the soil structure can be improved.

21: 2022/01201. 22: 2022-01-26. 43: 2022-03-03
51: G01N
71: Southwest Forestry University
72: Xiang Ping, Tian Wen, Liu Jianxiang, Wang Chengchen, Yang Ziyue, Zhang Mengyan

54: METHOD FOR QUICKLY DETECTING THE CONCENTRATION OF HEAVY METALS IN BODY FLUID

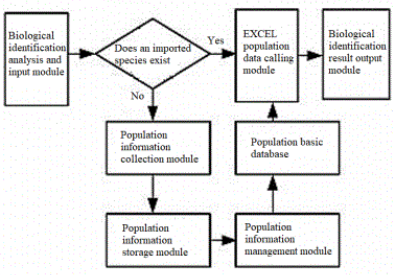
00: -

The invention discloses a method for rapidly detecting the concentration of heavy metals in body fluid, belonging to the technical field of chemical detection. The specific steps are as follows: adding diluent to the collected body fluid for dilution to obtain diluted solution; adding a magnetic heavy metal adsorbent into the diluted solution, and stirring to obtain a magnetic heavy metal adsorbent which absorbs heavy metals; eluting the obtained magnetic heavy metal adsorbent with nitric acid to obtain detection solution; inductively coupled plasma mass spectrometer is used to detect the concentration of heavy metals in the detection solution. The invention uses ICP-MS to detect the concentration of heavy metals in the detection solution, which greatly shortens the detection time of samples and reduces the detection cost, and is suitable for high-

throughput and rapid detection. The invention can be widely applied to the technical field of detecting trace heavy metal elements in human body fluids.

21: 2022/01202. 22: 2022-01-26. 43: 2022-03-03
51: C09K
71: Panjin Howleting Oil And Gas Technology Service Co., Ltd., Lengjia Oilfield Development Company, Liaohe Oilfield of China National Petroleum Corporation, Petrochemical Institute of Drilling and Production Institute, Liaohe Oilfield of China National Petroleum Corporation, Huanxiling Oil Production Plant, Liaohe Oilfield of China National Petroleum Corporation, The Fourth Oil Production Plant, Changqing Oilfield of China National Petroleum Corporation
72: LI, Feng, CUI, Zhongyu, XU, Shuang, QIAO, Shihan, XIANG, Pengxin, XU, Chong, HUANG, Wuming, LI, Lin, YAN, Yupeng, ZHANG, Xinxin, LI, Jun, QU, Jinming, JIANG, Shuo, WANG, Jianwei, WANG, Junliang, HE, Dewen, GUO, Zilong, LI, Mu
54: METHOD FOR PREPARING MICROEMULSION CLEANUP ADDITIVE FOR ULTRA-LOW PERMEABILITY RESERVOIR FRACTURING
00: -
The present disclosure relates to a method for preparing a microemulsion cleanup additive for ultra-low permeability reservoir fracturing. According to the present disclosure, a green surfactant and a plant organic solvent are selected as main raw materials, which are compounded with multiple surfactants to prepare a microemulsion cleanup additive system applicable to fracturing production-increasing transformation of an ultra-low permeability oil and gas reservoir, particularly high-rank coalbed methane. The system is a nano microemulsion. Due to ultra-low surface tension, efficient solubilization and extremely small nanoparticles, a nanoemulsion can effectively enter pores to be in full contact with a solid surface, then the surface tension can be reduced, and a wetting angle of a solid surface is changed, so that the capillary resistance is reduced, and the cleanup assistance effect is improved.

21: 2022/01205. 22: 2022-01-26. 43: 2022-03-03
51: G06F
71: Shandong Marine Resource and Environment Research Institute (Shandong Marine Environmental Monitoring Center, Shandong Aquatic Products Quality Inspection Center)
72: CHENG, Ling, SONG, Xiukai, MA, Yuanqing, HE, Jianlong, FU, Ping, JIANG, Xiangyang, WANG, Ning, SUI, Fu
54: SYSTEM FOR INTELLIGENTLY AND RAPIDLY IDENTIFYING MARINE PLANKTON
00: -
Disclosed is a system for intelligently and rapidly identifying marine plankton. The system includes a population information collection module, a population information storage module, a population information management module, a population basic database, an EXCEL population information calling module, a biological identification analysis and input module connected with the EXCEL population information calling module or the population information collection module, and a biological identification result output module connected to the EXCEL population information calling module. Compared with the prior art, the patent of the present invention provides the system for intelligently and rapidly identifying marine plankton, which can conveniently, rapidly and accurately input species names, Latin names and populations of marine organisms, solve the problems of synonyms, nonstandard spelling in Latin, species name input typos, time-consuming and labor-consuming statistical analysis, etc. during existing identification of marine organisms, and improve efficiency of detection and data analysis and processing.

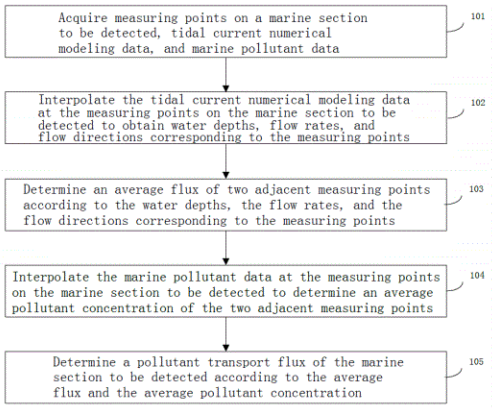


21: 2022/01206. 22: 2022-01-26. 43: 2022-03-03
51: G06F
71: Shandong Marine Resource and Environment Research Institute (Shandong Marine Environmental Monitoring Center, Shandong Aquatic Products Quality Inspection Center)
72: ZHU, Jinlong, WANG, Bin, XU, Yandong, SUN, Wei, YANG, Lipeng, LIU, Ning, SUN, Guiqin

54: METHOD AND SYSTEM FOR EVALUATING MARINE POLLUTANT CROSS-BOUNDARY TRANSPORT FLUX

00: -

The present invention discloses a method and system for determining a pollutant transport flux of a marine section. The method includes: acquiring measuring points on a marine section to be detected, tidal current numerical modeling data, and marine pollutant data; interpolating the tidal current numerical modeling data at the measuring points on the marine section to be detected to obtain water depths, flow rates, and flow directions corresponding to the measuring points; determining an average flux of two adjacent measuring points according to the water depths, the flow rates, and the flow directions corresponding to the measuring points; interpolating the marine pollutant data at the measuring points on the marine section to be detected to determine an average pollutant concentration of the two adjacent measuring points; and determining a pollutant transport flux of the marine section to be detected according to the average flux and the average pollutant concentration.



21: 2022/01208. 22: 2022-01-26. 43: 2022-03-02

51: C12N; C12Q

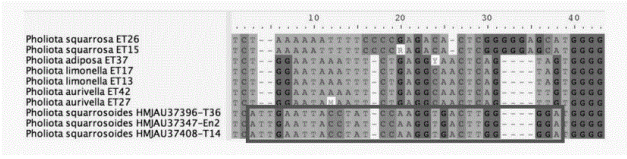
71: Jilin Agricultural University

72: TIAN, Enjing, GAO, Chonghua, XIE, Xiaomei, ZHENG, Yuan, CAO, Guangcheng

54: SPECIFIC GENE OF PHOLIOTA SQUARROSOIDES AND USE THEREOF

00: -

The present disclosure provides a specific gene of Pholiota squarrosoides and use thereof, where the specific gene has a short sequence as shown in SEQ ID NO. 1: ATTGAATTACCTATCCAAGGTGACTTGGGGA. The present disclosure further provides a method for molecular identification of the Pholiota squarrosoides using the specific gene, including the following steps: (1) extracting a genomic DNA from tissues of a sample to be tested; (2) conducting polymerase chain reaction (PCR) amplification using the genomic DNA obtained in step (1) as a template with specific primers of the Pholiota squarrosoides to obtain an amplified DNA product; (3) sequencing the amplified DNA product obtained in step (2); and (4) assembling a sequencing result for proofreading to obtain an amplified fragment, detecting whether there is the short sequence SEQ ID NO. 1 of the specific gene in the amplified fragment, and identifying the sample as the Pholiota squarrosoides if the short sequence exists.



21: 2022/01209. 22: 2022-01-26. 43: 2022-03-02

51: A61K

71: Jilin Agricultural University

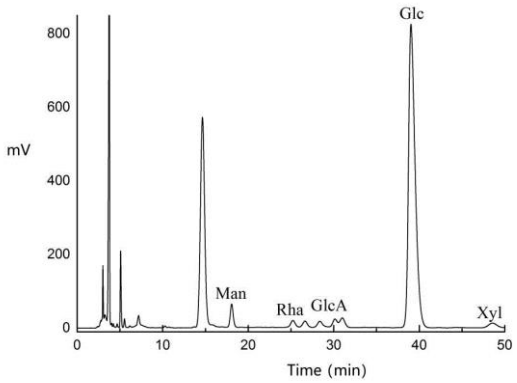
72: Li Yuting, Su Ling, Guan Lili, Wang Jinling, Li Meng

54: PREPARATION METHOD OF ARONIA MELANOCARPA POLYSACCHARIDE FOR PROTECTING ALCOHOLIC LIVER INJURY

00: -

The invention discloses a preparation method of Aronia melanocarpa polysaccharide for protecting alcoholic liver injury, belonging to the technical field of natural product development and utilization. The method comprises the following steps: cleaning Aronia melanocarpa, extruding, centrifuging and filtering to obtain filtrate; adding absolute ethanol into the filtrate, standing and centrifuging to obtain precipitate; Freeze-drying the precipitate to obtain Aronia melanocarpa polysaccharide. The present invention adopts high-pressure low-temperature slow-speed extrusion combined with ethanol precipitation to obtain Aronia melanocarpa polysaccharide, the sugar content of which is less than 76.2 percent, and contains flavonoids not higher than 3.46±0.13 mg/g, procyanidins not higher than 1.07±0.08 mg/g and polyphenols not higher

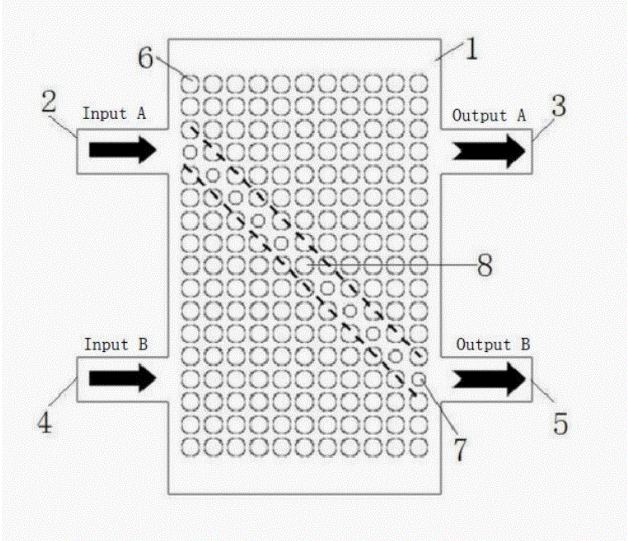
than 18.2±1.4 mg/g. In vivo experiments in mice proved that Aronia melanocarpa polysaccharide can reduce the level of oxidative stress, regulate the inflammatory reaction of the body and play a role in protecting alcoholic liver injury.



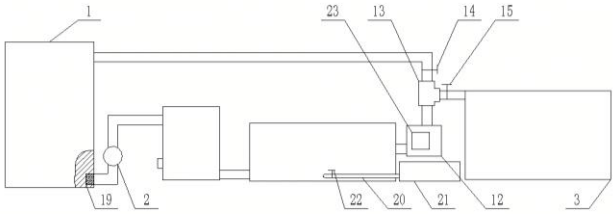
21: 2022/01210. 22: 2022-01-26. 43: 2022-03-02
51: A01G
71: Hunan Crop Research Institute
72: ZHANG, Lu, HE, Luqiu, YANG, Xuele, WANG, Suhua
54: METHOD FOR FERTILIZING SOIL AND INHIBITING ORCHARD WEEDS
00: -
The present disclosure provides a method for fertilizing soil and inhibiting orchard weeds. In spring and summer, tartary buckwheat is used, (1), in April, shallow ploughing, seed drying, seed dressing and broadcast sowing are carried out; and (2), reseeding is carried out, no fertilizer is applied before sowing, when the tartary buckwheat grows to 20-25 cm, fertilizer is applied; after the tartary buckwheat is mature, residual tartary buckwheat straws are harvested to serve as green manure. In autumn and winter, oilseed rape is used, (1), in the first ten days and the middle ten days of October, shallow ploughing, seed drying, seed dressing and broadcast sowing are carried out; and (2), reseeding is carried out, water spraying or irrigation is carried out; fertilizer is applied 30-35 days after oilseed rape seedlings emerge; oilseed rape is harvested to serve as green manure.

21: 2022/01211. 22: 2022-01-26. 43: 2022-03-02
51: A01G
71: Qingdao Agricultural University
72: LI, Jun, SONG, Chaoyu, LI, Yubin, LIU, Ligong, LIU, Shutang, SONG, Xiyun
54: DEVELOPMENT METHOD OF AGENT FOR REDUCING COLD DAMAGE TO MAIZE CROPS
00: -
Provided is a development method of an agent for reducing low-temperature stress to maize crops, including the following steps: cultivating maize seedlings: selecting different varieties of maize seeds, sowing the seeds in pots with potting soil, placing the pots in a phytotron for normal cultivation at 25 degrees , and applying an appropriate amount of clear water every morning; when the maize seedlings have grown to a stage with 4-5 leaves, selecting the seedlings; preparing a mixed agent according to a certain concentration; and spraying the mixed agent evenly on leaves, with a spray amount of 5 mL for each plant, then keeping the maize seedlings in an 8 degrees low-temperature incubator for 5 days. The present invention features the advantages that spraying the mixed agent can significantly increase a protein content, catalase activity, peroxidase activity and superoxide dismutase activity in the seedlings, and significantly reduce the malondialdehyde content.

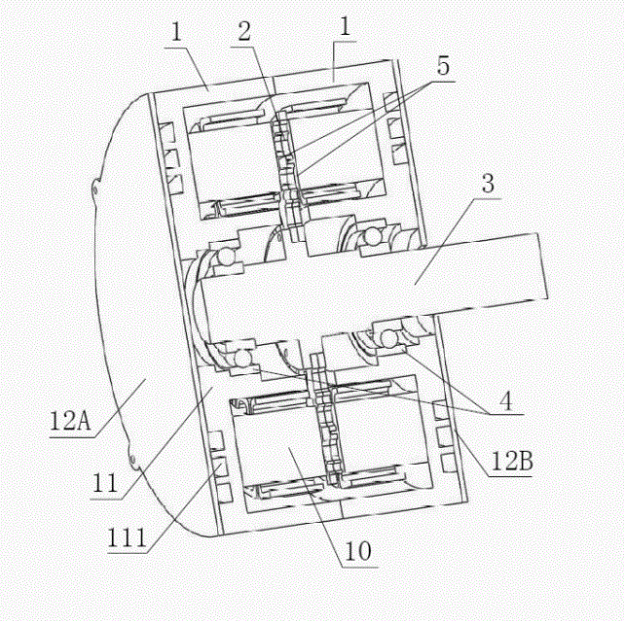
21: 2022/01212. 22: 2022-01-26. 43: 2022-03-02
51: G02B; G02F
71: Shandong Jiaotong University
72: YUAN, Ruihua
33: CN 31: 202110948549.3 32: 2021-08-18
54: PHOTONIC CRYSTAL ALL-OPTICAL AND/NOR LOGIC GATE
00: -
A photonic crystal all-optical AND/NOR logic gate comprises a photonic crystal structure, an optical signal input end A, an optical signal input end B, an optical signal output end A and an optical signal output end B. The photonic crystal structure is an array structure of (2k + 1) * (2k + 7), where k is an integer not less than 2. Centered on a central hole of the photonic crystal structure, the radius of air holes along a line of the central hole at the upper left 45 degrees and the lower right 45 degrees is r1, and the radius of the remaining air holes is r2. The 2k air holes of radius r1 form a diagonal column having a left end connected to the optical signal input end A and a right end connected to the optical signal output end B.



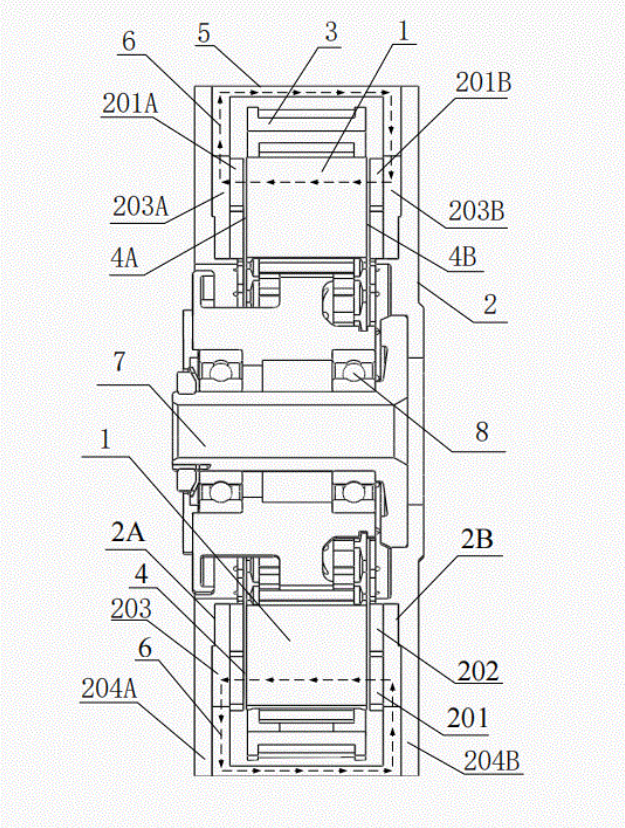
21: 2022/01213. 22: 2022-01-26. 43: 2022-03-02
51: C02F
71: Yantai University
72: Sui Zhuyin, Yang Zhaojin, Pei Ziyuan, Zhang Guotong
54: ELECTRO-ADSORPTION DESALTING UNIT FOR HIGH-SALINITY WASTEWATER
00: -
The invention provides an electro-adsorption desalting unit for high-salinity wastewater, which comprises a sewage tank, a filter assembly, an electro-adsorption assembly, a salt concentration detection assembly, a water storage tank and a controller, wherein the sewage tank, the filter assembly, the electro-adsorption assembly and the salt concentration detection assembly are sequentially communicated through pipelines; the salt concentration detection assembly is respectively communicated with the sewage tank and the water storage tank through pipelines; the pipeline between the sewage tank and the filter assembly is fixedly installed with a water pump; the water pump, the electro-adsorption assembly and the salt concentration detection assembly are electrically connected with the controller respectively. The invention is provided with a filter assembly, an electro-adsorption assembly and a salt concentration detection assembly, wherein visible particles such as suspended matters in wastewater are filtered through the filter assembly, then the wastewater is desalted through the electro-adsorption assembly, the salt concentration is detected through the salt concentration detection assembly, and the substandard wastewater is subjected to secondary treatment. The invention has the advantages of low construction cost, low-voltage direct current as the electro-adsorption component, low energy consumption in operation and good wastewater treatment effect.



21: 2022/01214. 22: 2022-01-26. 43: 2022-03-02
51: H02K
71: Shenyang University of Technology
72: PENG, Bing, GUO, Zhenxing, SHI, Chen
54: LOW-ROTOR-LOSS DOUBLE-STATOR AXIAL FLUX PERMANENT MAGNET MOTOR
00: -
The disclosure discloses a low-rotor-loss double-stator axial flux permanent magnet motor. The motor comprises two stators, a rotor, a rotating shaft and bearings, wherein the rotor is sandwiched between the two stators, air gaps are formed between the rotor and the stators, and the rotor is in rotating fit with the stators. The rotor comprises rotor frames and magnetic steel, and the rotor frames are provided with vortex blocking bridges, wind fins and magnetic steel containing holes. By arranging the vortex blocking bridges on the rotor frames, a vortex path on the rotor frames is blocked, motor rotor losses are reduced, and then motor temperature rise is reduced; and the wind fins are arranged on the rotor frames so that air flowing in the motor can be driven to further reduce motor temperature rise.

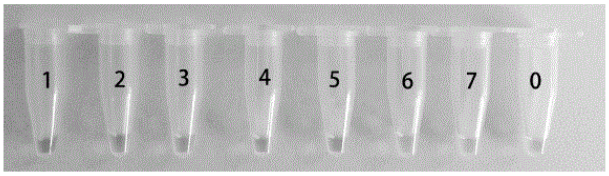


21: 2022/01215. 22: 2022-01-26. 43: 2022-03-02
51: H02K
71: Shenyang University of Technology
72: PENG, Bing, GUO, Zhenxing, YAN, Wei
54: DOUBLE-ROTOR SINGLE-STATOR AXIAL FLUX HYBRID EXCITATION MOTOR
00: -
The disclosure discloses a double-rotor single-stator axial flux hybrid excitation motor which comprises one stator, two rotors, a direct-current excitation unit and a magnetic conductive cover. The two rotors are arranged on the two sides of the stator, and the stator is in rotating fit with the rotors. Each rotor comprises a soft magnetic pole, an auxiliary permanent magnet, a main permanent magnet and a rotor yoke, and the magnetic conductive cover and the rotor yokes are attached without air gaps and fixed to a rotating shaft. Direct-current excitation flux passes through the stator, a first air gap, the first soft magnetic pole, the first rotor yoke, the magnetic conductive cover, the second rotor yoke, the second soft magnetic pole and a second air gap and then returns to the stator to form a closed path, and the direct-current excitation flux only passes through the two air gaps.



21: 2022/01216. 22: 2022-01-26. 43: 2022-03-02
51: A61K; A61P
71: Jilin Agricultural University
72: TIAN, Enjing, XIE, Xiaomei, GAO, Chonghua, ZHENG, Yuan, DUAN, Renhe, CAO, Guangcheng
33: CN 31: 202111490147.X 32: 2021-12-08
54: PRIMER SET AND KIT FOR IDENTIFYING GYROMITRA INFULA AND USE THEREOF
00: -
The present disclosure relates to the technical field of molecular identification, in particular to a primer set and a kit for identifying Gyromitra infula and use thereof. The primer set provided by the present disclosure can specifically amplify a nucleic acid of the G. infula, and shows no cross reaction with nucleic acids of easily confusing Helvella crispa, Gyromitra gigas, Morchella esculenta, Verpa bohemica, Peziza badia, Helvella macropus, and other macrofungi (Suillus placidus, Inocybe rimosa, Amanita virgineoides, and Suillus bovinus). With strong specificity, the G. infula can be identified by using this primer set. Further, in the identification method provided by the present disclosure, the G. infula can be specifically identified by using the foregoing primer set within 90 min, and detection

results can be visible to the naked eye, having advantages of easy operation, high sensitivity (limit of detection is 1 nanograms per microliter), and suitability for primary-level and on-site detection.

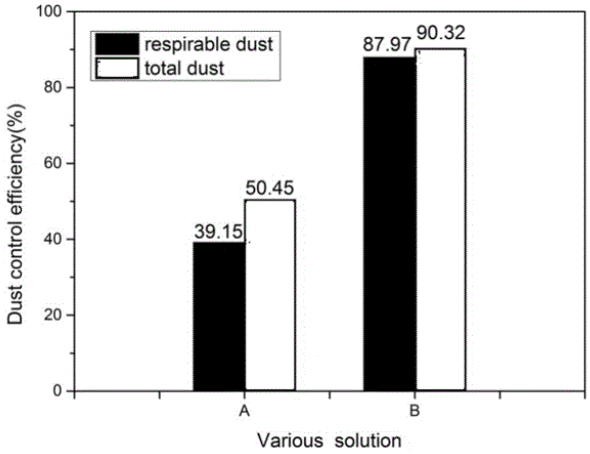


21: 2022/01217. 22: 2022-01-26. 43: 2022-03-02
51: C09K; E21F
71: Chongqing University of Science and Technology
72: Wang Xiaonan, Yang Junni, Li Xiang

54: COMPOUND SOLUTION FOR REDUCING DUST CONCENTRATION, PREPARATION METHOD AND APPLICATION

00: -

The invention belongs to the technical field of dustfall agents, and relates to a compound surfactant solution for reducing dust concentration, preparation method and application. The compounded surfactant solution comprises the following raw materials in percentage by weight: 0.025 wt percent of anionic surfactant fatty acid methyl ethoxysulfonate (FMES), 0.025 wt percent of nonionic surfactant coconut diethanolamide (CDEA) and the balance of water. Compound surfactant solution (0.025 wt percent FMES and 0.025 wt percent CDEA) can reduce the surface tension and contact angle with dust tablet by 59.39 percent and 83.57 percent, respectively, and the wetting ability of the solution is significantly improved. And it can be successfully applied to the actual conditions of coal mine production, significantly improving the dustfall efficiency of spraying. Compared with untreated water, the compound solution can increase the dust moving efficiency of total dust and respirable dust by 39.87 percent and 48.81 percent respectively.



21: 2022/01218. 22: 2022-01-26. 43: 2022-03-02
51: A01G
71: XINJIANG INSTITUTE OF ECOLOGY AND GEOGRAPHY CHINESE ACADEMY OF SCIENCES
72: WANG, Yongdong, YOU, Yuan, ZHOU, Na, WANG, Xiaojing, XU, Xinwen

54: ECOLOGICAL RESTORATION AND SUSTAINABLE MANAGEMENT METHOD FOR SHRUB-ENCROACHED GRASSLAND

00: -

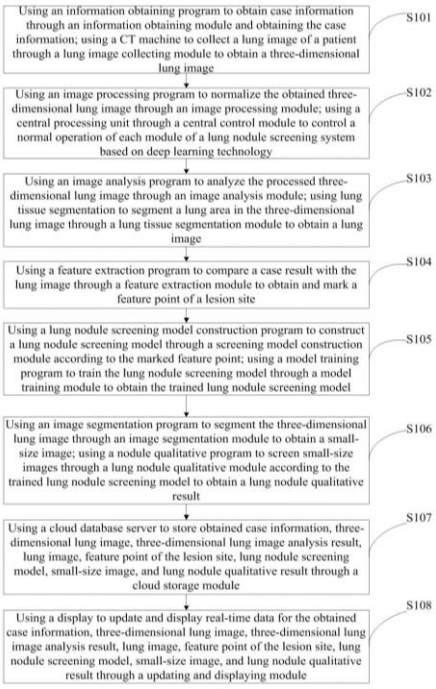
The present disclosure provides an ecological restoration and sustainable management method for a shrub-encroached grassland, and belongs to the technical field of a restoration of a grassland ecosystem. Based on a severe shrub-encroached area where shrubs grow rapidly and encroach on the grassland severely, resulting in influence on local livestock husbandry development due to incapability for livestock to enter the grassland and reduction in the edible grassland, an ecological restoration and sustainable management method for the shrub-encroached grassland, which integrates "shrub removal for breeding the grassland, enclosure and rotational grazing, combination of grazing and raising, and sustainable development", is proposed. Problems of reduction in grassland productivity, overgrazing, less livestock, and difficulty in maintaining livelihoods, arising from shrub invasion to the shrub-encroached grassland, are solved, and objectives of shrub removal and recycling, ecological restoration of grassland, and sustainable management of livelihoods are fulfilled.

21: 2022/01219. 22: 2022-01-26. 43: 2022-03-02
51: G06K; G06T
71: The Affiliated Hospital of Medical School, Ningbo University
72: ZHOU, Chengwei, CHEN, Zixuan, LI, Xiaowen
33: CN 31: 202110368194.0 32: 2021-04-06

54: LUNG NODULE SCREENING METHOD AND SCREENING SYSTEM BASED ON DEEP LEARNING TECHNOLOGY

00: -

The present disclosure discloses a lung nodule screening method and screening system based on deep learning technology. The lung nodule screening system based on deep learning technology includes: an information obtaining module, a lung image collecting module, an image processing module, a central control module, an image analysis module, a lung tissue segmentation module, a feature extraction module, a screening model construction module, a model training module, an image segmentation module, a lung nodule qualitative module, a cloud storage module and an updating and displaying module. The present disclosure uses 2D space to avoid missed detection of nodules on a lung wall according to the concavity and convexity of the segmentation contour; achieves the classification of various types of nodules through lesion classification method based on deep learning, which makes full use of the local three-dimensional information of the lesions in CT sequence images.

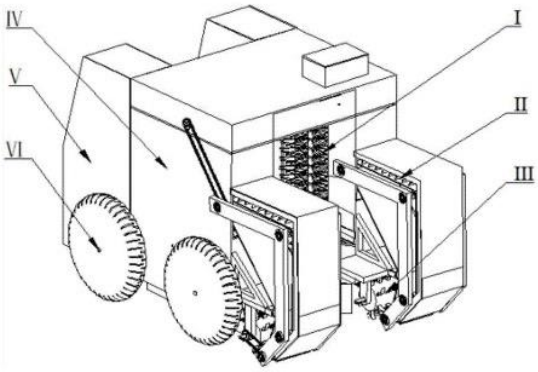


21: 2022/01225. 22: 2022-01-26. 43: 2022-03-01
51: A01D
71: QINGDAO UNIVERSITY OF TECHNOLOGY
72: YANG, Jianjun, LI, Da, SONG, Juntong, ZHANG, Mingyu, LI, Qingxiang, LI, Zhaohua, MENG, Qingyuan, SUN, Shangzhen

54: JUN JUJUBE PICKING MACHINE BASED ON SYNCHRONOUS DISTANCE ADJUSTMENT MECHANISM

00: -

The present invention discloses a jun jujube picking machine based on a synchronous distance adjustment mechanism, including a stand, a cab, a synchronous distance adjustment picking unit, a three-stage fallen jujube collection unit, and a jun jujube conveying unit. The degree of mechanization is high, which ensures the integrity of jun jujubes, without causing a damage to a jujube tree, and the jujube picking efficiency is high. The problems in the existing art that fallen jujubes on the ground are hard to collect and jun jujubes and jujube trees are easily damaged in a jun jujube picking process are solved.

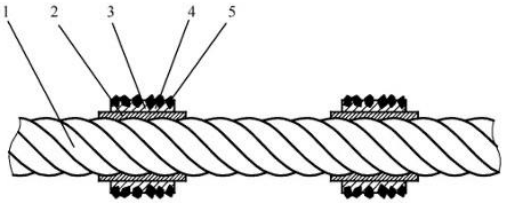


21: 2022/01226. 22: 2022-01-26. 43: 2022-03-01
51: B28D
71: QINGDAO UNIVERSITY OF SCIENCE AND TECHNOLOGY
72: GAO, Wei, YAN, Pengfei, WU, Conghao, JIANG, Hongfei

54: CONSOLIDATION TYPE BEAD SAW AND MANUFACTURING METHOD THEREOF

00: -

The present disclosure relates to a consolidation type diamond bead saw, which mainly comprises a wire rope, a transition layer, a grinding layer. A sectional transition layer is formed on the wire rope through the method of electrodeposition, then the grinding layer is subjected to braze welding on the transition layer, so that the beads are consolidated to the wire rope, avoiding the use of separation sleeve between beads; in addition, the adjacent beads will not be close together due to the damage of separation sleeve in the cutting process, to cause the bead saw to be stuck in the kerf, or even the breaking of the bead saw. The present disclosure also provides a manufacturing method of the consolidation type diamond bead saw.



21: 2022/01263. 22: 2022-01-27. 43: 2022-03-07
51: A61K
71: ZHANG, Xia
72: ZHANG, Xia, ZHANG, Chuyue, ZHANG, Yao, KANG, Le

54: A MICROBIAL CHINESE HERBAL MEDICINE FEED FOR DETOXIFYING AND DEODORIZING AND ENHANCING AROMA AND IMPROVING MUTTON QUALITY

00: -

This invention discloses a microbial Chinese herbal medicine feed for detoxifying, deodorizing, enhancing aroma and improving mutton quality, comprising 190-1920 parts of feed substrate, 39-238 parts of additives, 1-65 parts of Chinese herbal medicine components, and 100-550 parts of forage powder; the Chinese herbal medicine components comprise fructus aurantii, dried tangerine peel, amomum villosum and so on. The formula of the invention can obviously decrease the synthesis of short-chain fatty acids and C18 fatty acids in sheep, inhibit and block the further combination of C6, C8 and C10 into stable complexes or associations to the greatest extent and effectively improve the quality of the mutton, particularly effective in removing odor of the mutton. The sheep fed in the invention has bright wool, low incidence rate, high food intake, and high rate of weight gain during a certain breeding period, after the sheep is slaughtered, the mutton is delicious, fragrant and has no odor of mutton, which can be more widely accepted by the majority of consumers.

21: 2022/01267. 22: 2022-01-27. 43: 2022-03-07
51: C04B
71: University of Science and Technology Beijing
72: Zhang Siqi, Ren Yutong, Zhang Minggen, Wu Bo, Wu Zeping, Liu Jialu, Yu Junhao, Li Keqing, Ni Wen

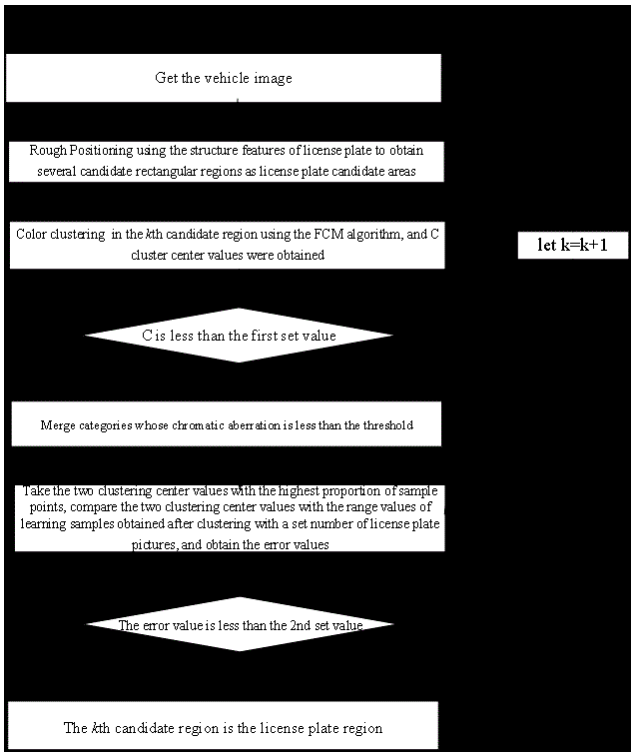
54: PREPARATION METHOD AND APPLICATION OF CEMENTED BACKFILL MATERIALS BY USING STEEL SLAG-DESULFURIZATION BY-PRODUCT AGENT

00: -

The invention relates to a preparation method and application of cemented backfill materials by using steel slag-desulfurization by-product agent. A novel cementitious material containing converter steel slag, power plant desulfurization gypsum and steel mill desulfurization ash mainly consists of the following components in parts by weight: 65-75 parts of converter steel slag, 15-25 parts of desulfurization gypsum and 5-15 parts of desulfurization ash. The ratio of cementitious material to aggregate in the filler is 1:4-1:8, and the concentration is 70 Percent.

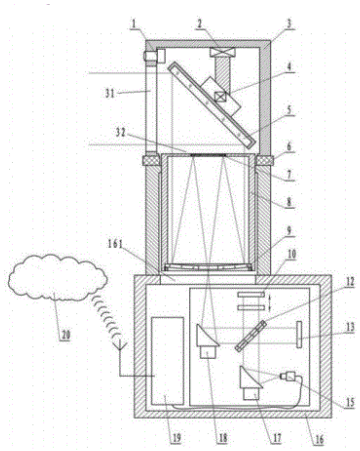
According to the invention, a large amount of superfine tailings are utilized, and good compressive strength which can be industrially applied can be displayed without adding additives such as excitant and early strength agent, so that the compressive strength of the filling material with practical value (28-day strength is bigger than or equal to 1MPa) can be ensured. It is used as mining filler, improves the utilization rate of superfine iron tailings, and reasonably solves the problem of stacking superfine iron tailings, steel slag and desulfurization by-products. In addition, a new cementitious material without cement clinker, which is mainly steel slag, and ultra-fine tailings as filling aggregate, is used to prepare ultra-low cost filling materials with extremely high application value.

21: 2022/01268. 22: 2022-01-27. 43: 2022-03-07
51: G06K
71: Yang Aiqiang
72: Yang Aiqiang
54: AN ADAPTIVE FCM LICENSE PLATE LOCALIZATION METHOD AND SYSTEM
00: -
The invention provides an adaptive FCM license plate localization method and system. The method includes: The invention provides an adaptive FCM license plate localization method and system. The method includes : rough localization using license plate structure characteristics to obtain multiple candidate regions; color clustering in the kth candidate region using the FCM algorithm to obtain C cluster center values; determine whether the number of cluster center values C is less than the first set value; if the number of cluster centers C is greater than or equal to the first set value, then let k = k + 1, and return to re-color clustering; if the number of cluster centers C is less than the first set value, merge categories whose chromatic aberration is less than the threshold; the two clustering center values with the highest proportion of these points are sampled, and the error values are obtained by comparing the two clustering center values with the learning sample range values; the license plate area is determined based on the error value; the above method not only improves the convergence speed, but also improves the accuracy and reliability of license plate location.



21: 2022/01269. 22: 2022-01-27. 43: 2022-03-07
51: G01N
71: Hunan Aerospace YuanWang Science And Technology Co., Ltd
72: WU, Hao, FANG, Xiao, WANG, Gaoming, YIN, Shouqin, LING, Gang, CHANG, Shengli
54: HAZARDOUS CHEMICAL GAS REMOTE-MEASURING DETECTION DEVICE AND METHOD
00: -
A hazardous chemical gas remote-measuring detection device and a method. The hazardous chemical gas remote-measuring detection device comprises a server, a lens group for acquiring images, a scanning swinging device for acquiring infrared spectrums, an infrared telescope system for amplifying the acquired infrared spectrums, and a measuring device for measuring the amplified infrared spectrums, wherein the lens group and the measuring device are in signal connection with the server. Compared with the related technologies, the hazardous chemical gas remote-measuring detection device provided by the present disclosure is based on the principle of Fourier transform infrared spectroscopy and adopts a passive remote-measuring method, which can acquire characteristic radiation or absorption spectra of hazardous

chemical gas at the position of 2.5-15 micrometers of a middle infrared band in situ at a leakage place, and through the intelligent recognition algorithm operating in the cloud, the analysis of leaked gas can be realized.



21: 2022/01270. 22: 2022-01-27. 43: 2022-03-07
51: C07D
71: Shihezi University
72: LI, Shiwu, ZHAO, Zhifei, REN, Yingzheng, ZHAO, Yujie

54: METHOD FOR PREPARING CHIRAL OXINDOLE COMPOUND CONTAINING ALL-CARBON QUATERNARY CENTER

00: -

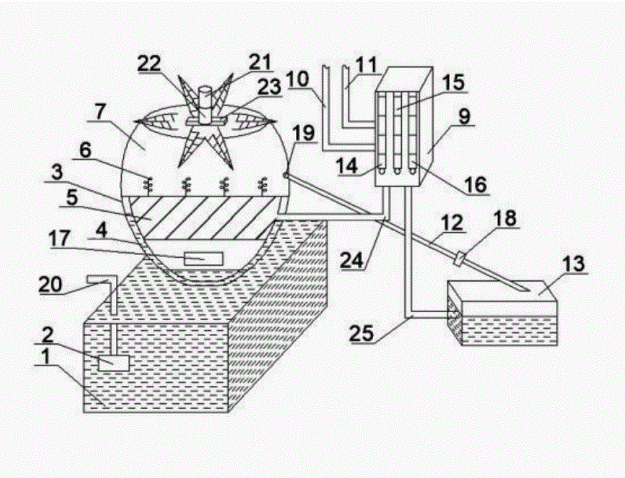
The present invention provides a method for preparing a chiral oxindole compound containing an all-carbon quaternary center, and relates to the technical fields of chemistry and pharmaceutics. The method for preparing a chiral oxindole compound containing an all-carbon quaternary center provided by the present invention is an important pharmaceutical intermediate analogue and an important drug molecule analogue, and features a significant application value in drug screening and pharmaceutical industry. The synthesis method of the chiral compound is economical and simple, and high in yield and enantioselectivity.

21: 2022/01271. 22: 2022-01-27. 43: 2022-03-07
51: A01G
71: Institute of Leisure Agriculture, Shandong Academy of Agricultural Sciences
72: YAO, Huimin, YUAN, Kuiming, WANG, Yue, WANG, Jianghui, CHEN, Shujun

54: SMART STRAWBERRY MICRO-LANDSCAPE SOILLESS CULTIVATION SYSTEM

00: -

The present invention provides a smart strawberry micro-landscape soilless cultivation system, including a water tank, an air oxygen mixer and a strawberry cover. An upper portion of the water tank is connected to the strawberry cover, and a lower portion of the strawberry cover is connected to the water tank, and a water pump is arranged inside the water tank, the water tank has a water filling port outside, an upper water pipe is provided on both sides of the strawberry cover, and a lower portion of the upper water pipe is connected with the water tank, and a matrix layer is provided in a middle of strawberry cover, and a controller is arranged on a lower side of the matrix layer and located on an outside of the strawberry cover, the matrix layer has a number of planting holes, and strawberries are planted in the planting holes.



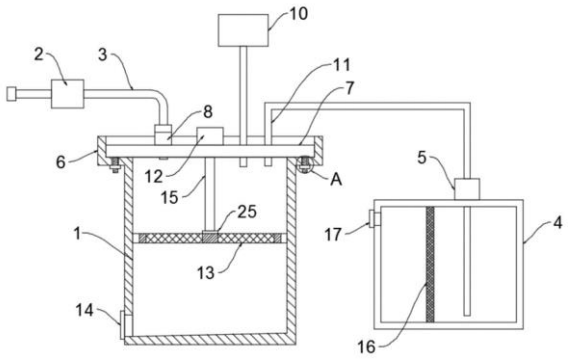
21: 2022/01272. 22: 2022-01-27. 43: 2022-03-07
51: G06T
71: THE AFFILIATED HOSPITAL OF QINGDAO UNIVERSITY
72: ZHANG, Hongliang, WANG, Lin, LV, Bingke, HAN, Kun, CHENG, Lei, SHI, Mingpeng

54: DEVICE FOR SEPARATING AND RECYCLING BRAIN TUMOR TISSUES

00: -

The present invention discloses a device for separating and recycling brain tumor tissues, and relates to the technical field of medical appliances; the device comprising a separation box, a vacuum extractor and a water storage box, wherein an extraction duct is respectively provided at an input

end and an output end of the vacuum extractor, an end portion of the extraction duct at the input end of the vacuum extractor extends into the separation box, a flushing pump is provided in the water storage box, a catheter extending inside the separation box is connected to an output end of the flushing pump, an installation groove with a diameter bigger than an inner diameter of the separation box is provided on a top portion of the separation box, a closing plate is provided in the installation groove, end portions of both the catheter and the extraction duct are installed on the closing plate, a filter disc is provided in the separation box, a rotation shaft is provided at a center of the filter disc, and a top end portion of the rotation shaft is connected with an output end of a rotation motor provided on the closing plate; the filter disc comprises a central disc and an outer ring, wherein the central disc is connected with the outer ring via a plurality of connection poles, a plurality of open cavities are provided among the plurality of connection poles, the central disc and the outer ring and a filter layer is respectively provided in each of the plurality of open cavities. The entire device is of simple structure, easy operation, and can separate foreign matters and recycle the brain tumor tissues very quickly, which makes it convenient to detach and clean the filter disc and is of high utility values.



21: 2022/01273. 22: 2022-01-27. 43: 2022-03-02
51: E02D; E03F; E04F
71: Shihezi University
72: LI, Shiwu, LU, Shuhui, REN, Yingzheng, ZHAO, Yujie

54: METHOD FOR PREPARING CHIRAL 3,3'-DISUBSTITUTED OXINDOLE COMPOUND CONTAINING CYANO STRUCTURE

00: -

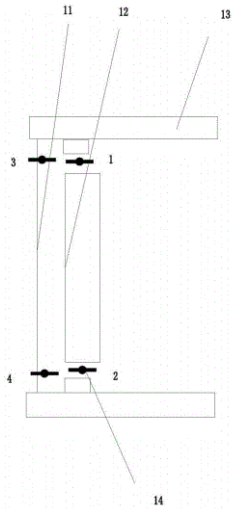
The present invention provides a method for preparing a chiral 3,3'-disubstituted oxindole compound containing an imidazole structure, and relates to the technical fields of chemistry and pharmaceutics. The present invention is easy to operate, and the raw materials are cheap and easy to get, synthesis can be conducted in various organic solvents, and the compound features a high air stability, a wide applicability, and an excellent compatibility with various substituents.

21: 2022/01274. 22: 2022-01-27. 43: 2022-03-02
51: F24D; F25B; F24S
71: Qingdao University of Technology
72: MENG, Xi, GAO, Yanna, GAO, Weijun

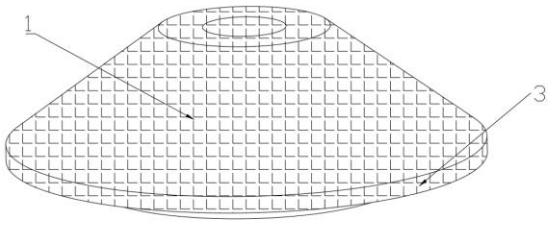
54: AN ECOLOGICAL BUILDING ENERGY SYSTEM BASED ON SOLAR ENERGY HEAT UTILIZATION

00: -

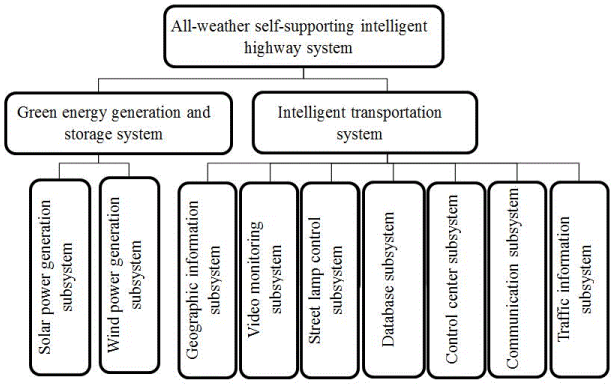
The invention discloses an ecological building energy system based on solar energy heat utilization, comprising a building body which comprises a heat collection wall comprising a heat storage wall and a transparent cover plate, wherein an air cavity is arranged therebetween, ventilation valves are arranged on both the transparent cover plate and the heat storage wall; a heat collection roof comprising a roof plate and a heat insulation plate arranged in an inclined manner to achieve the optimization of indoor heating and refrigeration systems and increase the utilization efficiency of solar energy. The technical solution of the invention effectively provides a green building system with organic connection, multi-energy complementation and comprehensive utilization benefits at the lowest cost, and solves the problem of energy waste caused by the fact that most of solar energy cannot be converted into useful energy in the prior art.



21: 2022/01275. 22: 2022-01-27. 43: 2022-03-02
51: B22F
71: Dezhi Guo
72: Dezhi Guo
33: CN 31: 202110284923.4 32: 2021-03-17
54: A PREPARATION METHOD AND MACHINED PARTS FOR CERMETS
00: -
The invention discloses a preparation method and machined parts for cermets, and the preparation method comprising the following steps: taking the metal as a matrix, binding the wear-resistant ceramic on the metal matrix through a special composite medium for high-strength ceramic, and then processing the steps of heating and drying to obtain the cermets. The invention binds the metal alloys and the ceramics with simple preparation operations, improving the wear resistance of the alloy matrix by utilizing the wear resistance of the ceramic; and the machined parts of the invention provides the high-strength alloy as a matrix, and provide the wear-resistant ceramic as the wearing parts. The strong composite is prepared through the special composite medium for ceramics, realizing high bonding force and high wear resistance, and significantly improving the machined parts' service cycles and service life.

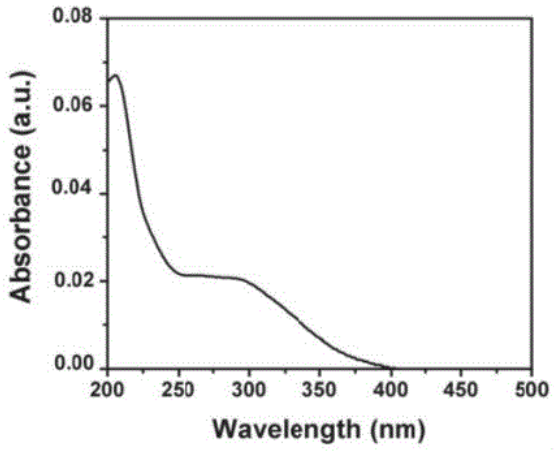


21: 2022/01276. 22: 2022-01-27. 43: 2022-03-02
51: G08G; H02S
71: ShanDong JiaoTong University
72: Zhang Lidong
54: ALL-WEATHER SELF-SUPPORTING INTELLIGENT HIGHWAY SYSTEM
00: -
The invention discloses an all-weather self-supporting intelligent highway system, which comprises: erecting solar panels at a certain height over roads with installation conditions, on the one hand, making full use of the upper space of roads to realize the function of solar power generation; They can shield rain and snow, and construct an all-weather traffic and travel environment, especially in snowstorm and rainstorm weather. Freeways can be free from road closure and unimpeded, which can improve people's travel convenience and safety, and avoid the recurrence of difficult travel problems caused by snowstorm. Furthermore, a wind energy collecting device is arranged below the solar panel layer to collect wind energy generated during the driving process of traffic flow, and realize wind power generation. And the electric energy generated by solar energy and wind energy can not only be supplied to roadside facilities and equipment, but also be connected to the national power grid.

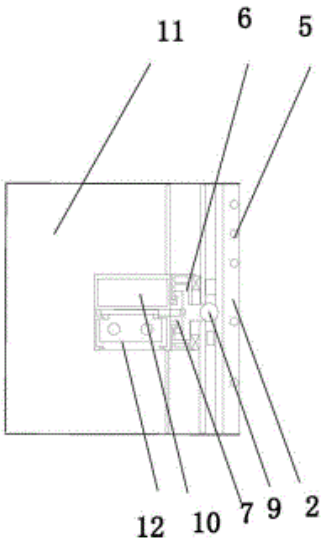


21: 2022/01277. 22: 2022-01-27. 43: 2022-03-02

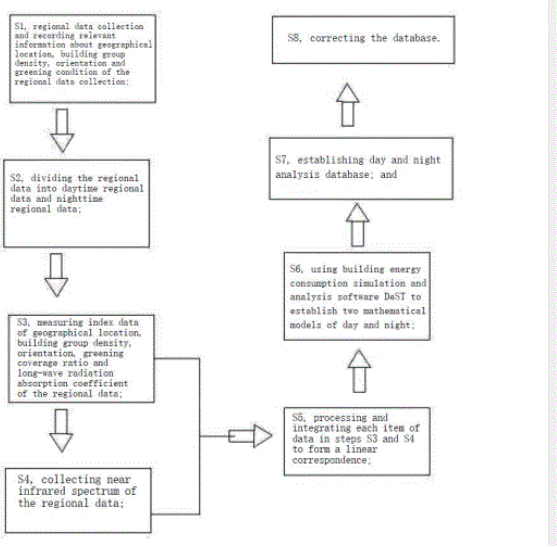
51: B22F; G01N; B82Y
71: Nanchang University
72: ZHUANG, Qianfen, WANG, Yong, LI, Zhuo
33: CN 31: 202110682857.6 32: 2021-06-19
54: METHOD FOR PREPARING GOLD-LEAD FLUORESCENT NANOCLUSTER AND APPLICATION IN NABAM DETECTION
00: -
Disclosed is a method for preparing a gold-lead fluorescent nanocluster. The preparation method is used to prepare a gold-lead nanocluster with chloroauric acid as a raw material, adenosine as a stabilizer, ascorbic acid as a reducer and lead acetate as a dopant through a one-step process. The gold-lead nanocluster prepared by the present invention is based on the principle of aggregation-induced emission enhancement, with the advantages of a favorable fluorescence property, a good water solubility and a high fluorescence quantum yield. The present invention further discloses an application of the gold-lead nanocluster in nabam detection. The aggregated gold-lead nanocluster is dispersed when nabam is present in a solution, resulting in fluorescence quenching of the gold-lead nanocluster. As a concentration of nabam is increased, a fluorescence intensity of the gold-lead nanocluster gradually decreases, so that ultra-sensitive and selective detection of nabam is realized.



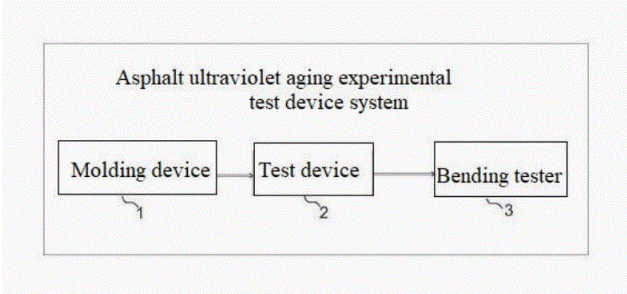
21: 2022/01278. 22: 2022-01-27. 43: 2022-03-02
51: E04B
71: Qingdao University of Technology
72: MENG, Xi, GAO, Yanna, GAO, Weijun
54: A COASTAL BUILDING CURTAIN WALL AND METHOD FOR MANUFACTURING THE SAME
00: -
The invention discloses a coastal building curtain wall and a method for manufacturing the same. The invention makes full use of a closed cavity naturally formed by a closed building curtain wall to ensure the strength and deflection of the curtain wall, and is simple in process, convenient in construction and low in cost.



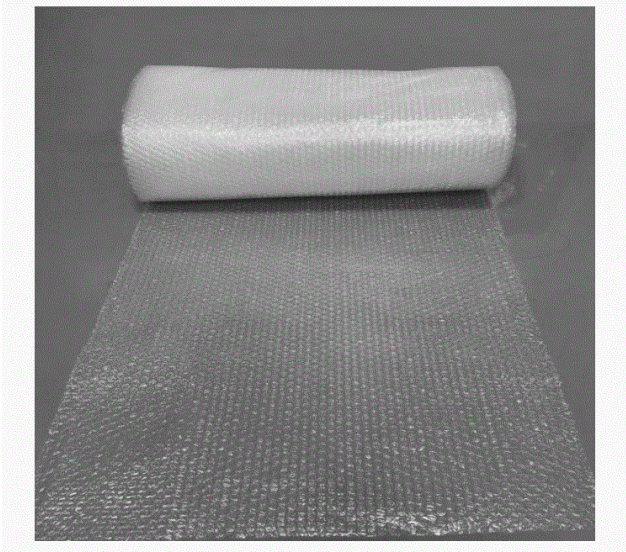
21: 2022/01279. 22: 2022-01-27. 43: 2022-03-02
51: G01D; G01J; G01N; G06Q
71: Qingdao University of Technology
72: MENG, Xi, GAO, Yanna, GAO, Weijun
54: METHOD FOR COLLECTING OUTDOOR THERMAL ENVIRONMENT DATA OF URBAN BUILDING GROUP BASED ON INFRARED DETECTION
00: -
The present disclosure discloses a method for collecting outdoor thermal environment data of an urban building group based on infrared detection, and the present disclosure is used for collecting and analyzing outdoor thermal environment data of an urban building group, collecting data of an urban building, and monitoring and detecting outdoor thermal environment data through a monitoring and analysing system for outdoor thermal environment data of a building group.



21: 2022/01280. 22: 2022-01-27. 43: 2022-03-02
51: G01N
71: Guizhou Institute of Technology, Guizhou Qiancheng Hongjing Engineering Consulting Co., Ltd., Guizhou Highway Development Company
72: GAN, Xinli, ZHANG, Wenli, LI, Jie, TANG, Hui, DUAN, Shaofan, MENG, Jialu
54: SMALL ULTRAVIOLET AGING CHAMBER AND TEST METHOD
00: -
An asphalt ultraviolet aging experimental test device. It includes a molding device, a test device, and a bending tester for measuring the bending of the asphalt mold after undergoes an ultraviolet aging test in the test device. According to the present disclosure, bBy dropwise adding molten asphalt into the molding device, a mold with a thickness of 0.2 mm is made by the molding device. After cooling, the asphalt mold is placed in a mold holder in the test device and fixed, a rotating motor is turned on, and an outer door is closed to prevent the damage to the skin caused by long-term exposure to ultraviolet rays. Then the test is carried out by adjusting the conditions such as temperature and ultraviolet light intensity in the test device. Finally, the bending of an aged asphalt specimen can be tested by using the bending tester.



21: 2022/01281. 22: 2022-01-27. 43: 2022-03-02
51: B65D
71: ZIBO ZHONGNAN PHARMACEUTICAL PACKAGING MATERIALS CO., LTD.
72: WANG, Huanyu, MU, Xize, LIU, Cheng, GONG, Xiaohan, WANG, Xinnan, WANG, Yubo
54: DEGRADABLE SHOCKPROOF BUBBLE FILM AND PREPARATION METHOD THEREOF
00: -
The present disclosure provides a degradable shockproof bubble film and a preparation method thereof, and belongs to the technical field of shockproof bubble films. The degradable shockproof bubble film provided in the present disclosure is prepared from the following raw materials in percentage by mass: 75-85% of PBAT, 10-20% of PLA and 1-10% of a toughening agent. The shockproof bubble film provided by the present disclosure takes PBTA as a matrix, and PLA and the toughening agent are added, and the degradation property of the shockproof bubble film is improved by controlling the proportional relation of the PBTA, PLA and toughening agent. Experimental results show that the shockproof bubble film provided by the present disclosure can be completely degraded within about 360 days.

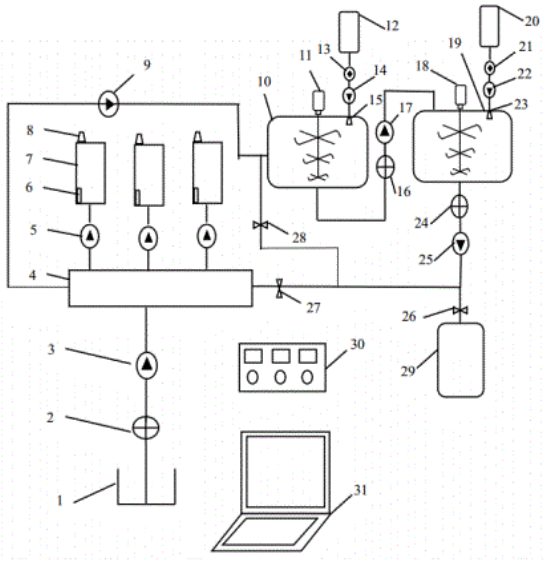


21: 2022/01282. 22: 2022-01-27. 43: 2022-03-01
51: C02F
71: Qingdao University of Technology
72: LI, Yuanyuan, SHEN, Shuiyue, LIU, Jiang, CHEN, Peng, JIA, Shibo, QUAN, Xianhao

54: DEVICE FOR COLLECTING, DETECTING AND COMPREHENSIVELY TREATING LEACHATE

00: -

The present invention provides a device for collecting, detecting and comprehensively treating a leachate, wherein a plurality of detection modules are connected above a liquid storage tank in parallel respectively, and detection bins in various detection modules include different detection ends for detecting pH, electrical conductivity, oxidation-reduction potentials, heavy metals, ammonia-nitrogen and/or COD content of the leachate rapidly; a data acquisition device may acquire detection data in real time and transmit to a data terminal through a hub; repair schemes as well as types and addition amounts of repairing agents are formulated scientifically according to the data together with components of the leachate which may be processed efficiently and rapidly by a biological treatment module and a chemical treatment module; the detection modules may detect processed leachate for the second time to monitor repair effects in real time; and a raffinate recovery module may collect and store the processed leachate.

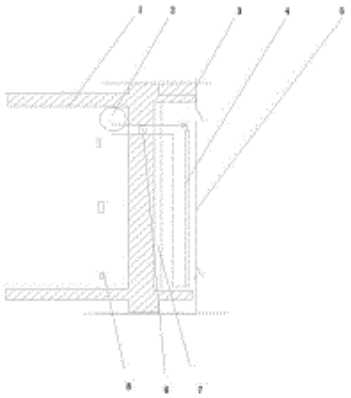


21: 2022/01283. 22: 2022-01-27. 43: 2022-03-01
51: E04B; F24D; H02J; F24S
71: QINGDAO UNIVERSITY OF TECHNOLOGY
72: MENG, Xi, GAO, Yanna, GAO, Weijun

54: BUILDING INTEGRATED PHOTOTHERMAL HEATING SYSTEM

00: -

Disclosed is a building integrated photothermal heating system, including a main wall body, an outer side of the main wall body being provided with a glass curtain wall, an air interlayer being arranged between the glass curtain wall and the outer side of the main wall body, a solar heat collection panel being arranged in the air interlayer, the solar heat collection panel being connected to a photothermal utilization device in the main wall body to absorb heat energy of the solar heat collection panel and transfer the heat energy from the outer side of the main wall body into the main wall body, a plurality of chip type thermal resistors being arranged on an inner side of the main wall body, and the outer side of the main wall body being provided with a heat-radiated reflective layer. The present invention effectively eliminates energy waste in the prior art.

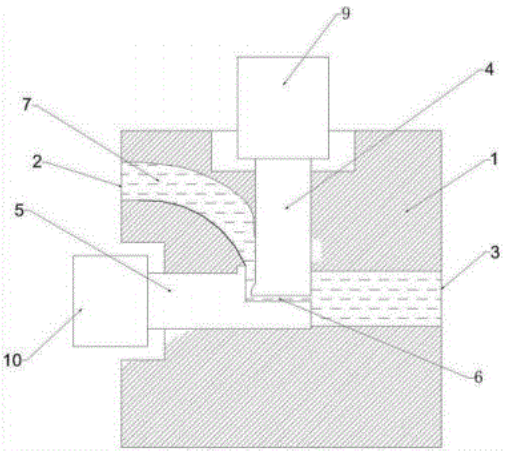


21: 2022/01284. 22: 2022-01-27. 43: 2022-03-01
51: B23H
71: Qingdao University of Science and Technology
72: WANG, Lei, XU, Yuanchang, SONG, Lirong, XU, Guoqing

54: FLOW FIELD FIXTURE FOR ELECTROCHEMICAL MACHINING OF L-SHAPED CURVED WORKPIECE

00: -

A flow field fixture for electrochemical machining of an L-shaped curved workpiece is provided. The flow field fixture comprises a fixture main body, an electrolyte inlet, an electrolyte outlet, a cathode, and an anode slot, wherein the electrolyte inlet and the electrolyte outlet are formed on the fixture main body. The cathode is hermetically connected to the fixture main body, an axis of the cathode intersects with an axis of the anode slot, and an L-shaped gap is formed between the cathode and the anode slot; the electrolyte inlet and the electrolyte outlet are communicated by a flow channel, and the L-shaped gap is a part of the flow channel; and a flow dividing channel is formed at one side, close to the anode slot, of the cathode.

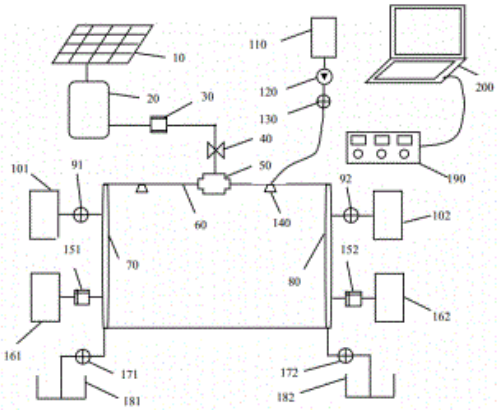


21: 2022/01285. 22: 2022-01-27. 43: 2022-03-01
51: B09C
71: Qingdao University of Technology
72: LI, Yuanyuan, SHEN, Shuiyue, LIU, Jiang, JIA, Shibo, QUAN, Xianhao, CHEN, Peng

54: SOLAR ELECTRIC DEVICE FOR RESTORING SOIL CONTAMINATED BY HEAVY METAL

00: -

Provided is a solar electric device for restoring soil contaminated by heavy metal. The device includes a solar power supply module, an agent supply module, an electric restoration module, a tail waste recovery module and an automatic control module; the solar power supply module converts solar energy into electric energy; the agent supply module can regulate and control physical and chemical properties of the contaminated soil; the tail waste recovery module can recover enriched heavy metal and waste liquid to the greatest extent; and the automatic control module can accurately regulate and control a restoration parameter in real time. The present invention integrates electric energy supply, contaminated soil property conditioning, harmless restoration, tail waste collection and automatic control, has a compact structure, convenient operation, strong adaptability and high efficiency, and can efficiently and rapidly restore the soil contaminated by heavy metal.



21: 2022/01286. 22: 2022-01-27. 43: 2022-03-01
51: A62D
71: Qingdao University of Technology
72: LIU, Jiang, LI, Yuanyuan, CHEN, Peng, JIA, Shibo, QUAN, Xianhao, GUO, Bin

54: EFFICIENT WASTE INCINERATION FLY ASH CURING AGENT AND PREPARATION METHOD THEREOF

00: -

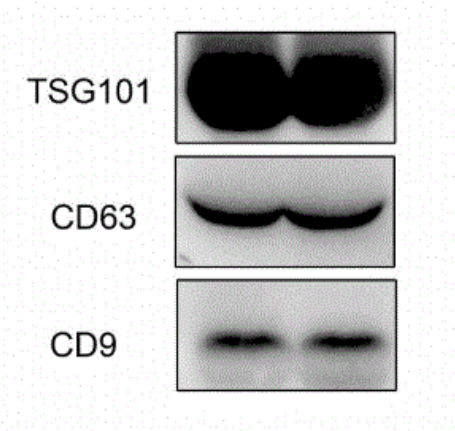
Provided are an efficient waste incineration fly ash curing agent and a preparation method thereof. The curing agent includes red mud, metakaolin, calcium oxide, phosphorus slags and ferrous powder. A reactivity of each mineral is significantly improved after crushing and grinding treatments, and the ground phosphorus slags and ferrous powder are acidized to further improve an ability of stabilizing heavy metals. Potential cementitious components in the red mud and metakaolin can be activated by the calcium oxide, and a resulting calcium silicoaluminate gel further wraps up and adsorbs heavy metals such as Pb, Zn, Cd, As and Cr, making such heavy metals lose mobility. The curing agent is mainly made of dump slags, physical and chemical reactions between various waste slags are fully used to realize reduction and resource utilization of various slag wastes as well as harmless disposal of waste incineration fly ash, showing a huge application prospect.

21: 2022/01287. 22: 2022-01-27. 43: 2022-03-01
51: G01N
71: Nanjing University
72: LI, Liang, DING, Xiang

54: APPLICATION OF TREM 2 PROTEIN ANTIBODY COATED MAGNETIC BEADS IN EXTRACTION OF MICROGLIA-DERIVED EXOSOMES IN SERUM

00: -

The present disclosure discloses an application of TREM2 protein antibody coated magnetic beads in extraction of microglia-derived exosomes in serum. The antibody of microglia specific protein TREM2 protein is used for coating magnetic beads, the exosomes in the serum are extracted through a magnetic bead immunization method. The immunofluorescence imprinting, transmission electron microscopy imaging and particle size analysis prove that the TREM2 protein antibody coated magnetic beads can be used to effectively extract the microglia-derived exosomes in the serum.



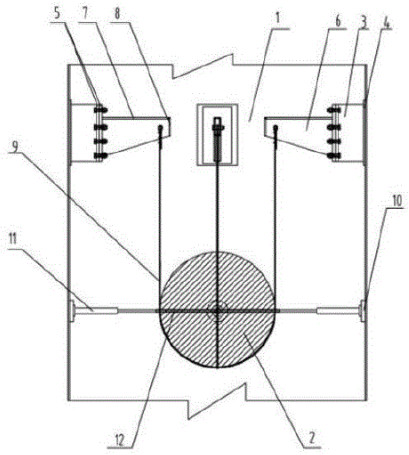
21: 2022/01288. 22: 2022-01-27. 43: 2022-03-01
51: F03D; F16F
71: Zhejiang University of Technology, Shengzhou Zhejiang University of Technology Innovation Research Institute
72: DING, Zhenyu, SONG, Jiahui, GAO, Zengliang, LIU, Hekun, GUO, Lijian, CHAI, Hongliang, GUAN, Chenfeng

54: SIMPLE PENDULUM VIBRATION DAMPING DEVICE USED INSIDE LARGE WIND POWER GENERATOR TOWER

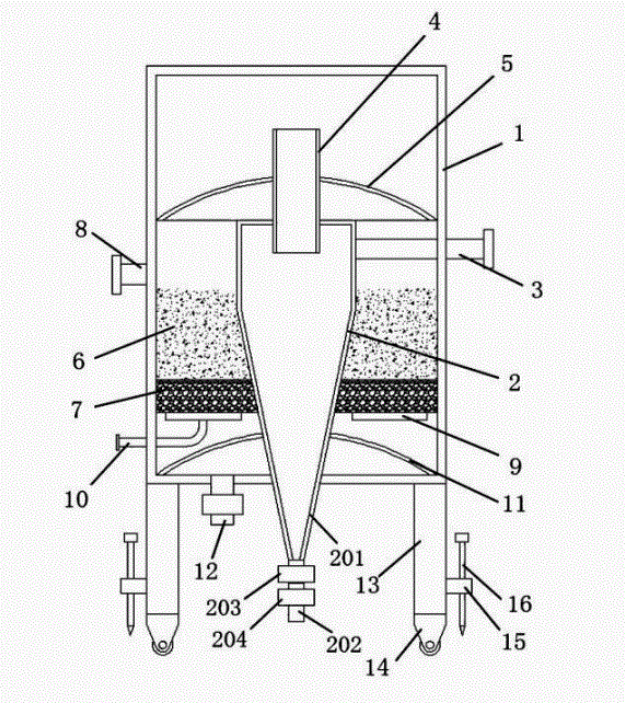
00: -

The present invention discloses a single pendulum TMD damper device used inside a tower-shaped cylinder of a large wind generator, the device comprising a top bracket, a mass block, and a viscous damper. The top brackets are four in total uniformly distributed inside the cylinder to fix and suspend the mass block; the mass block is provided with a load-bearing ring; a groove is provided on the lower hemisphere of the mass block to facilitate the wire rope to bypass the suspension; the viscous dampers are four in total uniformly distributed

between and below each bracket, with the axis being on the same horizontal line with the horizontal axis of the load-bearing ring, and can play the role of dissipating energy and preventing the mass block from generating large displacement.



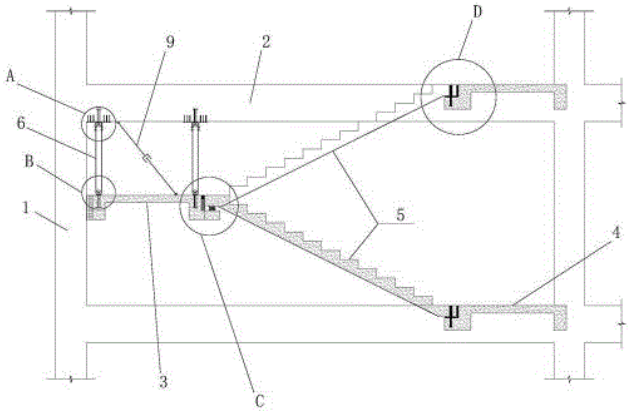
21: 2022/01289. 22: 2022-01-27. 43: 2022-03-01
51: C02F
71: Zunyi Normal University, CHONGQING ARCHITECTURAL DESIGN INSTITUTE CO., LTD.
72: HE, Li, ZENG, Boping, TAN, Tao, GAO, Zhixi
54: DEVICE FOR SEPARATING FINE SILT IN SEWAGE
00: -
The present disclosure discloses a sewage treatment device capable of removing fine silt. The device comprises a box body, wherein a cyclone is arranged in the box body; a water inlet pipe penetrating through a side plate of the box body is connected to the side end of the upper part of the cyclone; a sand collecting hopper penetrating through a bottom plate of the box body is arranged at the bottom of the cyclone; a sand discharging pipe with a discharging valve is arranged at the lower end of the sand collecting hopper; an overflow pipe is arranged at the top end of the cyclone; an upper partition plate is fixed at the position, located on the outer side of the overflow pipe, of an inner cavity of the box body; a lower partition plate is fixed at the position of the inner cavity of the box body.



21: 2022/01290. 22: 2022-01-27. 43: 2022-03-01
51: D06M
71: Qingdao University
72: ZHU, Shifeng, QU, Lijun, TIAN, Mingwei, CHEN, Guohua, WANG, Jinquan
54: METHOD FOR PREPARING TEXTILE FABRICS WITH FLAME-RETARDANT AND ANTI-MOLTEN-DRIPPING COATING
00: -
Disclosed is a method for preparing textile fabrics with flame-retardant and anti-molten-dripping coating, including the following steps: firstly, vibrating and dispersing an anti-drip agent solution and a flame retardant, adding both to an auxiliary solution, and fully mixing them to obtain a mixed solution; then placing the mixed solution in a soaking tank of a padding machine, padding the mixed solution onto different types of fabrics at a room temperature through a two-dipping and two-padding procedure to obtain different types of padded fabrics; finally, placing different types of padded fabrics in an oven and drying the padded fabrics to obtain the textile fabrics with flame-retardant and anti-molten-dripping coating. The method features a simple production process, easy operation, high output and lower cost. The prepared textile fabrics exhibit a damaged length of less than or equal to 150mm and an after-flame time of less than or equal to 5s, with

excellent flame-retardant and anti-molten-dripping functions.

21: 2022/01291. 22: 2022-01-27. 43: 2022-03-01
51: E04B
71: Anhui Xinhua University
72: Wu Tao, He Xiaoyu, Jiang Yaqiong
54: SHOCK-ABSORBING FABRICATED SUSPENDED STAIRCASE STRUCTURE
00: -
The invention provides a shock-absorbing fabricated suspended staircase structure, which comprises frame components and a stair component arranged between two adjacent frame components; the frame component comprises vertically arranged frame columns and horizontally arranged frame beams, and the ends of the frame beams are connected with the frame columns; the stair component comprises a staggered platform, a floor platform and a prefabricated ladder board, wherein the stagger platform is connected with the frame beam through a plurality of suspension components, and one end of the prefabricated ladder board is connected with the staggered platform and the other end is connected with the floor platform. According to the invention, the staircase is suspended by suspenders, and the integrated prefabricated trough-shaped plates are used, and shock absorption units such as shock isolation bearings, dampers, energy dissipation plates and the like are also added. With the joint connection structure, the substructure of the staircase is in an elastic deformation state, the constraint of the degree of freedom of the joint is correspondingly released according to the intensity situation, and the functions of vibration decoupling, vibration suppression, flexibility, energy dissipation and shock absorption will be started in due time.



21: 2022/01292. 22: 2022-01-27. 43: 2022-03-01
51: G01N
71: Shandong University of Science and Technology, Guizhou Qianxi Energy Development Co., Ltd
72: XIE Jun, WANG Yi, SUN Xiangke, CHEN Dawei, LIU Xuefei, LI Hongxian, SUN Shouyi, XU Shurong, XIE Hengxing, MA Zan
54: EXPERIMENTAL SYSTEM AND METHOD FOR SIMULATING SPONTANEOUS COMBUSTION AND THREE-ZONE DISTRIBUTION IN GOAF
00: -
This invention provides experimental system and method for simulating spontaneous combustion and three-zone distribution in goaf area, which comprises six parts as follows: experimental furnace body part, similar material part of goaf, air supply and exhaust part, gas collection and analysis part, automatic temperature measurement and monitoring system and mechanical part. First, select similar materials, then simulate the construction of the goaf system, measure temperature and gas extraction layout, lay similar simulated materials and the goaf system, and finally simulate the spontaneous combustion process of the coal in the goaf. Simulate the combustion process of the belt distribution area, and monitor and analyze the simulation process. The beneficial effect of the invention is that it can accurately and effectively simulate the whole process of coal spontaneous ignition and combustion in different distribution zones in goaf under sealing condition in the laboratory.

21: 2022/01293. 22: 2022-01-27. 43: 2022-03-01
51: A61L
71: Affiliated Hospital of Nantong University
72: Shi Wei, Liu Qianqian, Yao Junzhong

54: PREPARATION METHOD OF A PRE-VASCULARIZED BRAIN ACELLULAR STENT

00: -

The invention provides a preparation method of a pre-vascularized decellularized brain stent, which is characterized by comprising the following steps: (1) using detergent soaking and rinsing method to obtain decellularized brain stent as cell carrier; (2) pre-vascularization of the decellularized brain stent in step (1) to obtain a pre-vascularized decellularized brain stent; (3) transplanting PC12 cells into the pre-vascularized stent prepared in step (2) to verify the importance of the formation of vascular network in the pre-vascularized decellularized stent for seed cell transplantation in tissue engineering. The invention provides an experimental basis for the brain acellular stent used as a cell carrier to repair the injury of central nervous system, and the preliminarily constructed pre-vascularization method of the brain acellular stent provides a new treatment strategy for the pre-vascularization of the brain acellular stent and the transplantation of seed cells into tissues and nerve regeneration and repair after traumatic brain injury.

21: 2022/01295. 22: 2022-01-27. 43: 2022-03-01
51: E04H
71: Ali Gangcheng Jiaqi Brick Factory
72: ChenZhengLong

54: MOVABLE FIXED TELESCOPIC BOX TYPE INTELLIGENT TEMPERATURE-CONTROLLED ROOM

00: -

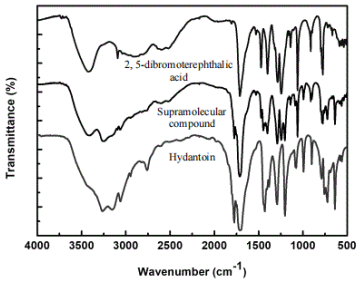
The present invention relates to the technical field of temperature-controlled rooms. Disclosed is a movable fixed telescopic box type intelligent temperature-controlled room, comprising room body compartments, aluminium-plastic plates, steam-adding blocks, plastic-steel gusset plates, ventilation pipes, broken bridge windows, bottom plates and door plates, wherein there are two or more room body compartments which are connected to each other, an aluminium-plastic plate is mounted at the top of the interior of each room body compartment, a bottom plate is mounted at the bottom of the interior of each room body compartment, steam-adding blocks are symmetrically mounted at the left and right ends of each room body compartment, a plastic-steel gusset plate is mounted at one end of each steam-adding block away from the room body compartment, a ventilation pipe is mounted inside each aluminium-plastic plate, a door plate is mounted at the rear side of the right end of each room body compartment, and a broken bridge window is mounted at the left end of each room body compartment. The present invention can adjust the size of the interior space of the temperature-controlled room by means of splicing of the room body compartments, can drive a screw rod to rotate by means of an electric motor, so as to achieve the purpose of shrinking a sunshade cloth and facilitate unlocking of rollers; and the present invention can press a push rod by means of a conical block, so as to lock the roller.

21: 2022/01296. 22: 2022-01-27. 43: 2022-03-01
51: C07D
71: Qingdao University of Science and Technology
72: WANG, Lei, SUN, Yuexin, DU, Yunmei, CHI, Jingqi

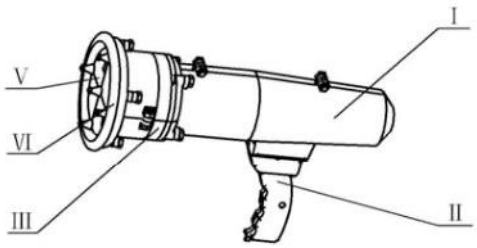
54: HYDANTOIN PHARMACEUTICAL CO-CRYSTAL AND PREPARATION METHOD THEREOF

00: -

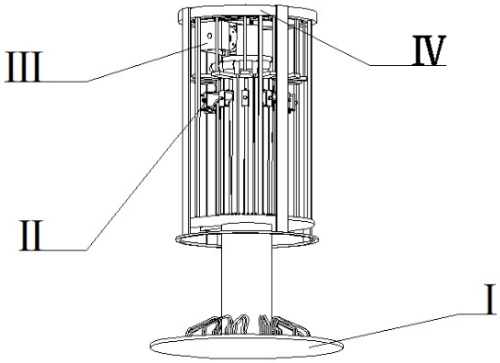
The present disclosure provides a hydantoin pharmaceutical co-crystal and a preparation method thereof, and belongs to the technical field of pharmaceutical co-crystals. The hydantoin pharmaceutical co-crystal is characterized in that the basic structural unit of the hydantoin pharmaceutical co-crystal provided by the present disclosure comprises a hydantoin molecule and 2, 5-dibromoterephthalic acid molecules, wherein the hydantoin molecule and the 2, 5-dibromoterephthalic acid molecules are connected through hydrogen bonds; the hydantoin pharmaceutical co-crystal belongs to a triclinic system, and the space group is P21/c; the crystal cell parameters are as follows: a=7.0765(8), b=9.2691(10), c=13.3494(9), alpha=90 degree beta=96.134(8), and gamma=90 degree; the crystal cell volume V is that V=870.61(15)A3; and Z=1. The hydantoin pharmaceutical co-crystal provided by the present disclosure has obviously improved solubility and stability on the basis of inheriting various pharmacological actions of the active pharmaceutical ingredient hydantoin.



21: 2022/01299. 22: 2022-01-27. 43: 2022-03-07
51: B08B
71: QINGDAO UNIVERSITY OF TECHNOLOGY, HANERGY (QINGDAO) LUBRICATION TECHNOLOGY CO., LTD., IK GUJRAL PUNJAB TECHNICAL UNIVERSITY
72: ZHANG, Zechen, LI, Changhe, ZHOU, Zongming, SHARMA, Shubham, HOU, Yali
54: CERAMIC TILE CRUSHING AND DISMANTLING SYSTEM BASED ON ULTRASONIC VIBRATION
00: -
The invention provides a ceramic tile crushing and removal system based on ultrasonic vibration, which comprises a frame, the frame includes a fixing mechanism and a hammer mechanism, the fixing mechanism contains an ultrasonic transducer, the ultrasonic transducer is connected with the hammer mechanism through an amplitude horn, and the ultrasonic wave with adjustable input frequency to the ultrasonic transducer by an ultrasonic wave generator. By controlling the ultrasonic frequency, the hammer mechanism transmits the corresponding ultrasonic energy to break the ceramic tile. The invention uses the ultrasonic transducer to convert the current into high-frequency and low amplitude mechanical vibration, the amplitude horn further increases the vibration amplitude, the tool head vibrates the wall tile, transmits the energy to the tile, completely separates the tile from the wall, and completes the tile removal. Due to the certain energy transmission depth, the final broken wall surface is smoother than the manual method, the problem of difficult removal of wall tiles is solved.



21: 2022/01301. 22: 2022-01-27. 43: 2022-03-14
51: H04W
71: QINGDAO UNIVERSITY OF TECHNOLOGY, INNER MONGOLIA UNIVERSITY FOR NATIONALITIES, NINGBO SANHAN ALLOY MATERIAL CO., LTD.
72: LIU, Dewei, LI, Changhe, HONG, Huaping, ZHAO, Huayang, HOU, Yali
54: PURELY HUMAN-POWERED DOUBLE-LAYER CONTROLLABLE POWER-ASSISTED BICYCLE ACCESS DEVICE
00: -
The present invention discloses a pure human double-layer controllable power-assisted bicycle access device, which solves the problem that the existing bicycle access device occupies a large area and is not energy-saving and environmentally friendly enough, and its overall parking rack has the effect of structural safety, labor-saving, convenience, space-saving and multi-functionality, and its technical solutions are: including a first layer parking rack located at the bottom, and a second layer parking rack is correspondingly provided above the first layer parking rack; said The second layer parking rack includes a parking plate device, which clamps the fixed bicycle; the bottom of the parking plate device can be connected with the power-assisted lifting device, driven by the power-assisted lifting device along the controllable rotating device up and down to complete the second layer parking or picking up the bicycle; the controllable rotating device rotates under the action of human power and drives the parking plate device to rotate to complete the storage of the bicycle in the second layer set position.

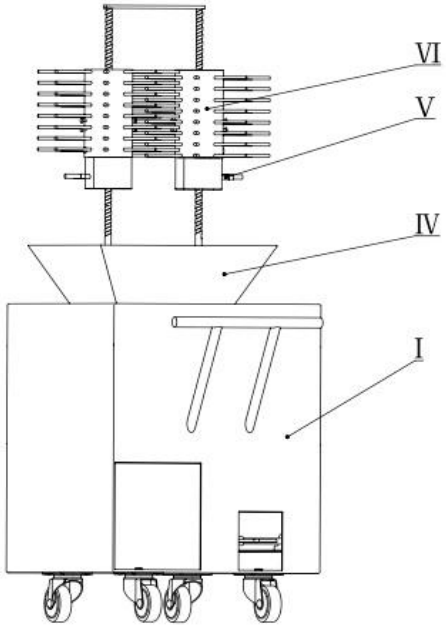


21: 2022/01302. 22: 2022-01-27. 43: 2022-03-14
51: A01D
71: QINGDAO UNIVERSITY OF TECHNOLOGY, HENAN UNIVERSITY OF SCIENCE AND TECHNOLOGY, QINGDAO KAWS INTELLIGENT MANUFACTURING CO. LTD.
72: KONG, Ming, YANG, Min, LI, Xinping, QIN, Aiguo

54: PAIR-ROLLER AUXILIARY ARTIFICIAL WINTER JUJUBE PICKING DEVICE AND LIFTING LOCKING MECHANISM

00: -

The invention discloses a pair of roller-type auxiliary artificial winter jujube picking device and a lifting locking mechanism, which solves the problems of easy damage during the picking process of winter jujube and too cumbersome for ordinary manual picking in the prior art, and has the advantages of high picking efficiency and low damage to winter jujube. The beneficial effects are as follows: including a pair of roller picking mechanism, the roll picking mechanism includes at least two rotary rolls, the adjacent two rotary rolls are set at a set distance apart, the adjacent two rotary rolls rotate in opposite directions, each rotary roll is provided with a plurality of comb rods in a circumferential direction, and during the rotation of the rotary rolls, the comb rods of two adjacent rotating rollers can be crossed and staggered to form a gap for separating the fruit and the fruit stem, a gap is less than or equal to the diameter of the fruit, and the branches and leaves with the fruit are driven by the comb rods, crossing area to separate fruit from stem by comb bar.



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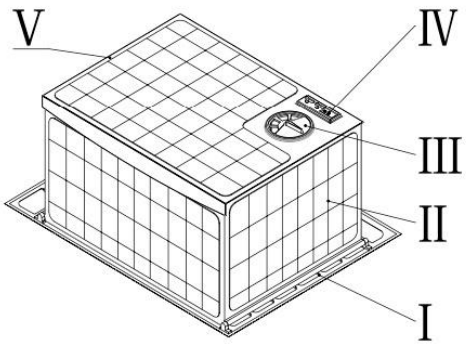
51: F24S
71: QINGDAO UNIVERSITY OF TECHNOLOGY, HANERGY (QINGDAO) LUBRICATION TECHNOLOGY CO., LTD.
72: LI, Kang, LI, Changhe, ZHOU, Zongming, HOU, Yali

54: TAKE-OUT HEATING AND HEAT PRESERVATION TRANSPORTATION EQUIPMENT THAT CAN UTILIZE SOLAR ENERGY

00: -

The invention discloses a take-out heating and heat preservation transportation equipment that can utilize solar energy, which solves the problem that the existing take-out box is difficult to meet the heating of food and the full use of solar energy at the same time. The equipment by using solar energy to achieve the heating and insulation of take-out food, environmental protection and energy saving, while equipped with external power supply to adapt to a variety of weather, greatly improving the taste and efficiency of take-out, the technical solution: including a box skeleton, the outside of the box skeleton is wrapped and closed by a box shell to form a box structure, and the bottom of the box structure is fixed to the tray assembly; a heating assembly is arranged inside the box structure to heat the delivered items, and a ventilation assembly communicating with the inside of the box structure is

arranged on the top of the box structure to exhaust air.



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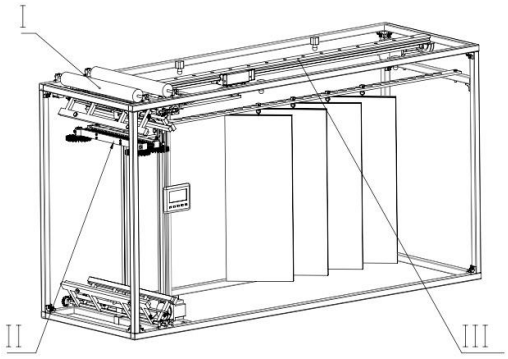
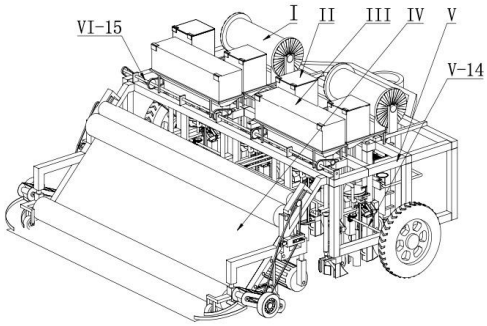
51: A47B
71: QINGDAO UNIVERSITY OF TECHNOLOGY, XINJIANG INSTITUTE OF TECHNOLOGY, QINGDAO KAWS INTELLIGENT MANUFACTURING CO. LTD.
72: LI, Wenyi, ZHANG, Yanbin, QIN, Aiguo, LIU, Xiangdong
54: A SMART WARDROBE INTEGRATING THE FUNCTIONS OF VACUUM PACKAGING, AUTOMATIC ACCESS AND IRONING
00: -
The invention discloses an intelligent wardrobe integrating the functions of vacuum packaging, automatic access and ironing, which comprises a frame, in which a vacuum packaging system, ironing system, storage system and control system are arranged; the vacuum packing system includes a packing unit and two vacuum sealing units; the packing unit is located at the top of the frame for bagging clothes; two vacuum sealing units are located at the lower part of the packaging unit, and the upper and lower parts are set up to realize the vacuum sealing of clothes; the ironing system is located between two vacuum sealing units for ironing clothes; the storage system includes a transmission part and a power part, and the transmission part includes a storage module and a hanger; the storage module is driven by the power part to grab the clothes automatically and store the clothes on the hanger to realize the automatic access to the clothes; control system Control vacuum packaging system, ironing system, storage system



21: 2022/01305. 22: 2022-01-27. 43: 2022-03-14
51: A01C
71: QINGDAO UNIVERSITY OF TECHNOLOGY, GUANGZHOU UNIVERSITY, IK GUJRAL PUNJAB TECHNICAL UNIVERSITY
72: LU, Yue, LI, Changhe, LIU, Xiaochu, SHARMA, Shubham, HOU, Yali
54: THE AGRICULTURAL MACHINERY EQUIPMENT AND METHOD FOR THE INTEGRATION OF FINE SEED FERTILIZER AND SHALLOW BURIED DRIP IRRIGATION PIPE LAYING AND FILM MULCHING
00: -
The invention discloses an agricultural machinery equipment and method for integrating precision seed fertilizer with a shallow buried drip irrigation pipe laying system and a film covering, including: a integral frame, a system power wheel is installed on the integral frame, the power axle of the system is fixedly connected with a gear, the gear is meshed with a reverse gear to transmit the power to the shallow buried drip irrigation pipe laying system, a air suction precision sowing system, a seed fertilizer screw quantitative positioning conveying system, a film mulching and a soil mulching system, the control system is respectively connected with the shallow buried drip irrigation pipe laying system, the air suction precision sowing system, the seed fertilizer screw quantitative positioning and conveying system, the plastic film mulching and the soil covering system to control the work of each system. The equipment of the application can simultaneously carry out four rows of sowing and two rows of pipe laying, according to the actual needs of agricultural production, it can meet the needs of row spacing and plant spacing of different crops, as well as the requirements for fertilization and pipe laying position.

Intelligent and efficient sowing, fertilization, irrigation and film mulching are realized, which greatly improves the adaptability of machines and the work efficiency of agricultural cultivation

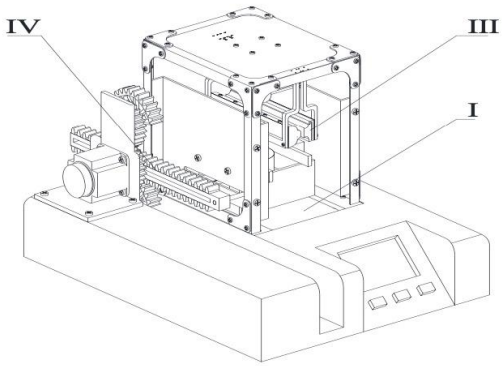


21: 2022/01306. 22: 2022-01-27. 43: 2022-03-14
51: G01G
71: QINGDAO UNIVERSITY OF TECHNOLOGY, IK GUJRAL PUNJAB TECHNICAL UNIVERSITY
72: SHI, Zhuang, LI, Changhe, SHARMA, Shubham, HOU, Yali

54: THE INVENTION RELATES TO AN ELECTRONIC SCALE, AN AUTOMATIC WEIGHING PACKAGING CODING SYSTEM AND A WORKING METHOD THEREOF

00: -

The invention discloses an electronic scale, an automatic weighing packaging coding system and a working method thereof. Among them, the automatic weighing, packaging and coding system includes: electronic scale, a fully automatic packaging and coding device, which starts after receiving the start signal triggered by the outside. The automatic packaging and coding device comprises a sealing device and a coding device. The sealing device is used for sealing the packaging bag containing the weighed articles at the preset position, and pushing the sealed packaging bag to the coding device. The coding device is used to receive the unit price, weight and price information of the article transmitted by the identification device and generate a two-dimensional code label. Contacting the sticky side of the two-dimensional code label with the packaging bag, so as to adhere to the outside of the packaging bag to complete the coding.

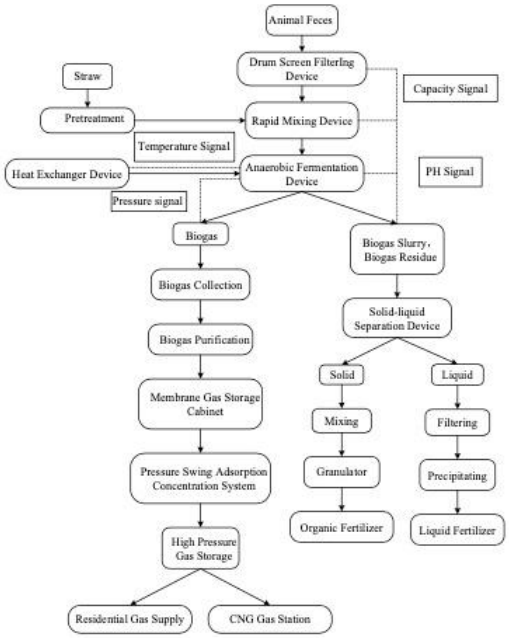


21: 2022/01307. 22: 2022-01-27. 43: 2022-03-14
51: B09B
71: QINGDAO UNIVERSITY OF TECHNOLOGY, IK GUJRAL PUNJAB TECHNICAL UNIVERSITY
72: MA Hao, LI, Changhe, SHARMA, Shubham, HOU, Yali

54: AN INTELLIGENT PROCESSING SYSTEM AND METHOD FOR RESOURCE REUSE OF ANIMAL FECES

00: -

The invention discloses an intelligent processing system and method for harmless resource reuse of animal feces, comprising: a drum screen filtering device to remove impurities in animal feces; a rapid mixing device mixes the screened animal manure with the biologically fermented straw; an anaerobic fermentation device for anaerobic fermentation of the mixed materials; a biogas collection device for collecting the biogas generated in the anaerobic fermentation device; a gas purification module for desulfurization, dehydration and decarbonization of the biogas collected by the biogas collection device; a gas storage device for storing the gas purified by the gas purification component at constant pressure; a solid-liquid treatment module separates the fermented biogas slurry and biogas residue, the biogas residue is treated to make organic fertilizer, the biogas slurry is treated to make liquid fertilizer. The invention integrates fecal fermentation, biogas production, organic fertilizer production and other functions, shortens the process flow, greatly improves the efficiency, and opens up a new way to increase income for the people in areas with developed aquaculture industry.

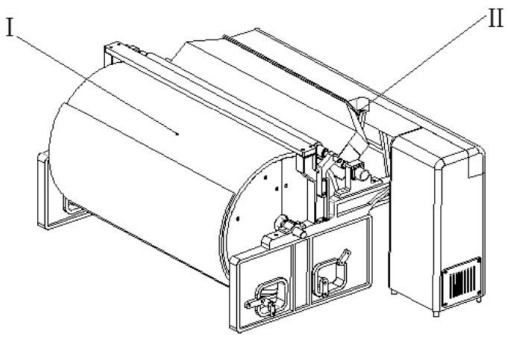


21: 2022/01308. 22: 2022-01-27. 43: 2022-03-14
51: B65G
71: QINGDAO UNIVERSITY OF TECHNOLOGY, QINGDAO DONGJIA TEXTILE MACHINERY GROUP CO., LTD.
72: SUN, Jingang, LI, Changhe, JI, Heju, HOU, Yali

54: A DOFFER ONLINE AUTOMATIC CLEANING DEVICE AND METHOD

00: -

The invention discloses a doffer online automatic cleaning device and method, which comprises a doffer component and a cleaning component; The doffer assembly comprises a doffer roller, and plugs are arranged at both ends of the doffer roller; A cleaning roller located at the upper part of the doffer roller; The cleaning component comprises: a negative pressure suction port arranged above the cleaning roller, a negative pressure pipe is arranged at the upper end of the negative pressure suction port, a pipe support frame is arranged below the negative pressure pipe, an operation box is arranged on one side of the negative pressure pipe, a partition is arranged at a certain distance from the bottom end of the operation box, a dust bag is placed on the partition plate, and a negative pressure fan is arranged below the dust bag; A chopper is arranged close to the cleaning roller, and a chopper box is arranged on both sides of the chopper. The invention keeps the doffer clean all the time, has good stripping effect, reduces the secondary pollution caused by impurities to the combed fiber, and has good fiber quality



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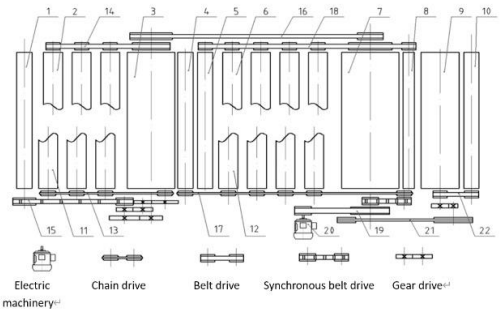
51: D01G
71: QINGDAO UNIVERSITY OF TECHNOLOGY, QINGDAO DONGJIA TEXTILE MACHINERY GROUP CO., LTD.
72: JIANG, Zhiyong, LI, Changhe, JI, Heju, HOU, Yali

54: CASHMERE CARDING MACHINE TRANSMISSION SYSTEM AND CARDING MACHINE

00: -

The invention discloses a transmission system of a cashmere carding machine and a carding machine, which has the effects of good synchronization of the transmission process and improving the energy utilization rate of the transmission mechanism. The technical scheme is as follows: it comprises a hair opening cylinder, one end of the hair opening cylinder is connected with a plurality of hair opening cylinder work rollers through the first chain transmission mechanism, the other end of the hair opening cylinder is connected with a plurality of hair opening cylinder stripping rollers through the first belt transmission mechanism, and the hair opening cylinder is also connected with the hair opening roller through the first synchronous belt transmission mechanism; the opening cylinder is also connected with the primary cylinder through the second belt transmission mechanism, one end of the primary cylinder is connected with a plurality of primary cylinder work rollers and the first wind wheel through the second chain transmission mechanism, the other end of the primary cylinder is connected with a plurality of primary cylinder stripping rollers, transfer rollers and the second wind wheel through the third belt transmission mechanism, and the primary

cylinder is also connected with the motor through the fourth belt transmission mechanism; the primary carding cylinder is also connected with the doffer through the fifth belt transmission mechanism, and the doffer is connected with the cleaning roller through the sixth belt transmission mechanism.



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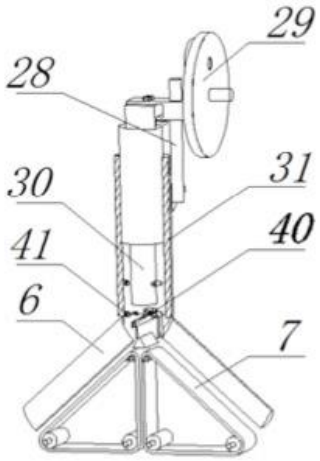
51: F16C
71: QINGDAO UNIVERSITY OF TECHNOLOGY, LIAONING UNIVERSITY OF TECHNOLOGY, IK GUJRAL PUNJAB TECHNICAL UNIVERSITY
72: WANG, Leyi, LI, Changhe, JIA, Dongzhou, SHARMA, Shubham, HOU, Yali
54: AN ECCENTRIC WHEEL CONNECTING ROD PUNCHING AND SEPARATING DEVICE FOR AUXILIARY SEED POTATO CUTTING TUBER
00: -
The invention discloses an eccentric wheel connecting rod punching and separating device for auxiliary seed potato cutting tuber, comprising an eccentric wheel mechanism, the eccentric wheel mechanism is connected with a segmented punching hammer, the segmented punching hammer is sleeved in a sleeve, and the segmented punching hammer moves in the sleeve driven by the eccentric wheel mechanism; the position of the lower end of the sleeve is provided with a righting and positioning mechanism to realize the righting and positioning of the seed potato falling into the sleeve, the bottom end of the sleeve is provided with a cutter to cut the seed potato longitudinally that has been righted and positioned, and the bottom end of the sleeve is also connected with a transfer device to transfer the seed potato after longitudinal cutting. The device cuts the seed potato into two pieces longitudinally, so that each piece has apical dominance and is convenient for subsequent identification and cutting.



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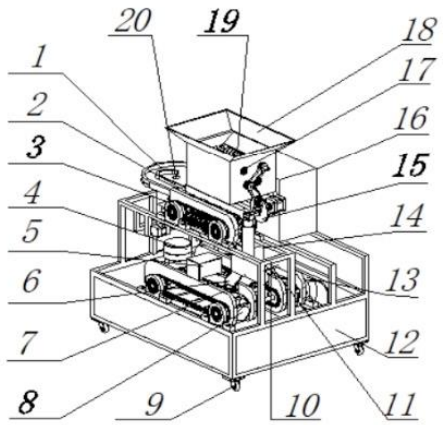
51: A01C
71: QINGDAO UNIVERSITY OF TECHNOLOGY, LIAONING UNIVERSITY OF TECHNOLOGY, SHANGHAI JINZHAO ENERGY SAVING TECHNOLOGY CO., LTD.
72: YANG, Yuying, LI, Changhe, JIA, Dongzhou, ZHANG, Naiqing, HOU, Yali
54: POTATO PLANTING MACHINE WITH PRECISE SCREENING, INTELLIGENT RECOGNITION OF CUTTING AND MIXING
00: -
The present invention discloses a potato the planting machine integrating precise screening, intelligent identification of cutting and mixing, including a classifying feeding system, a cutting system, and a mixing system. Wherein the classifying feeding system divides the seed yams of different sizes into different classifications. It conveys the different classifications of seed yams separately, a portion of which is transferred to the blocking system. Based on the image recognition technology, the cutting system collects the number and location of bud eye on the surface of seed yams, and considers the nutrient content required for the growth of the cut pieces, and makes the corresponding cutting method to cut the seed yams. The cut seed yams are transported to the mixing system, and the mixing system protects the cut yams by preserving the cut yams. This application integrates the functions of classifying, feeding, bud eye recognition, automatic gang tool, block cutting, mixing, and recycling mixing, which realizes the classifying work of

different sizes of seed yams and ensures the germination rate of seed yams. Separate the large-sized seed yams directly without cutting blocks to improve economic efficiency



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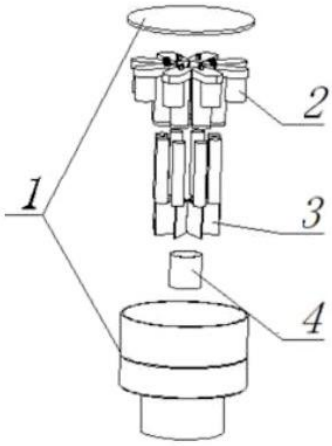
51: B26D
71: QINGDAO UNIVERSITY OF TECHNOLOGY, XINJIANG JIANG NING LIGHT INDUSTRIAL MACHINERY ENGINEERING TECHNOLOGY CO., LTD.
72: SUN, Jingang, HOU, Yali, CHE, Ji
54: AUTOMATIC KNIFE ARRANGEMENT AND CUTTING DEVICE, CUTTING MACHINE AND ITS WORKING METHOD AND APPLICATION
00: -
The invention discloses an automatic cutter arrangement and block cutting device, a block cutting machine, a working method and application thereof. The utility model relates to an automatic cutter arrangement and block cutting device, which comprises a cutter control disc and a block cutting cutter group; The cutter group is composed of a plurality of centripetal combinations of cutters of the same size, the long axis edge of the cutter is close to the same axis, and each cutter is independent of each other; The cutter control panel is composed of a plurality of electric push rods, all electric push rods form a circle, and the position of each electric push rod corresponds to the position of a tool, the number of electric push rods is equal to the number of tools, and each electric push rod is rigidly connected with a tool, and each electric push rod controls a tool to expand and retract to realize cutting, The operation of each electric push rod is independent of each other. The automatic cutter arrangement and block cutting device of the invention can complete the cutting of the seed block at one time, reduce the cutting times and the disinfection times of the cutter, simplify the mechanical structure, improve the cutting efficiency, and solve the problem of fixing the seed block at one time



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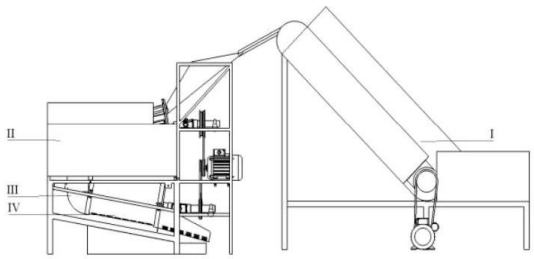
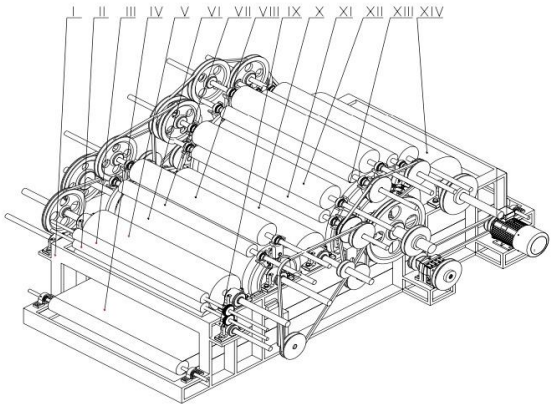
51: A23N
71: QINGDAO UNIVERSITY OF TECHNOLOGY, SICHUAN JIENENG DRYING EQUIPMENT CO., LTD.
72: ZHANG, Xiaotian, HOU, Yali, HE, Guangzan
54: ADAPTIVE OPPOSITE OBLIQUE CUTTING EXTRUSION PEELING AND FRICTION CLEANING DEVICE AND METHOD
00: -
The invention discloses an adaptive opposite oblique cutting extrusion peeling and friction cleaning device and method, which comprises a feeding system, a green skin stripping system and a cleaning system. The feeding system transmits the material to the green skin stripping system at a set rate. The green skin stripping system comprises a conical stripping drum arranged with a floating opposite oblique cutting tool, and the inner gap between the inner and outer drums of the conical stripping drum is gradually reduced so that the green skin is rubbed and stripped under the joint action of friction and shear force when the inner drum rotates. The cleaning system uses friction to conduct secondary friction and cleaning on the materials treated by the green skin stripping system. The technical scheme of the disclosure integrates the functions of feeding, peeling, cleaning and peeling recovery, skillfully

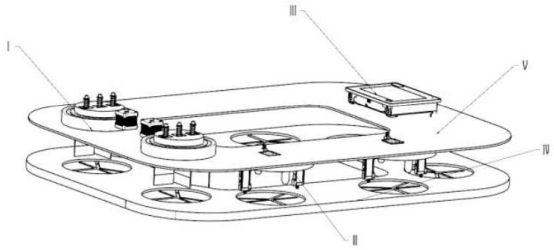
realizes the integration of walnut peeling and cleaning, improves the purification rate and productivity of walnut peeling, reduces the walnut crushing rate in the process, and provides conditions for the reuse of walnut peel.



21: 2022/01314. 22: 2022-01-27. 43: 2022-03-07
51: D01G
71: QINGDAO UNIVERSITY OF TECHNOLOGY, QINGDAO DONGJIA TEXTILE MACHINERY GROUP CO., LTD.
72: WANG, Xiaoming, LI, Changhe, JI, Heju, HOU, Yali
54: FIBER CARDING MACHINE BASED ON ROLLER TYPE CARDING STRUCTURE
00: -
The invention discloses a fiber carding machine based on a roller-type carding structure, solves the problem that the fiber carding mechanism is complicated and the fiber damage rate is large in the prior art, and has the advantages of good carding effect and small fiber damage. The scheme is as follows: the fiber carding machine based on the roller-type carding structure comprises a pre-carding system comprising a licker-in supported by a frame for loosening fiber bundles and removing impurities, one side of the licker-in is provided with a breast cylinder, a breast cylinder stripping roll and a breast cylinder working roll are arranged above the breast cylinder, and a cylinder-roller carding system is arranged on the breast cylinder relative to the licker-in. The cylinder-roller carding system comprises at least one group of carding units, the carding unit comprises a working roll and a stripping roll arranged adjacent to each other, and a cylinder is arranged below the working roll. The pre-carded fibers enter the cylinder-roller carding system, and are combed or stripped or replenished by working rolls, stripping rolls and cylinders.

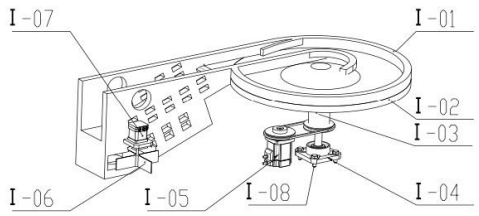


21: 2022/01315. 22: 2022-01-27. 43: 2022-03-07
51: A01C
71: QINGDAO UNIVERSITY OF TECHNOLOGY, INNER MONGOLIA UNIVERSITY FOR NATIONALITIES, IK GUJRAL PUNJAB TECHNICAL UNIVERSITY
72: XU, Wenhao, HOU, Yali, ZHAO, Huayang, SHARMA, Shubham
54: A SELF-ARRANGING KNIFE CUTTING DEVICE AND WORKING METHOD FOR ROOT CROPS
00: -
The present invention relates to a self-arranging knife cutting device and working method for root crops, comprising: cutting mechanism: it includes a plurality of blades that can be combined into different types of cutting knives, the blades are connected with a power mechanism, the power mechanism can drive the blade to cut crops, a plurality of power mechanisms are installed on a rotating part rotatably connected with a support, and the rotating part is connected with a rotating mechanism; bearing mechanism: it is used to place crops, and the bearing mechanism is connected with a station switching mechanism, the cutting device of the invention has high cutting efficiency.



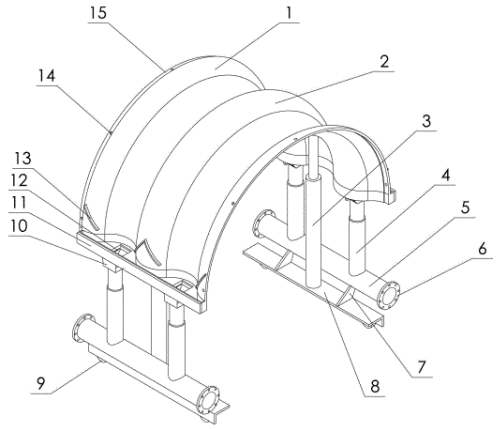
21: 2022/01316. 22: 2022-01-27. 43: 2022-03-07
51: A01K

71: QINGDAO UNIVERSITY OF TECHNOLOGY, HANERGY (QINGDAO) LUBRICATION TECHNOLOGY CO., LTD.
72: XU, Shuaiqiang, HOU, Yali, ZHOU, Zongming
54: A MULTI-STAGE SCREENING LIMIT FEEDING DEVICE AND METHOD
00: -
The present invention discloses a multi-stage screening limit feeding device and method, the technical solution of which includes: a limiting track, a load-bearing disk, a driving device and a limit mechanism, wherein the load-bearing disk is installed below the first end of the limiting track, and the load-bearing disk can rotate relative to the limiting track under the action of the driving device; the limiting track includes a multi-layer sorting track and forms a sorting slot; the limit mechanism is fixed on the side of the limiting track. The present invention can screen out different quality grades of materials, and can realize the orderly transportation of materials.



21: 2022/01319. 22: 2022-01-27. 43: 2022-03-01
51: C07D
71: JIANGSU TETRA NEW MATERIAL TECHNOLOGY CO., LTD
72: HAN, JianWei, CHANG, YangJun, YANG, Sheng, JIA, Quan, CAO, XiangMing
33: CN 31: 201910564540.5 32: 2019-06-27
54: SAFE, ENVIRONMENTALLY FRIENDLY AND CONTROLLABLE PROCESS FOR SYNTHESIZING DIEPOXIDE
00: -
The present invention relates to the field of epoxide synthesis. More specifically, the present invention relates to a safe, environmentally friendly and controllable process for synthesizing a diepoxides. The process for synthesizing the diepoxide at least comprising: mixing a diolefin compound, a carboxylic acid substance, a basic salt, and a solvent, and cooling same; dropwise adding a hydrogen peroxide solution to same over a period of 1-12 h; standing and layering to obtain an underlayer of an organic phase-1, and washing the organic phase-1 with a cleaning solution, and standing and layering to obtain an underlayer of an organic phase-2; and then purifying same. The reaction system of the present invention is simple, environmentally friendly, safe and controllable, and low in production cost, and also can meet technical and economic requirements.

21: 2022/01323. 22: 2022-01-27. 43: 2022-03-01
51: B01D; E21D; E21F
71: SHANDONG UNIVERSITY OF SCIENCE AND TECHNOLOGY
72: JIANG, Donghai, WANG, Tongxu, LUAN, Hengjie
33: CN 31: 201911352257.2 32: 2019-12-25
54: WATERPROOF METHOD AND WATERPROOF FLOW GUIDE DEVICE FOR COAL MINE ROOF
00: -
Disclosed are a waterproof flow guide device which can better guide flow by means of a wave-shaped flow guide plate (1) and is provided with a blocking net structure to prevent a flow guide drainage pipeline from being blocked, and a waterproof method using the waterproof flow guide device. The method comprise the following steps: pushing a corresponding number of waterproof flow guide devices to below a roof required to be waterproof according to the required waterproof length, and assembling the waterproof flow guide devices into a whole; then adjusting the height of the waterproof flow guide device to be slightly lower than the roof to complete erection of a waterproof structure; and enabling water seeping through the roof to be collected into a drainage pipe (5) by means of the waterproof flow guide devices and drained in a centralized manner.

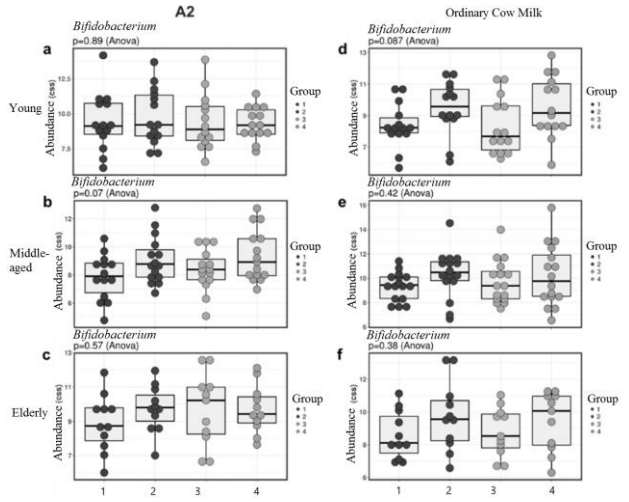


21: 2022/01337. 22: 2022-01-27. 43: 2022-03-07
51: A23C; A61K; A61P
71: BEIJING SANYUAN FOODS CO., LTD.
72: CHEN, Lijun, LIU, Bin, ZHAO, Jun Ying, JIANG, Tiemin, ZHOU, Weiming, LI, Jiantao, LIU, Yanpin, QIAO, Weicang

54: APPLICATION OF B-CASEIN A2 AND COMPOSITION THEREOF IN PROMOTING PROLIFERATION OF BIFIDOBACTERIUM

00: -

The present invention provides use of beta-casein A2 or a composition comprising the same for promoting the proliferation of Bifidobacterium. Compared with ordinary cow milk, the cow milk containing beta-casein A2 can significantly reduce the occurrence of bloating and borborygmus, increase the frequency of defecation, and change the stool characteristics. In addition, the cow milk containing beta-casein A2 can significantly increase the relative abundance of Bifidobacterium in gut microbiota.

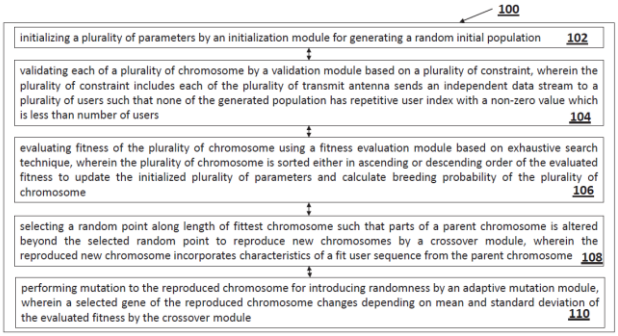


21: 2022/01522. 22: 2022-02-03. 43: 2022-03-07
51: H04B
71: PATTANAYAK, Prabina
72: PATTANAYAK, Prabina, KUMAR, Preetam

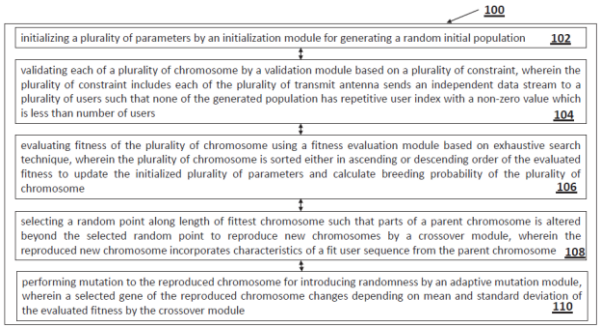
54: A METHOD OF MODIFIED GENETIC OPTIMIZATION TECHNIQUE FOR MIMO BROADCAST SCHEDULING.

00: -

A method of modified genetic optimization technique for multiple input multiple output (MIMO) broadcast scheduling, wherein the method comprises of: initializing a plurality of parameters for generating a random initial population; validating each of a plurality of chromosome such that none of the generated population has repetitive user index with a non-zero value which is less than number of users; evaluating fitness of the plurality of chromosome based on exhaustive search technique to update the initialized plurality of parameters and calculate breeding probability of the plurality of chromosome; selecting a random point along length of fittest chromosome such that parts of a parent chromosome is altered beyond the selected random point to reproduce new chromosomes by a crossover module; and performing mutation to the reproduced chromosome for introducing randomness, wherein a selected gene of the reproduced chromosome changes depending on mean and standard deviation of the evaluated fitness.



21: 2022/01524. 22: 2022-02-03. 43: 2022-03-09
51: H04W
71: PATTANAYAK, Prabina
72: PATTANAYAK, Prabina, KUMAR, Preetam
54: A METHOD OF MULTI-BIT QUANTIZED FEEDBACK MIMO SCHEDULING FOR HETEROGENEOUS BROADCAST NETWORK.
00: -
A method of optimized multi-bit quantized feedback scheduling, comprises of:initializing a plurality of parameters by an at each of a plurality of user terminal for processing signal;quantizing SINR value of the each of a plurality of user terminal by a quantizer, wherein a maximum SINR value corresponding to a transmit antenna is evaluated;computing a b-bit quantized value of the SINR, wherein the computed SINR value is transmitted to a base station restricting transmission of transmitter antenna index for reducing feedback load;receiving the transmitted SINR value by a kth user from the transmitter antenna index; and performing user scheduling for the transmitter antenna at the base station upon completion of receiving the transmitted SNIR value as feedback, wherein maximum decimal value of the quantized SINR feedback of a grouped users is selected, wherein one user from the grouped user is selected randomly with highest decimal value.



21: 2022/01615. 22: 2022-02-07. 43: 2022-02-24
51: C22B
71: SIBANYE GOLD LIMITED t/a SIBANYE-STILLWATER
72: JUBILEUS, Julius
33: ZA 31: 2021/00800 32: 2021-02-05
54: PLANT LAYOUT AND PROCESS FOR EXTRACTING FINE CHROME
00: -
According to one aspect of the invention, there is provided a plant layout for extracting fine chrome from a PGM tails stream, typically after the PGM tails stream has undergone a desliming process to yield a fine fraction mineral slurry. The plant layout comprises a first spiral concentrator arrangement to receive the fine fraction mineral slurry as an input and to output an intermediate grade chrome concentrate*, a first intermediate middling concentrate and first tailings, the latter two components defining a flotation feed. A flotation stage is provided for receiving the flotation feed and floating and extracting chrome concentrate from the flotation feed. A second spiral concentrator arrangement receive the intermediate grade chrome concentrate from the first spiral arrangement as an input and to output a first final grade chrome concentrate for subsequent storage in a final grade concentrate sump, a second intermediate middling concentrate and second tailings.

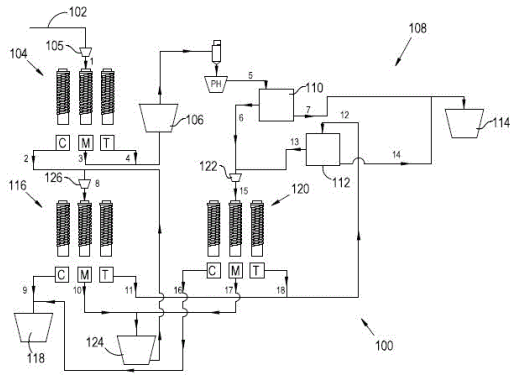


Fig. 2

21: 2022/01806. 22: 2022-02-11. 43: 2022-03-09
51: A61K
71: INSTITUTE OF ANIMAL HUSBANDRY, HEILONGJIANG ACADEMY OF AGRICULTURAL SCIENCES, HUNAN NORMAL UNIVERSITY
72: CHEN, Heshu, HE, Liuqin, HE, Xinmiao, FENG, Yanzhong, LIU, Di, WANG, Wentao, ZHANG,

Haifeng, TIAN, Ming, LIU, Ziguang, HE, Haijuan, QI, Meiyu, WU, Saihui, YU, Xiaolong

54: FEED ADDITIVE FOR PREVENTING AND TREATING GASTRITIS OF NORTHEAST MIN PIGS AS WELL AS PREPARATION METHOD AND APPLICATION THEREOF

00: -

The present invention discloses a feed additive for preventing and treating gastritis of northeast Min pigs as well as a preparation method and an application thereof, and belongs to the field of preparation of pig feed additives. The present invention first discloses the feed additive for preventing and treating gastritis of the northeast Min pigs. The feed additive includes the following components: Clematis chinensis Osbeck, Dendrobium, Portulaca oleracea L and an EM bacterial solution. In the present invention, Viola philippica and malt are added on the basis of the above components, so that an effective rate on the gastritis of the Min pigs can be significantly increased; and the effective rate is up to 98%. Moreover, an incidence rate of the gastritis of the pigs can be decreased; and a protection rate can be up to 100%.

21: 2022/01808. 22: 2022-02-11. 43: 2022-03-09
51: C08J
71: YELLOW SEA FISHERIES RESEARCH INSTITUTE, CHINESE ACADEMY OF FISHERY SCIENCES, LANKUN MARINE BIOTECHNOLOGY (YANTAI) CO., LTD.
72: ZHAO, Ling, LIU, Qi, CAO, Rong, SUN, Huihui, YU, Yanfei, LI, Ya

54: PREPARATION METHOD AND APPLICATION OF COLLAGEN PEPTIDE CHELATED FERROUS HYDROGEL

00: -

The present invention provides the preparation method and application of collagen peptide chelated ferrous hydrogel, which is incorporated in the field of marine biological products. In the said method, the collagen peptide chelated ferrous hydrogel is prepared first. Then, carboxymethyl chitosan/polyvinyl alcohol hydrogel is prepared with glutaraldehyde as crosslinking agent. Collagen peptide chelated ferrous iron is mixed with hydrogel to obtain the collagen peptide chelated ferrous hydrogel. The hydrogel prepared by the method of the present invention hardly swells when passing through the oral cavity and the stomach, and it only targets to release the collagen peptide chelated ferrous iron at the proximal end of the small intestine. Its characteristics of highly stable and easy absorption by the epithelial cells of the small intestine can enhance the bioavailability of iron.

21: 2022/01809. 22: 2022-02-11. 43: 2022-03-09
51: B01D
71: Quzhou Ke'er Gaiye Technology Co., Ltd.
72: SHAO, Yating, LIU, Jingen

54: COMPOUND DESULFURIZER, PREPARATION METHOD AND APPLICATION THEREOF

00: -

The disclosure provides a compound desulfurizer, comprising the following raw materials according to parts by weight: 10-30 parts of lime, 50-80 parts of limestone and 3-10 parts of metal curing agent; the particle size of the compound desulfurizer is less than or equal to 10 meshes; the metal curing agent comprises the following raw materials according to mass percent: 70% of fine iron powder, 25% of calcium hydroxide and 5% of pyrite cinder.

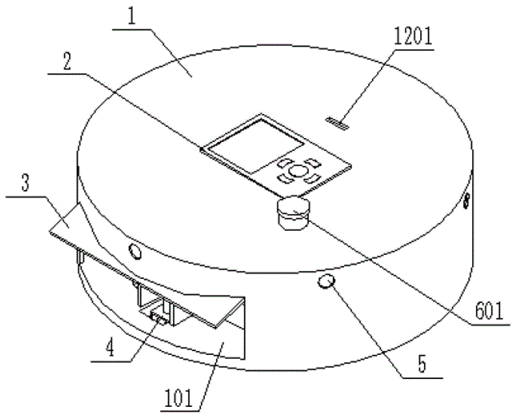
21: 2022/01810. 22: 2022-02-11. 43: 2022-03-09
51: A47L
71: ANHUI UNIVERSITY OF SCIENCE AND TECHNOLOGY
72: TIAN, Xing, ZHU, Lewen, WU, Yanyong

54: SMART SWEEPING ROBOT AND SWEEPING EXECUTION CONTROL METHOD THEREOF

00: -

The present disclosure discloses a smart sweeping robot and a sweeping execution control method thereof. A housing is included; a controller is embedded in a surface of the housing, and distance measuring sensors are embedded uniformly in an outer circular surface of the housing; a detection port is arranged outside the housing in a penetrating mode; an inclined baffle is arranged on an inner top surface of the detection port; a laser generator and a camera are arranged on an inner top surface of the inclined baffle; a steering wheel assembly and two driving wheel assemblies are arranged at an inner bottom of the housing; and a steam generator, a sweeping assembly and a dust collection assembly are arranged inside the housing. The smart sweeping robot and the sweeping execution control

method thereof have the beneficial effects that steam is generated through the steam generator to be sprayed to the ground as a whole to achieve a sterilization effect, at the same time, dust adhering to the ground can be softened to facilitate sweeping and achieve diversified sweeping, and a sweeping effect is good; it can detect the dust amount and adjust a walking speed, a spraying speed, a sweeping speed and a dust collection speed according to the dust amount to ensure the sweeping effect and achieve an energy-saving effect at the same time.



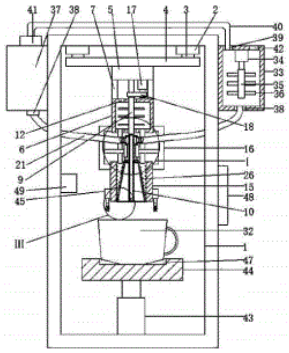
21: 2022/01811. 22: 2022-02-11. 43: 2022-03-09
51: C12N
71: Vegetable Research Institute, Guangdong Academy of Agricultural Sciences
72: Du Hu, Yin Yan, Wu Tingquan, Wang Rui, He Tingting, Yao Chunpeng
54: MULTI-GENE VECTOR SYSTEM AND ITS APPLICATION
00: -
The invention belongs to the field of molecular biology and discloses a multi-gene vector system and its application. The multi-gene vector system comprises an acceptor vector p32RR, a linker donor vector pP1Dor and a gene donor vector pGedor. BP or LR clonase recombinase is used to catalyze the gene donor vector and the acceptor vector to have a gene recombination exchange reaction. After exchanging the target gene to the acceptor vector; then, the linker donor vector and the recipient vector containing the target gene are enzymatically cleaved and ligated by restriction endonuclease and ligase, and the ligated recipient vector containing the target gene forms a pair linker which is recognized by BP or LR clonase recombinase, at this time, the recipient vector containing the target gene and the gene donor vector undergo a second round of recombination exchange reaction. According to the above steps, any number of target genes can be serially connected to the receiving vector.

21: 2022/01812. 22: 2022-02-11. 43: 2022-03-09
51: C02F
71: Tibet University
72: Bu Duo, Wang Jinhu, Wei Yanli, Li Jing, Chen Junyu, Liu Jun
54: APPLICATION OF PLATEAU GREEN ALGAE IN SEWAGE TREATMENT
00: -
The invention discloses an application of plateau green algae in sewage treatment, which belongs to the technical field of sewage treatment; when the plateau green algae is added into the sewage to be treated for sewage treatment for the first time, the specific treatment conditions include: the treatment temperature is 20-25 degree Celsius, the illumination intensity is 3,000-8,000 Lx, and the pH of the reaction system is 7.0-7.5. It effectively solves the problems of low sewage treatment efficiency, high cost, high energy consumption, easy secondary pollution and the like in the existing traditional sewage treatment technology.

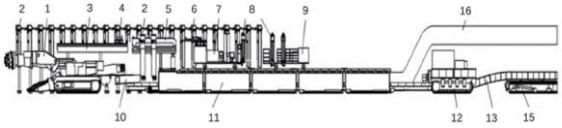
21: 2022/01813. 22: 2022-02-11. 43: 2022-03-09
51: B60N; F16F
71: Baicheng Normal University
72: Yu Xiuhua, Shan Yuhao, Zhang Chongji, Zhang Ying, Liu Jie, Yu Shuai, Bai Guang
54: SHOCK-ABSORBING SEAT WITH TEMPERATURE CONTROL AND VENTILATION FOR AUTOMOBILES
00: -
The invention discloses a shock-absorbing seat with temperature control and ventilation for automobiles, which comprises a backrest, a cushion and a connecting frame, wherein the cushion is fixedly installed at the top of the connecting frame, shock-absorbing blocks are fixedly installed at two sides inside the cushion, a spring is fixedly installed inside the cushion at the top of the shock absorption block, a ventilation fan is fixedly installed between the ventilation pads, a backrest is movably installed at the top of the connecting frame at the other end of the cushion, a heating plate is fixedly installed

between soft cotton in the backrest, a heat dissipation fan is fixedly installed in the backrest between ventilation layers, and cushions are movably installed between the connecting plates on both sides of the motor, and a temperature sensor is fixedly installed inside the box on one side of the controller. According to the invention, a series of structures are arranged, so that the comfort of users sitting on the device can be increased in the use process, heating and cooling can be carried out according to temperature requirements, and the comfort of users sitting on the device for a long time can be increased.

21: 2022/01815. 22: 2022-02-11. 43: 2022-03-09
51: A47J
71: Tangshan University
72: LIAN, Wenli
54: AUTOMATICALLY-CONTROLLED BEVERAGE BLENDING APPARATUS
00: -
Disclosed is an automatically-controlled beverage blending apparatus. The automatically-controlled beverage blending apparatus includes a housing, where a panel display computer is fixedly mounted in the housing, a controller is fixedly mounted in the housing, and first electric sliding rails are fixedly mounted on the housing. The present invention preliminarily chops coffee beans by means of a cutting blade, feeds chopped coffee beans into a space between a sleeve and a circular-truncated-cone-shaped cylinder, and smashes the coffee beans step by step by means of cooperation of first grinding teeth and second grinding teeth in a falling process of the coffee beans from top to bottom, thereby fully smashing the coffee beans and making sizes of particles of the smashed coffee beans more even. Further, the particles of the coffee beans falling into a cup body can be gradually enlarged by controlling descent of the circular-truncated-cone-shaped cylinder.



21: 2022/01816. 22: 2022-02-11. 43: 2022-03-09
51: B01D
71: Shandong Dong'anyun Mining Technology Co., Ltd.
72: CHENG, Yunhai, HAN, Chengjian
54: SHIELD-TYPE RAPID TUNNELING SYSTEM AND DEVICE
00: -
Provided are a shield-type rapid tunneling system and device. The shield-type rapid tunneling system and device mainly include a temporary support, a boring machine, a telescopic belt, a spare rack warehouse, a transporting machine, an anchor rod drill carriage, an anchor cable drill carriage, a comprehensive cart, a conveyor, a self-moving machine tail, a fresh air duct, etc., all of which are arranged from inside to outside of a roadway or arranged in the roadway according to respective functions. The temporary support is reusable. An fresh air duct is suspended at a top of the roadway and downwards connected to an air channel of the transporting machine, so air is supplied to a front end of the boring machine, then filtered through a dust removal air duct, connected to an air channel on the other side of the transporting machine, and discharged from a tail of the transporting machine.



21: 2022/01817. 22: 2022-02-11. 43: 2022-03-09
51: C08G; C09K
71: Northeast Petroleum University
72: LIU, Yang, WEI, Lixin, SONG, Yang, LU, Mengzhen, JIA, Xinlei, ZHAO, Jian, CHEN, Shuangqing, DONG, Hang, ZHANG, Zhijuan, ZHANG, Yu, JI, Lili

54: METHOD FOR PREPARING DEMULSIFIER SUITABLE FOR TERNARY COMPOUND FLOODING CRUDE OIL

00: -

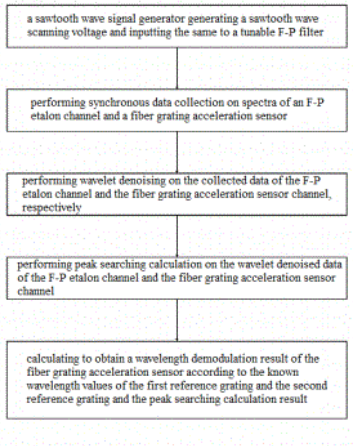
Provided is a method for preparing a novel demulsifier suitable for ternary compound flooding crude oil, the method including: (1) using potassium hydroxide as a catalyst, putting quantitative perfluorobutanamide into a high-pressure reaction kettle, sealing the high-pressure reaction kettle, vacuumizing the high-pressure reaction kettle with a vacuum pump, and slowly introducing ethylene oxide into the high-pressure reaction kettle, to react to generate an intermediate product; and (2) using potassium hydroxide as a catalyst, putting the intermediate product into a trisection flask, heating the oil bath, slowly adding benzyl chloride into the trisection flask, and modifying the intermediate product to generate the novel demulsifier . The present invention features the beneficial effects of a simple apparatus, easy operation, a high dehydration rate, a desirable demulsification effect, a high demulsification rate, a low dosage, a low treatment cost, a desirable water solubility and a capability to improve crude oil production efficiency.

21: 2022/01818. 22: 2022-02-11. 43: 2022-03-09
51: G01P
71: Central South University
72: XU, Xuemei, WEN, Jun, WANG, Jinhui, SUN, Kehui, DING, Jiafeng, YIN, Jianjin, DING, Yipeng, YIN, Linzi

54: WAVELENGTH DEMODULATION SYSTEM OF FIBER GRATING ACCELERATION SENSOR AND WAVELENGTH DEMODULATION METHOD

00: -

The present invention discloses a wavelength demodulation system of a fiber grating acceleration sensor, light of a bandwidth light source enters a tunable F-P filter, and a sawtooth wave signal generator generates a sawtooth wave signal and drives the tunable F-P filter; signals outputted from the tunable F-P filter enter the coupler and are divided into two paths, a path of signal enters the first photodetector through the F-P etalon, another path of signal passes through the optical circulator, the first reference grating, the second reference grating and the fiber grating acceleration sensor, and then is reflected circulator to enter the second photodetector. The present invention further discloses a wavelength demodulation method of the wavelength demodulation system, including inputting a sawtooth wave to the tunable F-P filter; performing collection, wavelet denoising, peak searching calculation and wavelength demodulation on spectra of the F-P etalon channel and the fiber grating acceleration sensor.



21: 2022/01819. 22: 2022-02-11. 43: 2022-03-09
51: G01N
71: INSTITUTE OF TOBACCO RESEARCH OF CAAS (QINGZHOU TOBACCO RESEARCH INSTITUTE OF CHINA NATIONAL TOBACCO COMPANY)
72: WANG, Xiaoqiang, YUAN, Yuan, WANG, Fenglong, REN, Guangwei, WANG, Dongkun, LI, Yichi, WANG, Wenjing
33: CN 31: 202110407113.3 32: 2021-04-15

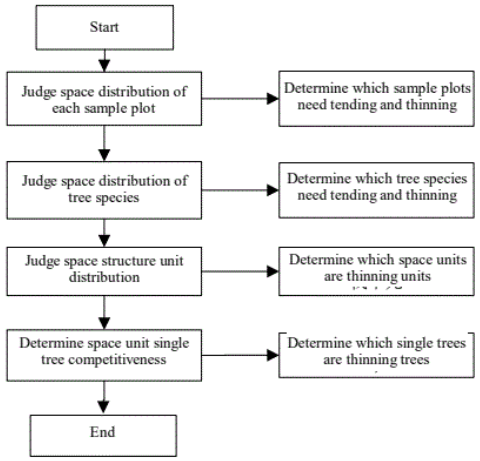
54: RAPID IMMUNOASSAY TEST STRIP FOR RALSTONIA SOLANACEARUM AND PREPARATION METHOD AND APPLICATION THEREOF

00: -

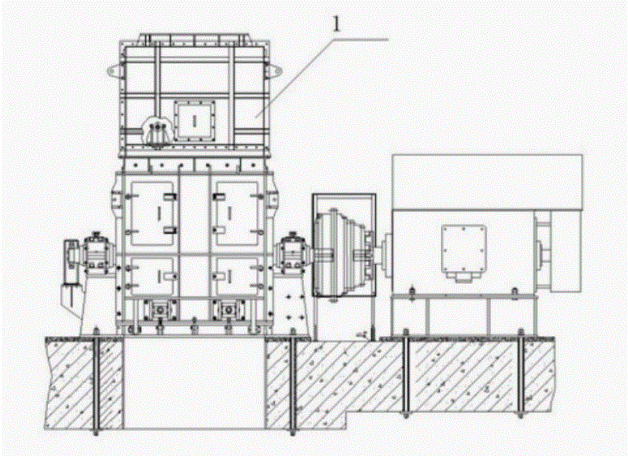
The present invention provides a rapid immunoassay test strip for Ralstonia solanacearum and a preparation method and application thereof, belonging to the technical field of biological detection. The test strip contains an anti-Ralstonia solanacearum monoclonal antibody, wherein a heavy chain variable region of the anti-Ralstonia solanacearum monoclonal antibody contains an amino acid sequence shown in SEQ ID NO. 1, and a light chain variable region thereof contains an amino acid sequence shown in SEQ ID NO. 2. By improving and optimizing the existing colloidal gold test strips for detecting Ralstonia solanacearum, the present invention successfully prepares a rapid

immunoassay test strip for Ralstonia solanacearum with the advantages of strong specificity, high sensitivity, simple operation, rapid response, etc., which has good practical application value accordingly.

21: 2022/01820. 22: 2022-02-11. 43: 2022-03-09
51: G06K
71: Institute of Forest Resource Information Techniques CAF
72: PANG, Lifeng, ZHANG, Laomo
54: TARGET TREE MANAGEMENT THINNING TREE INTELLIGENT SELECTION ALGORITHM
00: -
A target tree management thinning tree intelligent selection algorithm, specifically comprises: I, judging space distribution of each sample plot, and determining sample plots needed tendering and thinning; II, judging space distribution of tree species, and determining tree species needed tending; III, judging space structure units, and determining thinning units; and IV, analyzing single tree competitiveness of the space units, and determining thinning trees. A space structure of each tree is quantized by adopting space structure parameters. On this basis, a neighborhood pattern is used as a main index for thinning tree selection, flows and algorithms of sample plot thinning selection, tree species thinning selection, space structure unit thinning selection and single tree thinning selection are designed. The thinning trees are selected on the basis of the neighborhood pattern, thinning tree selection is performed through three different competition factors respectively, and selection results of the thinning trees are compared and analyzed.

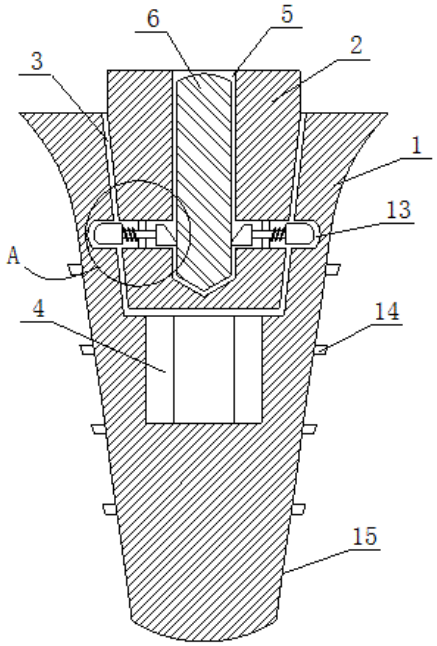


21: 2022/01821. 22: 2022-02-11. 43: 2022-03-09
51: B02C
71: SHANDONG SHANKUANG MACHINERY CO., LTD.
72: SUN, Shanjin, ZHENG, Zhaozong, SUN, Hua, QIU, Leiming, ZHANG, Ying, YU, Mingqiao
54: NOVEL REVERSIBLE HAMMER CRUSHER WITH UNPOWERED DISTRIBUTOR
00: -
Disclosed is a novel reversible hammer crusher with an unpowered distributor, including an unpowered distributor, wherein a feed inlet is arranged in a middle of a top surface of the unpowered distributor, fixed distributing plates are arranged at a bottom of the feed inlet inside the unpowered distributor, a movable distributing plate is arranged at a bottom of the fixed distribution plate inside the unpowered distributor, and a coal crusher is arranged at a bottom of the unpowered distributor. The device is small in occupied space and suitable for many situations that space is insufficient. The production requirement can be met as the product can be installed and used under many situations that space is insufficient. Meanwhile, the product is quite suitable for the market requirement and features low cost and easy installation, thereby greatly improving the market competitiveness of the product.



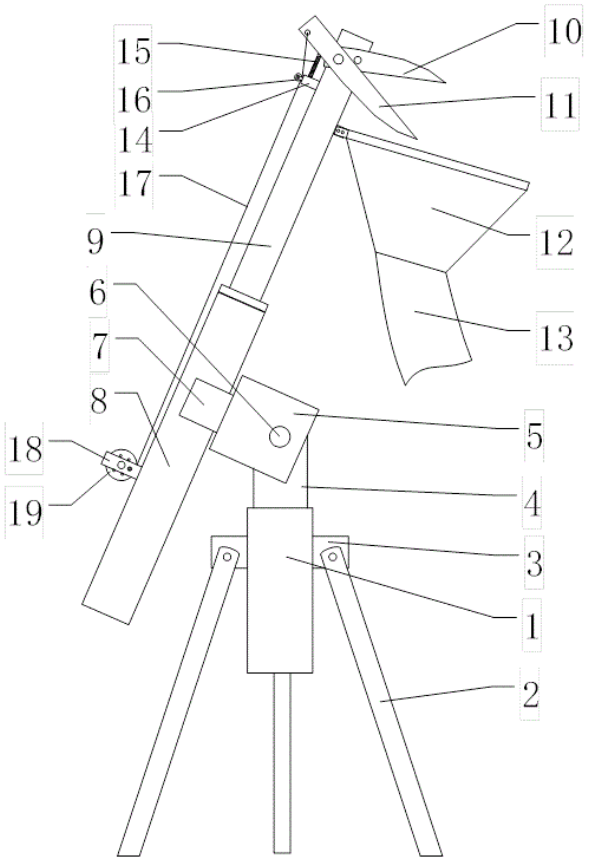
21: 2022/01822. 22: 2022-02-11. 43: 2022-03-09
51: A23L
71: Shandong Sunflower Bioengineering Co., Ltd
72: MA, Minglei, XIA, Yue, HAN, Wenli, ZHANG, Huanhuan, LIU, Yongqing, LI, Haijian, YANG, Xiaoning
33: CN 31: 202111090104.2 32: 2021-09-17
54: PLANT BEVERAGE FERMENTED BY LACTOBACILLUS PLANTARUM SF-L-28 FOR PROTECTING LIVER AND REDUCING LIPID AND PREPARATION PROCESS THEREOF
00: -
The present disclosure relates to a plant beverage fermented by Lactobacillus plantarum SF-L-28 for protecting liver and reducing lipid and a preparation process thereof, where raw materials of the plant beverage fermented by Lactobacillus plantarum SF-L-28 include a fermented substrate and a seasoning; the fermented substrate includes the following components: purified water, a Poria extract, a rose flower extract, a hawthorn extract, a lily extract, an orange peel extract, a gardenia extract, a chrysanthemum extract, a cassia seed extract, a kudzuvine root extract, a red date powder, a coix seed powder, a black fungus powder, a yam powder and a yeast powder; the seasoning includes the following components: a honey, a carrot juice concentrate, a peach juice concentrate and a pineapple juice concentrate; the fermented substrate is fermented by Lactobacillus plantarum SF-L-28 and mixed with the seasoning to prepare the plant beverage fermented by the Lactobacillus plantarum SF-L-28.

21: 2022/01823. 22: 2022-02-11. 43: 2022-03-09
51: A61C
71: CHEN, Yang
72: CHEN, Yang
54: DENTAL IMPLANT
00: -
A dental implant, including an implant and an abutment, wherein an implantation hole for implanting the abutment is provided inside the implant, including a tapered hole opened downwards from a top end of an inclined shoulder and an internal hexagonal hole with an internal hexagonal cross section at a bottom of the tapered hole, and having a plug-in structure without a threaded connection between the abutment and the implant; the internal hexagonal hole facilitates placing an implant carrier and an implantation tool, so that the implant can be screwed, instead of being knocked, into the jawbone. A cylindrical hole is provided in the abutment, an engaging block movably connected to a spring via a piston rod are provided therein, an engaging notch is provided at a corresponding position on the implant, and the abutment and the tapered hole are connected tighter by fitting the engaging block with the engaging notch.



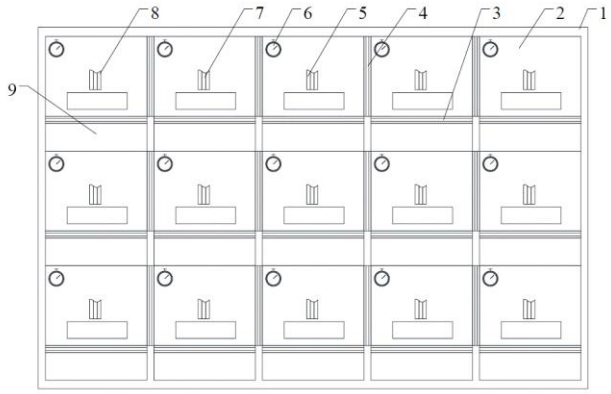
21: 2022/01825. 22: 2022-02-11. 43: 2022-03-09
51: G01D
71: Gansu Province Academy of Qilian Water Resource Conservation Forests Research Institute
72: Wang Yilin, Zhao Yuhong, Li Xiaoyan, Miao Yuxin, Jia Xin, Zhang Juan

33: CN 31: 202111578672.7 32: 2021-12-22
54: HIGH-EFFICIENCY XANTHOCERAS SORBIFOLIA PICKING DEVICE
00: -
The invention discloses a high-efficiency xanthoceras sorbifolia picking device, which belongs to the field of picking device technique. High-efficiency xanthoceras sorbifolia picking device includes a picking rod and a support frame, with the picking rod set on the support frame and rotatable; the said picking rod includes a telescopic rod, whose top is fixedly arranged with fixed shear and rotatable movable shear matching with the fixed shear, and a reset structure capable of resetting the movable shear is arranged on the telescopic rod; one end of the movable shear is provided with a pull rope by which the movable shear is pulled to rotate, and a coiling drum for collecting the pull rope is arranged on the telescopic rod; the telescopic rod is provided with a collecting hopper which is located directly below the fixed shear and movable shear and below which a collecting pipe is arranged. The invention adopts the high-efficiency xanthoceras sorbifolia picking device of the above structure, which can solve the problems of the existing picking tools such as large labor intensity and low efficiency, with the advantages of simple structure and easy to use.



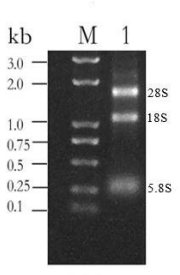
21: 2022/01826. 22: 2022-02-11. 43: 2022-03-09
51: G01D
71: Gansu Province Academy of Qilian Water Resource Conservation Forests Research Institute
72: Lv Dong, Zhang Hongbin, Yang Xiaohu, Zhao Hu, Zhao Xingpeng, Zhao Ming, Yuan Hao, Hou Yumei, Wang Guangyu, Chen Min
33: CN 31: 202111528768.2 32: 2021-12-14
54: MEGASTIGMUS SABINAE XU ET HE BEHAVIOR OBSERVATION DEVICE
00: -
The invention discloses a Megastigmus sabinae Xu et He behavior observation device, including a transparent observation box with its inside divided by diaphragms into a plurality of observation chambers arranged in a matrix. A circulation expansion opening is arranged on the said diaphragm between two adjacent observation chambers, and a lateral pull-out door is detachably arranged on the said transparent observation box at the position corresponding to the said circulation expansion opening; the said observation chambers include behavior observation chambers for observing the adult oviposition behavior and life observation chambers for observing the impact of mixed feeding

of male and female adults, separate feeding of male and female adults, and food on life. This invention adopts the Megastigmus sabinae Xu et He behavior observation device of the above structure, which can simultaneously observe a series of behaviors of the adult Megastigmus sabinae Xu et He after eclosion, improving the experimental effect and efficiency, and making the experimental results more intuitive and accurate.



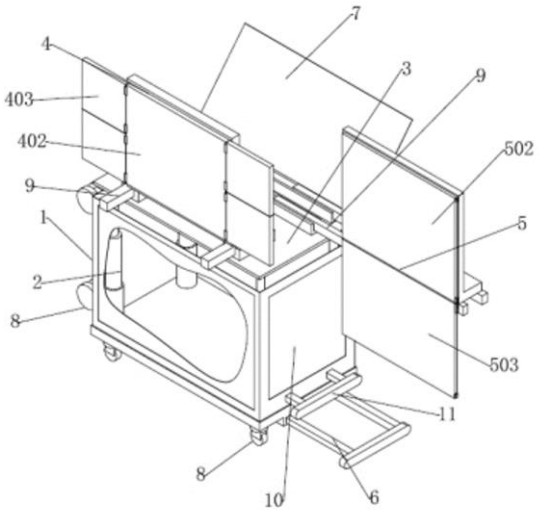
21: 2022/01840. 22: 2022-02-11. 43: 2022-03-07
51: A23K
71: Anhui Zhengdayuan Feed Group Co., Ltd
72: PENG, Cheng, MENG, Linglin, ZHU, Huarong
33: CN 31: 202010679578.X 32: 2020-07-15
54: SUCKING PIG FEED PREPARED BY MICROBIAL FERMENTATION AND PREPARATION METHOD THEREFOR
00: -
A sucking pig feed prepared by microbial fermentation and a preparation method therefor. The sucking pig feed comprises the following raw materials in parts by weight: 20 to 30 parts of bean pulp, 10 to 20 parts of soybean, 30 to 50 parts of corn grains, 15 to 20 parts of chicken meat, 20 to 25 parts of fish meal, 15 to 20 parts of nuts, 10 to 15 parts of vegetables and fruits, 20 to 30 parts of distiller's grains, 15 to 20 parts of wheat hulls, 2 to 4 parts of calcium hydrogen phosphate and 10 to 15 parts of a bacteria solution. The preparation method comprises: 1) respectively pulverizing the bean pulp, soybean, corn grains, chicken meat, fish meal, nuts, vegetables and fruits, and mixing same to perform probiotic fermentation; 2) respectively pulverizing the distiller's grains and wheat hulls, and mixing same to carry out fiber decomposition and fermentation; and 3) mixing the bacteria solutions in step 1) and step 2), adding calcium hydrogen phosphate and dissolving same, and performing drying and granulation, so as to prepare the feed.

21: 2022/01875. 22: 2022-02-14. 43: 2022-02-24
51: A01K; C12N
71: SHANGHAI OCEAN UNIVERSITY
72: FU, Yuanshuai, MA, Keyi, LIU, Xue
33: CN 31: 202111333421.2 32: 2021-11-11
54: SHORT-CHAIN RIBONUCLEIC ACID INTERFERING WITH EXPRESSION OF IAG GENE OF MACROBRACHIUM ROSENBERGII AND USE THEREOF
00: -
A short-chain ribonucleic acid which interferes with the expression of the IAG gene of Macrobrachium rosenbergii as well as use thereof is disclosed. The short-chain ribonucleic acid has the targeting to the 3'-UTR region of the IAG gene of Macrobrachium rosenbergii, and can specifically bind to the mRNA transcribed by the IAG gene to inhibit the expression of the IAG gene. The short-chain ribonucleic acid can interfere with the IAG gene of male Macrobrachium rosenbergii in the critical period of its sex differentiation by being introduced into the androgenic gland or organ of male Macrobrachium rosenbergii or other ways, to realize a sex reversal of Macrobrachium rosenbergii from males to neo females, which will mate with adult male prawns after sexual maturation and produce offspring all in male, thus realizing all-male culture in production, thereby reducing cost investment and improving economic benefits.

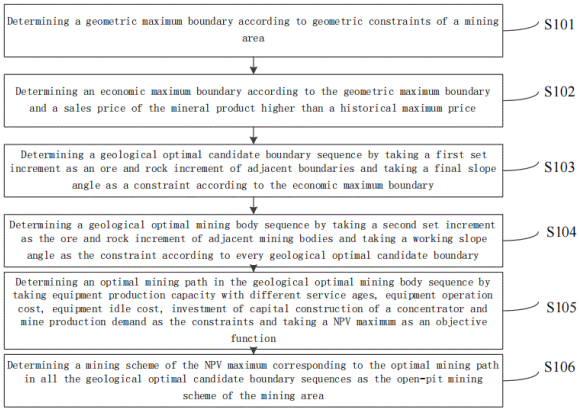


21: 2022/02013. 22: 2022-02-17. 43: 2022-03-09
51: G06F; G09B; G06Q
71: SUZHOU UNIVERSITY
72: Xiaohong Yu, Sufen Huang, Xiaoman Xu, Huanqin Ye, Tiantian Qu
54: MULTIFUNCTIONAL IDEOLOGICAL AND POLITICAL EDUCATION MOBILE PROPAGANDA DEVICE
00: -

The invention relates to the field of propaganda and education devices, in particular to a multifunctional ideological and political education mobile propaganda device, comprising a mobile frame, wherein the inner side of the mobile frame is connected with a lifting platform through electric cylinders; one side of the lifting platform is provided with an LED propaganda screen, and the other side thereof is provided with a propaganda blackboard; the propaganda area of the LED propaganda screen and the propaganda blackboard can be enlarged; the bottom side of the mobile frame is provided with a pulling handle. The invention has a reasonable design structure, is convenient to move, and has a folding function that greatly reduces the occupied space. It has both the LED screen playback function and the propagandist blackboard demonstration function, which enhances interactivity, improves people's reading interest and improves the level of propaganda.



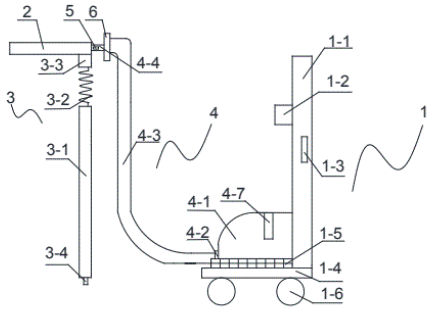
21: 2022/02014. 22: 2022-02-17. 43: 2022-03-09
51: G06F
71: Northeastern University
72: GU, Xiaowei, XU, Xiaochuan, WANG, Qing, WANG, Hao
33: CN 31: 202111513731.2 32: 2021-12-13
54: METHOD AND SYSTEM FOR DETERMINING OPEN-PIT MINING SCHEME IN CONSIDERATION OF EQUIPMENT CONFIGURATION
00: -
The invention relates to a method and system for determining an open-pit mining scheme in consideration of equipment configuration. The method includes determining an economic maximum boundary according to the geometric maximum boundary and a sales price of the mineral product higher than a historical maximum price; determining a geological optimal candidate boundary sequence according to the economic maximum boundary; determining a geological optimal mining body sequence according to every geological optimal candidate boundary; determining an optimal mining path by taking equipment production capacity with different service ages, equipment operation cost, equipment idle cost, investment of capital construction of a concentrator and mine production demand as the constraints and taking a NPV maximum as an objective function; and determining a mining scheme of the NPV maximum corresponding to the optimal mining path in all the geological optimal candidate boundary sequences as the open-pit mining scheme of the mining area.



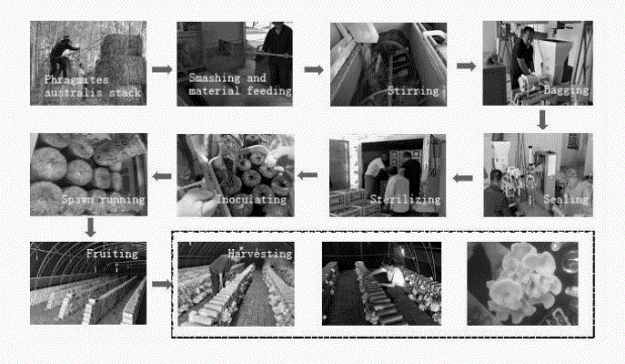
21: 2022/02015. 22: 2022-02-17. 43: 2022-03-09
51: A23L; A61K; C02F; A61P
71: Zhejiang Chiyu Health Technology Co., Ltd.
72: CHEN, Xudong
54: METEORITE ACTIVATED WATER AND PREPARATION METHOD THEREOF
00: -
The present invention discloses a meteorite activated water prepared by raw materials including following parts by weight: 90-110 parts of meteorite particles, 50-70 parts of opal particles, 1.5-1.7 parts of sodium silicate, 1.3-1.6 parts of potassium metasilicate, 0.8-1.1 parts of sodium metasilicate heptahydrate, 1.8-2.3 parts of selenium methionine, and 920-990 parts of carbon dioxide solution. The meteorite activated water of the present invention has various effects, which may not only promote

health care and health preservation for the human body and activate the human body function, but also supplement the potassium and sodium elements required by the human body to improve the human immune function, offer an excellent anti-aging effect, and enable auxiliary therapeutic results on a variety of diseases.

21: 2022/02016. 22: 2022-02-17. 43: 2022-03-09
51: A47B; A47L
71: North China University of Science and Technology
72: LIU, Yang, HE, Shengtao
54: DUST-EXTRACTING SYSTEM FOR LIBRARY BOOKSHELVES
00: -
Disclosed is a dust-extracting system for library bookshelves, including: a dust extraction terminal including a housing with a dust extraction inlet formed on a bottom surface thereof, drums respectively installed at both sides of the dust extraction inlet, and formed with openings on side surface perpendicular to length direction of the drum; a mobile cart including a bottom plate fixed with a square groove and a vertical plate above the bottom plate and vertically fixed with it; a dust cleaner including a dust extraction box in the square groove, an air suction port formed on a side surface of the box and communicated with a dust extraction hose that is communicated with a dust extraction hard hose, and the hard hose is communicated with the opening. The dust-extracting system for library bookshelves can clean spines of books on bookshelves, deeply clean the dust on the bookshelves, which features strong practicability.

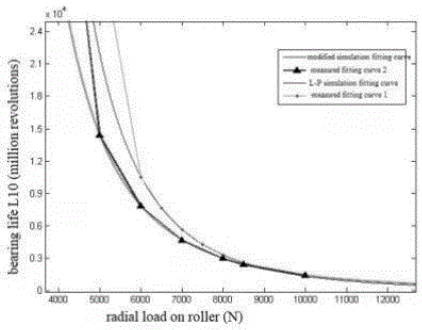


21: 2022/02017. 22: 2022-02-17. 43: 2022-03-09
51: A01G
71: Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences, Jilin Agricultural University
72: LI, Xiaoyu, YAO, Fangjie, LU, Lixin, CHEN, Guoshuang, WEN, Bolong
54: METHOD FOR CULTIVATING PLEUROTUS EDIBLE MUSHROOM WITH MARSH PHRAGMITES AUSTRALIS
00: -
The present invention relates to a method for cultivating Pleurotus edible mushroom by using marsh Phragmites australis, characterized in that P. australis, corncob, bean cake, gypsum and lime are used as raw materials, and a water content of a cultivation material is 60-62%. The content of the present invention also includes a method for manufacturing the cultivation material. The present invention has advantages that by adding 50% of P. australis straw scraps harvested in winter, varieties of ingredients are reduced, the collection of the cultivation material is more simple and easier, and a production cost is reduced; and using natural marsh P. australis as the main material improves food safety to a certain extent, and introducing new economic values for the process of P. australis marsh protection and restoration. Using marsh P. australis as the cultivation material to cultivate the Pleurotus edible mushroom has biological efficiency of 80-120%.

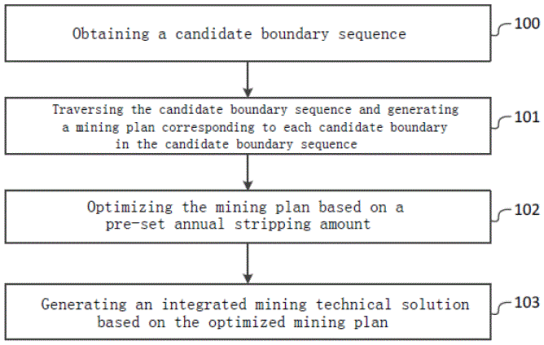


21: 2022/02018. 22: 2022-02-17. 43: 2022-03-09
51: G06F
71: Guangdong University of Petrochemical Technology
72: WANG, Xingang, WANG, Baoyan, LI, Zhihai, PAN, Maosen, GONG, Yongzhen, ZHAO, Fulei, WANG, Jigang
54: FATIGUE LIFE MODEL OF HOIST BEARING BASED ON AXIAL LOAD
00: -

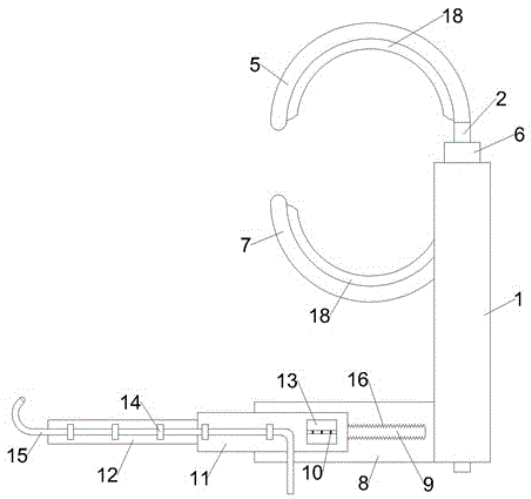
The present disclosure discloses a bearing fatigue life model based on axial load, including the following steps: S1, dividing an inclination offset of rollers in a longitudinal section of a bearing; S2, analyzing the force of the roller only under radial load; S3, analyzing the force of the roller under both radial load and axial load; S4, establishing a fatigue life model of hoist bearing based on roller, and introducing correction factor n , then a formula of the bearing life based on the maximum shear stress is:.L"=n L'



21: 2022/02019. 22: 2022-02-17. 43: 2022-03-09
51: G06F
71: Northeastern University
72: GU, Xiaowei, XU, Xiaochuan, WANG, Qing, WANG, Hao
33: CN 31: 202111513730.8 32: 2021-12-13
54: INTEGRATED OPTIMIZATION METHOD AND SYSTEM FOR METAL OPEN-PIT MINE BOUNDARY AND MINING PLAN
00: -
The present invention relates to an integrated optimization method and system for metal open-pit mine boundary and mining plan. The method includes: obtaining a candidate boundary sequence; traversing the candidate boundary sequence, and generating a geological optimal mining body corresponding to each of the candidate boundaries in the candidate boundary sequence; optimizing the mining plan based on a pre-set annual stripping amount; and generating an integrated mining technical solution based on the optimized mining plan. It can be seen that the present invention can improve the accuracy and rationality of the mining plan by considering the boundary and the mining plan as a whole to optimize the mining plan in the candidate boundary.



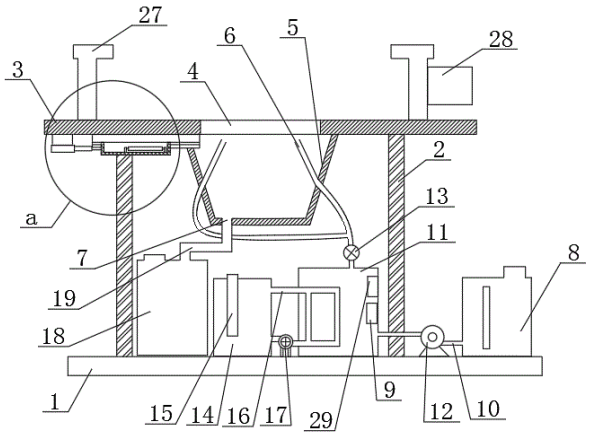
21: 2022/02020. 22: 2022-02-17. 43: 2022-03-09
51: A61J
71: Guang 'an People's Hospital
72: Chen Hua, Yang Rui, Xia Yuqing, Su Qin, Zhou Yumei, Xiong Ming, Yu Zhili, Tao Chan, Li Xiaoyan, Yan Dongmei, Ye Qihui
54: ANTI-DROPPING DEVICE FOR OXYGEN ABSORPTION TUBE
00: -
The invention disclose an anti-dropping device for an oxygen absorption tube, which comprises an installation tube, wherein an adjusting tube is in threaded connection inside that installation tube; a sliding part is slidably connected inside the adjusting tube; the sliding part is slidably connected with the inside of the installation tube; the top end of the sliding part is fixedly connected with an upper clamping part; the upper clamping part is placed in outer side wall of the installation tube, the outer side wall of the installation tube is fixedly connected with a lower clamping part; and the upper clamping part is correspondingly arranged with the lower clamping part, a connecting plate is fixedly connected to the bottom of the outer side wall of the installation tube, an adjusting part is slidably arranged on the connecting plate, an adjusting support plate is sleeved on the adjusting part, one end of the adjusting support plate far away from the adjusting part is fixedly connected with a support strip, a plurality of limit parts are fixedly connected with the support strip and the adjusting support plate at the same side, and an oxygen tube penetrate through the limit parts. The fixation degree of the device on the patient's head during oxygen delivery and the comfort degree of the patient wearing the device are improved.



21: 2022/02021. 22: 2022-02-17. 43: 2022-03-09
51: A61M
71: Guang 'an People's Hospital
72: Chen Hua, Zeng Xin, Dai Zhuling, Li Jianjun, Long Chengchao, Wang Fang, Cai Zhiju, Zhang Yan, Wang Li, Chen Jiao, Jiang Yuanyuan

54: CONSTANT TEMPERATURE AND CONSTANT PRESSURE WASHING NURSING DEVICE FOR UROLOGY

00: -
The invention disclose a constant temperature and constant pressure washing nursing device for urology, which comprises a support component, wherein the support component comprises a bottom plate, two vertical plates are fixedly connected on the bottom plate, the top end of the two vertical plates are fixedly connected with a top plate, and the top plate is provided with a cleaning hole; the cleaning component includes a collecting chamber, which is fixedly connected to the bottom of the top plate, located at the bottom of the cleaning hole, with several spray nozzles in the collecting chamber, several spray nozzles facing the cleaning hole, and a liquid outlet hole on the side wall of the bottom of the collecting chamber; the spray nozzles are communicated with a high-pressure component, which is communicated with a liquid medicine barrel; the high-pressure component is provided with a heating component, a temperature sensor and a pressure sensor, and the high-pressure component is fixedly connected to the bottom plate. The device reduces the user's discomfort, avoids the user's uncomfortable cleaning posture for a long time, and reduces the difference between liquid medicine and body temperature.

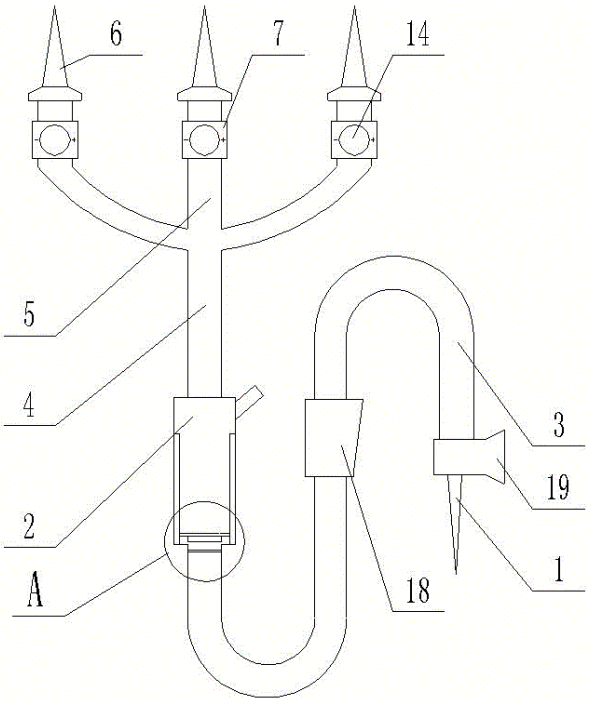


21: 2022/02022. 22: 2022-02-17. 43: 2022-03-09
51: A61M
71: Guang 'an People's Hospital
72: Chen Hua, Du Jianhui, Yang Lin, Chen Jing, Yang Xiaofang, Shu Xiaojuan, Wang Huiling, Su Na, He Chan, Liu Qin, Liu Xiaoyan

54: MULTIFUNCTIONAL INFUSION SET

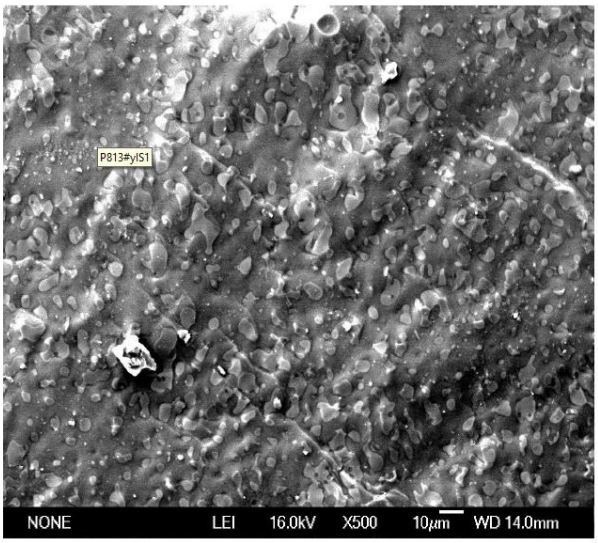
00: -
The invention discloses a multifunctional infusion set, which comprises an intravenous puncture needle and a drip hopper, wherein the intravenous puncture needle and the drip hopper are communicated through a hose; the end of the drip hopper far away from the hose is communicated with a main liquid pipe; the end of the main liquid pipe far away from the drip hopper is communicated with a plurality of liquid inlet pipes; the end of the liquid inlet pipe far away from the main liquid pipe is communicated with a bottle stopper puncture needle; the outer wall of the liquid inlet pipe is sleeved with a flow control component; the flow control component comprises a shell; a screw is movably connected in the shell; and one end of the screw is fixedly connected with a butt joint. The joint is abutted with the liquid inlet pipe, and a sealing assembly is arranged in the drip hopper. The sealing assembly includes a connecting rod which is slidably connected in the drip hopper. The bottom surface of the connecting rod is fixedly connected with a floating block which extends into the hose. The size of the floating block is matched with the size of the inner cavity of the hose. The invention can replace the infusion bottle repeatedly without using the same

stopper puncture needle, and reduce the air flowing into the vein of the human body after infusion.



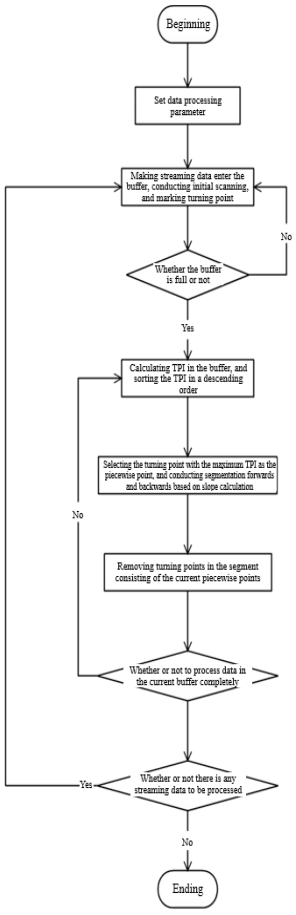
21: 2022/02023. 22: 2022-02-17. 43: 2022-03-09
51: A61K; A61P
71: Maoming People's Hospital
72: LV, Hualiang, HUANG, Jinbo, SONG, Yibo
54: NASAL CAVITY COLD COMPRESS GEL PATCH
00: -
The present disclosure aims to provide a nasal cavity cold compress gel patch, and solves the problem of respiratory distress caused by muscle relaxation during the sleeping process. The nasal cavity cold compress gel patch is composed of a supporting layer, a gel layer and an isolating layer, wherein the gel layer is prepared from the following raw materials in percentage by mass: 30-50% of deionized water, 4-6% of carbomer, 5-9% of polyacrylic resin, 0.1-3% of carboxymethyl cellulose sodium, 0.03-0.6% of polyvinylpyrrolidone, 10-20% of glycerol, 0.1-0.5% of chitosan, 0.1-0.5% of aluminum glycinate, 10-30% of dimethyl sulfoxide, a proper amount of triethanolamine, 3-10% of menthol microspheres, 0.5-5% of tea tree essential oil and 0.5-5% of grapefruit essential oil.

21: 2022/02024. 22: 2022-02-17. 43: 2022-03-09
51: C04B
71: QINGDAO UNIVERSITY OF SCIENCE AND TECHNOLOGY, QINGDAO LIANGMEIYI CERAMIC NEW MATERIAL TECHNOLOGY CO., LTD.
72: WANG, Zhiyi, MA, Zheng, WANG, Mingyue, WANG, Lixin, YANG, Changyu
54: MAGNESIA DOMESTIC FINE PORCELAIN GREEN BODY
00: -
The present disclosure relates to a flux system of the magnesia domestic fine porcelain green body, and belongs to the field of daily ceramics. In the present disclosure, the magnesia fine porcelain green body includes raw materials as follows: a talc, a flux and a clay, where the flux is a synthetic flux, including the following chemical components by mole percent: 45.0-70.0% of SiO2, 1.0-8.0% of Al2O3, 1.0-10.0% of an alkali metal oxide, 0.0-40.0% of an alkaline earth metal oxide and 5.0-20.0% of B2O3. After replacing a feldspar flux with a same amount of the synthetic flux, the appearance quality of magnesia daily fine porcelain has no change, but the firing temperature is reduced by 100 ~ 150℃, the bending strength is increased to 200 ~ 240MPa, and the thermal stability is improved to 240 ~ 260℃→20℃ without cracking by water primary heat exchange.



21: 2022/02102. 22: 2022-02-18. 43: 2022-03-17
51: G06F
71: LINGNAN NORMAL UNIVERSITY
72: LIU, Yong, LI, Hua, CHEN, Yongheng, LI, Xin
54: FEATURE DIVISION-BASED METHOD OF DIMENSIONALITY REDUCTION AND SIMPLIFIED REPRESENTATION FOR STREAMING TIME SERIES
00: -
The present disclosure relates to a feature segmentation-based method of dimensionality

reduction and simplified representation for streaming time series, including S1, presetting data division parameter, that is,maximum error for single point (ME_SP); S2, conducting data scanning with slide window, making the scanned data enter a data buffer, and recording all turning points of streaming time series; S3, calculating each importance of turning point (TPI) in the data buffer, sorting in descending order, and storing them in variable L; and completing data segmentation in the data buffer; and S4, judging whether there is any streaming time series to be processed in the data buffer, and if so, going into the step S2, or else, processing to the end. On the premise of ensuring the dimensionality reduction and simplified representation of the streaming time series, the efficiency of the dimensionality reduction and the simplified representation of data are improved greatly.



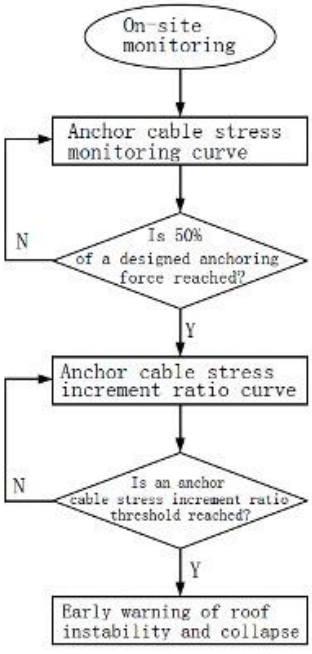
21: 2022/02104. 22: 2022-02-18. 43: 2022-03-17
51: E21F

71: SHANDONG UNIVERSITY OF SCIENCE AND TECHNOLOGY
72: YU, Fenghai, TAN, Yunliang, ZHAO, Tongbin, YIN, Yanchun

54: EARLY WARNING METHOD OF ROADWAY ROOF INSTABILITY AND COLLAPSE WITH ANCHOR CABLE SUPPORTING

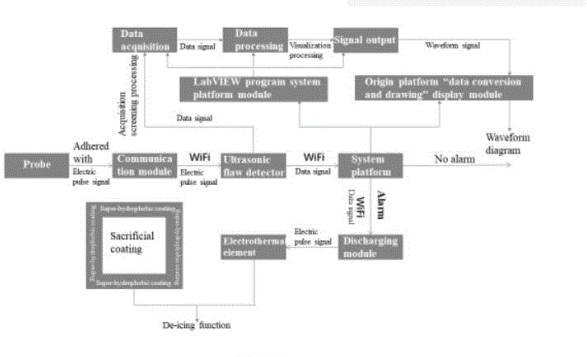
00: -

The present invention relates to an early warning method of roadway roof instability and collapse with anchor cable supporting, including: mounting an anchor cable dynamometer on a roadway roof with anchor cable supporting, and recording data to generate an anchor cable stress change curve; preliminarily judging a roof rock layer motion condition according to the generated anchor cable stress change curve; if the anchor cable stress change curve is on the rise, starting to move the roof, and comparing an anchor cable stress value obtained after motion of the roof with 50% of a designed anchoring force of an anchor cable; when the obtained anchor cable stress value is larger than 50% of the designed anchoring force, taking the anchor cable stress value at this moment as an initial point of calculating an anchor cable stress increment ratio, and generating an anchor cable stress increment ratio curve.

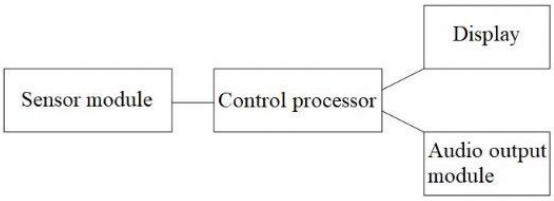


21: 2022/02136. 22: 2022-02-21. 43: 2022-03-02

51: E01H; G06T
71: Nanjing University of Aeronautics and Astronautics
72: PAN, Lei, ZHUANG, Zhiqi, HE, Xiping, ZHANG, Anjing, ZHANG, Haoran, HEI, Xuechun
54: INTELLIGENT MONITORING AND DE-ICING INTEGRATION SYSTEM AND METHOD
00: -
The present invention provides an intelligent system in which “intelligent monitoring of thickness of an ice layer”, “intelligent multi-functional combined de-icing”, and “provision of automated data storage and analysis functions” for a wind power blade are integrated. In the system, imaging, drawing, and analysis of detection data are implemented by using self-developed ultrasonic non-destructive detection technology in combination with WI-FI wireless information transfer technology and intelligent system platforms for software development such as Labview and Origin. Intelligent de-icing work is carried out using Wi-Fi network technology, and sacrificial coatings are mainly used in combination with thermal de-icing methods, so that “non-shutdown de-icing” work is implemented successfully, thereby greatly reducing damages caused by icing of the wind power blade and high human and material costs of de-icing.

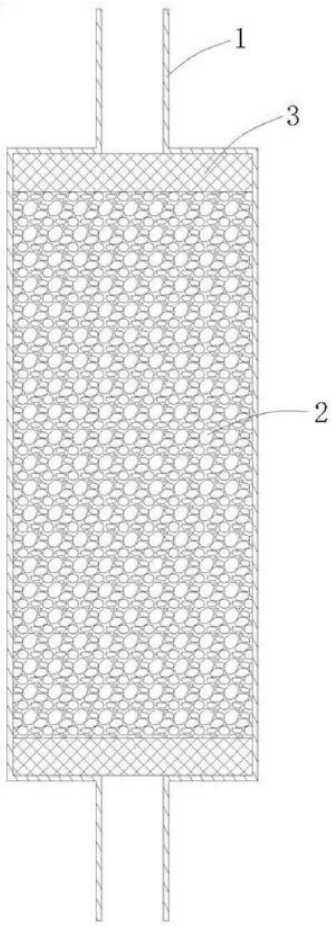


21: 2022/02388. 22: 2022-02-25. 43: 2022-03-17
51: A61B
71: THE SECOND AFFILIATED HOSPITAL OF SHANDONG FIRST MEDICAL UNIVERSITY
72: CHENG, Weihong, CHENG, Weiguo
54: PORTABLE FETAL HEART MONITOR
00: -
Disclosed is a portable fetal heart monitor. The portable fetal heart monitor includes a sensor module, a control processor, a display and an audio output module; the sensor module is used for obtaining fetal heart information of a monitored fetus; the control processor is used for determining fetal heart rate data and fetal movement data of the monitored fetus according to the fetal heart information; the display is used for displaying the fetal heart rate data and the fetal movement data of the monitored fetus; and the audio output module is used for broadcasting the fetal heart rate data and fetal movement data of the monitored fetus. The present invention enables a pregnant woman to monitor a fetal heart at home by herself, thereby improving a monitoring level of the fetal heart, improving a health care level of the pregnant woman and reducing a mortality rate of the fetus.



21: 2022/02401. 22: 2022-02-25. 43: 2022-03-16
51: H05K
71: JIANGSU MINGFENG ELECTRONIC MATERIALS CO., LTD.
72: CHEN, Zhidong, CAO, Qianying, WANG, Wenchang, WU, Minxian, MING, Xiaoqiang, WANG, Pengju
54: A FILLING MATERIAL AND ITS PREPARATION METHOD, AND A METHOD FOR PREPARING ELECTROLYTIC COPPER FOILS FOR HIGH-FREQUENCY SIGNAL TRANSMISSION
00: -
The present invention belongs to the technical field of additive decomposed products, and particularly relates to a filling material and its preparation method, and a method for preparing electrolytic copper foils for high-frequency signal transmission. The filling material contains 3g of FeCl3·6H2O; 0.15-3g of imprinted molecules; 60g of DMF; 1g of BDC; 6-30g of PC. The preparation method of the filling material comprises the following steps: dissolve FeCl3·6H2O and imprinted molecules in water to get a reaction solution; add DMF into the reaction solution and mix it for dissolution; add BDC into the reaction solution and mix it for dissolution; immerse PC in the reaction solution and mix it; treat the reaction solution by hydrothermal method, remove

the additive decomposed product molecules and prepare the filling material imprinted with the mould structure of additive decomposed product molecules. The present invention can selectively adsorb the additive decomposed products, so as to effectively remove the decomposed products of additives, prevent the copper electrodeposition film from being mixed with such products, realize the uniform distribution of current on cathode and anode, and ensure the prepared electrolytic copper foils qualified for high-frequency signal transmission.

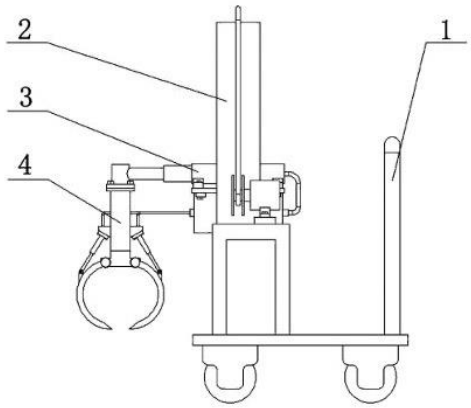


21: 2022/02402. 22: 2022-02-25. 43: 2022-03-16
51: C25D
71: JIANGSU MINGFENG ELECTRONIC MATERIALS CO., LTD.
72: WANG, Haijun, ZHANG, Zhi, WANG, Shuanglu, WANG, Pengju
54: AN ELECTROPLATING PROCESS FOR BLACKENING OF ULTRA-LOW-PROFILE COPPER FOILS
00: -

The present invention relates to an electroplating process for blackening of ultra-low-profile copper foils, which comprises the following steps: firstly, select the ultra-low-profile copper foils, and remove the oxides on the surface of the raw copper foils through pickling; secondly, electroplate and blacken the ultra-low-profile copper foils, wherein the electroplating solution features a nickel ion concentration of 5-12g/L, copper ion 2-3g/L, potassium pyrophosphate 50-70g/L, zinc ion 1-2g/L, cobalt ion 0.5-1g/L, with a pH of 9-10, glycine 5-50g/L, and ammonium chloride 10-100g/L, a flow rate of 5-8m3/h, a current density of 100-500A/m2, and a temperature of 25-30℃. Through the improvement of technological parameters and electroplating process, the blackened ultra-low-profile copper foils can show uniform color and no etching residue.

21: 2022/02404. 22: 2022-02-25. 43: 2022-03-16
51: B25J; B66F
71: ANHUI UNIVERSITY OF SCIENCE AND TECHNOLOGY
72: LI, Yihua, DENG, Jiayi, ZUO, Cheng, YAO, Jintao, WANG, Yupeng
54: SEMI-AUTOMATIC MANIPULATOR TRANSPORT VEHICLE AND USE METHOD THEREOF
00: -

Disclosed are a semi-automatic manipulator transport vehicle and a use method thereof. The vehicle includes a trolley, a lifting device, a sliding device and a gripping device. According to the position and height of materials, the height of the gripping device is adjusted by the lifting device. Then, the gripping device is pushed by the hydraulic cylinder (302) in the sliding device to a desired position. Next, the gripping device is lowered, and piston rods of hydraulic cylinders (403) retract to open four arc claws (407). When reaching a suitable position, the gripping device is stopped. Piston rods of hydraulic cylinders (403) extend, so that four arc claws (407) can be controlled to grip materials. Subsequently, the gripping device is lifted. Finally, the trolley is pushed to deliver materials to a designated position. The present invention features simple mechanisms, low cost and easy operations, with appreciable application prospects.

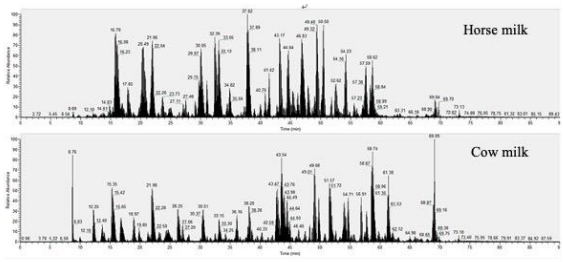


21: 2022/02405. 22: 2022-02-25. 43: 2022-03-16
51: G01N
71: QINGDAO AGRICULTURAL UNIVERSITY, XINJIANG AGRICULTURAL UNIVERSITY
72: HAN, Rongwei, ZANG, Changjiang, JI, Zhongyuan, WANG, Jun, YANG, Yongxin, ZHAO, Xiaowei, YU, Zhongna, JIANG, Hongning, FAN, Rongbo

54: MARKER FOR TESTING ADULTERATING COW MILK IN HORSE MILK BASED ON BOVINE-DERIVED POLYPEPTIDE AND APPLICATION THEREOF

00: -

The present invention provides a polypeptide marker method for testing adulterating cow milk in horse milk and application thereof. The method includes: 1) centrifuging an appropriate amount of horse milk or adulterating milk sample to remove fat and then placing the sample in a centrifuge tube; 2) reducing and enzymatically hydrolyzing alkylated protein, then desalting a peptide fragment mixture and drying the same in vacuum; 3) after the drying, performing reconstitution with 0.1% formic acid solution and determination by high-resolution liquid chromatography tandem mass spectrometry; and 4) using a peptide fragment (IKSEQSDLSFSK) from Beta-2-microglobulin to test a labeled peptide fragment of adulterating cow milk-derived ingredients in horse milk, at a test level of 1%. This test method tests a polypeptide marker in horse milk by DIA-based high-resolution liquid chromatography tandem mass spectrometry and qualitatively and quantitatively determines the cow milk in the horse milk, so compared with common DDA-based protein polypeptide analysis, this test method has high data utilization, fast analysis speed and high sensitivity.



21: 2022/02406. 22: 2022-02-25. 43: 2022-03-17
51: A23K
71: QINGDAO AGRICULTURAL UNIVERSITY, QINGDAO HOLSTEIN DAIRY FARMING CO., LTD.
72: YANG, Yongxin, ZHAO, Xiaowei, YU, Zhongna, PAN, Junyu, HAN, Rongwei, WANG, Yijian, DU, Qijing

54: METHOD FOR PRODUCING FEED ADDITIVE FOR IMPROVING HEALTH STATUS OF LACTATING DAIRY COWS AND APPLICATION THEREOF

00: -

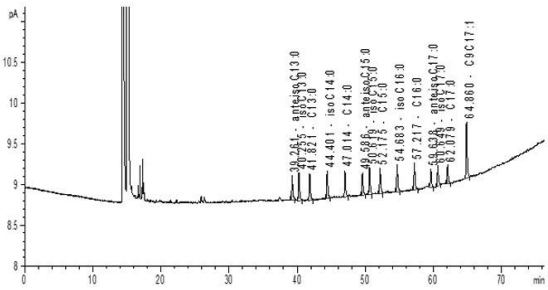
The present invention relates to the field of feeds, in particular to production and application of a feed additive for improving the health status of lactating dairy cows. The feed additive includes the following ingredients in percentage by weight: 20% of Astragalus membranaceus, 15% of Codonopsis pilosula, 10% of Angelica sinensis, 12% of Eclipta prostrata, 10% of Taraxacum mongolicum, 10% of orange peel and 8% of Glycyrrhiza uralensis. The production method for the feed additive includes: drying Astragalus membranaceus, Codonopsis pilosula, Angelica sinensis, etc. naturally in air or at 60-65°C for 48 hours, and weighing various ingredients according to the weight percentages, followed by mixing and crushing. The beneficial effects of the formula of the present invention are: the production performance of lactating dairy cows is improved, the body immunity of dairy cows is improved, the incidence of mastitis is reduced, the milk production of dairy cows is increased and the milk quality is improved.

21: 2022/02408. 22: 2022-02-25. 43: 2022-03-17
51: A61K
71: QINGDAO AGRICULTURAL UNIVERSITY, YEEPER DAIRY GROUP (QINGDAO) CO., LTD
72: YANG, Yongxin, HAN, Rongwei, XIE, Shubin, WEN, Jing, FAN, Rongbo, YU, Zhongna, WANG, Jun

54: IDENTIFYING COLOSTRUM AND ORDINARY MILK OF GOAT BASED ON BRANCHED-CHAIN FATTY ACIDS AND APPLICATION THEREOF

00: -

Provided is a method for testing and identifying ordinary milk and colostrum of goat based on branched-chain fatty acid markers, comprising: 1) placing an appropriate amount of goat milk sample in a container, adding an appropriate amount of lipid extract, shaking with vortexes, then adding an appropriate amount of inorganic salt solution, and centrifuging to extract a supernatant after shaking; 2) performing base esterification and acid esterification on fatty acid extracts respectively; 3) drying and extracting methyl esterified fatty acids, and determining a ratio of isoC17:0 content to isoC15:0 content by a gas chromatography-hydrogen flame ionization detector, which can be used for identifying colostrum and ordinary milk of goat, wherein the sample with a ratio of greater than 2 can be determined as colostrum. The test method utilizes an external standard method combined with a gas chromatography-hydrogen flame ionization detector to quantify branched-chain fatty acids in goat milk so as to identify colostrum and ordinary milk of goat, with simplicity, accuracy and high sensitivity.

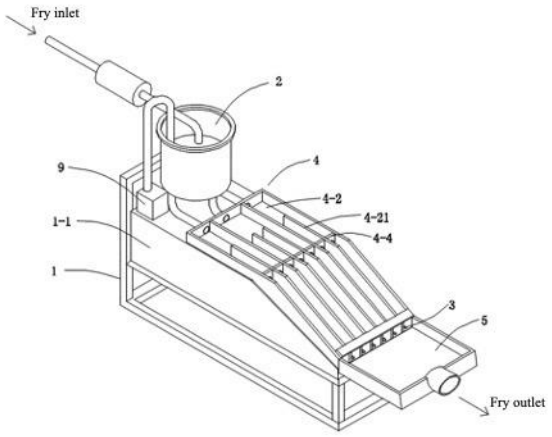


21: 2022/02409. 22: 2022-02-25. 43: 2022-03-17
51: G06M
71: YELLOW SEA FISHERIES RESEARCH INSTITUTE, CHINESE ACADEMY OF FISHERY SCIENCES, QINGDAO STARFISH INSTRUMENT CO., LTD.
72: MENG, Zhen, LI, Jiao, LIU, Xinfu, ZHANG, Zheng, JIA, Yudong, LIU, Bin, ZHANG, Yuefeng
33: CN 31: 202210121009.2 32: 2022-02-09

54: FRY COUNTING APPARATUS BASED ON INFRARED COUNTING AND ITS APPLICATION

00: -

The disclosure relates to a fry counting apparatus based on infrared counting and its application. The fry counting apparatus comprises a fish collecting barrel, counters and a flow dividing apparatus; the flow dividing apparatus comprises a plurality of flow dividing pipes disposed on a bottom plate of the fish collecting barrel and a plurality of flow dividing grooves corresponding to the plurality of flow dividing pipes one to one; and the counters are disposed at the outlet ends of the flow dividing grooves, and the horizontal height of the inlet ends of the flow dividing pipes is higher than that of the outlet ends. Each flow dividing groove comprises a first flow guiding part and a second flow guiding part, the second flow guiding part is obliquely disposed, and the counter is disposed at the outlet end of the second flow guiding part. In addition, partition plates and flow dividing partition plates are further disposed in the flow dividing apparatus. The disclosure provides the apparatus capable of performing flow dividing and flow guiding on fry twice, the fry are continuously counted in batches, and meanwhile the counting accuracy and efficiency of the fry can be improved; and by disposing an anesthetic liquid adding apparatus, stress damage of the fry and the counting error caused by reverse flow are reduced



21: 2022/02411. 22: 2022-02-25. 43: 2022-03-17
51: A23K; C12N; C12R
71: GUIZHOU INSTITUTE OF ANIMAL HUSBANDRY AND VETERINARY SCIENCE
72: HAN, Yong, YUAN, Chao, WANG, Hua, LONG, Yong, XIAO, Wen, WANG, Defeng, YANG, Yang, SHEN, Xiaoyun, CHEN, Haolin, SU, Chaozhi

54: STRAW EFFICIENT FERMENTATION BACTERIA AGENT AND STRAW BIOLOGICAL FEED

00: -

The invention relates to straw feed produced by using a microbial degradation technique, and aims to provide a straw efficient fermentation bacteria agent and straw biological feed. The efficient straw fermentation microbial agent comprises white rot fungi, lactobacillus acidophilus, trichoderma viride, bacillus subtilis and candida utilis. The straw biological feed used comprises white rot fungi, lactobacillus acidophilus, trichoderma viride, bacillus subtilis, and candida utilis. The feed is prepared by adding urea, brown sugar, compound trace elements and composite vitamins by weight; preparing a microbial bacteria solution from 0.05-0.15 liter of fermentation substrate per 100 kg; mixing the urea, the brown sugar, the compound trace elements and the microbial bacteria solution to prepare feed liquid; uniformly spraying the feed liquid on the straw; compressing the straw into a 50×50×80 cubic block, and using a black plastic film for sealed stacking and fermentation for 30 days.

HYPOTHECATIONS

No records available

JUDGMENTS

No records available

OFFICE PRACTISE NOTICES

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Department:
Trade, Industry and Competition
REPUBLIC OF SOUTH AFRICA

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the dtic Customer Contact Centre local: 0861 843 384 International: +27 12 394 9500, www.thedtic.gov.za

NOTIFICATION OF THE PATENT EXAMINATION BOARD IN TERMS OF SECTION 21 OF THE PATENT ACT 1978

PATENT EXAMINATION BOARD

The Patent Examination Board, in terms of Section 21(3)(a)(ix)(bb) of the Patents Act, 1978, has issued certificates to the persons listed below who have passed the prescribed examinations in 2021.

1. Mr Thandanani Cwele
2. Ms Marilé Fouché

Ms Sandra Clelland
Chairperson
Patent Examination Board
22 February 2022

Chairperson : Ms Sandra Clelland
Members : Ms Shanaaz Mahomed, Mr Paul Sibisi, Mr Johnny Fiandeiro, Thandiwe Khumalo & Dr Mavis Nyatlo
Secretariat : Ms Sheperd Khanyisa Chauke

3. DESIGNS

DESIGNS

APPLICATIONS FOR REGISTRATION OF DESIGNS IN TERMS OF ACT No. 195 OF 1993

The particulars appear in the following sequence: Copies of the application and representations cannot be supplied until application is registered and advertised. In all correspondence reference should be made to the number of the application. Application number, full name of applicant, class, articles to which design is to be applied and priority date (if any)

. - APPLIED ON 2022-02-21 -

A2022/00177 - DEXOWL société anynome Class 09. BOTTLE

A2022/00176 - SANDVIK MINING AND CONSTRUCTION OY Class 15. MINING TRUCK

. - APPLIED ON 2022-02-22 -

F2022/00184 - GASPARRE, Gioacchino Class 07. BASTER FOR A ROTISSERIE

A2022/00178 - YANTAI XINGYE MACHINERY CO., LTD. Class 15. A LOADING-HAULING-DUMPING (LHD) MACHINE

A2022/00179 - YANTAI XINGYE MACHINERY CO., LTD. Class 15. A REAR COVER FOR A LOADING-HAULING-DUMPING (LHD) MACHINE

A2022/00183 - YANTAI XINGYE MACHINERY CO., LTD. Class 15. A CAB FOR A LOADING-HAULING-DUMPING (LHD) MACHINE

A2022/00182 - SNGLS HOLDING & MANAGEMENT OÜ Class 26. LIGHTING APPARATUS

A2022/00181 - SNGLS HOLDING & MANAGEMENT OÜ Class 26. LIGHTING APPARATUS

A2022/00180 - GREAT WALL MOTOR COMPANY LIMITED Class 12. AUTOMOBILE

. - APPLIED ON 2022-02-23 -

A2022/00186 - STASHER, INC. Class 7. CONTAINER

A2022/00187 - STASHER, INC. Class 7. CONTAINER

F2022/00185 - STELLENBOSCH UNIVERSITY Class 24. DISSECTION STATION

F2022/00188 - John Richard Voogt Class 12. LIFTER

. - APPLIED ON 2022-02-24 -

A2022/00190 - PUMA SE Class 2. SHOE MIDSOLE

A2022/00189 - WHEEL PROS, LLC Class 12. WHEEL

. - APPLIED ON 2022-02-25 -

A2022/00198 - Koninklijke Philips N.V. Class 28. SHAVERS

A2022/00195 - FLENDER GMBH Class 13. GEARBOX FOR AN ELECTRIC MOTOR

A2022/00192 - LifeCORE Fitness, Inc. Class 21. EXERCISE APPARATUS

A2022/00194 - FLENDER GMBH Class 13. GEARBOX FOR AN ELECTRIC MOTOR

A2022/00202 - Janssen Pharmaceutica NV Class 24. PHARMACEUTICAL INGREDIENT MIXING DEVICES

A2022/00196 - FLENDER GMBH Class 13. GEARBOX FOR AN ELECTRIC MOTOR

A2022/00199 - Koninklijke Philips N.V. Class 28. SHAVERS

A2022/00201 - Koninklijke Philips N.V. Class 28. BLADES FOR SHAVERS

A2022/00200 - Koninklijke Philips N.V. Class 28. HANDLES FOR SHAVERS

A2022/00205 - Koninklijke Philips N.V. Class 28. BLADES FOR SHAVERS

A2022/00191 - LifeCORE Fitness, Inc. Class 21. EXERCISE APPARATUS

A2022/00197 - FLENDER GMBH Class 13. GEARBOX FOR AN ELECTRIC MOTOR

A2022/00204 - Koninklijke Philips N.V. Class 28. HANDLES FOR SHAVERS

A2022/00193 - LifeCORE Fitness, Inc. Class 21. EXERCISE APPARATUS

A2022/00206 - FLENDER GMBH Class 13. GEARBOX FOR AN ELECTRIC MOTOR

A2022/00203 - Koninklijke Philips N.V. Class 28. SHAVERS

. - APPLIED ON 2022-02-28 -

A2022/00219 - CHOCOLADEFABRIKEN LINDT & SPRÜNGLI AG Class 09. PACKAGING FOR FOODSTUFFS

F2022/00221 - VICTOR, Paul Class 8. MOUNTING DEVICE FOR A SHOCK ABSORBER FOR A VEHICLE

A2022/00210 - DART INDUSTRIES INC. Class 7. STORAGE CONTAINER SEAL

F2022/00208 - GIDEON HITCHCOCK Class 07. BRI-N-BBQ

A2022/00212 - DART INDUSTRIES INC. Class 7. STORAGE CONTAINER SEAL

A2022/00211 - DART INDUSTRIES INC. Class 7. STORAGE CONTAINER SEAL

F2022/00207 - VICTOR, Paul Class 12. MOUNTING DEVICE FOR A SHOCK ABSORBER FOR A VEHICLE

F2022/00215 - CRAIG DAVID DAVIES, GORDON DANIEL DAVIES Class 25. HEADER BOARD

A2022/00220 - CHOCOLADEFABRIKEN LINDT & SPRÜNGLI AG Class 09. PACKAGING FOR FOODSTUFFS

A2022/00217 - CHOCOLADEFABRIKEN LINDT & SPRÜNGLI AG Class 09. PACKAGING FOR FOODSTUFFS

A2022/00216 - CHOCOLADEFABRIKEN LINDT & SPRÜNGLI AG Class 09. PACKAGING FOR FOODSTUFFS

A2022/00218 - CHOCOLADEFABRIKEN LINDT & SPRÜNGLI AG Class 09. PACKAGING FOR FOODSTUFFS

F2022/00214 - CRAIG DAVID DAVIES, GORDON DANIEL DAVIES Class 25. HEADER BOARD

F2022/00213 - CRAIG DAVID DAVIES, GORDON DANIEL DAVIES Class 25. HEADER BOARD

A2022/00209 - DART INDUSTRIES INC. Class 7. STORAGE CONTAINER SEAL

. - APPLIED ON 2022-03-01 -

F2022/00222 - RAUBENHEIMER, Pieter Jacobus Adriaan Class 07. A HINGE ARRANGEMENT FOR A GRILL

F2022/00224 - BATTLEMAX (PTY) LTD Class 23. THROAT BUSH

A2022/00223 - DIAS AND SONS TOOL AND DIE (PTY) LIMITED Class 09. A BOTTLE CONTAINER

F2022/00225 - RAUBENHEIMER, Pieter Jacobus Adriaan Class 07. OVEN ACCESSORY FOR A GRILL

. - APPLIED ON 2022-03-02 -

F2022/00226 - JCP ROOFING (PTY) LTD Class 25. ROOF SHEET

A2022/00229 - FASS S.P.A. Class 4. BROOM HEAD

A2022/00228 - FASS S.P.A. Class 4. BROOM HEAD

A2022/00227 - JCP ROOFING (PTY) LTD Class 25. ROOF SHEET

. - APPLIED ON 2022-03-07 -

A2022/00231 - AFFIRM MANUFACTURING SERVICES (PROPRIETARY) LIMITED T/A ROTOTANK Class 25. BARRIER

A2022/00236 - Lesedi Class 01. CLASS 1

A2022/00232 - AFFIRM MANUFACTURING SERVICES (PROPRIETARY) LIMITED T/A ROTOTANK Class 25. CONE BARRIER

A2022/00235 - C&G Bodyworks Class 12. FENDER FLARES

A2022/00230 - SCHREDER Class 26. VALINTA CURVE MIDI

A2022/00233 - C&G Bodyworks Class 12. FENDER FLARES

A2022/00234 - Stewart Lachlan Thompson Class 23. ROOF TOP TANK

. - APPLIED ON 2022-03-09 -

A2022/00237 - Carol Edith Martin Class 02. 02-03 HEADWEAR - 100155 (HATS)

A2022/00239 - TANGLE TEEZER LIMITED Class 4. PART OF A HAIR BRUSH

A2022/00238 - TANGLE TEEZER LIMITED Class 4. HAIR BRUSH

. - APPLIED ON 2022-03-10 -

F2022/00240 - EPIROC DRILLING SOLUTIONS, LLC Class 15. TRACK SHOE FOR TRACKED VEHICLE

A2022/00241 - EPIROC DRILLING SOLUTIONS, LLC Class 15. TRACK SHOE AND TRACK ASSEMBLY FOR TRACKED VEHICLES

A2022/00244 - Courvoisier S.A.S. Class 9. BOTTLES

A2022/00243 - Courvoisier S.A.S. Class 9. BOTTLES

A2022/00242 - Courvoisier S.A.S. Class 9. BOTTLES

. - APPLIED ON 2022-03-11 -

A2022/00254 - NIXED JEWELLERY (PTY) LTD Class 11. PENDANT

A2022/00250 - KILLASSY, Timothy Joseph Class 02. KNEE GUARD

A2022/00251 - S.B. PATENT HOLDING APS Class 15. YAW BRAKE DISC RESURFACING TOOL

F2022/00252 - AzatiServe (Proprietary) Limited, Mvikeli Mavick Matutu Class 28. STEAM INHALER

F2022/00258 - NIXED JEWELLERY (PTY) LTD Class 22. PENDANT

F2022/00247 - KILLASSY, Timothy Joseph Class 02. KNEE GUARD

F2022/00257 - NIXED JEWELLERY (PTY) LTD Class 11. PENDANT

F2022/00253 - FIRE STARTER ZA (PTY) LTD Class 23. A FIRELIGHTER

A2022/00255 - FIRE STARTER ZA (PTY) LTD Class 23. A FIRELIGHTER

F2022/00246 - COMPAGNIE GENERALE DES ETABLISSEMENTS MICHELIN Class 12. TYRE THREAD

A2022/00245 - COMPAGNIE GENERALE DES ETABLISSEMENTS MICHELIN Class 12. TYRE

A2022/00248 - KILLASSY, Timothy Joseph Class 02. KNEE GUARD

A2022/00256 - NIXED JEWELLERY (PTY) LTD Class 22. PENDANT

F2022/00249 - KILLASSY, Timothy Joseph Class 02. KNEE GUARD

. - APPLIED ON 2022-03-14 -

A2022/00260 - Blaser Group GmbH Class 16. CAMERAS

A2022/00259 - MOULD A FOAM CC Class 30. PET GARMENT

. - APPLIED ON 2022-03-15 -

A2022/00286 - Andile basil Manshinga Mtshali Class 14. ALL-IN-ONE COMPUTER

A2022/00261 - ICHSEN HOLDINGS (PTY) LTD Class 12. COVERS FOR INTERNAL PARTS OF VEHICLES

A2022/00264 - SUMITOMO RUBBER INDUSTRIES, LTD. Class 12. TIRE FOR AN AUTOMOBILE

A2022/00263 - SUMITOMO RUBBER INDUSTRIES, LTD. Class 12. TIRE FOR AN AUTOMOBILE

F2022/00262 - ICHSEN HOLDINGS (PTY) LTD Class 12. COVERS FOR INTERNAL PARTS OF VEHICLES

. - APPLIED ON 2022-03-16 -

F2022/00271 - KELLER, Izaan Louis Class 25. PRESSURE SPREADING DEVICE

A2022/00266 - Clearvue Technologies Ltd Class 13. GLASS PANELS

F2022/00268 - NIENHUIS, Jan, Balster Class 13. SOLAR PANEL BRACKET 1

F2022/00265 - NGOZA, Thato Frederick Class 21. GAME PLAYING FIELDS

F2022/00272 - KELLER, Izaan Louis Class 25. PRESSURE SPREADING DEVICE

A2022/00267 - Clearvue Technologies Ltd Class 13. GLASS PANELS

F2022/00270 - NIENHUIS, Jan, Balster Class 13. SOLAR PANEL RAIL

F2022/00269 - NIENHUIS, Jan, Balster Class 13. SOLAR PANEL BRACKET 2

. - APPLIED ON 2022-03-18 -

A2022/00275 - STASHER, INC. Class 7. CONTAINER

A2022/00274 - STASHER, INC. Class 7. CONTAINER

A2022/00277 - STASHER, INC. Class 7. CONTAINER

A2022/00276 - STASHER, INC. Class 7. CONTAINER

A2022/00273 - BATTLEMAX (PTY) LTD Class 23. COVER FOR A CENTRIFUGAL PUMP

. - APPLIED ON 2022-03-22 -

A2022/00278 - Precision Valve Corporation Class 15. ACTUATORS

A2022/00280 - HALEWOOD INTERNATIONAL BRANDS LIMITED Class 09. BOTTLE

A2022/00279 - HALEWOOD INTERNATIONAL BRANDS LIMITED Class 09. BOTTLE

. - APPLIED ON 2022-03-23 -

F2022/00282 - iKAMPER CO., LTD. Class 6. CAMPING TABLE

F2022/00284 - iKAMPER CO., LTD. Class 7. COOKING UTENSIL HANGER FOR CAMPING

A2022/00281 - SNYMAN, Mornay Class 07. STOVE

F2022/00285 - iKAMPER CO., LTD. Class 7. COOKING UTENSIL HANGER FOR CAMPING

F2022/00283 - iKAMPER CO., LTD. Class 21. TENT FRAME CONNECTORS

. - APPLIED ON 2022-03-24 -

A2022/00287 - HANSGROHE SE Class 23. FAUCET

A2022/00302 - HANSGROHE SE Class 23. FAUCET

F2022/00289 - Tyrone Bedessy Class 29. UNIVERSAL RETROFITTABLE INTELLIGENT POWER SWITCH DEVICE FOR RADIO FREQUENCY TRANSMITTER/RECIEVER

A2022/00295 - HANSGROHE SE Class 23. FAUCET

A2022/00297 - UNILEVER GLOBAL IP LIMITED Class 9. A POUCH CONTAINER

A2022/00290 - HANSGROHE SE Class 23. FAUCET

A2022/00291 - HANSGROHE SE Class 23. FAUCET

A2022/00292 - HANSGROHE SE Class 23. FAUCET

A2022/00296 - HANSGROHE SE Class 23. FAUCET

A2022/00294 - HANSGROHE SE Class 23. FAUCET

A2022/00301 - HANSGROHE SE Class 23. FAUCET

A2022/00303 - CIPLA LIMITED Class 24. INHALER DEVICE

F2022/00304 - CIPLA LIMITED Class 24. INHALER DEVICE

A2022/00293 - HANSGROHE SE Class 23. FAUCET

A2022/00299 - UNILEVER GLOBAL IP LIMITED Class 9. A POUCH CONTAINER

A2022/00300 - HANSGROHE SE Class 23. FAUCET

A2022/00298 - UNILEVER GLOBAL IP LIMITED Class 9. A POUCH CONTAINER

A2022/00288 - HANSGROHE SE Class 23. FAUCET

. - APPLIED ON 2022-03-25 -

A2022/00311 - Sky CP Limited Class 14. ELECTRONIC DEVICES

A2022/00307 - THE ALESSIO TRUST Class 31. MILK FROTHER

F2022/00317 - CQMS PTY LTD Class 15. WEAR MEMBER

A2022/00309 - HANSGROHE SE Class 23. SANITARY SHOWER

A2022/00314 - Sky CP Limited Class 14. TELEVISIONS WITH STANDS

A2022/00315 - Sky CP Limited Class 14. TELEVISION FASCIAS

A2022/00313 - Sky CP Limited Class 14. TELEVISION STANDS

A2022/00318 - SUPERCART SOUTH AFRICA (PTY) LTD Class 12. TROLLEY

F2022/00305 - SVI ENGINEERING (PTY) LTD Class 12. ARMOURED WINDOW

A2022/00306 - THE ALESSIO TRUST Class 7. CUP WARMER

F2022/00308 - WOODLANDS ENGINEERING (PTY) LIMITED Class 23. HYDRANT

A2022/00310 - HANSGROHE SE Class 23. SANITARY SHOWER

A2022/00312 - Sky CP Limited Class 14. TELEVISIONS

F2022/00316 - CQMS PTY LTD Class 15. A LIP FOR AN EXCAVATOR BUCKET

CHANGE OF NAME IN TERMS OF REGULATION 24

No records available

APPLICATION FOR THE RESTORATION OF A LAPSED DESIGN UNDER SECTION 23 OF THE ACT

Notice is hereby given that: **ARB GLOBAL PROPRIETARY LIMITED 10 Mack Road, Prospecton, 4115, DURBAN, Kwa-zulu Natal. South Africa** has made application for the restoration of the design registered to the said: **ARB GLOBAL PROPRIETARY LIMITED** for the Design: **CROSS RUNG FOR A CABLE LADDER** application number: **F2014/01026** date: **03/07/2014** which become void on **03/07/2020** due to non-payment of the prescribed renewal fee.

Any person may give notice on Design Form No 11 of opposition to restoration of the design within two months of the advertisement hereof.

Registrar of Designs

APPLICATION TO CORRECT AND/OR AMEND DESIGNS APPLICATION OR REGISTRATION

No records available

NOTICE OF REGISTRATION OF DESIGNS

Notice of registration of the designs mentioned below has been issued by the Registrar of Designs in terms of the Designs Act, 1993 (Act No. 195 of 1993)

INSPECTION OF DESIGNS

A design application, may after a notice of registration has been published, be inspected during office hours at the Designs Office, Pretoria, at a charge of R3, 00

COPIES OF DOCUMENTS

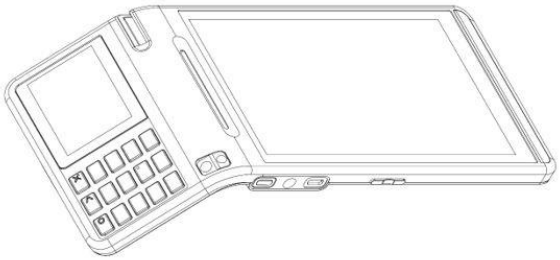
The Designs Office, Private Bag X400, Pretoria, supplies photocopies of all design documents at R1, 00 per page. (Payment to be affected by revenue stamps only.)

The numerical references denote the following: **(21)** Number of application. **(22)** Date of lodgement. **(23)** release date (if applicable). **(DR)** Date of registration. **(52)** Class. **(24)** Type of design. **(71)** Name(s) of applicant(s). **(33)** Country. **(31)** Number and. **(32)** Date of convention application. **(54)** Articles to which design is to be applied. **(57)** Brief statement of features.

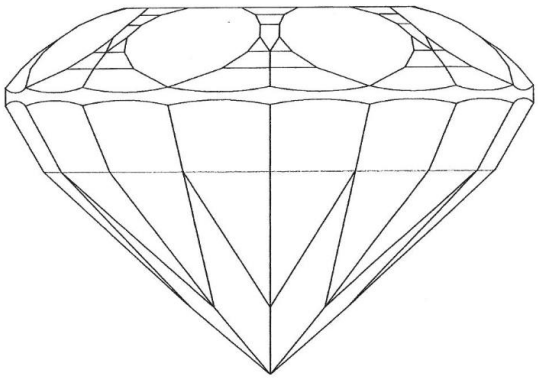
N.B.: Date of registration (DR) is either Date of lodgement (22) or Date of convention of application (32) whichever is the earlier.

Registrar of Designs

21: A2018/01150 22: 2018-07-24 23:
43: 2021-11-23
52: Class 20 24: Part A
71: BANKS AND ACQUIREES INTERNATIONAL HOLDING
33: EU 31: 0047739464-001 32: 2018-03-05
54: PAYMENT TERMINAL
57: The features of the design for which protection is claimed reside in the shape and/or configuration of the payment terminal substantially as shown in the accompanying representations.



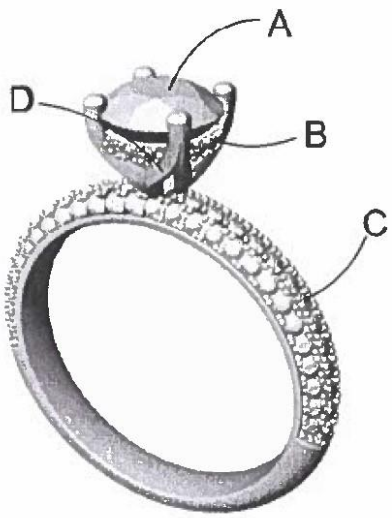
21: A2018/01613 22: 2018-10-19 23:
43: 2022-03-01
52: Class 11 24: Part A
71: Efrayim DREZNER
33: US 31: 29/644,941 32: 2018-04-22
54: GEMSTONE
57: The novelty of the design as applied to a Gemstone resides in the features of shape and/or configuration and/or pattern and/or ornamentation as applied to the article as shown in the representations.



21: A2018/01964 22: 2018-12-20 23:
43: 2022-03-01
52: Class 11 24: Part A
71: BROWNS THE DIAMOND STORE (PTY) LIMITED
54: MY TRUE NORTH SET
57: The design is to be applied to a set of jewellery articles consisting of a ring, earring and pendant. The features for which protection is claimed reside in the shape and or/configuration and/or ornamentation and/or pattern of the design applied to a set of jewellery consisting of a ring, earring and pendant, irrespective of the shape, size and/or colour of the one or more gemstone(s) A.

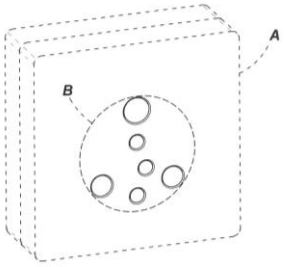
PERSPECTIVE VIEW

21: A2018/01965 22: 2018-12-20 23:
43: 2022-03-01
52: Class 11 24: Part A
71: BROWNS THE DIAMOND STORE (PTY) LIMITED
54: BLUSHING PROTEA RING
57: The design is to be applied to a ring. The features of the design for which protection is claimed reside in the shape and/or configuration and/or ornamentation and/or pattern of a ring including the shape and/or configuration and/or pattern of a claw/prong and beautification element D, substantially as illustrated in the accompanying representations, irrespective of the shape, size and/or colour of the one or more gemstone(s) illustrated by reference arrows A, B and C present herein.



PERSPECTIVE VIEW

21: A2019/00189 22: 2019-02-06 23:
43: 2022-02-17
52: Class 13 24: Part A
71: Universal Brand Group (Pty) Limited
54: PLUG POINT ADAPTER
57: This design is intended to be applied to a set of articles. The features of the design for which protection is claimed reside in the shape and/or configuration of the plug point adapter as shown in the accompanying representations. Neither the plug socket cover (indicated in broken lines and marked by reference “A”), nor the imaginary boundary perimeter marking (indicated in broken lines and marked by reference “B”) forms a part of the design, and these aspects are specifically disclaimed as forming part of the design protection sought.



PERSPECTIVE VIEW OF A FIRST DESIGN VARIATION

21: A2019/01749 22: 2019-12-04 23:
43: 2022-03-01
52: Class 11 24: Part A

71: BROWNS THE DIAMOND STORE (PTY) LIMITED
54: JEWELLERY
57: The design is to be applied to articles of adornment, more particularly, items of jewellery. The features of the design for which protection is claimed reside in the shape and/or configuration and/or pattern and/or ornamentation of a charm, substantially as illustrated in the accompanying drawings.

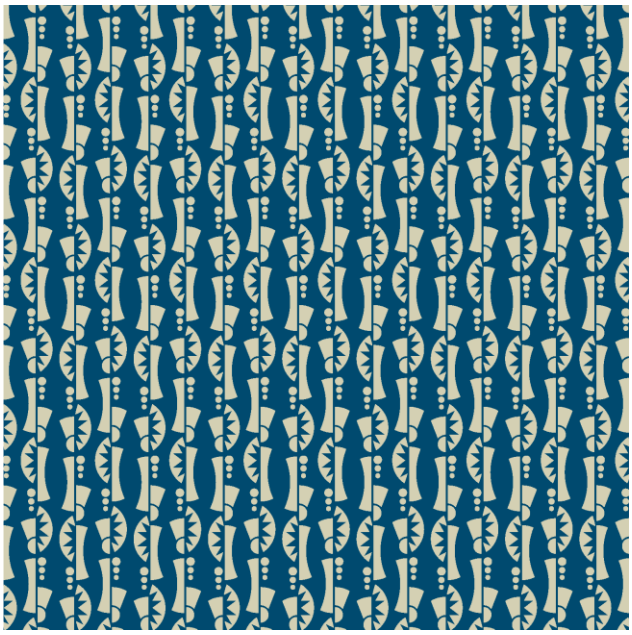
PERSPECTIVE VIEW

21: A2020/01432 22: 2020-11-05 23:
43: 2021-12-13
52: Class 09 24: Part A
71: StyleProps (Proprietary) Limited
54: CONTAINER
57: The features of the container for which protection is sought are those features of shape and/or configuration and/or pattern or ornament applied to the container shown in the representations.

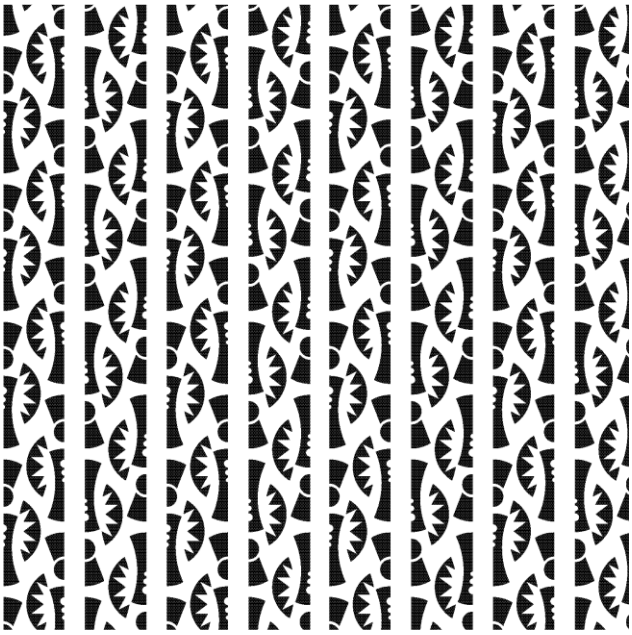
21: A2021/00230 22: 2021-03-05 23:
43: 2022-03-01
52: Class 6 24: Part A
71: HAMMOND, John
54: TABLE
57: The design relates to a table. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.

TOP PERSPECTIVE VIEW

21: A2021/00390 22: 2021-04-14 23:
43: 2022-02-08
52: Class 05 24: Part A
71: Zodwa Msimang
54: TEXTILE
57: Pattern design is a duotone pattern using an African Women`s face wearing isicolo on her head and radiance element on either side the logo has been slit to form this design with the designs being all in a straight horizontal line background is blue and the logo is grey. This design taken from an Ikhono Communications logo.

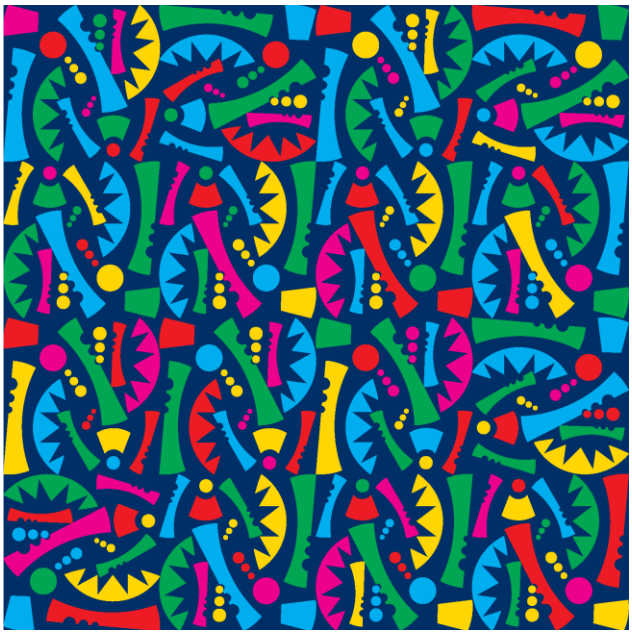


21: A2021/00391 22: 2021-04-14 23:
43: 2022-02-08
52: Class 05 24: Part A
71: Zodwa Msimang
54: TEXTILE
57: This pattern design is a monochrome pattern using an African Women`s face wearing isicolo on her head and radiance element on either side the logo has been design as half of the logo with white background and the logo is black. This design taken from an Ikhono Communications logo.



21: A2021/00392 22: 2021-04-14 23:
43: 2022-02-08
52: Class 05 24: Part A
71: Zodwa Msimang
54: TEXTILE
57: This pattern design a full colour design using African Women`s face wearing isicolo on her head and radiance element on either side the logo has been design as half of the logo with full colour background and the logo being white. This design taken from an Ikhono Communications logo.

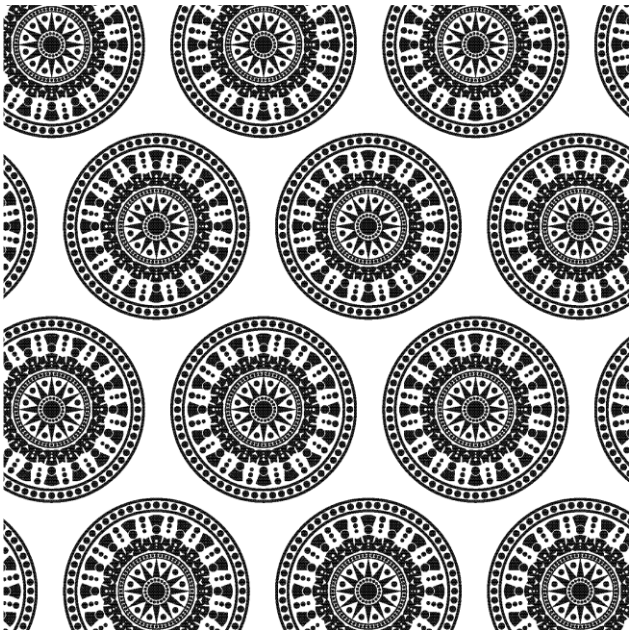
21: A2021/00394 22: 2021-04-14 23:
43: 2022-02-08
52: Class 05 24: Part A
71: Zodwa Msimang
54: TEXTILE
57: This pattern is a full colour pattern using African Women`s face wearing isicolo on her head and radiance element on either side, the logo has been broken into different shapes with are in different colours which consists of the following yellow, green, pink, blue, green with dark blue. This design taken from an Ikhono Communications logo.



21: A2021/00395 22: 2021-04-14 23:
43: 2022-02-08
52: Class 05 24: Part A
71: Zodwa Msimang
54: TEXTILE
57: This pattern is a full colour pattern using African Women`s face wearing isicolo on her head and radiance element on either side, the logo has been enlarged and broken into different shapes from the logo colours used yellow, red, green and blue. This design taken from an Ikhono Communications logo.

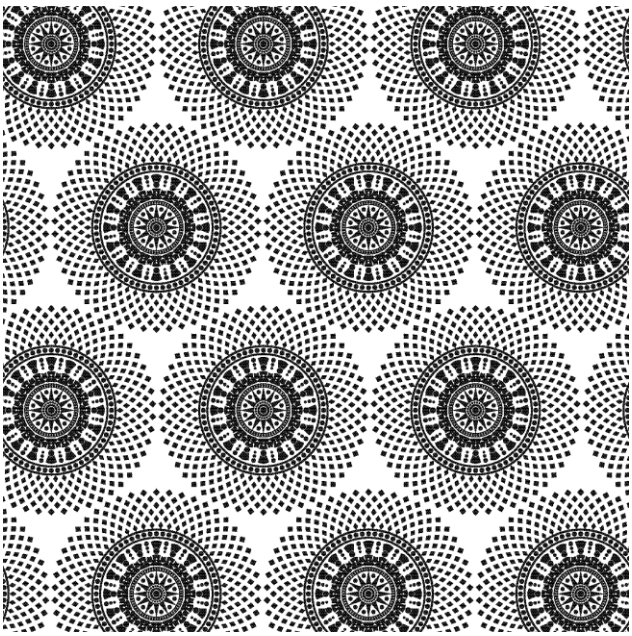
21: A2021/00396 22: 2021-04-14 23:
43: 2022-02-08
52: Class 05 24: Part A
71: Zodwa Msimang
54: TEXTILE
57: This pattern is a full colour pattern using African Women`s face wearing isicolo on her head and radiance element on either side, the logo has been enlarged and broken into different shapes from the logo colours used yellow, red, green and blue. This design taken from an Ikhono Communications logo.

21: A2021/00397 22: 2021-04-14 23:
43: 2022-02-08
52: Class 05 24: Part A
71: Zodwa Msimang
54: TEXTILE
57: This pattern is a duotone pattern with a circle within a large circle with beads on the outline of the circle inside the circle there is used the logo with African Women`s face wearing isicolo and radiance element on either side next to each logo there are smaller beads next to each logo middle circle has beads with radiance element in black with one bead in the middle with black and white background. This design taken from an Ikhono Communications logo.



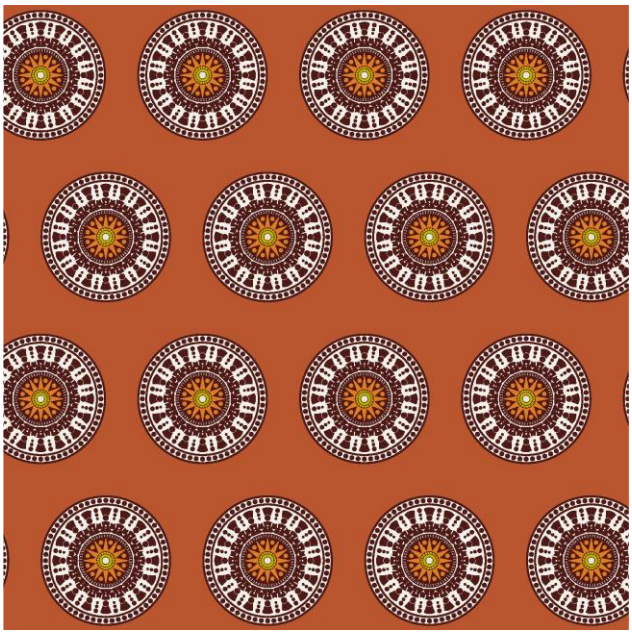
21: A2021/00398 22: 2021-04-14 23:
43: 2022-02-08
52: Class 05 24: Part A
71: Zodwa Msimang
54: TEXTILE
57: This pattern has solid colour with a black background of an African Women`s face wearing isicolo on her head and radiance element on either side. This design was taken from an Ikhono Communications logo.

21: A2021/00399 22: 2021-04-14 23:
43: 2022-02-08
52: Class 05 24: Part A
71: Zodwa Msimang
54: TEXTILE
57: This pattern is a spot colour pattern with a circle within a large circle with black beads on the outline of the circle inside the circle there is used the logo with African Women`s face wearing isicolo next to each logo there are smaller black beads next to each logo middle circle has beads with radiance element in black with one bead in the middle with black and white background with net design surrounding the center. This design taken from an Ikhono Communications logo.

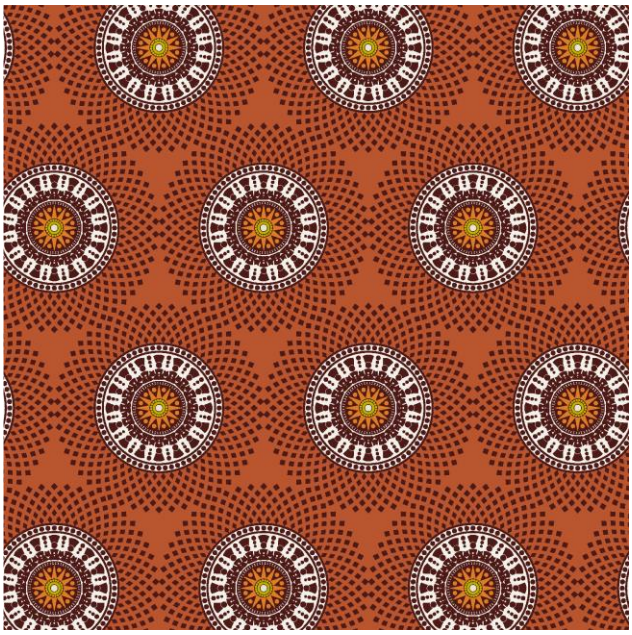


21: A2021/00400 22: 2021-04-14 23:
43: 2022-02-08
52: Class 05 24: Part A
71: Zodwa Msimang
54: TEXTILE
57: This pattern is a spot colour pattern with a circle within a large circle with brown beads on the outline of the circle inside the circle there is used the logo with African Women`s face wearing isicolo there are smaller beads next to each logo middle circle has beads with radiance element in yellow with one bead in the middle which is blue with a smaller yellow bead with a bright yellow background. This design taken from an Ikhono Communications logo.

21: A2021/00401 22: 2021-04-14 23:
43: 2022-02-08
52: Class 05 24: Part A
71: Zodwa Msimang
54: TEXTILE
57: This pattern is a spot colour pattern with a circle within a large circle with brown beads on the outline of the circle inside the circle there is used the logo with African Women`s face wearing isicolo next to each logo there are smaller brown beads next to each logo middle circle has beads with radiance element in orange with one bead in the middle which is gold with a smaller yellow bead with a clay colour in the background. This design taken from an Ikhono Communications logo.



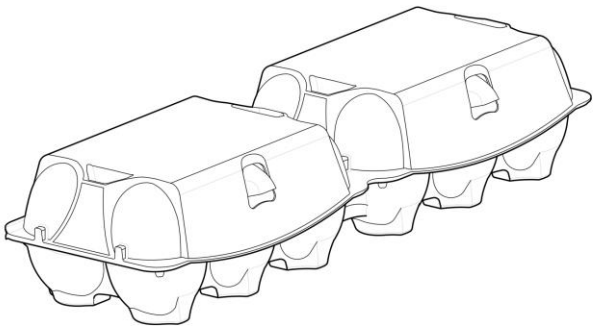
21: A2021/00402 22: 2021-04-14 23:
43: 2022-02-08
52: Class 05 24: Part A
71: Zodwa Msimang
54: TEXTILE
57: This pattern is a spot colour pattern with a circle within a large circle with brown beads on the outline of the circle inside the circle there is used the logo with African Women`s face wearing isicolo next to each logo there are smaller brown beads next to each logo middle circle has beads with radiance element in orange with one bead in the middle which is gold with a smaller yellow bead with net design surrounding the center. This design taken from an Ikhono Communications logo.



21: A2021/00403 22: 2021-04-14 23:
43: 2022-02-08
52: Class 05 24: Part A
71: Zodwa Msimang
54: TEXTILE
57: This pattern is a spot colour pattern with flower design in gold of a circle using African Women`s face wearing isicolo on her head and radiance element on either side with black background with net design surrounding the center. This design taken from an Ikhono Communications logo.

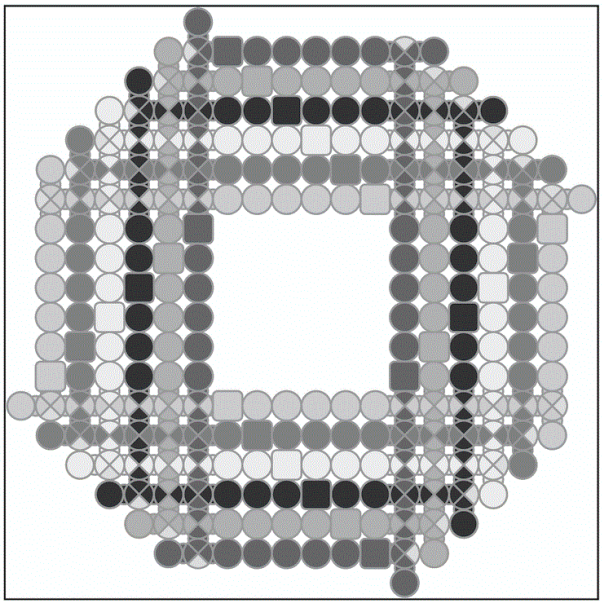
21: A2021/00404 22: 2021-04-14 23:
43: 2022-02-08
52: Class 05 24: Part A
71: Zodwa Msimang
54: TEXTILE
57: This pattern is a spot colour pattern a with flower design in gold of a circle using African Women`s face wearing isicolo on her head and radiance element on either side with black background with design surrounding the center. This design taken from an Ikhono Communications logo.

21: A2021/00437 22: 2021-04-23 23:
43: 2022-02-03
52: Class 09 24: Part A
71: Huhtamaki Molded Fiber Technology B.V.
33: WO 31: WIPO099062 32: 2020-11-02
54: EGG CARTONS
57: The features of the design for which novelty is claimed are the shape and/or configuration and/or pattern and/or ornamentation of an Egg carton as shown in the accompanying representations.

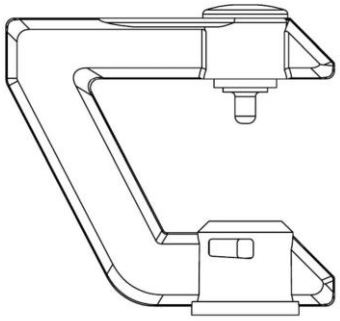


21: A2021/00440 22: 2021-04-23 23:
43: 2022-02-17
52: Class 12 24: Part A
71: Kuozui Motors, LTD.
33: TW 31: 109306742 32: 2020-12-01
54: FRONT BUMPER FOR VEHICLE
57: The design relates to a Front bumper for vehicle. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.

21: A2021/00552 22: 2021-05-24 23:
43: 2022-02-01
52: Class 21 24: Part A
71: Jacobus Cornelius Ferreira
54: GAME BOARD
57: The design relates to a Game Board. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.



21: A2021/00589 22: 2021-05-25 23:
43: 2022-02-17
52: Class 23 24: Part A
71: Agriplas (Pty) Ltd
54: WATER SPRAYER COMPONENT
57: The features of the design for which protection is claimed include the shape and/or configuration and/or pattern of an article substantially as shown in the accompanying representation(s).

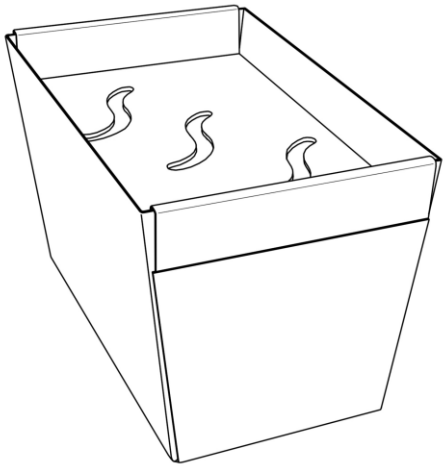


21: A2021/00596 22: 2021-05-28 23:
43: 2022-02-03
52: Class 13 24: Part A
71: SYMION AUTOMATION AND ENERGY (PTY) LTD
54: A HOUSING
57: The design is applied to a housing. The features of the design for which protection is claimed are those of the shape and/or configuration and/or pattern and/or ornamentation of the housing, substantially as illustrated in the accompanying

representations. The textual matter shown on the top of the housing and on the labels thereon does not form part of the design and is disclaimed.

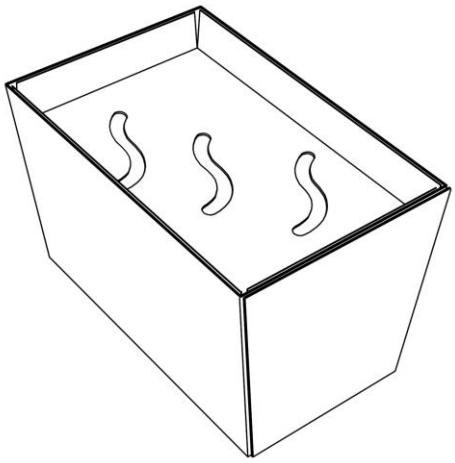
THREE DIMENSIONAL
VIEW FROM THE FRONT

21: A2021/00616 22: 2021-05-31 23:
43: 2022-02-03
52: Class 09 24: Part A
71: DS SMITH PACKAGING FRANCE SAS
33: WO 31: WIPO99936 32: 2020-12-02
54: TRAYS FOR PACKING FOODS
57: The design is for a tray for packing foods. The tray has rectangular opening at its top and tapers in trapezoidal fashion in its front-rear and left-right aspect, to a rectangular bottom that is smaller than the top. The top is closed off and defines three angled wave motifs.



perspective view

21: A2021/00617 22: 2021-05-31 23:
43: 2022-02-03
52: Class 09 24: Part A
71: DS Smith Packaging France SAS
33: WO 31: WIPO99936 32: 2020-12-02
54: TRAYS FOR PACKING FOOD
57: The design is for a tray for packing foods. The tray has rectangular opening at its top and tapers in trapezoidal fashion in its front-rear and left-right aspect, to a rectangular bottom that is smaller than the top. The top is closed off and defines three angled wave motifs.



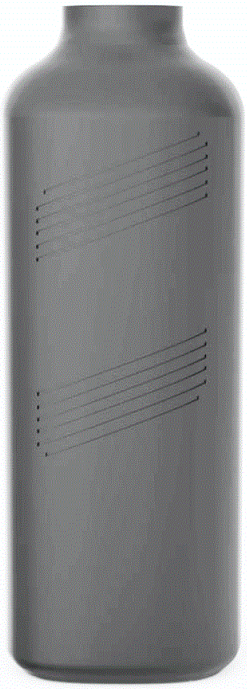
perspective view

21: A2021/00672 22: 2021-06-08 23:
43: 2022-02-01
52: Class 9 24: Part A
71: Diageo Brands B.V.

33: EM 31: 008313084-0001 32: 2020-12-09
54: BOTTLE
57: The design relates to a Bottle. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.

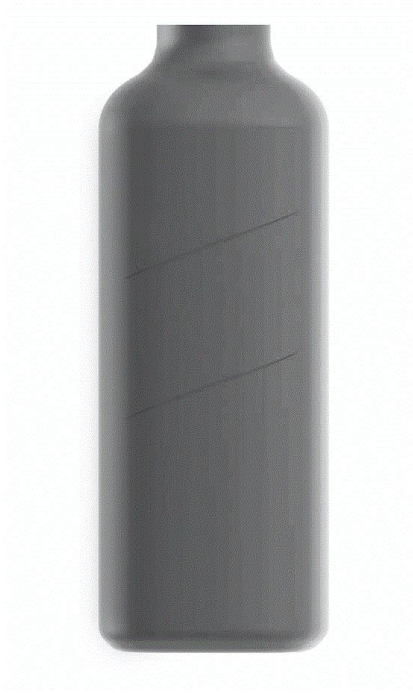
21: A2021/00673 22: 2021-06-08 23:
43: 2022-02-01
52: Class 9 24: Part A
71: Diageo Brands B.V.
33: EM 31: 008313084-0002 32: 2020-12-09
54: BOTTLE
57: The design relates to a Bottle. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.

21: A2021/00674 22: 2021-06-08 23:
43: 2022-02-01
52: Class 9 24: Part A
71: Diageo Brands B.V.
33: EM 31: 008313084-0003 32: 2020-12-09
54: BOTTLE
57: The design relates to a Bottle. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.

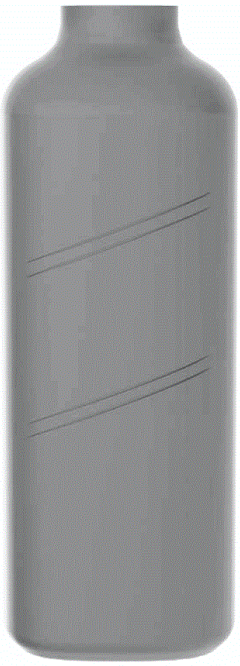


21: A2021/00675 22: 2021-06-08 23:
43: 2022-02-01
52: Class 9 24: Part A
71: Diageo Brands B.V.
33: EM 31: 008313084-0004 32: 2020-12-09
54: BOTTLE
57: The design relates to a Bottle. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.

21: A2021/00676 22: 2021-06-08 23:
43: 2022-02-01
52: Class 9 24: Part A
71: Diageo Brands B.V.
33: EM 31: 008313084-0005 32: 2020-12-09
54: BOTTLE
57: The design relates to a Bottle. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.

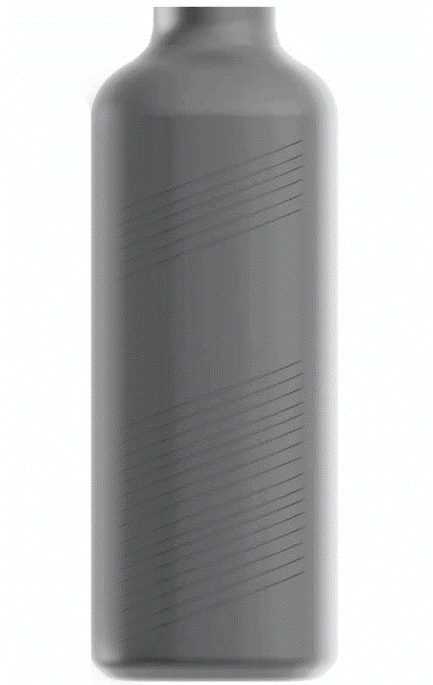


21: A2021/00677 22: 2021-06-08 23:
43: 2022-02-01
52: Class 9 24: Part A
71: Diageo Brands B.V.
33: EM 31: 008313084-0006 32: 2020-12-09
54: BOTTLE
57: The design relates to a Bottle. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.



21: A2021/00678 22: 2021-06-08 23:
43: 2022-02-01
52: Class 9 24: Part A
71: Diageo Brands B.V.
33: EM 31: 008313084-0007 32: 2020-12-09
54: BOTTLE
57: The design relates to a Bottle. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.

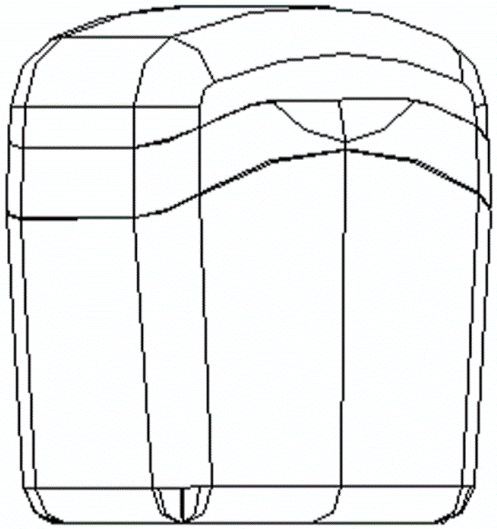
21: A2021/00679 22: 2021-06-08 23:
43: 2022-02-01
52: Class 9 24: Part A
71: Diageo Brands B.V.
33: EM 31: 008313084-0008 32: 2020-12-09
54: BOTTLE
57: The design relates to a Bottle. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.



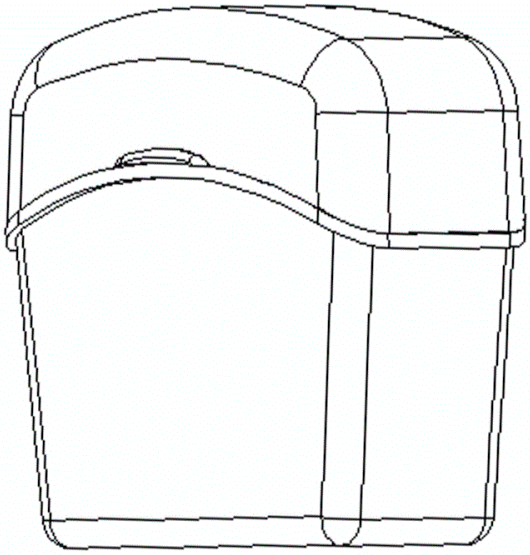
21: A2021/00680 22: 2021-06-08 23:
43: 2022-02-01
52: Class 9 24: Part A
71: Diageo Brands B.V.
33: EM 31: 008313084-0009 32: 2020-12-09
54: BOTTLE
57: The design relates to a Bottle. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.

21: A2021/00681 22: 2021-06-08 23:
43: 2022-02-01
52: Class 9 24: Part A
71: Diageo Brands B.V.
33: EM 31: 008313084-0010 32: 2020-12-09
54: BOTTLE
57: The design relates to a Bottle. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.

21: A2021/00682 22: 2021-06-09 23:
43: 2022-02-01
52: Class 9 24: Part A
71: Capstone 1456 CC
54: CONTAINER
57: The design relates to a Container. The features of the design are those of shape and/or pattern and/or configuration.



21: A2021/00683 22: 2021-06-09 23:
43: 2022-02-01
52: Class 9 24: Part A
71: Capstone 1456 CC
54: CONTAINER
57: The design relates to a Container. The features of the design are those of shape and/or pattern and/or configuration.

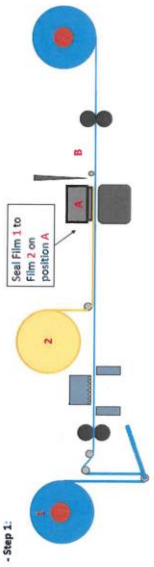


21: A2021/00693 22: 2021-06-11 23:
43: 2022-03-10
52: Class 9 24: Part A
71: Diageo Brands B.V.
33: EM 31: RCD008323596-0001 32: 2020-12-16
54: BOTTLE
57: The design relates to a Bottle. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.

21: A2021/00840 22: 2021-07-19 23:
43: 2022-02-17
52: Class 08 24: Part A
71: Vortex Innovation Worx (Pty) Ltd
54: HOOK HANGER TOOL COMPONENT
57: The features of the design for which protection is claimed include the shape and/or configuration and/or pattern of an article substantially as shown in the accompanying representation(s).

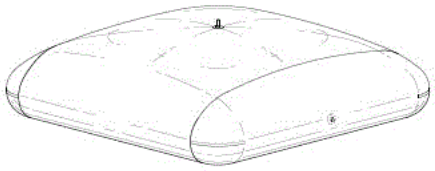
21: A2021/00842 22: 2021-07-19 23:
43: 2022-02-17
52: Class 08 24: Part A
71: Vortex Innovation Worx (Pty) Ltd
54: HOOK HANGER TOOL COMPONENT
57: The features of the design for which protection is claimed include the shape and/or configuration and/or pattern of an article substantially as shown in the accompanying representation(s).

21: A2021/00849 22: 2021-07-20 23:
43: 2022-02-22
52: Class 15 24: Part A
71: Vortex Innovation Worx (Pty) Ltd
54: DESICCANT MANUFACTURING ARRANGEMENT
57: The features of the design for which protection is claimed include the shape and/or configuration and/or pattern of an article substantially as shown in the accompanying representation(s).



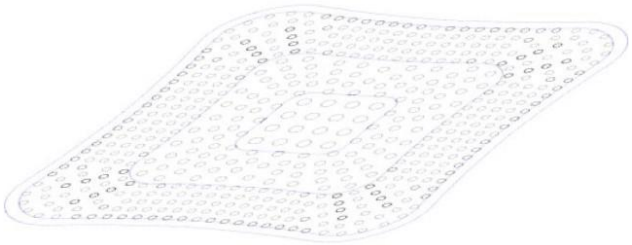
21: A2021/00856 22: 2021-07-23 23:
43: 2022-02-18
52: Class 23 24: Part A
71: BREDENKAMP, Gordon Leslie
54: A RESERVIOR BLADDER
57: The features of the design for which protection is claimed include the shape and/or configuration of a reservoir bladder, substantially as illustrated in the accompanying representations. The component

shown in broken lines does not form part of the design.

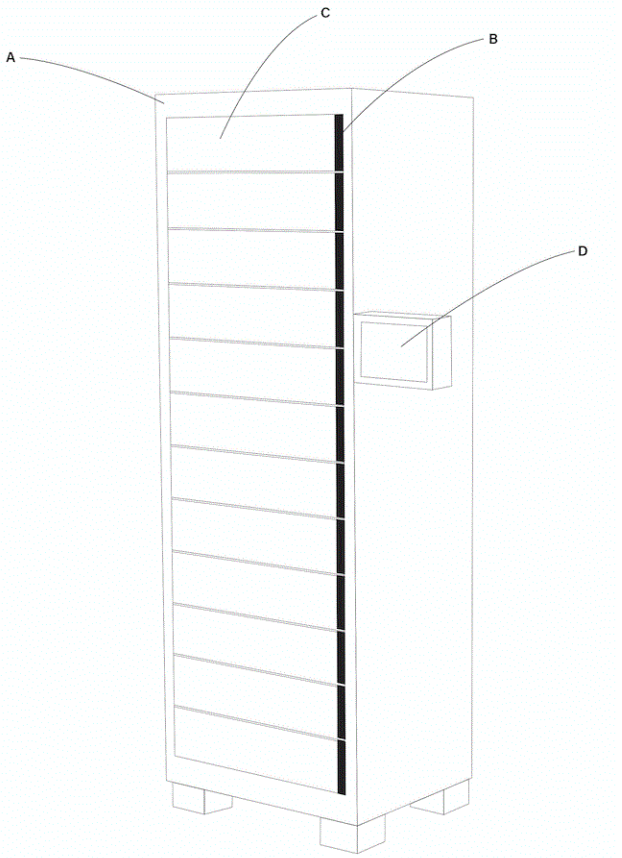


TOP PERSPECTIVE VIEW

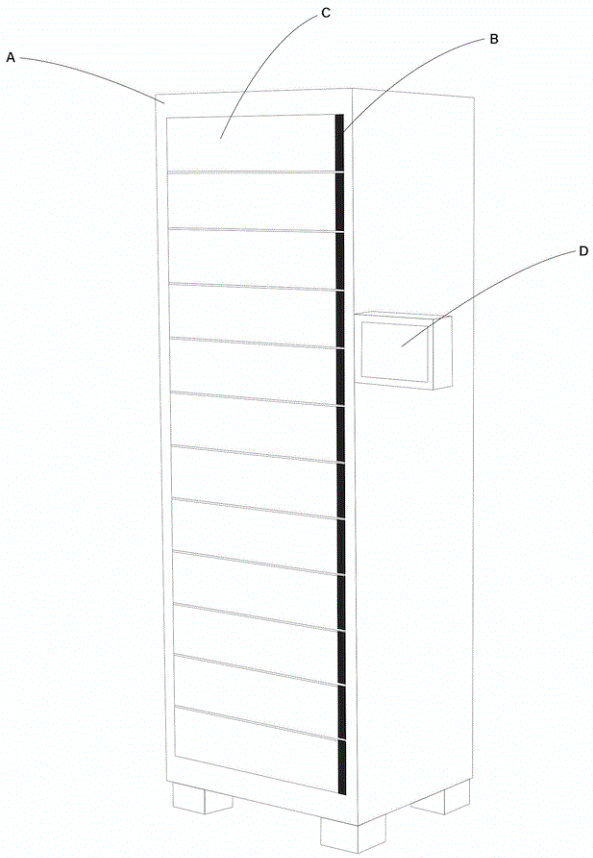
21: A2021/00861 22: 2021-07-23 23:
43: 2022-02-03
52: Class 24 24: Part A
71: Medtrade Products Limited
33: GB 31: 6115233 32: 2021-01-25
54: WOUND DRESSING
57: The features of the design for which protection is claimed include the pattern and/or shape and/or configuration and/or ornamentation of a wound dressing (or part thereof) substantially as illustrated in the accompanying representations.



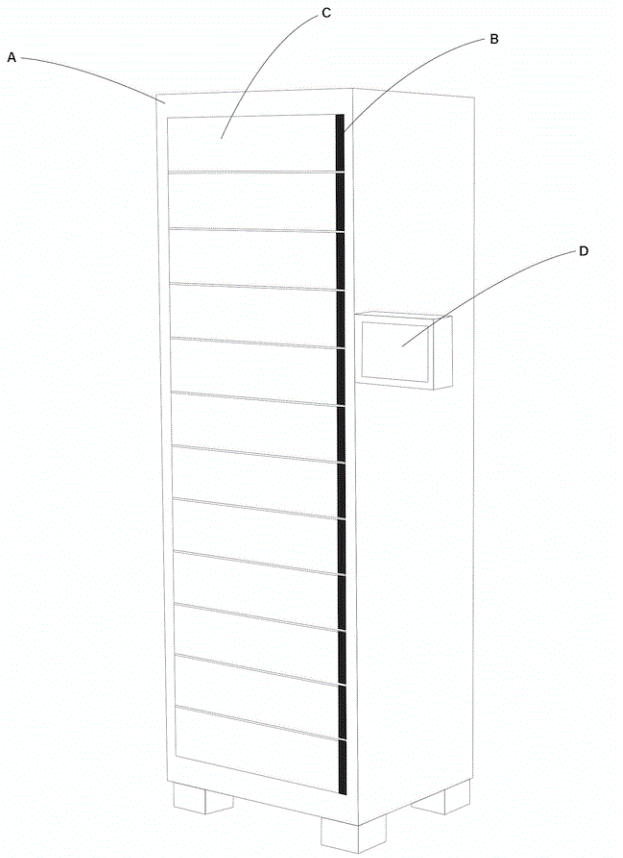
21: A2021/00878 22: 2021-07-27 23:
43: 2022-02-18
52: Class 6 24: Part A
71: Good Try (Pty) Ltd
54: LOCKER
57: The design relates to a Locker. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.



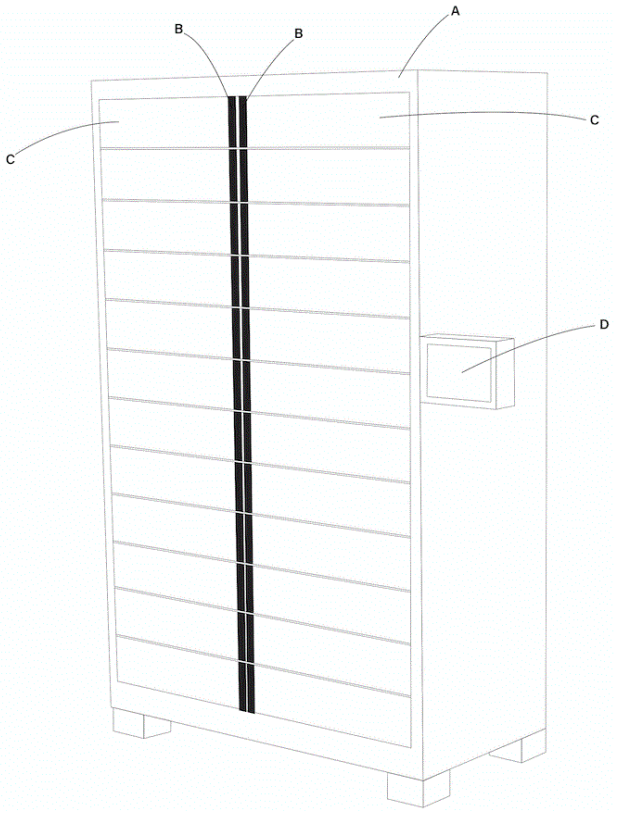
21: A2021/00879 22: 2021-07-27 23:
43: 2022-02-18
52: Class 25 24: Part A
71: Good Try (Pty) Ltd
54: LOCKER
57: The design relates to a Locker. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.



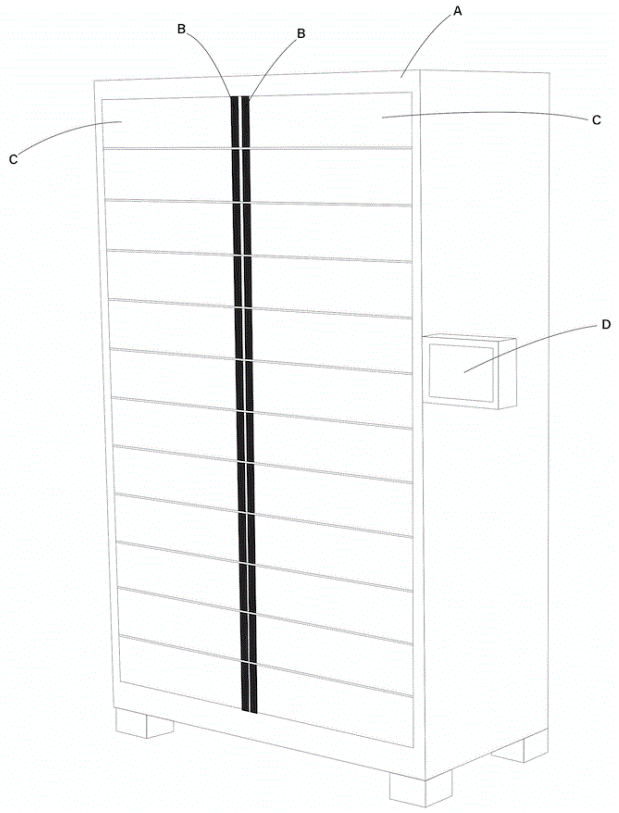
21: A2021/00880 22: 2021-07-27 23:
43: 2022-02-18
52: Class 20 24: Part A
71: Good Try (Pty) Ltd
54: LOCKER
57: The design relates to a Locker. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.



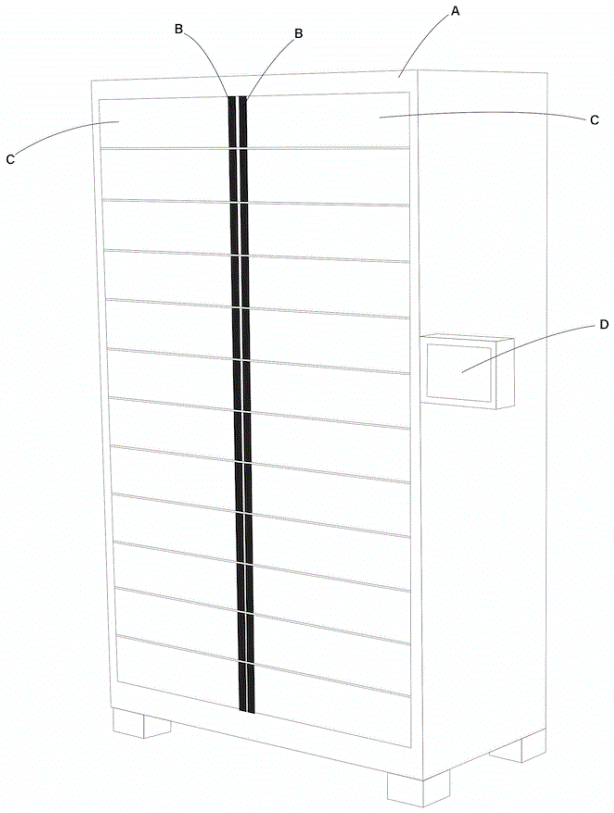
21: A2021/00884 22: 2021-07-27 23:
43: 2022-02-18
52: Class 6 24: Part A
71: Good Try (Pty) Ltd
54: LOCKER
57: The design relates to a Locker. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.



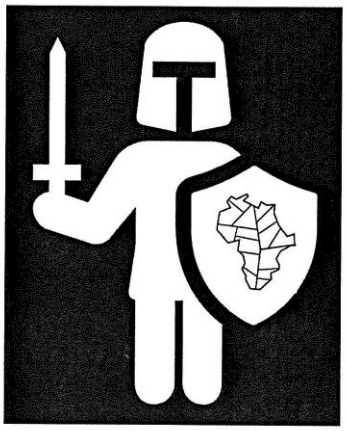
21: A2021/00885 22: 2021-07-27 23:
43: 2022-02-18
52: Class 20 24: Part A
71: Good Try (Pty) Ltd
54: LOCKER
57: The design relates to a Locker. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.



21: A2021/00886 22: 2021-07-27 23:
43: 1900-01-01
52: Class 25 24: Part A
71: Good Try (Pty) Ltd
54: LOCKER
57: The design relates to a Locker. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.

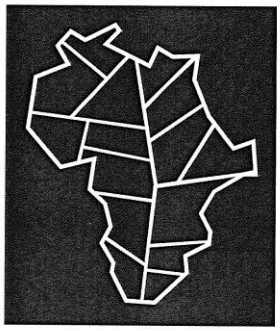


21: A2021/00908 22: 2021-07-29 23:
43: 2022-02-18
52: Class 32 24: Part A
71: AFRICA SUPPLY CHAIN EXCELLENCE AWARDS NPC
54: LOGO
57: The design relates to a logo. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.



SCHEMATIC REPRESENTATION OF LOGO

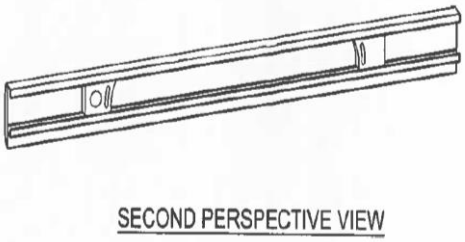
21: A2021/00909 22: 2021-07-29 23:
43: 2022-02-18
52: Class 32 24: Part A
71: AFRICA SUPPLY CHAIN EXCELLENCE AWARDS NPC
54: LOGO
57: The design relates to a logo. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.



SCHEMATIC REPRESENTATION OF LOGO

21: F2017/01045 22: 2017-06-29 23:
43: 2022-03-01
52: Class 23 24: Part F
71: SALVATORE DI BELLA BATHROOM ACCESSORIES CC T/A PRIMA BELLA
54: A SHOWER RAIL ASSEMBLY
57: The design relates to a shower rail assembly which prevents a runner from derailing, upon the runner abutting a stopper situated within the rail, from the said rail. The features of the design for

which protection is claimed reside in the shape and/or configuration of the shower rail assembly, the shower rail assembly including a shower rail and a stopper situated within the shower rail, substantially as illustrated in the accompanying drawings.

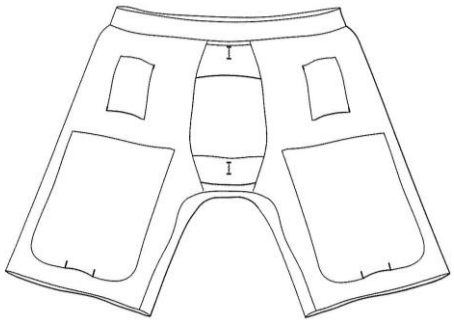


SECOND PERSPECTIVE VIEW

21: F2020/01433 22: 2020-11-05 23:
43: 2021-12-13
52: Class 09 24: Part F
71: StyleProps (Proprietary) Limited
54: CONTAINER
57: The features of the container for which protection is sought are those features of shape and/or configuration and/or pattern applied to the container shown in the representations.

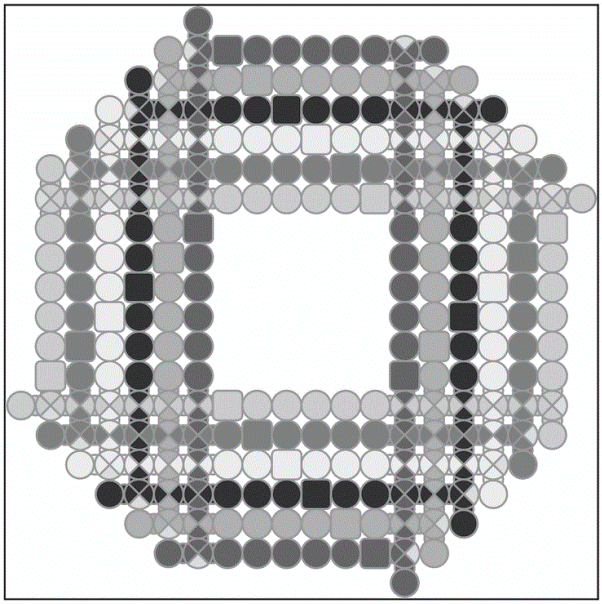
21: F2020/01668 22: 2020-12-22 23:
43: 2022-03-01
52: Class 02 24: Part F
71: MAHLWELE, Sue-Ann

54: MEDICAL GARMENT
57: he design relates to a medical garment. The features of the design are those of shape and/or configuration and/or pattern.



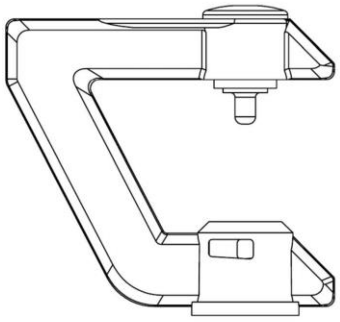
FRONT VIEW
OF GARMENT

21: F2021/00553 22: 2021-05-24 23:
43: 2021-12-03
52: Class 14 24: Part F
71: Jacobus Cornelius Ferreira
54: GAME BOARD
57: The design relates to a Game Board. The features of the design are those of shape and/or pattern and/or configuration.

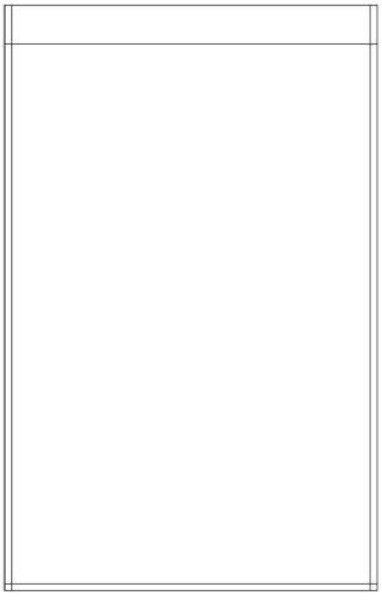


21: F2021/00590 22: 2021-05-25 23:
43: 2022-02-17
52: Class 23 24: Part F
71: Agriplas (Pty) Ltd

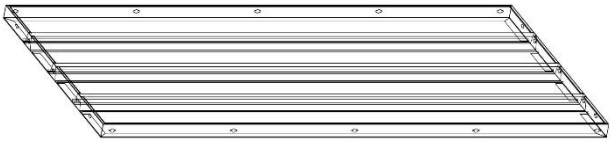
54: WATER SPRAYER COMPONENT
57: The features of the design for which protection is claimed include the shape and/or configuration and/or pattern of an article substantially as shown in the accompanying representation(s).



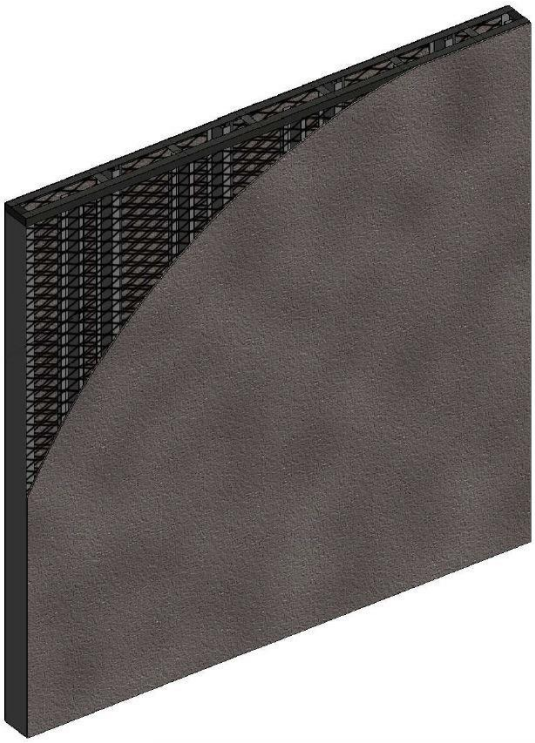
21: F2021/00593 22: 2021-05-27 23:
43: 2022-03-01
52: Class 06 24: Part F
71: Shaoxing Keqiao Diwan Textile Co., Ltd.
33: CN 31: 202030779890.7 32: 2020-12-17
54: CURTAIN
57: The design is to be applied to a curtain. The features for which protection is claimed are those of shape and/or configuration, substantially as shown in the accompanying representations.



21: F2021/00597 22: 2021-05-28 23:
43: 2022-02-03
52: Class 25 24: Part F
71: NES CONSULT & ASSOCIATES (PTY) LTD
54: FORMWORK SET
57: The design is for a formwork set comprising panels that are attachable edge-to-edge with spacers attached to their tops and bottoms and with clamps engaging bayonet-fashion in apertures defined in edges of the panels.

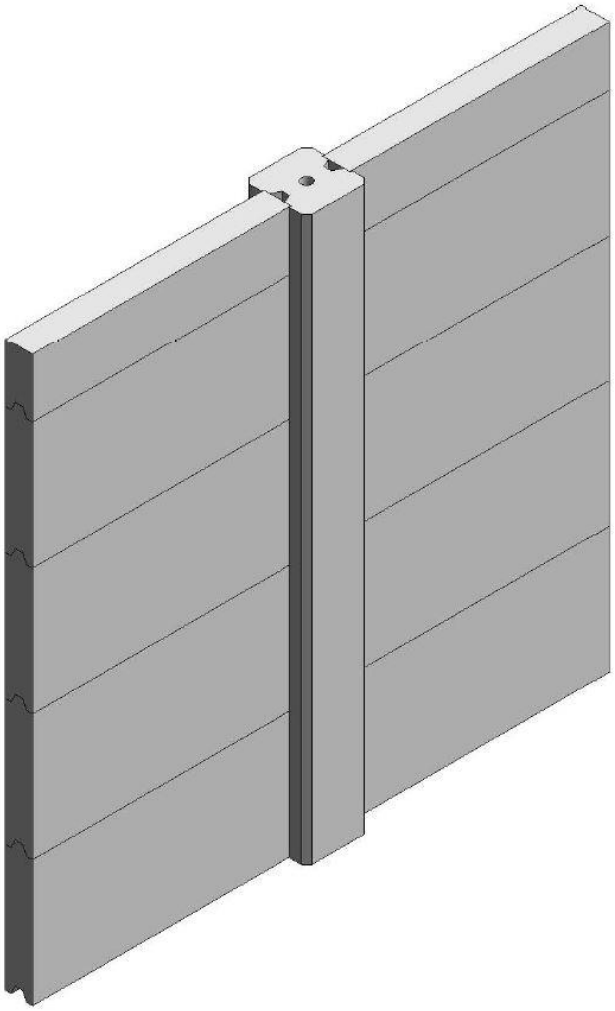


21: F2021/00598 22: 2021-05-28 23:
43: 2022-02-03
52: Class 25 24: Part F
71: NES CONSULT & ASSOCIATES (PTY) LTD
54: CONSTRUCTION SYSTEM
57: The design is for a construction system with a support structure to which wire mesh is spot welded and plaster is sprayed onto the wire mesh.

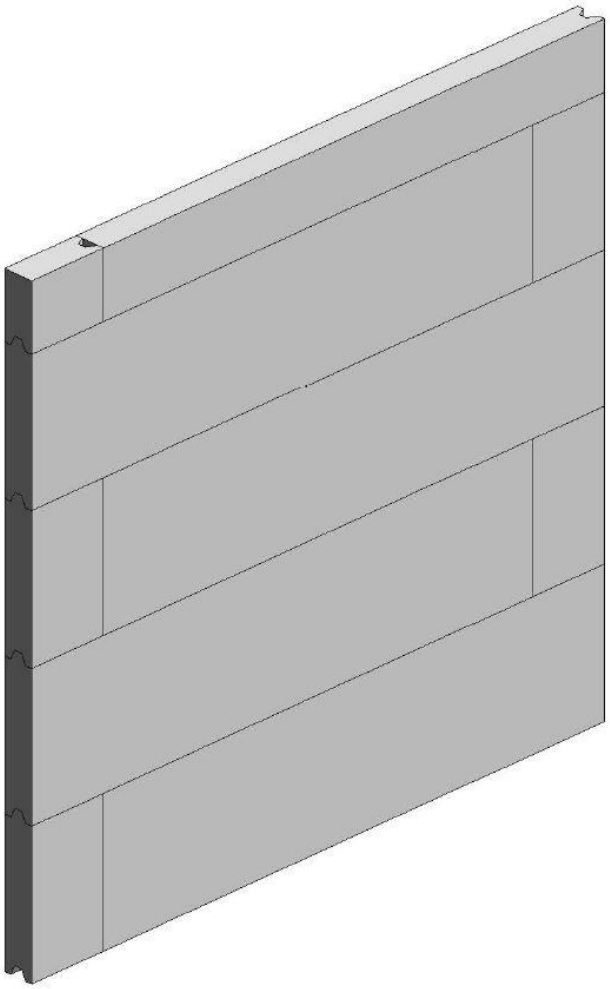


21: F2021/00599 22: 2021-05-28 23:
43: 2022-02-03
52: Class 25 24: Part F
71: NES CONSULT & ASSOCIATE (PTY) LTD
54: CONSTRUCTION SYSTEM

57: The design is for a construction system comprising panels fitted to adjacent columns at one of both ends, with male/female fittings between panels and between each panel and its adjacent column.



21: F2021/00600 22: 2021-05-28 23:
43: 2022-02-03
52: Class 25 24: Part F
71: NES CONSULT & ASSOCIATES (PTY) LTD
54: CONSTRUCTION SYSTEM
57: The design is for a construction system comprising panels fitted together vertically and horizontally with male-female joints, in a staggered arrangement.



21: F2021/00628 22: 2021-06-02 23:
43: 2022-02-01
52: Class 6 24: Part F
71: Glen Clifton Kruger
54: TABLE FRAME
57: The design relates to a Table frame. The features of the design are those of shape and/or pattern and/or configuration.

21: F2021/00633 22: 2021-06-03 23:
43: 2022-02-01
52: Class 24 24: Part F
71: VIGAMED PRODUCTS PRIVATE LIMITED
33: IN 31: 338343-001 32: 2021-01-31
54: FEMALE CONDOM
57: The design relates to a FEMALE CONDOM. The features of the design are those of shape and/or configuration.

PERSPECTIVE VIEW

21: F2021/00634 22: 2021-06-03 23:
43: 2022-02-01
52: Class 24 24: Part F
71: VIGAMED PRODUCTS PRIVATE LIMITED
33: IN 31: 338344-001 32: 2021-01-31
54: FEMALE CONDOM
57: The design relates to a FEMALE CONDOM. The features of the design are those of shape and/or configuration.

PERSPECTIVE VIEW

21: F2021/00635 22: 2021-06-03 23:
43: 2022-02-01
52: Class 24 24: Part F
71: VIGAMED PRODUCTS PRIVATE LIMITED
33: IN 31: 338341-001 32: 2021-01-31
54: FEMALE CONDOM
57: The design relates to a FEMALE CONDOM. The features of the design are those of shape and/or configuration.

PERSPECTIVE VIEW

21: F2021/00636 22: 2021-06-03 23:
43: 2022-02-01
52: Class 24 24: Part F
71: VIGAMED PRODUCTS PRIVATE LIMITED
33: IN 31: 338342-001 32: 2021-01-31
54: FEMALE CONDOM
57: The design relates to a FEMALE CONDOM. The features of the design are those of shape and/or configuration.

PERSPECTIVE VIEW

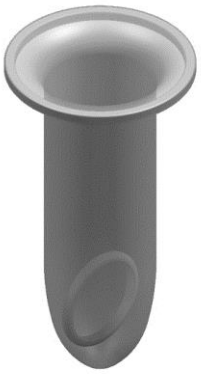
21: F2021/00637 22: 2021-06-03 23:
43: 2022-02-01
52: Class 24 24: Part F
71: VIGAMED PRODUCTS PRIVATE LIMITED
33: IN 31: 338278-001 32: 2021-01-29
54: FEMALE CONDOM
57: The design relates to a FEMALE CONDOM. The features of the design are those of shape and/or configuration.

PERSPCTIVE VIEW

21: F2021/00639 22: 2021-06-03 23:
43: 2022-02-01
52: Class 24 24: Part F
71: VIGAMED PRODUCTS PRIVATE LIMITED
33: IN 31: 338354-001 32: 2021-01-31
54: FEMALE CONDOM
57: The design relates to a FEMALE CONDOM. The features of the design are those of shape and/or configuration.

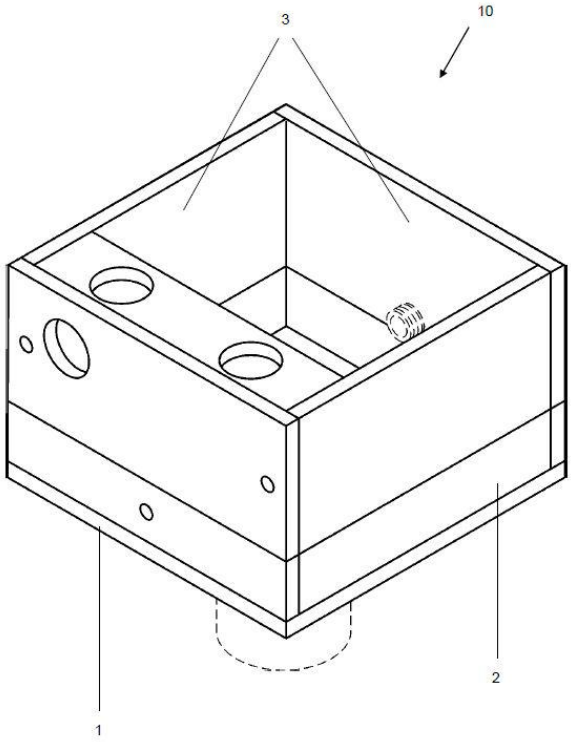
PERSPECTIVE VIEW

21: F2021/00638 22: 2021-06-03 23:
43: 2022-02-03
52: Class 24 24: Part F
71: VIGAMED PRODUCTS PRIVATE LIMITED
33: IN 31: 338279-001 32: 2021-01-29
54: FEMALE CONDOM
57: The design relates to a FEMALE CONDOM. The features of the design are those of shape and/or configuration.



PERSPECTIVE VIEW

21: F2021/00644 22: 2021-06-03 23:
43: 2022-02-17
52: Class 25 24: Part F
71: HADLOW, William Albert
54: DRAINAGE GULLY SURROUND
57: The design is applied to a drainage gully surround. The features of the design for which protection is claimed are those of the shape and/or configuration of the gully surround, substantially as illustrated in the accompanying representations.

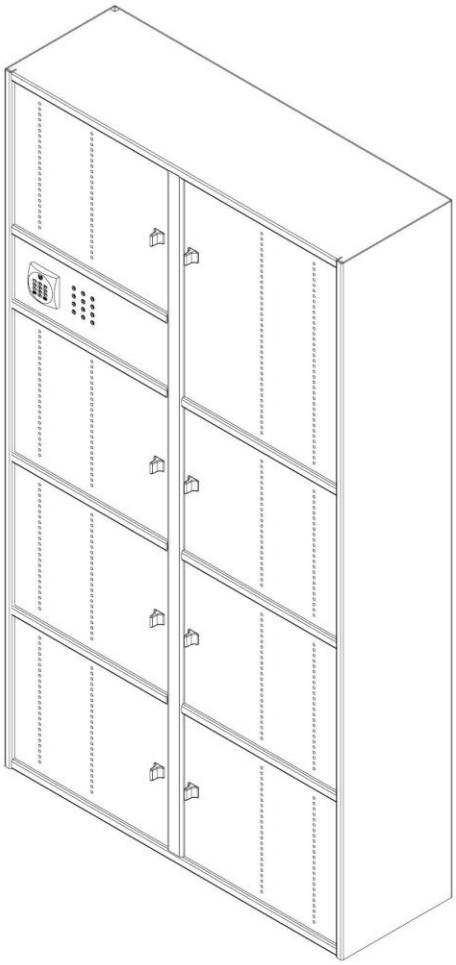


21: F2021/00684 22: 2021-06-09 23:
43: 2022-02-03
52: Class 24 24: Part F
71: VIGAMED PRODUCTS PRIVATE LIMITED.
33: IN 31: 338355-001 32: 2021-01-31
54: FEMALE CONDOM
57: The design relates to a FEMALE CONDOM. The features of the design are those of shape and/or configuration.

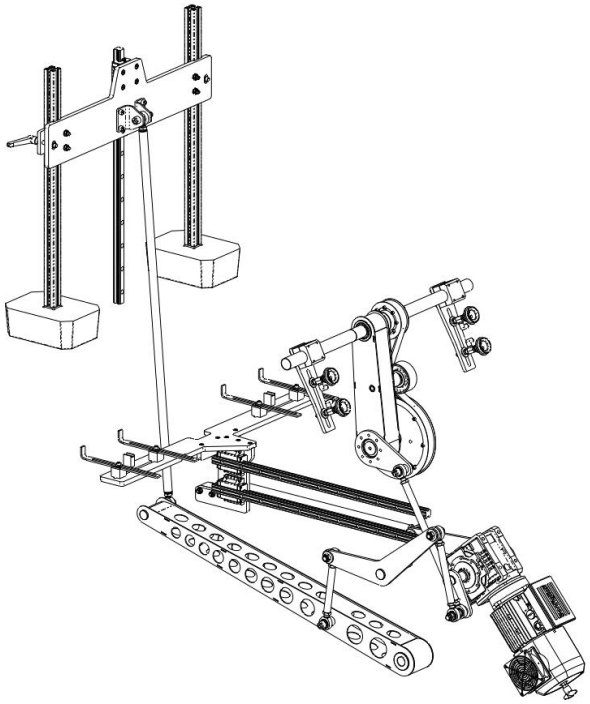
PERSPECTIVE VIEW

21: F2021/00685 22: 2021-06-10 23:
43: 2022-02-03
52: Class 06 24: Part F
71: DTRON COMMUNICATIONS (PTY) LTD

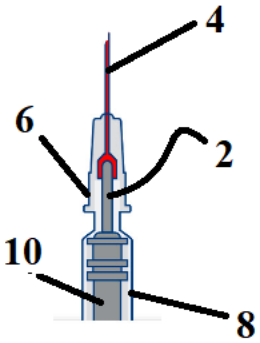
54: SECURE STORAGE CABINET
57: The design is for a secure storage cabinet that has an upright rectangular shape, with two columns of doors at its front, which are hinged at outer edges and lock on opposing sides of a central vertical post.



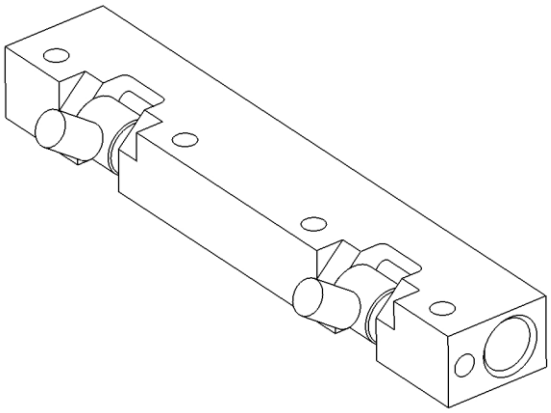
21: F2021/00694 22: 2021-06-14 23:
43: 2022-03-03
52: Class 15 24: Part F
71: GOSSAMER MACHINERY (PTY) LTD
54: CONTAINER FORMING MECHANISM
57: The design is for a container forming mechanism that is driven by continuous rotation of a crank, through an arrangement of crank arms, links and other mechanical elements.



21: F2021/00700 22: 2021-06-15 23:
43: 2022-02-03
52: Class 24 24: Part F
71: MATHOMOMAYO FAMILY TRUST
54: A MEDICAL SYRINGE
57: The novelty of the design as applied to a medical syringe resides in the features of shape and/or configuration and/or pattern as applied to the article as shown in the representations.

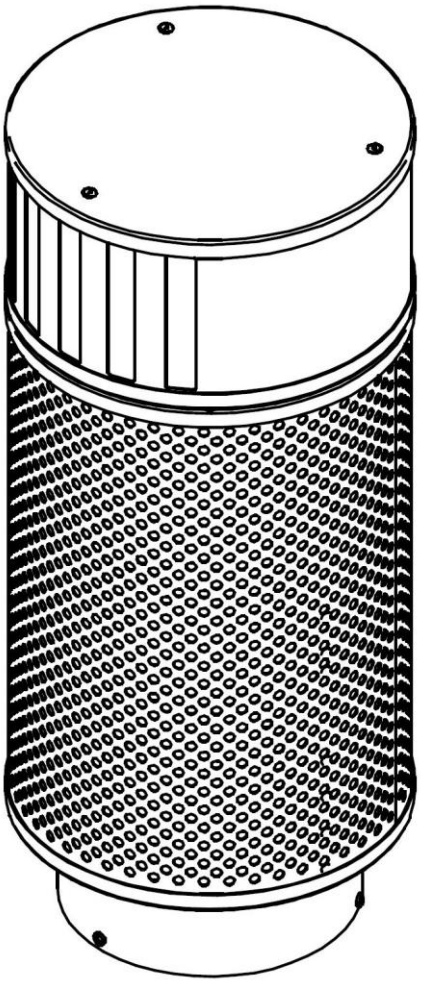


21: F2021/00716 22: 2021-06-18 23:
43: 2022-02-03
52: Class 15 24: Part F
71: Gossamer Machinery (Pty) Ltd
54: DAMPER ARRANGEMENT
57: The design is for a damper arrangement comprising a hinge mechanism and two dampers that are arranged to allow a flap of a container forming mandrel to pivot during operation, with dampening.

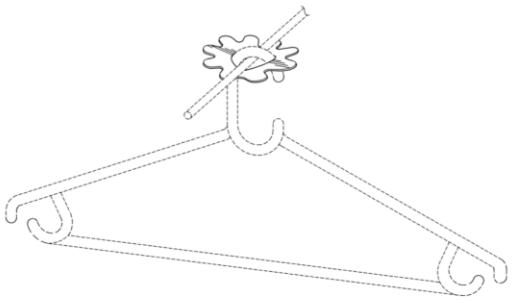


21: F2021/00746 22: 2021-06-22 23:
43: 2022-02-03
52: Class 21 24: Part F
71: VAN NIEROP, Simon
54: ROOFTOP TENTS FOR VEHICLES
57: The design is for a rooftop tent for a vehicle, that can be fitted on top of the vehicle, to be deployed from a stowed condition.

21: F2021/00747 22: 2021-06-22 23:
43: 2022-02-03
52: Class 23 24: Part F
71: RICKARD AIR DIFFUSION (PTY) LTD
54: AIR DIFFUSER
57: The design is for an air diffuser that is intended for use as a table top diffuser that is generally cylindrical in shape, with a slotted top that can be rotated between an open and a closed position.



21: F2021/00749 22: 2021-06-24 23:
43: 2022-02-03
52: Class 07 24: Part F
71: BARTELS, Linda
54: CLOTHES HANGER STABILIZERS
57: The design is for a clothes hanger stabilizer, specifically for an in-use application in conjunction with a clothes hanger suspended from a washing line. The clothes hanger stabilizer comprises of a substantially flexible circular disc, including a scalloped edge formation. Furthermore, the disc includes a substantially oval aperture disposed centrally thereon. In use, the disc is positioned beneath the washing line with the aperture transversely extending on both sides of the washing line, after which two opposing sides of the disc are folded in an upwards direction, resulting in a half oval shape opening above the washing line, through which a hook portion of the clothes hanger is inserted. The two sides are thereafter released, thereby retaining the clothes hanger, disc and the washing line together, which prevents the clothes hanger to rotate and move, in a longitudinal direction, relative to the washing line, resulting in a stabilization means.



Three-dimensional in-use view of the clothes hanger stabilizer, retaining a clothes hanger onto a washing line

21: F2021/00750 22: 2021-06-24 23:
43: 2022-02-17
52: Class 10 24: Part F
71: STELLENBOSCH UNIVERSITY
54: APPARATUS FOR MEASURING FOULING PARAMETERS IN A FLUID
57: The design is applied to an apparatus for measuring fouling parameters in a fluid. The features of the design for which protection is claimed are those of the shape and/or configuration and/or pattern of the apparatus for measuring fouling parameters in a fluid, substantially as illustrated in the accompanying representations.

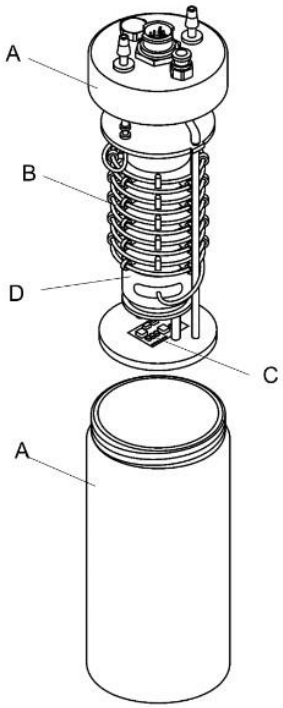


FIGURE 1
THREE-DIMENSIONAL VIEW – DISASSEMBLED CONDITION

21: F2021/00751 22: 2021-06-24 23:
43: 2022-02-17
52: Class 10 24: Part F
71: STELLENBOSCH UNIVERSITY
54: APPARATUS FOR MEASURING FOULING PARAMETERS IN A FLUID
57: The design is applied to an apparatus for measuring fouling parameters in a fluid. The features of the design for which protection is claimed are those of the shape and/or configuration and/or pattern of the apparatus for measuring fouling parameters in a fluid, substantially as illustrated in the accompanying representations.

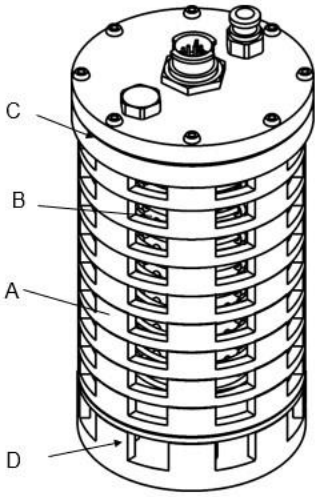
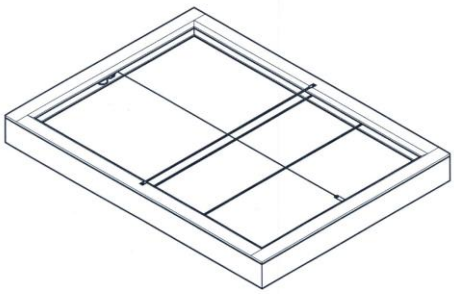
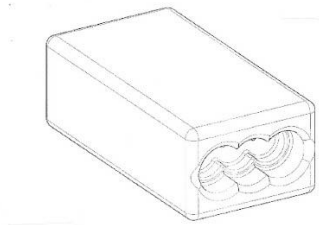


FIGURE 1
THREE-DIMENSIONAL VIEW – ASSEMBLED CONDITION

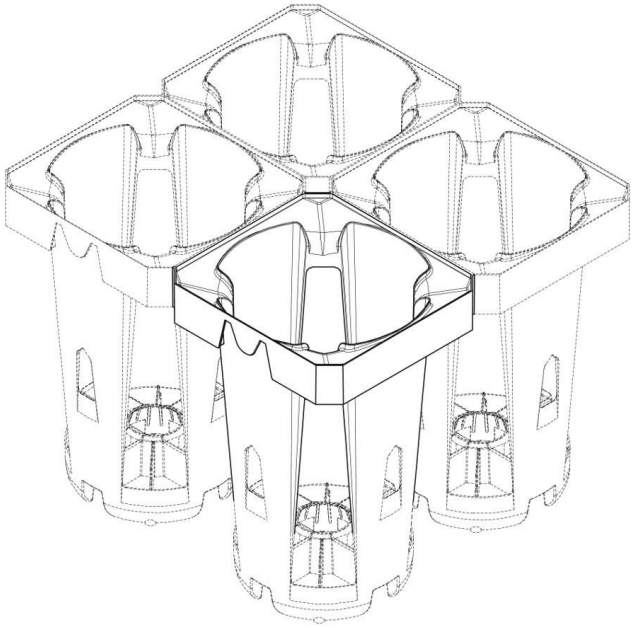
21: F2021/00757 22: 2021-06-28 23:
43: 2022-02-03
52: Class 13 24: Part F
71: MARTHINUS JOHANNES PRETORIUS
54: FRAME FOR USE IN A SOLAR PANEL
57: The features for which protection is claimed reside in the shape or configuration of a frame for use in a solar panel, the frame including a cover which is retractable and extendable, as shown in the accompanying drawings, irrespective of the material of the cover.



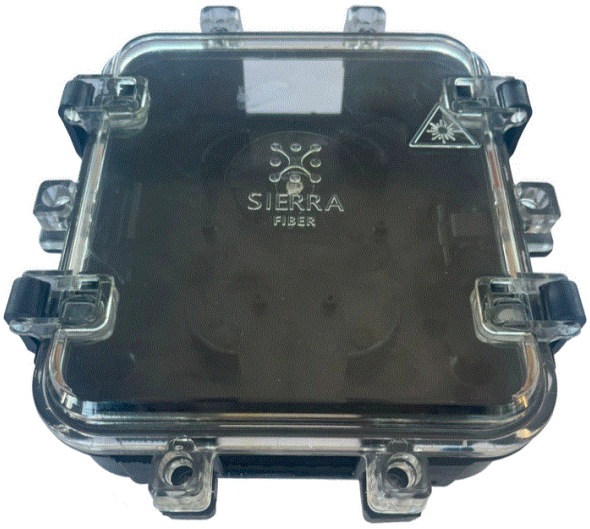
21: F2021/00758 22: 2021-06-28 23:
43: 2022-02-03
52: Class 09 24: Part F
71: Builderbottle
54: BRICK BOTTLE
57: The features of the design for which protection is claimed are the shape, pattern and configuration of a brick bottle substantially as illustrated in the accompanying drawings.



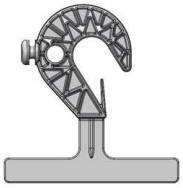
21: F2021/00783 22: 2021-07-01 23: 21-01-2021
43: 2022-02-17
52: Class 09 24: Part F
71: INTERNATIONAL PLANT PROPAGATION TECHNOLOGY LIMITED
54: PLANT- GROWING TRAY
57: The design is applied to a plant-growing tray. The features of the design for which protection is claimed are those of the shape and/or configuration and/or pattern of the plant-growing tray, substantially as illustrated in the accompanying representation. Features shown in broken lines do not form part of the design and are disclaimed.



21: F2021/00786 22: 2021-07-06 23:
43: 2022-02-18
52: Class 14 24: Part F
71: Sierra Fiber (Pty) Ltd
54: SPLICE ENCLOSURE
57: The design relates to a Splice enclosure. The features of the design are those of shape and/or pattern and/or configuration.



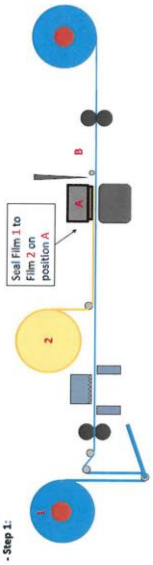
21: F2021/00839 22: 2021-07-19 23:
43: 2022-02-17
52: Class 08 24: Part F
71: Vortex Innovation Worx (Pty) Ltd
54: HOOK HANGER COMPONENT
57: The features of the design for which protection is claimed include the shape and/or configuration and/or pattern of an article substantially as shown in the accompanying representation(s).



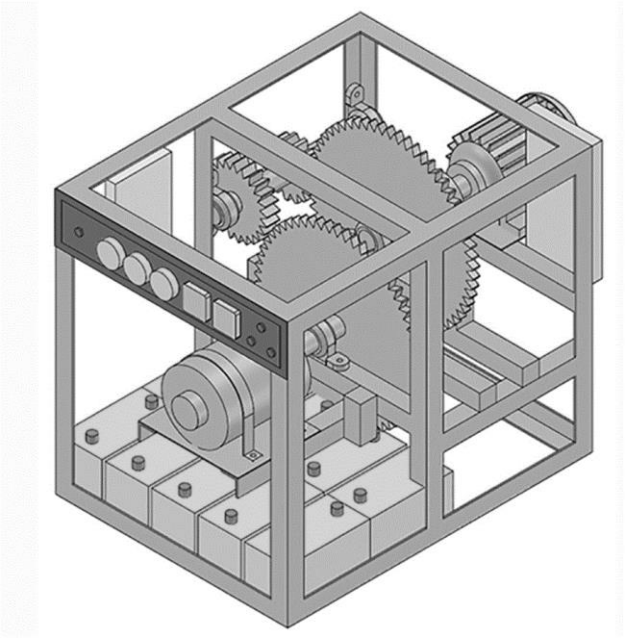
21: F2021/00841 22: 2021-07-19 23:
43: 2022-02-17
52: Class 08 24: Part F
71: Vortex Innovation Worx (Pty) Ltd
54: HOOK HANGER TOOL COMPONENT
57: The features of the design for which protection is claimed include the shape and/or configuration and/or pattern of an article substantially as shown in the accompanying representation(s).

21: F2021/00843 22: 2021-07-19 23:
43: 2022-02-22
52: Class 08 24: Part F
71: Vortex Innovation Worx (Pty) Ltd
54: HOOK HANGER TOOL COMPONENT
57: The features of the design for which protection is claimed include the shape and/or configuration and/or pattern of an article substantially as shown in the accompanying representation(s).

21: F2021/00850 22: 2021-07-20 23:
43: 2022-02-22
52: Class 15 24: Part F
71: Vortex Innovation Worx (Pty) Ltd
54: DESICCANT MANUFACTURING ARRANGEMENT
57: The features of the design for which protection is claimed include the shape and/or configuration and/or pattern of an article substantially as shown in the accompanying representation(s).



21: F2021/00855 22: 2021-07-22 23:
43: 2022-02-18
52: Class 15 24: Part F
71: Tiankai Zhang
33: CN 31: 202130093214.9 32: 2021-02-07
54: ENGINE
57: The design relates to a Engine. The features of the design are those of shape and/or pattern and/or configuration.

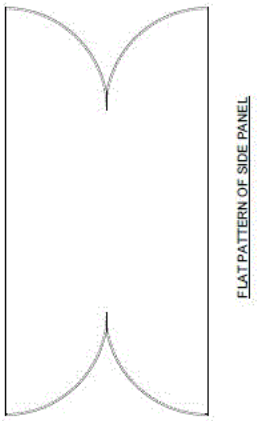


21: F2021/00857 22: 2021-07-23 23:
43: 2022-02-18
52: Class 23 24: Part F

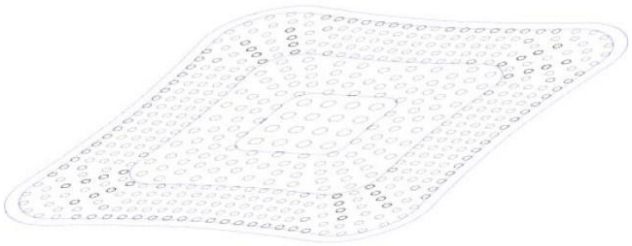
71: BREDENKAMP, Gordon Leslie
54: A RESERVIOR BLADDER
57: The features of the design for which protection is claimed include the shape and/or configuration of a reservoir bladder, substantially as illustrated in the accompanying representations. The component shown in broken lines does not form part of the design.

TOP PERSPECTIVE VIEW

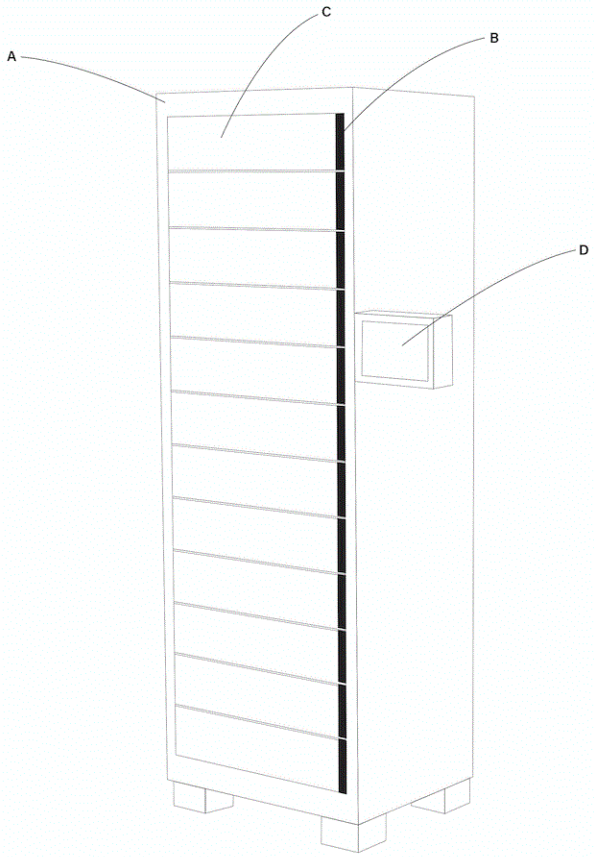
21: F2021/00858 22: 2021-07-23 23:
43: 2022-02-18
52: Class 23 24: Part F
71: BREDENKAMP, Gordon Leslie
54: FLAT PATTERN FOR A RESERVIOR BLADDER
57: The features of the design for which protection is claimed include the shape and/or configuration of a flat pattern reservoir bladder, substantially as illustrated in the accompanying representations.



21: F2021/00862 22: 2021-07-23 23:
43: 2022-02-22
52: Class 24 24: Part F
71: Medtrade Products Limited
33: GB 31: 6115233 32: 2021-01-25
54: WOUND DRESSING
57: The features of the design for which protection is claimed include the pattern and/or shape and/or configuration and/or ornamentation of a wound dressing (or part thereof) substantially as illustrated in the accompanying representations.

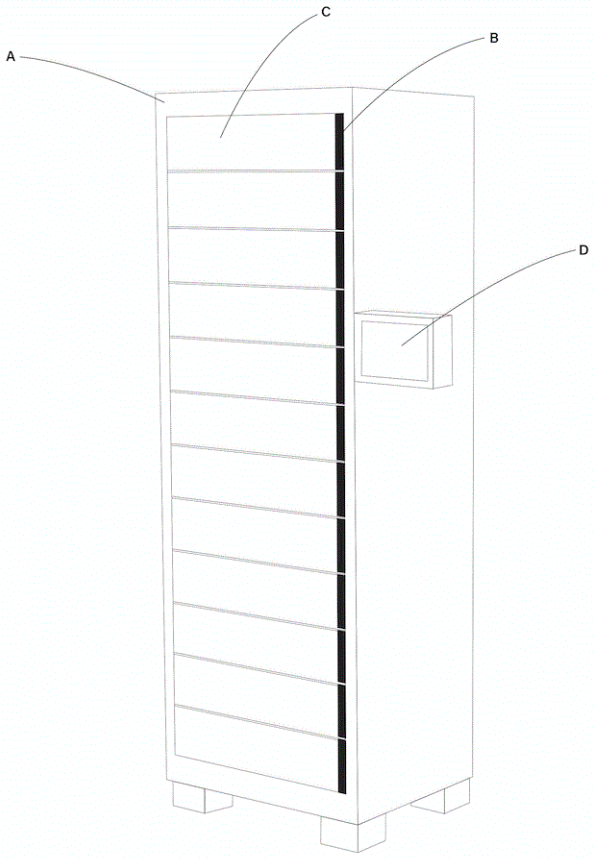


21: F2021/00881 22: 2021-07-27 23:
43: 2022-02-18
52: Class 6 24: Part F
71: Good Try (Pty) Ltd
54: LOCKER
57: The design relates to a Locker. The features of the design are those of shape and/or pattern and/or configuration.

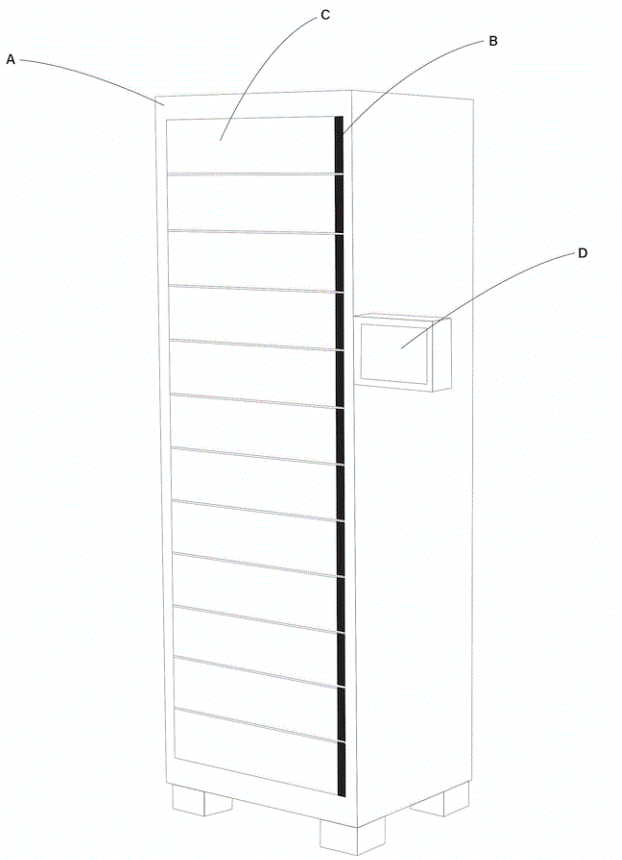


21: F2021/00882 22: 2021-07-27 23:
43: 2022-02-18
52: Class 20 24: Part F
71: Good Try (Pty) Ltd
54: LOCKER

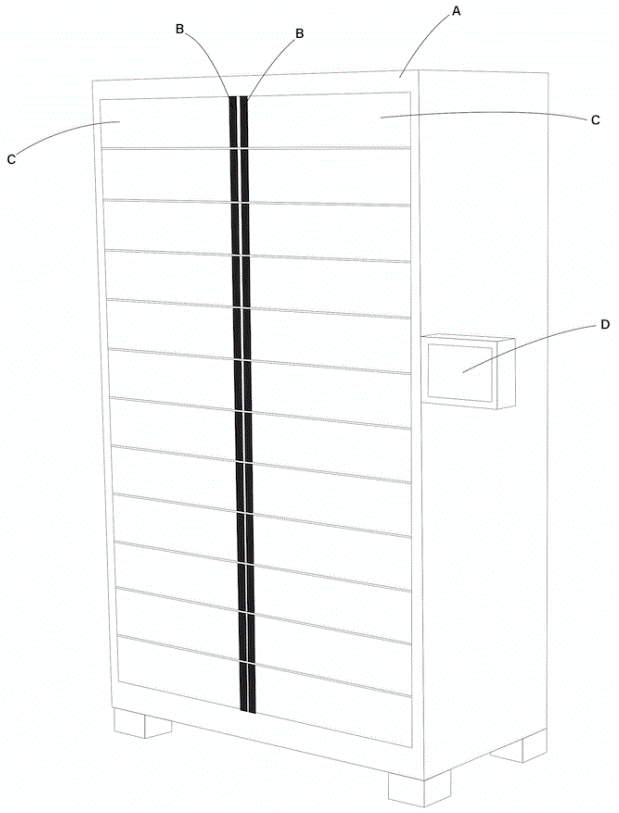
57: The design relates to a Locker. The features of the design are those of shape and/or pattern and/or configuration.



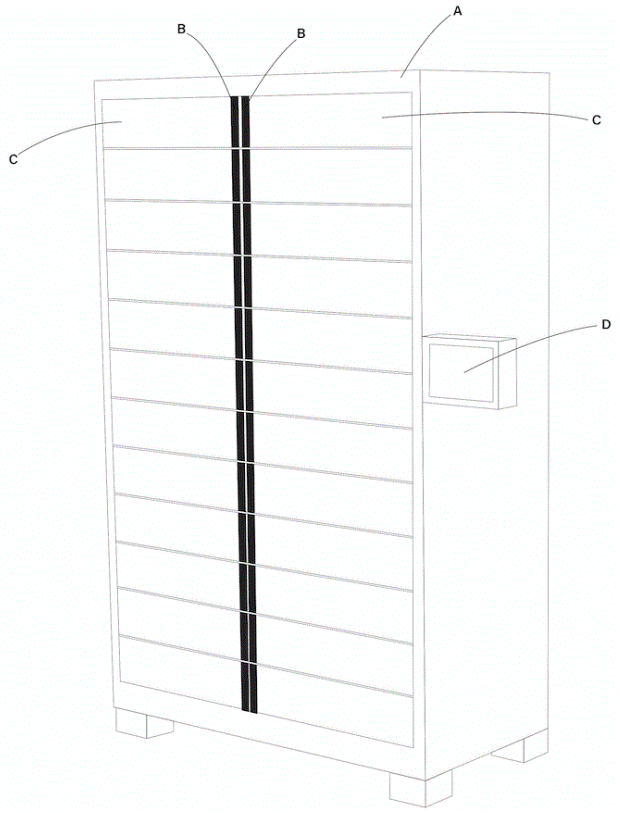
21: F2021/00883 22: 2021-07-27 23:
43: 2022-02-18
52: Class 25 24: Part F
71: Good Try (Pty) Ltd
54: LOCKER
57: The design relates to a Locker. The features of the design are those of shape and/or pattern and/or configuration.



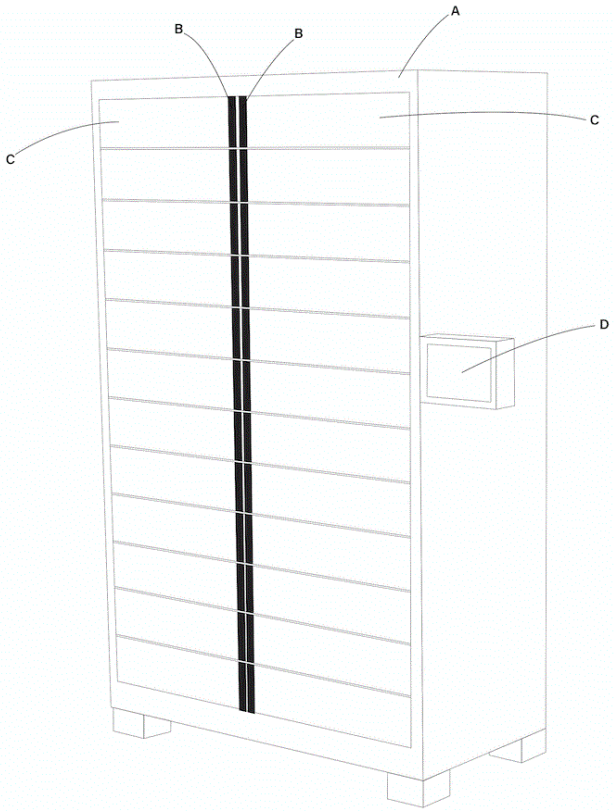
21: F2021/00887 22: 2021-07-27 23:
43: 2022-02-18
52: Class 6 24: Part F
71: Good Try (Pty) Ltd
54: LOCKER
57: The design relates to a Locker. The features of the design are those of shape and/or pattern and/or configuration.



21: F2021/00888 22: 2021-07-27 23:
43: 2022-02-18
52: Class 20 24: Part F
71: Good Try (Pty) Ltd
54: LOCKER
57: The design relates to a Locker. The features of the design are those of shape and/or pattern and/or configuration.

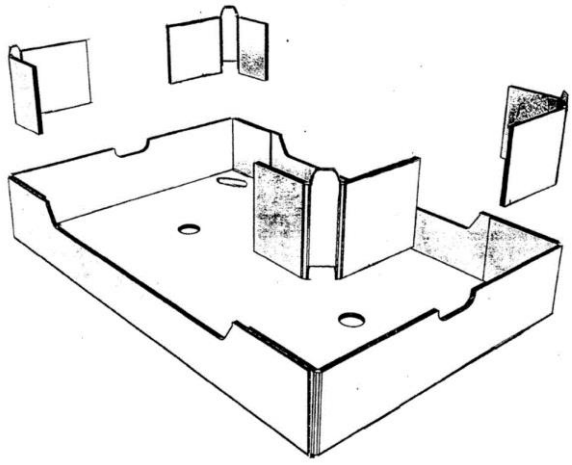


21: F2021/00889 22: 2021-07-27 23:
43: 2022-02-18
52: Class 25 24: Part F
71: Good Try (Pty) Ltd
54: LOCKER
57: The design relates to a Locker. The features of the design are those of shape and/or pattern and/or configuration.



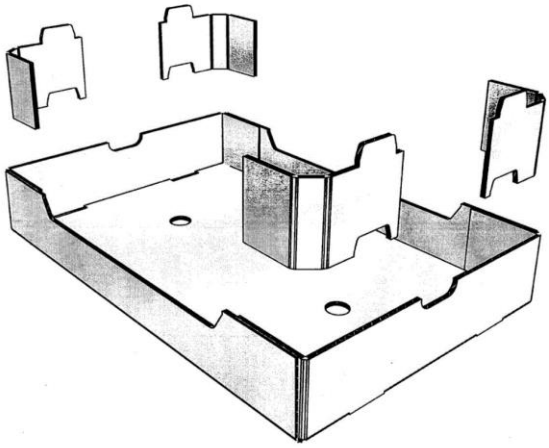
21: F2021/00958 22: 2021-08-12 23:
43: 2022-03-08
52: Class 6 24: Part F
71: Carrie Anne Yvonne Troxler, Barend Christiaan Kok
54: WORKSTATION
57: The design relates to a Workstation. The features of the design are those of shape and/or pattern and/or configuration.

21: F2021/00983 22: 2021-08-23 23:
43: 2022-03-15
52: Class 9 24: Part F
71: Roche Kenny
54: CARTON
57: The design relates to a Carton. The features of the design are those of shape and/or pattern and/or configuration.

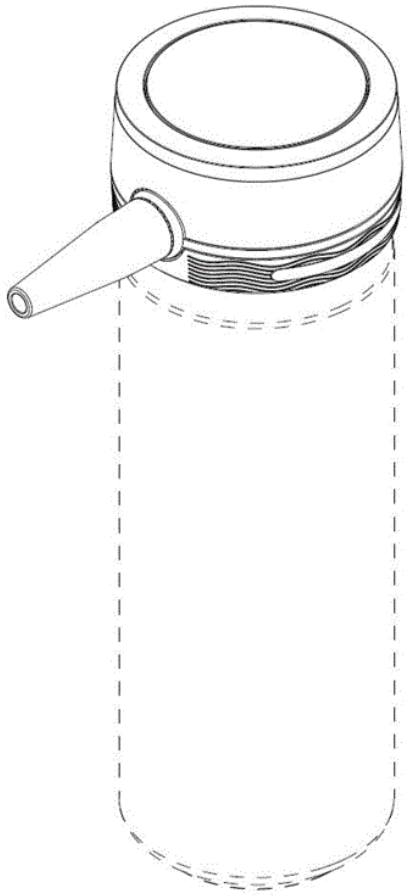


21: F2021/00984 22: 2021-08-23 23:
43: 2022-03-15
52: Class 9 24: Part F
71: Roche Kenny
54: CARTON

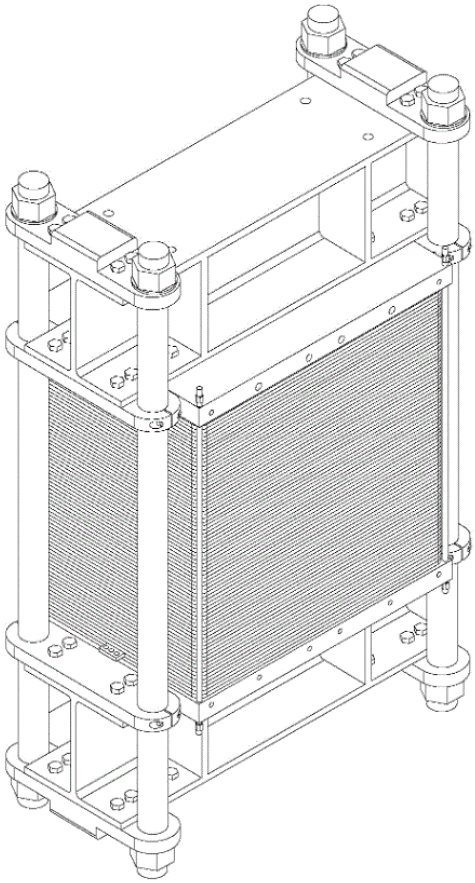
57: The design relates to a Carton. The features of the design are those of shape and/or pattern and/or configuration.



21: F2021/01014 22: 2021-08-31 23:
43: 2022-03-15
52: Class 9 24: Part F
71: DIAGEO IRELAND
33: EM 31: 008445647_0001 32: 2021-03-01
54: DISPENSING CLOSURE
57: The design relates to a Dispensing closure. The features of the design are those of shape and/or pattern and/or configuration.



21: F2022/00145 22: 2022-02-11 23:
43: 2022-02-17
52: Class 13 24: Part F
71: XIAMEN ZHONGXINDA HYDROGEN TECHNIQUE CO., LTD
33: CN 31: 202130789271.0 32: 2021-11-30
54: ELECTROLYZER
57: The design relates to a Electrolyzer. The features of the design are those of shape and/or pattern and/or configuration.



Perspective view

HYPOTHECATIONS

No records available

JUDGMENTS

No records available

OFFICE PRACTISE NOTICES

No records available

4. COPYRIGHT

COPYRIGHT IN CINEMATOGRAPH FILMS

NOTICES OF ACCEPTANCE

(Applications filed in terms of Act No. 62 of 1977)

Any person, who has grounds for objection to the registration of the copyright in any of the following cinematographs films, may within the prescribed time, lodge Notice of Opposition on Form RF 5 contained in the Second Schedule to the Registration of Copyright in Cinematograph Films Regulations, 1980. The prescribed time is one month after the date of advertisement. This period may on application be extended by the Registrar.

The numerical denote the following: **(21)** Official application number. **(22)** Date of application. **(43)** Date of acceptance. **(24)** Date(s) and place(s) at which cinematograph films was made. **(25)** Date and place of first publication. **(71)** Name (s) of all applicant (s). **(75)** Name of author. **(76)** Name of producer **(77)** Name of director **(54)** Title of cinematograph film. **(78)** Name(s) of principal players or narrator. **(26)** Places at which cinematograph film may be viewed and conditions. **(55)** Specimen lodged/Not lodged. **(56)** Preview requested/Not requested. **(57)** Abstract (Storyline). **(58)** Category.

21: 2022/00006. 22: 2022/03/07 43: 2022/03/07
24: 01/07/2021 to 31/07/2021; Pretoria Apartment
25: 22/08/2021; YouTube
71: Xolani Enerst Khumalo 173 Pretorius Street 0002 Pretoria CBD South Africa
75: Xolani Khumalo173 Pretorius Street, Pretoria CBD, ZA, 0002, Phone: 0723611507, Email: exkhumalo@yahoo.com
76: Xolani Khumalo
77: Xolani Khumalo
54: **Cotton Talk**
78: Lungelo Mbatha; Khumbuza Cele
26: N/A
55: Specimen lodged/Not lodged.
56: Preview Requested/Not requested
57: Our talk show is the only show that brings conversation about art, fashion, music, sport and culture featuring upcoming guests.

58: IN

HYPOTHECATIONS

No records available

JUDGMENTS

No records available

OFFICE PRACTISE NOTICES

No records available

5. CORRECTION NOTICES

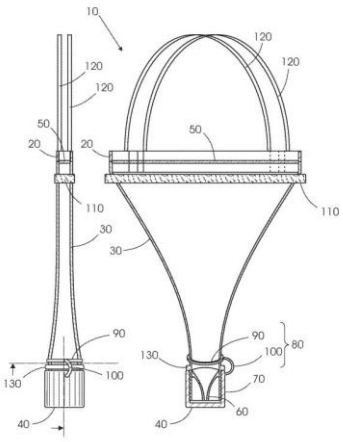
TRADE MARK CORRECTION NOTICES

No records available

PATENT CORRECTION NOTICES

The patent application no: **2021/02018** was advertised in the January 2022 with an incorrect name of the applicant which read as **HANKS TB DIAGNOSTICS (PTY) LTD** and the assignment was filed on the **15/06/2021** and the correct names of the applicants are **Anne Frederica Grobler** and **Urban Vermeulen** and the entire publication should have appeared as the one below, however the publication will remain the **26/01/2022**

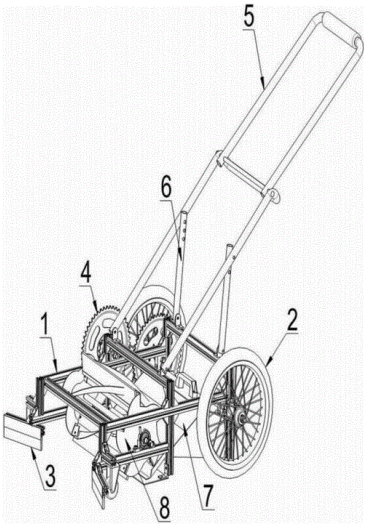
21: 2021/02018. 22: 2021/03/25. 43: 2021/11/29
51: A61B
71: **Anne Frederica Grobler, Urban Vermeulen**
72: GROBLER, Anne Frederica, VERMEULEN, Urban
33: ZA 31: 2018/05822 32: 2018-08-30
54: ORAL FLUID COLLECTION DEVICE
00: -
This invention relates to a device for collection, storage, transport and/or transfer of expectorated fluid and/or cells, including sputum, oral fluid and/or cells or pleural fluid and/or cells samples obtained from a subject and a method of sampling expectorated fluid and/or cells, including sputum, oral fluid and/or cells or pleural fluid and/or cells from a subject.



The patent application no: **2021/09141** was advertised in the February 2022 with an incorrect name of the applicant which read as **Xuzhou Institute of Technology** and the assignment was filed on the 24/11/2021 and the correct name of the applicant is **XUZHOU UNIVERSITY OF TECHNOLOGY** and the entire publication should have appeared as the one below, however the publication date will remain the **23/02/2022**

21: 2021/09141. 22: 2021-11-17. 43: 2022-02-03
51: A01D
71: **XUZHOU UNIVERSITY OF TECHNOLOGY**
72: Tan Xuehong
54: ROAD VEGETATION GREENING WEEDING SANITATION DEVICE AND WORKING METHOD THEREOF
00: -

The invention discloses a road vegetation greening weeding sanitation device and a working method thereof, which consists of a vehicle body bracket, a moving tire, a side auxiliary row brush, a rotating tooth plate, a handle, a connecting rod, a weed storage box and a weeding device. The front and rear sides of the car body bracket are respectively provided with moving tires, which are divided into big tires and small tires; The side sub-row brush is located on the front surface of the vehicle body bracket, and the bottom surface of the side sub-row brush is flush with the ground plane; The rotating toothed disc is located between the moving tire and the vehicle body bracket, and the two groups of rotating toothed discs are in transmission connection through a chain; The push handle is located on the upper surface of the vehicle body bracket; The weed storage box is located in the cavity inside the vehicle body bracket; The weeding device is located in front of the weed storage box, and the weeding device is fixedly connected with the vehicle body bracket through screws. The device for greening, weeding and sanitation of highway vegetation has novel and reasonable structure, convenient and quick operation and high weeding efficiency, and is suitable for different types of highway vegetation.



DESIGNS CORRECTION NOTICES

No records available

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PATENTS

Advertisement List for March 2022

Number of Advertised Patents: 1363

Application Number	Patent Title	Filing Date
2008/04213	High viscosity diutan gums and methods of producing	2008-05-15
2009/04492	COMPOSITIONS AND METHODS FOR THE TREATMENT OF INFECTIONS AND TUMORS	2009-06-26
2009/09003	BORON-CONTAINING SMALL MOLECULES	2009-12-17
2010/02770	CRYSTALLINE PEPTIDE EPOXY KETONE PROTEASE INHIBITORS AND THE SYNTHESIS OF AMINO ACID KETO-EPOXIDES	2010-04-20
2010/03331	LEAN AUSTENITIC STAINLESS STEEL	2010-05-11
2010/04196	CORROSION RESISTANT LEAN AUSTENITIC STAINLESS STEEL	2010-06-11
2010/08559	PUMP CASING	2010-11-29
2011/03803	ANTIBODIES TO IL-6 AND USE THEREOF	2011-05-24
2011/04600	USE OF A FOAMABLE COMPOSITION ESSENTIALLY FREE OF PHARMACEUTICALLY ACTIVE INGREDIENTS FOR THE TREATMENT OF HUMAN SKIN	2011-06-22
2011/06664	FROZEN AERATED PRODUCTS	2011-09-12
2011/09328	SKIN GRIPPING MEANS, INJECTOR INCLUDING THE SKIN GRIPPING MEANS AND METHOD OF PERFORMING A SUBCUTANEOUS INJECTION	2011-12-19
2011/09340	PYRIMIDINONES AS PI3K INHIBITORS	2011-12-19
2012/00509	A TAMPER INDICATING OPTICAL SECURITY DEVICE	2012-01-20
2012/01164	METHOD AND APPARATUS FOR PROVIDING CONTENTS VIA NETWORK, METHOD AND APPARATUS FOR RECEIVING CONTENTS VIA NETWORK, AND METHOD AND APPARATUS FOR BACKING UP DATA VIA NETWORK, BACKUP DATA PROVIDING DEVICE, AND BACKUP SYSTEM	2012-02-16
2012/01738	DOMAIN SELECTION FOR MOBILE-ORIGINATED MESSAGE SERVICE	2012-03-09
2012/02025	INTERMEDIATES USEFUL IN THE PREPARATION OF PYRROLO[2,3-b] PYRIDINE DERIVATIVES	2012-03-19
2012/03538	PALM ACTIVATED DRUG DELIVERY DEVICE	2012-05-15
2012/03955	METHODS FOR DETECTING A MYCOBACTERIUM TUBERCULOSIS INFECTION	2012-05-30
2012/04583	DEGRADABLE REMOVABLE IMPLANT FOR THE SUSTAINED RELEASE OF AN ACTIVE COMPOUND	2012-06-20
2012/05335	PRODUCTION OF HIGH STRENGTH TITANIUM ALLOYS	2012-07-17
2012/06026	PROCESS FOR PREPARING AN ALKENE	2012-08-10
2012/06069	CHILLED BEAM DEVICES, SYSTEMS, AND METHODS	2012-08-13
2012/06546	A NUTRITIONAL COMPOSITION COMPRISING PROBIOTICS AND IMPROVING SLEEP PATTERNS	2012-08-31

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2012/06550	PUMP INTAKE DEVICE	2012-08-31
2012/08459	VIDEO-ENCODING METHOD AND VIDEO-ENCODING APPARATUS BASED ON ENCODING UNITS DETERMINED IN ACCORDANCE WITH A TREE STRUCTURE, AND VIDEO-DECODING METHOD AND VIDEO-DECODING APPARATUS BASED ON ENCODING UNITS DETERMINED IN ACCORDANCE WITH A TREE STRUCTURE	2012-11-09
2012/08728	A PACK FOR SMOKING ARTICLES	2012-11-20
2012/09101	METHOD AND SYSTEM FOR PULP PROCESSING USING COLD CAUSTIC EXTRACTION WITH ALKALINE FILTRATE REUSE	2012-11-30
2013/01988	ROTATIONAL DRILL BITS AND DRILLING APPARATUSES INCLUDING THE SAME	2013-03-15
2013/04481	THERAPEUTIC COMPOSITIONS COMPRISING RILPIVIRINE HCL AND TENOFOVIR DISOPROXIL FUMARATE	2013-06-18
2013/06402	CRYSTALLINE FORMS AND PROCESSES FOR THE PREPARATION OF CONDENSED AZACYCLES (CANNABINOID RECEPTOR MODULATORS)	2013-08-23
2013/06455	VIRTUAL ACCESS CONTROL	2013-08-27
2013/06958	NOVEL MODULATORS AND METHODS OF USE	2013-09-16
2013/07118	FUSION PROTEINS AND COMBINATION VACCINES COMPRISING HAEMOPHILUS INFLUENZAE PROTEIN E AND PILIN A	2013-09-20
2013/07302	CD37-BINDING MOLECULES AND IMMUNOCONJUGATES THEREOF	2013-09-30
2013/07540	VIDEO CODING TECHNIQUES FOR CODING DEPENDENT PICTURES AFTER RANDOM ACCESS	2013-10-09
2013/07609	COPOLYMERS HAVING GEM-BISPHOSPHONATE GROUPINGS	2013-10-11
2013/09672	4-ARYL-N-PHENYL-1,3,5-TRIAZIN-2-AMINES CONTAINING A SULFOXIMINE GROUP	2013-12-20
2014/00089	METHODS AND NUCLEIC ACIDS FOR DETERMINING THE PROGNOSIS OF A CANCER SUBJECT	2014-01-06
2014/00114	CAN MANUFACTURE	2014-01-07
2014/00294	METHOD FOR RECOVERING PRECIOUS METALS AND COPPER FROM LEACH SOLUTIONS	2014-01-14
2014/00330	NOVEL COMPOSITION	2014-01-15
2014/00952	COMPOSITION FOR CONTROLLED OVARIAN STIMULATION	2014-02-07
2014/01223	HYDRAZIDE CONTAINING NUCLEAR TRANSPORT MODULATORS AND USES THEREOF	2014-02-18
2014/04486	SUBSTITUTED NUCLEOSIDES, NUCLEOTIDES AND ANALOGS THEREOF	2014-06-18
2014/04797	INFLUENZA VIRUS VACCINES AND USES THEREOF	2014-06-27
2014/04979	HYDROGEN QUALITY MONITOR	2014-07-07
2014/05410	SYSTEMS AND METHODS FOR PRIORITY BASED SESSION AND MOBILITY MANAGEMENT DUAL-PRIORITY MTC DEVICES	2014-07-22
2015/02768	METHOD OF DECODING AN IMAGE	2015-04-23

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2015/04132	DELIVERY, ENGINEERING AND OPTIMIZATION OF SYSTEMS, METHODS AND COMPOSITIONS FOR SEQUENCE MANIPULATION AND THERAPEUTIC APPLICATIONS	2015-06-08
2015/05575	FLUORINATED INTEGRIN ANTAGONISTS	2015-08-03
2015/05753	PYRROLOBENZODIAZEPINES AND CONJUGATES THEREOF	2015-08-11
2015/05785	LEAK DETECTABLE GEOMEMBRANE LINERS AND METHOD AND APPARATUS FOR FORMING	2015-08-12
2015/06214	ENGINEERING A CONTROL DRUG RELEASE PROFILE VIA LIPOSOME COMPOSITIONS IN BOTH AQUEOUS AND NON-AQUEOUS COMPARTMENTS	2015-08-26
2015/06222	HYBRID LATEX EMULSIONS AND COATING COMPOSITIONS FORMED FROM HYBRID LATEX EMULSIONS	2015-08-26
2015/06906	REGENERATIVE RECOVERY OF CONTAMINANTS FROM EFFLUENT GASES	2015-09-17
2015/07275	PROBIOTIC STRAINS FOR USE IN TREATMENT OR PREVENTION OF OSTEOPOROSIS	2015-10-01
2015/07292	LASER RELAY FOR FREE SPACE OPTICAL COMMUNICATIONS	2015-10-01
2015/07439	PROMOTER COMPOSITIONS	2015-10-07
2015/07519	CHARGING METHOD, MOBILE DEVICE, CHARGING DEVICE AND CHARGING SYSTEM	2015-10-09
2015/07523	STERILIZATION REACTOR AND METHOD	2015-10-09
2015/07645	ONLINE PURCHASE PROCESSING SYSTEM AND METHOD	2015-10-14
2015/07722	TAMPER EVIDENT CLOSURE	2015-10-15
2015/07879	SAFETY LATCH FOR A DOWNHOLE TOOL	2015-10-22
2015/07912	STABILIZED SOLUBLE PREFUSION RSV F POLYPEPTIDES	2015-10-23
2015/08006	NHE3-BINDING COMPOUNDS AND METHODS FOR INHIBITING PHOSPHATE TRANSPORT	2015-10-28
2015/08045	VIBRATING SCREEN	2015-10-29
2015/08156	ANTI-REGURGITATION COMPOSITION MAINTAINING GUT MOTILITY	2015-11-04
2015/08212	BACTERIOPHAGE THERAPY	2015-11-06
2015/08218	COMBINATION CORN AND SUGAR CANE PROCESSING PLANT AND SYSTEMS AND PROCESSES FOR PRODUCING ALCOHOL THEREAT	2015-11-06
2015/08411	SWALLOWABLE N-ACETYLCYSTEINE TABLETS	2015-11-13
2015/08520	ACOUSTIC APPARATUS AND OPERATION	2015-11-18
2015/08552	LASER CONTROLLED INTERNAL WELDING MACHINE FOR PIPELINES	2015-11-19
2015/08585	IMMUNOGENIC COMPOSITION FOR USE IN THERAPY	2015-11-20
2015/08592	METHODS AND APPARATUS FOR THE CONTINUOUS MONITORING OF WEAR IN GRINDING CIRCUITS	2015-11-20
2015/08642	MALARIA VACCINE	2015-11-24
2015/08697	METHOD FOR PRE-TREATMENT OF GOLD-BEARING OXIDE ORES	2015-11-26

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2015/08777	BUNYAVIRUSES WITH SEGMENTED GLYCOPROTEIN PRECURSOR GENES AND METHODS FOR GENERATING THESE VIRUSES	2015-12-01
2015/08857	LISTEN-BEFORE-TALK RESERVATION SCHEME FOR WIRELESS COMMUNICATIONS OVER UNLICENSED SPECTRUM	2015-12-03
2015/08895	METHODS FOR PRODUCING MELANIN AND INORGANIC FERTILIZER FROM FERMENTATION LEACHATES	2015-12-04
2015/08953	METHODS AND USES FOR CONTROLLING DEPOSITS ON VALVES IN DIRECT-INJECTION SPARK-IGNITION ENGINES	2015-12-08
2015/09140	STABILIZED SOLUBLE PRE-FUSION RSV F POLYPEPTIDES	2015-12-15
2015/09229	INFLUENZA VIRUS VACCINES AND USES THEREOF	2015-12-18
2015/09239	AMORPHOUS LETERMOVIR AND SOLID PHARMACEUTICAL FORMULATIONS THEREOF FOR ORAL ADMINISTRATION	2015-12-18
2016/00044	FORMWORK PANEL FOR CONCRETING FORMWORKS	2016-01-04
2016/00155	INJECTION DEVICE	2016-01-08
2016/00170	LINCRNA-DEFICIEN NON-HUMAN ANIMALS	2016-01-08
2016/00353	CYANOTRIAZOLE COMPOUNDS	2016-01-15
2016/00655	THIENO[3,2-d]PYRIMIDINES DERIVATIVES FOR THE TREATMENT OF VIRAL INFECTIONS	2016-01-29
2016/00857	APPARATUS FOR EXTRACTING ORE FROM BLOCK CAVES AND METHOD AND SYSTEM THEREFOR	2016-02-08
2016/00950	DYNAMIC INDICATION OF TIME DIVISION DUPLEX (TDD) UPLINK/DOWNLINK SUBFRAME CONFIGURATIONS	2016-02-11
2016/01793	INTELLIGENT GROUNDS MANAGEMENT SYSTEM INTEGRATING ROBOTIC ROVER	2016-03-15
2016/03083	AUTOTAXIN INHIBITOR COMPOUNDS	2016-05-09
2016/03621	A PULVERISER MILL	2016-05-27
2016/05644	INTERDENTAL CLEANER	2016-08-15
2016/05822	DENTAL IMPLANT	2016-08-22
2017/02394	SYNTHETIC POROUS POLYMER MATERIALS	2017-04-05
2017/03271	MULTI-DRIVE CRUSHER	2017-05-11
2017/03443	ORAL REHYDRATION COMPOSITION AND METHODS THEREOF	2017-05-18
2017/03605	Low-alloy high-strength high-toughness steel plate and method for manufacturing same	2017-05-25
2017/03728	ZINC PHOSPHATE COMPLEX	2017-05-31
2017/03837	DRILL BIT BUTTON INSERT AND DRILL BIT	2017-06-05
2017/03873	PROCESS FOR PREPARATION OF A SUPPORTED COBALT-CONTAINING FISCHER-TROPSCH SYNTHESIS CATALYST	2017-06-06
2017/03874	FISCHER-TROPSCH PROCESS USING REDUCED COBALT CATALYST	2017-06-06
2017/03905	5-[(PIPERAZIN-1-YL)-3-OXO-PROPYL]-IMIDAZOLIDINE-2,4-DIONE DERIVATIVES AS ADAMTS INHIBITORS FOR THE TREATMENT OF	2017-06-07

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	OSTEOARTHRITIS	
2017/04058	STRUCTURAL ARRANGEMENT FOR A FLEXIBLE WHEEL OF A WHEELBARROW AND HAND-PROPELLED INDUSTRIAL CARTS	2017-06-13
2017/04112	CENTRIFUGAL PUMP IMPELLER	2017-06-15
2017/04168	PROCESS FOR RECYCLING BY SEPARATING THE CONSTITUENTS OF ALUMINIZED AND PLASTICIZED, OPTIONALLY CARTON, CONTAINERS, AND RESPECTIVE EQUIPMENT	2017-06-19
2017/04170	JOINT IDENTIFICATION OF MERGE SIGNALS IN NON-COOPERATIVE DIGITAL TELECOMMUNICATIONS	2017-06-19
2017/04198	TRANSACTION SYSTEM AND METHOD	2017-06-20
2017/04254	METHOD AND SYSTEM FOR AUDIO SHARING	2017-06-22
2017/04383	PARG INHIBITORY COMPOUNDS	2017-06-28
2017/04385	DRIVE ARRANGEMENT FOR BELT, MOBILE HAULAGE ARRANGEMENT, AND METHOD	2017-06-28
2017/04490	SYSTEM FOR PASSIVELY REMOVING HEAT FROM INSIDE A CONTAINMENT SHELL	2017-07-03
2017/04494	4,6-SUBSTITUTED-PYRAZOLO[1,5-a]PYRAZINES AS JANUS KINASE INHIBITORS	2017-07-03
2017/04553	RECESS PLATE AND METHOD FOR MANUFACTURING THE SAME	2017-07-05
2017/04584	PRELOAD DEVICE WITH INDICATOR DYE	2017-07-07
2017/04590	A MODIFIED RELEASE COMPOSITION OF ORLISTAT AND ACARBOSE FOR THE TREATMENT OF OBESITY AND RELATED METABOLIC DISORDERS	2017-07-07
2017/04624	DOSING REGIMEN FOR A SELECTIVE S1P1 RECEPTOR AGONIST	2017-07-10
2017/04625	DEWATERING OF SULPHUR	2017-07-10
2017/04662	FRIABLE CERAMIC-BONDED DIAMOND COMPOSITE PARTICLES AND METHODS TO PRODUCE SAME	2017-07-11
2017/04664	BACILLUS THURINGIENSIS SUBSP. KURSTAKI AND BACILLUS THURINGIENSIS SUBSP. AIZAWAI COMBINATION FORMULATIONS	2017-07-11
2017/04694	A METHOD AND AN ASSEMBLY FOR GENERATING A MAGNETIC FIELD AND A METHOD OF MANUFACTURING AN ASSEMBLY	2017-07-12
2017/04736	POLYCRYSTALLINE DIAMOND CUTTERS HAVING NON-CATALYTIC MATERIAL ADDITION AND METHODS OF MAKING THE SAME	2017-07-13
2017/04737	FUNGICIDAL COMPOSITION EFFECTIVE AGAINST ALTERNARIA ON CITRUS	2017-07-13
2017/04909	PALLET CONTAINER HAVING AN INNER LINER	2017-07-19
2017/04942	COMPOSITIONS FOR IMPROVING BUDBREAK AND FLOWERING	2017-07-20
2017/05027	PRINTING MATERIAL CARTRIDGE	2017-07-24
2017/05090	CENTRIFUGAL SCROLL SCREEN APPARATUS	2017-07-26
2017/05142	DEVICE FOR SPACING PIPES OF HEAT-EXCHANGE APPARATUS (VARIANTS)	2017-07-28
2017/05164	ELECTROLYTIC CARTRIDGE, SYSTEMS AND METHODS OF USING SAME	2017-07-31

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2017/05197	ELECTRONIC VAPORIZATION DEVICES	2017-08-01
2017/05223	IMMUNOCONJUGATES FOR SPECIFIC INDUCTION OF T CELL CYTOTOXICITY AGAINST A TARGET CELL	2017-08-02
2017/05367	FOLDING BOX	2017-08-08
2017/05371	TUGBOAT PROVIDED WITH A CARROUSEL-TYPE TOWING SYSTEM	2017-08-08
2017/05803	PROTOCOL CONVERSION SYSTEM AND METHOD FOR A VEHICLE SYSTEM	2017-08-25
2017/05804	METHOD FOR THE SYNTHESIS OF LINEAR GERANYLORCINOL DERIVATIVES FROM GERANIOL AND ORCINOL, COMPOUNDS DERIVED FROM LINEAR GERANYLORCINOLS, AND USE OF SAID COMPOUNDS AS ANTIFUNGALS AGAINST BOTRYTIS CINEREA	2017-08-25
2017/06380	QUINOLINE DERIVATIVES AS TAM RTK INHIBITORS	2017-09-21
2017/06411	IMAGE DECODING METHOD	2017-09-22
2017/06412	IMAGE DECODING APPARATUS	2017-09-22
2017/06701	A PROCESS FOR PRODUCING OF A FIBRE-REINFORCED POLYMER COMPOSITION	2017-10-05
2017/06919	FIXED DOSE COMBINATIONS AND FORMULATIONS COMPRISING ETC1002 AND EZETIMIBE AND METHODS OF TREATING OR REDUCING THE RISK OF CARDIOVASCULAR DISEASE	2017-10-12
2017/07087	METHOD AND VEHICLE FOR APPLYING AN AGROCHEMICAL MIXTURE TO A WORKING AREA OF A FIELD	2017-10-19
2017/07136	METHOD OF PRODUCTION OF GONADOTROPHIN	2017-10-20
2017/07694	AN IMPROVED LOAD SUPPORT SYSTEM	2017-11-14
2017/08245	ANTIFUNGAL METHYLOBACTERIUM COMPOSITIONS AND METHODS OF USE	2017-12-05
2017/08264	COMPOSITIONS AND METHODS FOR ENRICHING POPULATIONS OF NUCLEIC ACIDS	2017-12-05
2017/08592	METHOD FOR PREPARATION OF ALUMINIUM PHOSPHATE GEL FOR APPLICATION IN VACCINE FORMULATIONS	2017-12-18
2017/08640	METHOD FOR PRODUCING A SANDWICH STRUCTURE	2017-12-19
2018/00418	CUTTING ELEMENTS WITH IMPACT RESISTANT DIAMOND BODY	2018-01-19
2018/01785	MINERAL WINNING PICK, HOLDER, AND COMBINATION	2018-03-16
2018/02178	PROCESSES FOR PRODUCING LOW NITROGEN, ESSENTIALLY NITRIDE-FREE CHROMIUM AND CHROMIUM PLUS NIOBIUM-CONTAINING NICKEL-BASED ALLOYS AND THE RESULTING CHROMIUM AND NICKEL-BASED ALLOYS	2018-04-04
2018/04688	NEW SUBSTITUTED CYANOINDOLINE DERIVATIVES AS NIK INHIBITORS	2018-07-13
2018/04859	A SYSTEM AND METHOD FOR LEARNING AND ASSESSMENT IN A CLASSROOM ENVIRONMENT	2018-07-19
2018/04860	A METHOD AND SYSTEM FOR DYNAMIC CONTENT	2018-07-19

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	GENERATION AND ASSESSMENT	
2018/04863	NOVEL PROBIOTIC BACTERIAL STRAIN OF LACTOBACILLUS PLANTARUM AND COMPOSITIONS AND USES THEREOF IN THE TREATMENT OF INFLAMMATION	2018-07-19
2018/04938	GLUCONO DELTA-LACTONE FOR TREATMENT OF VAGINAL FUNGAL INFECTIONS	2018-07-23
2018/04978	MULTILAYERED POLYMERIC FILM	2018-07-24
2018/05046	THERAPEUTIC COMPOUNDS	2018-07-26
2018/05069	METHOD FOR PRODUCING CATALYST FOR FISCHER-TROPSCH SYNTHESIS AND METHOD FOR PRODUCING HYDROCARBON	2018-07-27
2018/05099	METHOD OF FORMING PRIMARY PACKAGE TUBE FOR TAMPONS	2018-07-30
2018/05100	METHOD OF WINDING UP TAMPON MATERIAL	2018-07-30
2018/05147	PERSONAL VAPORIZING DEVICE	2018-07-31
2018/05231	STEROID DERIVATIVE FXR AGONIST	2018-08-03
2018/05743	HLA-B57 OPEN CONFORMERS	2018-08-28
2018/05797	NOVEL ALPHA-1-MICROGLOBULIN DERIVED PROTEINS AND THEIR USE	2018-08-29
2018/06187	DEVICE FOR USE IN HAZARDOUS AREAS	2018-09-14
2018/06307	ANTIBODIES TO TIGIT	2018-09-20
2018/06394	WHEELS	2018-09-26
2018/06783	THERMOLYTIC FRAGMENTATION OF SUGARS	2018-10-11
2018/06819	PHARMACEUTICAL COMBINATIONS FOR THE TREATMENT OF CANCER	2018-10-12
2018/06892	FERRIC MALTOL COMPOSITIONS FOR USE IN THE TREATMENT OR PREVENTION OF CANCER AND TUMOURS	2018-10-16
2018/06896	LARGE-SCALE METHODS OF UNIFORMLY COATING PACKAGING SURFACES WITH A VOLATILE ANTIMICROBIAL TO PRESERVE FOOD FRESHNESS	2018-10-16
2018/06924	PHOTONIC STUCTURE-BASED DEVICES AND COMPOSITIONS FOR USE IN LUMINESCENT IMAGING OF MULTIPLE SITES WITHIN A PIXEL, AND METHODS OF USING THE SAME	2018-10-17
2018/06946	FORMULATION FOR ANTI-A4ß7 ANTIBODY	2018-10-18
2018/06991	NOVEL POLYPROPYLENE COMPOSITIONS WITH LOW FOGGING	2018-10-19
2018/07384	EXERCISE ARRANGEMENT	2018-11-05
2018/08486	USE OF 2,4-DIHALO-6-SUBSTITUTED-1,3,5-TRIAZINES AND DERIVATIVE THEREOF AS CONDENSATION, CROSS-LINKING, TANNING, GRAFTING AND CURING AGENTS	2018-12-14
2019/00011	POLYMORPHIC FORMS OF (9-[(R)-2-[[(S)-[[(S)-1-(ISOPROPOXYCARBONYL)ETHYL]AMINO]PHENOXY PHOSPHINYL]METHOXY]PROPYL] ADENINE AND PHARMACEUTICALLY ACCEPTABLE SALTS THEREOF	2019-01-02
2019/00601	MODULAR ROOM	2019-01-29
2019/00716	PYRIDOPYRIMDINONE CDK2/4/6 INHIBITORS	2019-02-04
2019/00827	BARBEQUE ARRANGEMENT	2019-02-08

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2019/01489	DRILLING BOOM AND ROCK DRILLING RIG	2019-03-11
2019/01880	CABLE ANCHOR WITH SWAGED CONNECTOR ELEMENT	2019-03-27
2019/02325	7-SUBSTITUTED 1-ARYL-NAPHTHYRIDINE-3-CARBOXYLIC ACID AMIDES AND USE THEREOF	2019-04-12
2019/02922	METHOD OF ENSURING CONTROLLED FAILURE OF ROCK BOLT BAR	2019-05-10
2019/03212	METHOD FOR TRANSMITTING DATA, TERMINAL DEVICE AND NETWORK DEVICE	2019-05-21
2019/03398	MODULAR AEROPONIC SYSTEM	2019-05-29
2019/03586	INFORMATION TRANSMISSION METHOD, NETWORK APPARATUS, AND TERMINAL APPARATUS	2019-06-04
2019/03621	PNEUMATIC DRILL INSTALLED ROCK ANCHOR	2019-06-06
2019/03790	RAIL FASTENING SYSTEM	2019-06-12
2019/03981	IMPLANTABLE DEVICE WITH ENHANCED DRUG DELIVERY AREA	2019-06-19
2019/04028	LESS-LETHAL WINDOW PIERCING PROJECTILE	2019-06-21
2019/04056	DATA PROCESSING METHOD, AND TERMINAL DEVICE AND NETWORK DEVICE	2019-06-21
2019/04078	RAILCAR KNUCKLE	2019-06-24
2019/04214	LIQUID DISPENSER	2019-06-27
2019/04256	GUTTER SYSTEM	2019-06-28
2019/04264	METHOD FOR DEMODULATING SHARED REFERENCE SIGNAL, TERMINAL DEVICE, AND NETWORK DEVICE	2019-06-28
2019/04267	OBTAINING HIGH-PERFORMANCE YEAST STRAINS FOR METABOLIZING ARABINOSE	2019-06-28
2019/04280	COMBINATION OF A MCL-1 INHIBITOR AND A TAXANE COMPOUND, USES AND PHARMACEUTICAL COMPOSITIONS THEREOF	2019-06-28
2019/04381	PHASING CORRECTION	2019-07-03
2019/04489	ANTI-FREEZING URBAN GREEN WALL APPLICABLE TO GROWTH OF GREENHOUSE PLANTS	2019-07-09
2019/04702	METHOD AND NETWORK NODES TO MANAGE QOE MEASUREMENT COLLECTION DURING RELOCATION OR HANDOVER	2019-07-17
2019/04937	SELECTORS FOR NOZZLES AND MEMORY ELEMENTS	2019-07-26
2019/05081	CITRULLINE FOR TREATMENT OF SICKLE CELL CRISIS	2019-07-31
2019/05382	MILL LINER REMOVAL SYSTEM	2019-08-14
2019/05578	INFLATABLE BEAM AND USE OF THIS INFLATABLE BEAM	2019-08-23
2019/05583	LIPOLYTIC ENZYME FOR USE IN BAKING	2019-08-23
2019/05593	FLOTATION ARRANGEMENT	2019-08-23
2019/05624	FLOTATION ARRANGEMENT	2019-08-26
2019/05646	AZETIDINE DERIVATIVE	2019-08-27
2019/05836	SYSTEM AND METHOD FOR NAVIGATING IN A DIGITAL ENVIRONMENT	2019-09-04
2019/05891	PEPTIDES FOR TREATMENT OF DIABETES	2019-09-06

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2019/05975	RADIO NETWORK NODE, WIRELESS DEVICE AND METHODS PERFORMED THEREIN FOR HANDLING COMMUNICATION IN A WIRELESS COMMUNICATION NETWORK	2019-09-10
2019/06005	DEVICE FOR SHOOTING A CASTING CORE	2019-09-11
2019/06028	AUTONOMOUS EXPLOSIVES LOADING	2019-09-12
2019/06036	PREPARATION CONTAINING AT LEAST FLUDIOXONIL AND A MIXTURE CONTAINING AUREOBASIDIUM PULLULANS STRAINS	2019-09-12
2019/06047	COMPOUNDS FOR TREATING TUBERCULOSIS	2019-09-12
2019/06107	KAPPA OPIOID RECEPTOR ANTAGONISTS AND PRODUCTS AND METHODS RELATED THERETO	2019-09-16
2019/06109	DOOR HINGE HAVING BUFFERING FUNCTION	2019-09-16
2019/06114	TERMINAL APPARATUS, BASE STATION APPARATUS, COMMUNICATION METHOD, AND INTEGRATED CIRCUIT	2019-09-16
2019/06158	FUNGICIDAL COMBINATIONS	2019-09-18
2019/06161	TIP FILLING METHOD AND IMPROVEMENTS	2019-09-18
2019/06166	WASTEWATER TREATMENT SYSTEM AND METHOD	2019-09-18
2019/06197	CUTTING APPARATUS	2019-09-19
2019/06213	COMPOUNDS AND METHODS FOR THE TREATMENT OF PARASITIC DISEASES	2019-09-19
2019/06266	APPARATUS, METHOD AND SYSTEM FOR ELECTRICAL INTERCONNECTION	2019-09-23
2019/06274	PHARMACEUTICAL COMPOSITIONS HAVING HIGH DRUG LOADINGS OF MEDIUM CHAIN TRIGLYCERIDES AND METHODS RELATED THERETO	2019-09-23
2019/06304	TATK-CDKL5 FUSION PROTEINS, COMPOSITIONS, FORMULATIONS, AND USE THEREOF	2019-09-25
2019/06323	METHOD AND SYSTEM FOR THE REMOVAL OF NOXIOUS COMPOUNDS FROM FLUE-GAS USING FABRIC FILTER BAGS WITH AN SCR CATALYST	2019-09-25
2019/06324	METHOD AND SYSTEM FOR THE REMOVAL OF PARTICULATE MATTER AND NOXIOUS COMPOUNDS FROM FLUE-GAS USING A CERAMIC FILTER WITH AN SCR CATALYST	2019-09-25
2019/06367	NOVEL PYRIDAZINONE HERBICIDES	2019-09-26
2019/06390	ISOLATION TENT	2019-09-27
2019/06512	RIB, WALL, SLOPE AND ROOF SAFETY SYSTEM	2019-10-03
2019/06537	SYSTEM AND METHOD FOR COMBUSTION OF SOLID FUELS AND DERIVATIVES THEREOF	2019-10-04
2019/06538	AEROSOL DELIVERY DEVICE INCLUDING SUBSTRATE WITH IMPROVED ABSORBENCY PROPERTIES	2019-10-04
2019/06557	ASSEMBLY OF A CARRIER AND A PLURALITY OF ELECTRICAL CIRCUITS FIXED THERETO, AND METHOD OF MAKING THE SAME	2019-10-04
2019/06582	SYSTEM, METHOD AND SOFTWARE FOR PRODUCING VIRTUAL THREE DIMENSIONAL IMAGES THAT APPEAR TO PROJECT FORWARD OF OR ABOVE AN ELECTRONIC DISPLAY	2019-10-07

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2019/06609	METHOD FOR PREPARING DIFFERENT TYPES OF INDIUM GALLIUM ZINC OXIDE THIN FILM TRANSISTORS	2019-10-08
2019/06645	FOLDABLE TENT COMPRISING TWO UMBRELLA STRUCTURES	2019-10-09
2019/06671	FORMULATION OF (E)-2,4,6-TRIMETHOXYSTYRYL-3-[(CARBOXYMETHYL)AMINO]-4-METHOXYBENZYLSULPHONE WITH ENHANCED STABILITY AND BIOAVAILABILITY	2019-10-09
2019/06673	COORDINATION OF UPLINK RADIO TRANSMISSIONS ON UNLICENSED CARRIERS	2019-10-09
2019/06701	NETWORK NODE INDICATING BEAM FOR HANDOVER TO A WIRELESS DEVICE	2019-10-10
2019/06763	BEAM SELECTION FOR A RADIO TRANSCEIVER DEVICE	2019-10-14
2019/06784	IMPROVEMENT OF ANTI-CAKING PROPERTIES OF AMMONIUM NITRATE PARTICLES THAT ARE STORED IN A CLOSED CONTAINER	2019-10-15
2019/06797	MAGNETIC ENERGY HARVESTING DEVICE AND METHOD FOR ELECTRIC METALLURGICAL FURNACES AND SIMILAR ENVIRONMENTS	2019-10-15
2019/06805	LOG STRUCTURES	2019-10-16
2019/06829	PROCESS FOR THE MANUFACTURE OF VORTIOXETINE HBR ALPHA-FORM	2019-10-16
2019/06834	CLOSED BOTTOM VAPORIZER POD	2019-10-16
2019/06861	A GLOVE AND A METHOD OF MANUFACTURING A GLOVE	2019-10-17
2019/06873	TETRAHYDRO-BENZO[D]AZEPINE DERIVATIVES AS GPR120 MODULATORS	2019-10-18
2019/06887	BRUTON'S TYROSINE KINASE INHIBITORS	2019-10-18
2019/06919	PROCESS TO TREAT METAL OR MINERAL ORES AND COLLECTOR COMPOSITION THEREFOR	2019-10-21
2019/06934	A DATA PROTECTION SYSTEM AND METHOD	2019-10-22
2019/06955	ACYLATED INSULIN COMPOUND	2019-10-22
2019/06963	USER EQUIPMENT, BASE STATION AND METHODS IN A RADIO COMMUNICATIONS NETWORK	2019-10-22
2019/06983	POLYOL COMPONENTS AND USE THEREOF FOR THE PRODUCTION OF RIGID POLYURETHANE FOAMS	2019-10-23
2019/07054	ANTI-TAU ANTIBODIES AND METHODS OF USE	2019-10-25
2019/07269	DEVICE, SYSTEM, AND METHOD FOR FACILITATING COMMUNICATIONS BETWEEN ELECTRONIC GAMING MACHINES AND MOBILE DEVICES	2019-11-01
2019/07308	Health food and cosmetics for increasing the amount of apoptosis cells and decreasing the amount of necrosis cells and a method of manufacturing a sprout-forcing grape seed-derived ingredient for increasing the amount of apoptosis cells and decreasing the amount of necrosis cells	2019-11-04
2019/07322	METHOD FOR EVALUATING SAFETY DEGREE OF SLOPE BASED ON DAMAGE DEGREE OF	2019-11-05

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	DOWNSTREAM STRUCTURE	
2019/07324	LOCKABLE ELECTRONIC MOBILE PHONE OR DEVICE POUCH	2019-11-05
2019/07367	COVERAGE AREA ADJUSTMENT TO ADAPT SATELLITE COMMUNICATIONS	2019-11-06
2019/07401	TREATMENT OF ADIPOCYTES	2019-11-07
2019/07490	SEARCH SPACE MONITORING	2019-11-12
2019/07502	PROCESSES AND SYSTEMS FOR SEPARATING CARBON DIOXIDE IN THE PRODUCTION OF ALKANES	2019-11-12
2019/07514	DIAGNOSTIC ASSAYS FOR DETECTING, QUANTIFYING, AND/OR TRACKING MICROBES AND OTHER ANALYTES	2019-11-13
2019/07523	RECONFIGURABLE HIP PROSTHESIS, METHOD OF USE AND KIT	2019-11-13
2019/07546	ENVIRONMENTALLY RESPONSIBLE INSULATING CONSTRUCTION BLOCKS AND STRUCTURES	2019-11-14
2019/07556	EXPRESSION VECTOR AND METHOD FOR THE STABLE PRODUCTION OF A PROTEIN IN A PLANT, IN PARTICULAR A WHOLE RECOMBINANT ANTIBODY IN A CEREAL ENDOSPERM	2019-11-14
2019/07616	CEMENTITIOUS COMPOSITE MAT	2019-11-18
2019/07619	DEUTERATED PYRIDONE AMIDES AND PRODRUGS THEREOF AS MODULATORS OF SODIUM CHANNELS	2019-11-18
2019/07648	PROPENE RECOVERY BY SCRUBBING WITH A SOLVENT/WATER MIXTURE	2019-11-19
2019/07691	METHOD FOR SEX SORTING OF MOSQUITOES AND APPARATUS THEREFOR	2019-11-20
2019/07713	SUBSTITUTED INDOLINE DERIVATIVES AS DENGUE VIRAL REPLICATION INHIBITORS	2019-11-21
2019/07738	SYSTEM FOR AND METHOD OF PROCESSING SUGAR CANE	2019-11-22
2019/07792	HETEROCYCLIC COMPOUND	2019-11-25
2019/07793	HETEROCYCLIC COMPOUND	2019-11-25
2019/07802	DOWN THE HOLE DRILLING MACHINE AND METHOD FOR DRILLING ROCK	2019-11-25
2019/07828	ABSORBENT ARTICLE WITH CHANNELS AND METHOD FOR MANUFACTURING THEREOF	2019-11-26
2019/07837	NUCLEAR REACTOR FUEL ASSEMBLY	2019-11-26
2019/07907	CLEANING APPARATUS FOR BAG FILTERS	2019-11-28
2019/07935	CONTROL SYSTEM AT AN AIRPORT	2019-11-28
2019/07973	AGENT FOR PREVENTING OR TREATING BRAIN ATROPHY	2019-11-29
2019/07974	AGENT FOR PREVENTING OR TREATING SPINOCEREBELLAR ATAXIA	2019-11-29
2019/07988	LABELED NUCLEOTIDES AND USES THEREOF	2019-11-29
2019/08023	IMPROVED CLEANSING COMPOSITIONS	2019-12-03
2019/08028	PRE-WARPED ROTORS FOR CONTROL OF MAGNET-STATOR GAP IN AXIAL FLUX MACHINES	2019-12-03
2019/08081	MULTI-PURPOSE WATER SHOE	2019-12-05
2019/08094	NOVEL FRAGRANCE COMPOSITIONS AND	2019-12-05

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	PRODUCTS WITH MOOD ENHANCING EFFECTS	
2019/08208	COMPOSITIONS AND METHODS FOR TREATING IDIOPATHIC OVERACTIVE BLADDER SYNDROME AND DETRUSOR OVERACTIVITY	2019-12-10
2019/08211	IMAGE SENSOR STRUCTURE	2019-12-10
2019/08213	LONG RANGE WIRELESS MONITORING SYSTEMS	2019-12-10
2019/08215	EXPRESSION OF NOVEL CELL TAGS	2019-12-10
2019/08217	METHOD FOR THE PREPARATION OF SYNTHESIS GAS	2019-12-10
2019/08239	TREATMENT OF MOSAIC VIRUSES AND BACTERIAL INFECTIONS OF PLANTS	2019-12-11
2019/08264	FORMULATIONS OF HOMOTAURINES AND SALTS THEREOF	2019-12-11
2019/08272	DATA PROCESSING DEVICE, DATA PROCESSING METHOD, AND STORAGE MEDIUM	2019-12-11
2019/08295	METHOD AND APPARATUS FOR ADVANCING PRODUCTS TO BE FORMED	2019-12-12
2019/08309	METHOD FOR PROCESSING BIOMASS BY CO-GRINDING WITH A FOSSIL-BASED FEEDSTOCK	2019-12-12
2019/08318	A LINING, A HAUL TRUCK BODY COMPRISING THE SAME AND A HAUL TRUCK	2019-12-12
2019/08319	A LINING, A HAUL TRUCK BODY COMPRISING THE SAME AND A HAUL TRUCK	2019-12-12
2019/08327	WEIGHT OPTIMIZATION	2019-12-12
2019/08328	A HAUL TRUCK BODY AND A METHOD FOR MANUFACTURING A HAUL TRUCK BODY	2019-12-12
2019/08345	PROCESSES AND INTERMEDIATES FOR MAKING A JAK INHIBITOR	2019-12-13
2019/08354	FLOOR PANEL AND METHOD OF PRODUCING SUCH A FLOOR PANEL	2019-12-13
2019/08366	PANEL SUITABLE FOR FORMING A FLOOR COVERING, PROCESS FOR PRODUCING A PANEL, USE OF AN ADHESIVE PRECURSOR	2019-12-13
2019/08375	DEVICE FOR LUMINESCENT IMAGING	2019-12-13
2019/08408	SEPARATION OF ACTINIUM FROM PROCESS LIQUORS	2019-12-17
2019/08443	PROCESS FOR SSZ-39 SYNTHESIS USING MODIFIED REACTION COMPOSITION	2019-12-18
2019/08444	POLYMORPHS OF MESOTRIONE METAL CHELATE AND PREPARATION PROCESS	2019-12-18
2019/08452	IMPROVED PROCESS FOR PREPARING IMETELSTAT	2019-12-18
2019/08453	SYSTEM AND METHOD FOR MONITORING AT LEAST ONE CHARACTERISTIC PROPERTY OF A MULTIPHASE FLUID	2019-12-18
2019/08475	ORAL CARE CLEANING SYSTEM UTILIZING ENTRAINED FLUID	2019-12-19
2019/08478	TECHNIQUES FOR CARRIER SHARING BETWEEN RADIO ACCESS TECHNOLOGIES	2019-12-19
2019/08481	METHOD AND SYSTEM FOR CONVERTING WIND ENERGY	2019-12-19
2019/08500	HYDROCYCLONE SEPARATOR	2019-12-19

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2019/08501	HYDROCYCLONE SEPARATOR	2019-12-19
2019/08568	MEAL REPLACEMENT SHAKE, PREPARATION METHOD AND APPLICATION THEREOF	2019-12-23
2019/08589	FOREIGN OBJECT DETECTION IN A WIRELESS POWER TRANSFER SYSTEM	2019-12-23
2020/00300	SOLID FORMS AND FORMULATIONS OF (S)-4-(8-AMINO-3-(1 -(BUT-2-YNOYL)PYRROLIDIN-2-YL)IMIDAZO[1,5-A]PYRAZIN-1-YL)-N-(PYRIDIN-2-YL)BENZAMIDE	2020-01-16
2020/01014	WOUND DRESSING	2020-02-18
2020/01130	TOILET CLEANING DEVICE AND HOLDER ASSEMBLY	2020-02-24
2020/01132	AN AUTOMATED SYSTEM FOR DEFAULT PROBABILITY PREDICTION OF LOANS AND METHOD THEREOF	2020-02-24
2020/01335	LARGE SCALE PRODUCTION OF LIQUID AND SOLID TRICHODERMA PRODUCTS	2020-03-02
2020/01495	TOILET CISTERN AIR EXTRACTION AND FILTRATION SYSTEM	2020-03-10
2020/01999	TOPICAL FORMULATION FOR A JAK INHIBITOR	2020-05-04
2020/02686	METHOD OF MANUFACTURING A FACING ELEMENT FOR A REINFORCED SOIL STRUCTURE	2020-05-12
2020/03036	LOW/MEDIUM-CARBON FERROMANGANESE PRODUCTION METHOD	2020-05-22
2020/03383	A SYSTEM FOR MULTI-INGREDIENT BEVERAGE PREPARATION FROM VARIOUS CONTAINER TYPES	2020-06-05
2020/03414	ANTI-ALPHA SYNUCLEIN ANTIBODIES	2020-06-08
2020/03659	A SYSTEM FOR, AND METHOD OF COLLECTING AND CHECKING IN LUGGAGE FOR TRAVEL	2020-06-18
2020/03671	A BODY FLUID LEAKAGE DETECTION AQUEOUS COMPOSITION	2020-06-18
2020/03676	SUBSTITUTED THIOPHENYL URACILS, SALTS THEREOF AND THE USE THEREOF AS HERBICIDAL AGENTS	2020-06-18
2020/03682	METHOD AND SYSTEM FOR IMAGING AT HIGH AND LOW LIGHT LEVELS	2020-06-18
2020/03688	SENSING DEVICE, ADAPTER, COMBINATION THEREOF, AND DISPENSER	2020-06-18
2020/03830	cAMP RECEPTOR PROTEIN MUTANT AND METHOD FOR PREPARING L-AMINO ACID BY USING SAME	2020-06-24
2020/03832	PESU PARTICLE FOAMS FOR APPLICATION IN AVIATION INTERIORS	2020-06-24
2020/03834	FLUID FLOW ENERGY HARVESTER	2020-06-24
2020/04039	HYDROGEN REDUCTION OF METAL SULPHATE SOLUTIONS FOR DECREASED SILICON IN METAL POWDER	2020-07-02
2020/04074	METHODS FOR TREATING IL-6 MEDIATED INFLAMMATION WITHOUT IMMUNOSUPPRESSION	2020-07-03
2020/04153	DUAL INTERFACE CAPACITIVE EMBEDDED METAL CARD	2020-07-07
2020/04289	COMPOSITION COMPRISING REFRIGERANT, USE THEREOF, REFRIGERATING MACHINE HAVING	2020-07-13

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	SAME, AND METHOD FOR OPERATING SAID REFRIGERATING MACHINE	
2020/04340	A FIBRE OPTIC CABLE SPLICE ENCLOSURE AND A METHOD OF ENCLOSING FIBRE OPTIC CABLES	2020-07-15
2020/04367	UNIVERSAL TOKENISATION SYSTEM FOR BLOCKCHAIN-BASED CRYPTOCURRENCIES	2020-07-16
2020/04405	A DRUG MONITORING TOOL	2020-07-17
2020/04504	SECURITY ENCLOSURE	2020-07-21
2020/04506	METHOD FOR PUMPING OVER THE GRAPE HARVEST DURING MACERATION AND MEANS FOR PUMPING OVER A GRAPE HARVEST	2020-07-21
2020/04507	TIME DOMAIN RESOURCE ALLOCATION FOR DOWNLINK SHARED CHANNEL	2020-07-21
2020/04509	SYSTEM FOR PREHEATING GLASS MELTING FURNACE BATCH MATERIALS	2020-07-21
2020/04512	FURNACE SYSTEM	2020-07-21
2020/04600	METHYLLACTAM RING COMPOUND AND PHARMACEUTICAL USE THEREOF	2020-07-24
2020/04601	PD-1 AGONIST ANTIBODIES AND USES THEREOF	2020-07-24
2020/04629	DELIVERY OF BIOACTIVE MOLECULES IN COATINGS OR SURFACE LAYERS OF ORGANICALLY ENHANCED INORGANIC FERTILIZERS	2020-07-27
2020/04659	PROCESS FOR THE REMOVAL OF HEAVY METALS FROM LIQUIDS	2020-07-28
2020/04664	DATA SENDING OR RECEIVING METHOD AND COMMUNICATIONS DEVICE	2020-07-28
2020/04688	SPLICE SYSTEM FOR CONVEYOR BELT	2020-07-29
2020/04734	INTELLIGENT CLOUD DELIVERY AND BILLING METHOD AND SYSTEM FOR LOGISTICS APPARATUS	2020-07-30
2020/04738	OXYGEN INJECTION SYSTEM FOR A DIRECT REDUCTION PROCESS	2020-07-30
2020/04778	LINEAR MOTION DAMPENING SYSTEM	2020-07-31
2020/04913	IMPROVED MICROBES AND METHODS FOR PRODUCING THE SAME	2020-08-07
2020/04914	METHOD AND APPARATUS FOR REAL TIME, DYNAMIC MANAGEMENT OF REAL ESTATE FINANCE, SERVICES, AND REPORTING	2020-08-07
2020/05006	PROCESS FOR THE PRODUCTION OF ETHYLENE GLYCOL AND HETEROGENEOUS CATALYST COMPOSITION	2020-08-13
2020/05018	DRUM-TYPE SHEARER LOADER, AND A SHEARER DRUM OF A DRUM-TYPE SHEARER LOADER	2020-08-13
2020/05039	PROCESSES FOR PRODUCING OPTICAL EFFECTS LAYERS	2020-08-14
2020/05040	PROCESSES FOR PRODUCING OPTICAL EFFECTS LAYERS	2020-08-14
2020/05041	COMPUTER IMPLEMENTED METHOD AND SYSTEM FOR OBTAINING DIGITALLY SIGNED DATA	2020-08-14
2020/05072	FIRE STARTING DEVICE	2020-08-17
2020/05182	CONNECTION FOR PERCUSSION DRILLING	2020-08-20

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2020/05190	COUPLING FOR CONNECTING DOWNHOLE TUBULARS	2020-08-20
2020/05217	NUCLEIC ACID MOLECULES FOR PSEUDOURIDYLATION	2020-08-21
2020/05223	METHODS OF TREATING CANCERS WITH ANTAGONISTIC ANTI-PD-1 ANTIBODIES	2020-08-21
2020/05232	MODULAR FIN WITH COMMON RAIL SYSTEM	2020-08-21
2020/05252	HERBICIDALLY ACTIVE 3-PHENYLISOXAZOLINE-5-CARBOXAMIDES OF CYCLOPENTENYL CARBOXYLIC ACID DERIVATIVES	2020-08-24
2020/05293	COSMETIC APPLICATOR WAND; ASSEMBLY FOR APPLICATION OF COSMETIC COMPRISING AN APPLICATOR WAND AND AN APPLICATOR AND A METHOD FOR APPLYING COSMETIC FORMULATION	2020-08-25
2020/05442	AQUIFER SEGMENTED GROUTING CURTAIN WATER-PRESERVED MINING METHOD	2020-08-31
2020/05469	AGE INDICATOR FOR PERISHABLE GOODS	2020-09-02
2020/05470	ENGINEERED HIV-1 ENVELOPE IMMUNOGEN	2020-09-02
2020/05519	EXPANDABLE HEAVY EQUIPMENT, AND ELONGATED PULL ELEMENT	2020-09-04
2020/05541	NON-ALUMINIUM ANTIPERSPIRANT COMPOSITIONS	2020-09-07
2020/05561	VARIANT MALTOGENIC ALPHA-AMYLASE	2020-09-08
2020/05588	SYSTEM FOR AND METHOD OF MONITORING ATM OPERATIONAL ACTIVITIES	2020-09-09
2020/05630	A SYSTEM FOR IDENTIFYING PERSONS OF INTEREST	2020-09-10
2020/05637	PROCESS FOR THE PRODUCTION OF DIALKYL TEREPHTHALATE	2020-09-10
2020/05690	METHOD OF DRYING A RADIOACTIVE-WASTE TRANSPORT/STORAGE CONTAINER	2020-09-14
2020/05694	A HIGH-COERCIVITY NEODYMIUM IRON BORON MAGNET AND A PREPARATION METHOD THEREOF	2020-09-14
2020/05700	METAL-FREE WATER CLARIFICATION COMPOSITION	2020-09-14
2020/05794	COMPOUNDS FOR CHEMICALLY MARKING A PETROLEUM HYDROCARBON	2020-09-18
2020/05805	NATURAL MOSQUITO REPELLANT	2020-09-18
2020/05806	SEPARATING TOILET	2020-09-18
2020/05807	MODIFIED FILTER MEMBRANE AND METHOD	2020-09-18
2020/05832	FERTILIZER COMPOSITIONS	2020-09-21
2020/05844	DURABLE SUPERHYDROPHOBIC COATING	2020-09-21
2020/05887	IN VITRO METHOD FOR DETECTING INTESTINAL BARRIER FAILURE IN ANIMALS BY DETERMINING OVOTRANSFERRIN	2020-09-23
2020/05891	EYE DROPS IN FORM OF SOLUTION COMPRISING BENZOPYRAN DERIVATIVE OR PHARMACEUTICALLY ACCEPTABLE SALT THEREOF	2020-09-23
2020/05921	A FIRELIGHTER	2020-09-25
2020/05923	SMELTING METHOD AND SMELTING DEVICE FOR	2020-09-25

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	TREATING IRON-BASED POLYMETALLIC ORE IN SHORT PROCESS	
2020/05928	METHOD OF REDUCING CROP DAMAGE	2020-09-25
2020/05929	METHOD OF REDUCING CROP DAMAGE	2020-09-25
2020/05934	IL-15 VARIANTS AND USES THEREOF	2020-09-25
2020/05935	METHOD OF REDUCING CROP DAMAGE	2020-09-25
2020/05936	METHOD OF REDUCING CROP DAMAGE	2020-09-25
2020/05938	VEHICLE IDENTIFICATION MEANS	2020-09-25
2020/06002	PROCESS FOR MANIPULATING THE LEVEL OF GLYCAN CONTENT OF A GLYCOPROTEIN	2020-09-29
2020/06029	A SYSTEM AND A METHOD FOR SEPARATING PIECES HAVING A SECOND DENSITY FROM GRANULAR MATERIAL	2020-09-29
2020/06048	CELLULOSE PULP AND SHAPED LYOCELL ARTICLE HAVING A REDUCED CELLULOSE CONTENT	2020-09-30
2020/06053	HETEROARYL-SUBSTITUTED PYRAZOLE COMPOUND AND MEDICINAL USE THEREOF	2020-09-30
2020/06232	TRACK PAD GEOMETRY FOR SOFT SURFACES	2020-10-07
2020/06255	ANTI-PD-L1 ANTIBODY AND USE THEREOF	2020-10-08
2020/06511	ARCUATE BIT SURFACE AND BLADE ASSEMBLY	2020-10-20
2020/06516	CONSTRUCTION SYSTEM FOR A MODULE OF A BUILDING	2020-10-20
2020/06519	COMPOSITE TOOTH WITH FRUSTOCONICAL INSERT	2020-10-20
2020/06627	METHODS AND COMPOSITIONS FOR TREATING CANCER	2020-10-23
2020/06774	DOWNHOLE METHODS USING ACID COMPOSITIONS COMPRISING CORROSION INHIBITORS	2020-10-29
2020/06903	ANTI-HUMAN TLR7 ANTIBODY	2020-11-05
2020/06905	GENE THERAPY CONSTRUCTS AND METHODS OF USE	2020-11-05
2020/06906	A FATTY PREPARATION, A PROCESS FOR MAKING SAID FATTY PREPARATION, AND A PRODUCT CONTAINING THE SAME	2020-11-05
2020/06907	A FATTY PREPARATION, A PROCESS FOR MAKING SAID FATTY PREPARATION, AND A PRODUCT CONTAINING THE SAME	2020-11-05
2020/06908	ASSEMBLY FOR DISPENSING GRANULAR PRODUCTS	2020-11-05
2020/06909	EFFICIENT METHODS AND COMPOSITIONS FOR RECOVERY OF PRODUCTS FROM ORGANIC ACID PRETREATMENT OF PLANT MATERIALS	2020-11-05
2020/06934	ULTRASONIC METER	2020-11-06
2020/06935	MOBILE PHONE COVER PROVIDING PASSIVE NOISE REDUCTION OF MICROPHONE AUDIO INPUT SIGNALS	2020-11-06
2020/06938	COMPOSITIONS FOR THERAPY AND HEALTH CONTAINING AMINO ACIDS WITH BITTER TASTE	2020-11-06
2020/06940	SHAPED SAVOURY CONCENTRATE AND PROCESS FOR THE PREPARATION THEREOF	2020-11-06
2020/06956	ANTIGEN VARIANT OF VARICELLA ZOSTER VIRUS	2020-11-09

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	AND USE THEREOF	
2020/06957	RAIL VEHICLE AND COLLISION ENERGY ABSORPTION SYSTEM THEREFOR	2020-11-09
2020/06959	DRIVE SYSTEM WITH VERTICAL CRANKSHAFT AND CAMSHAFT-DRIVEN FUEL PUMP	2020-11-09
2020/06960	FUEL PELLET	2020-11-09
2020/06984	NUCLEIC ACID FOR TREATING MITE ALLERGY	2020-11-10
2020/06985	NUCLEIC ACID FOR TREATING CRUSTACEAN ALLERGY	2020-11-10
2020/06987	TREATMENT OF PROTEINURIA	2020-11-10
2020/07042	TRITERPENE AMINE DERIVATIVES	2020-11-11
2020/07052	SYSTEMS AND METHODS FOR DEFERRED POST-PROCESSES IN VIDEO ENCODING	2020-11-12
2020/07053	SYSTEMS AND METHODS FOR RENDERING & PRE-ENCODED LOAD ESTIMATION BASED ENCODER HINTING	2020-11-12
2020/07103	DRAINAGE PUMP ASSEMBLY AND METHOD FOR CONTROLLING A DRAINAGE PUMP	2020-11-13
2020/07104	GYRATORY CRUSHER AND CONTROL METHOD THEREFOR	2020-11-13
2020/07106	DUAL INTERFACE METAL SMART CARD WITH BOOSTER ANTENNA	2020-11-13
2020/07107	COMPOSITIONS COMPRISING PCSK9-BINDING MOLECULES AND METHODS OF USE	2020-11-13
2020/07188	UNDERCARRIAGE CLAMPING MASTER TRACK LINK WITH TEXTURED TRACK PIN BORE	2020-11-18
2020/07215	PLAYER INPUT MOTION COMPENSATION BY ANTICIPATING MOTION VECTORS	2020-11-19
2020/07218	LASER GUIDED BOMB WITH PROXIMITY SENSOR	2020-11-19
2020/07298	AIRCRAFT RECORDING SYSTEM	2020-11-24
2020/07351	MASTER LINK ASSEMBLY FOR A TRACK CHAIN	2020-11-25
2020/07384	COMPOSITIONS AND METHODS FOR NOURISHING MAMMALS	2020-11-26
2020/07534	MULTIPIECE BOGIE	2020-12-03
2020/07694	AGRICULTURAL HARVESTER CONTROL SYSTEM, METHOD OF CONTROLLING AN AGRICULTURAL HARVESTER AND AGRICULTURAL HARVESTER	2020-12-09
2020/07695	AGRICULTURE SUPPLY CHAIN SYSTEM AND METHOD	2020-12-09
2020/07709	SPRAY ATTACHMENT FOR DISPENSING LIQUID SUBSTANCES IN THE FORM OF A JET	2020-12-10
2020/07710	CONTROLLING THE RHEOLOGY OF A METAL ORE RESIDUE	2020-12-10
2020/07711	METHOD FOR CONTROLLING THE SEDIMENTATION OF A MINING DERIVATIVE	2020-12-10
2020/07712	CONTROLLING THE RHEOLOGY OF A METAL ORE RESIDUE	2020-12-10
2020/07745	SYSTEMS AND METHODS FOR TRAINING GENERATIVE ADVERSARIAL NETWORKS AND USE OF TRAINED GENERATIVE ADVERSARIAL NETWORKS	2020-12-11
2020/07748	BIODEGRADABLE TEXTILES, MASTERBATCHES,	2020-12-11

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	AND METHOD OF MAKING BIODEGRADABLE FIBERS	
2020/07752	TRACK ASSEMBLY FOR A MACHINE	2020-12-11
2020/07778	NUCLEIC ACID DETECTION METHOD	2020-12-14
2020/07991	MICROSTRUCTURED MULTICOMPOSITE COPPER MICROPARTICLE WITH ANTIBACTERIAL AND/OR BIOCIDAL ACTIVITY THAT COMPRISES 5 DIFFERENT TYPES OF COPPER COMPOUNDS	2020-12-21
2020/08038	DEVICE FOR DETECTING AND POSITIONING SPHERICAL ELEMENT	2020-12-22
2020/08042	COVERING FOR UNDERLAYS OF FLOORING	2020-12-22
2020/08046	TRACK ASSEMBLY FOR A MACHINE	2020-12-22
2020/08056	CONNECTION SYSTEM AND METHOD FOR PREFABRICATED VOLUMETRIC CONSTRUCTION MODULES	2020-12-23
2020/08061	METHODS AND SYSTEMS FOR CRYOPRESERVATION AND RESUSPENSION OF BODY FLUIDS	2020-12-23
2020/08064	TOILET HAVING A BIDET SHOWER	2020-12-23
2020/08065	MUC16 SPECIFIC CHIMERIC ANTIGEN RECEPTORS AND USES THEREOF	2020-12-23
2020/08067	WHEEL LOCK WITH CENTRAL EXPANDER	2020-12-23
2020/08068	USE OF HIGH-TEMPERATURE-RESISTANT CAS PROTEIN, AND METHOD AND REAGENT KIT FOR DETECTING TARGET NUCLEIC ACID MOLECULE	2020-12-23
2020/08069	PROCESSING OF IMPULSE NOISE IN A VIDEO SEQUENCE	2020-12-23
2020/08070	SECURITY SENSOR DEVICE	2020-12-23
2021/00049	PIPE JOINT	2021-01-05
2021/00421	AROMATIC MOLECULES FOR USE IN THE TREATMENT OF PATHOLOGICAL CONDITIONS	2021-01-20
2021/00436	PHENOXY(HETERO)ARYL ETHERS OF ANTIPROLIFERATIVE ACTIVITY	2021-01-21
2021/00482	AROMATIC MOLECULES FOR USE IN THE TREATMENT OF PATHOLOGICAL CONDITIONS	2021-01-22
2021/00625	A LOW-COST METHOD FOR THE SAFE EXTRACTION, STORAGE, AUDIT AND TRANSFER OF VALUE OF PRECIOUS METAL DEPOSITS	2021-01-28
2021/00753	OXIDATION TYPE MICRO-FLAME COMBUSTION DEVICE AND METHOD FOR HIGH-COD SEWAGE TREATMENT	2021-02-03
2021/00874	COMPOSITION FOR INACTIVATION OF GRAM-POSITIVE BACTERIA AND BACTERIAL SPORES AND METHODS OF MAKING AND USING SAME	2021-02-09
2021/01417	AN ELECTRICAL CONNECTOR	2021-03-02
2021/01527	FLASH JOULE HEATING SYNTHESIS METHOD AND COMPOSITIONS THEREOF	2021-03-05
2021/01592	EYEWEAR FOR SIMULATING FACE-TO-FACE COMMUNICATION	2021-03-09
2021/02078	COMBINED PARTITION FRAME FOR INTERIOR DESIGN	2021-03-26
2021/02137	DRILL BODY	2021-03-30

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2021/02209	PHARMACEUTICAL PREPARATIONS OF SEBACOYL DINALBUPHINE AND ACETAMINOPHEN AND METHODS FOR TREATING PAIN	2021-03-31
2021/02268	A METHOD FOR IN-LINE TREATMENT OF A THREAD AND A SYSTEM THEREFORE COMPRISING A TREATMENT UNIT AND A THREAD SPEED SENSOR	2021-04-06
2021/02269	A METHOD FOR PROVIDING VISUAL EFFECTS TO A DECORATIVE PATTERN, A CONTROL UNIT AND A SYSTEM FOR IN-LINE TREATMENT OF THREAD	2021-04-06
2021/02567	METHOD FOR VEHICLE CLASSIFICATION USING MULTIPLE GEOMAGNETIC SENSORS	2021-04-19
2021/02648	HISTORICAL CITY PROTECTION AND DEVELOPMENT COOPERATIVE CONTROL SCHEME AIDED DESIGN SYSTEM	2021-04-21
2021/02775	BISPECIFIC CD123 X CD3 DIABODIES FOR THE TREATMENT OF HEMATOLOGIC MALIGNANCIES	2021-04-26
2021/02809	COMPOSITIONS, METHODS, AND APPARATUSES FOR CATALYTIC COMBUSTION	2021-04-28
2021/02890	METHODS AND DEVICES FOR PERFORMING AN ANALYTICAL MEASUREMENT	2021-04-29
2021/02903	A SYSTEM AND METHOD FOR PREVENTING AND DETECTING AN EMERGENCY	2021-04-30
2021/03035	METHODS OF TREATING GRAVES' OPHTHALMOPATHY USING ANTI-FCRN ANTIBODIES	2021-05-05
2021/03055	RAPID PCR METHODOLOGY	2021-05-06
2021/03154	COMBINATION VACCINE COMPOSITION COMPRISING REDUCED DOSE INACTIVATED POLIOVIRUS AND METHOD FOR PREPARING THE SAME	2021-05-10
2021/03184	WOVEN, NONWOVEN, COTTON, NONWOVEN-COTTON BLENDED POLYETHYLENE AND POLIPROPILEN AND POLYSTYRENE MASK, WOUND DRESSING, PANTY, BRA, HANDKERCHIEF, PAD, SCOURING PAD, DISPOSABLE SURGICAL DRESS, DISPOSABLE SHEETS WITH ANTIMICROBIAL PROPERTIES	2021-05-11
2021/03367	ROPE TRANSMISSION STRUCTURE, SOLAR ENERGY TRACKER AND APPLICATION METHOD THEREOF	2021-05-18
2021/03405	SEALING STRUCTURE	2021-05-19
2021/03406	AN AGRICULTURAL WORK VEHICLE	2021-05-19
2021/03424	ADVANCED PHOSPHOROUS RECOVERY PROCESS AND PLANT	2021-05-20
2021/03540	MINING SUBSIDENCE PREDICTION METHOD BASED ON IMPROVED BOLTZMANN FUNCTION	2021-05-25
2021/03644	MULTIVALENT GLYCOCONJUGATES IMMUNOGENIC COMPOSITIONS	2021-05-27
2021/03782	TERIFLUNOMIDE TOPICAL PHARMACEUTICAL COMPOSITIONS	2021-06-02
2021/03846	AUTOGRAFTING TOOL FOR DEEP REACH APPLICATIONS	2021-06-04

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2021/04001	UNIT FUEL CELL, FUEL CELL STACK AND BIPOLAR PLATE ASSEMBLY	2021-06-10
2021/04233	ROTATING WHEEL TYPE COAL AND GANGUE IDENTIFICATION DEVICE	2021-06-21
2021/04365	ADJUSTABLE FULL-BODY PROTECTION GEAR	2021-06-24
2021/05035	THERAPEUTIC COMPOSITION OF INTRANASAL LIDOCAINE	2021-07-16
2021/05064	MICROWAVE OSCILLATOR AND MATRIX-TYPE MICROWAVE OSCILLATOR BASED THEREON	2021-07-19
2021/05343	SYSTEM AND METHOD FOR OPERATING A GAS-POWERED STOVE WITH NETWORK-CONNECTED METERING	2021-07-28
2021/05390	NEW FORMULATION FOR A LOW-CARBON CONSTRUCTION BINDER, METHOD OF PRODUCTION, AND CONSTRUCTION MATERIALS	2021-07-29
2021/05565	BIDIRECTIONALLY-FEEDING SLUDGE SOLIDIFICATION APPARATUS FOR SLUDGE TREATMENT	2021-08-06
2021/05711	HEIGHT ADJUSTMENT SPRINKLER GUARD	2021-08-12
2021/05737	METHOD TO MONITOR RIVER WATER QUALITY	2021-08-04
2021/05922	SPRINKLER GUARD	2021-08-18
2021/06002	METHOD FOR RAPIDLY CHANGING SALINE-ALKALI DESERTS AROUND OASIS INTO HIGH STANDARD FERTILE FARMLAND	2021-08-20
2021/06079	SPRINKLER GUARD WITH RETROACTIVE RISER INSTALLATION	2021-08-23
2021/06283	METHOD FOR CONTROLLING VOLTAGE OF ELECTROSTATIC-SPRAYING SPRAY GUN AND SYSTEM THEREOF	2021-08-30
2021/07050	ZERO-STIFFNESS IMPACT ISOLATION DEVICE	2021-09-21
2021/07098	PSEUDOMONAS CHLORORAPHIS QOHPHZ-8 FOR PRODUCING 1-HYDROXY-PHENAZINE (1-OH-PHZ) AND USE THEREOF	2021-09-23
2021/07119	GENETICALLY ENGINEERED STRAIN FOR HIGH PRODUCTION OF PHENAZINE-1-CARBOXYLIC ACID (PCA), AND CONSTRUCTION METHOD AND USE THEREOF	2021-09-23
2021/07144	MOVING BED BIOFILM REACTOR COUPLED AMMOXIDATION INTEGRATED PURIFICATION TANK	2021-09-23
2021/07213	DYNAMIC RESPONSE TEST SYSTEM FOR BENTHAL SANDY SEDIMENT	2021-09-27
2021/07498	COMPOSITE WEAR COMPONENT	2021-10-05
2021/07511	IN VITRO-IN VIVO EVALUATION OF FENOFIBRATE LOADED SOLID DISPERSIONS TABLETS BY MICRO OVEN IRRADIATION METHOD	2021-10-06
2021/07624	PREPARATION METHOD OF HIGHLY ACTIVE FRESH WAXBERRY JUICE	2021-10-11
2021/07644	ANTI-VEGF PROTEIN COMPOSITIONS AND METHODS FOR PRODUCING THE SAME	2021-10-11
2021/07646	ANTI-VEGF PROTEIN COMPOSITIONS AND METHODS FOR PRODUCING THE SAME	2021-10-11
2021/07647	ANTI-VEGF PROTEIN COMPOSITIONS AND	2021-10-11

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	METHODS FOR PRODUCING THE SAME	
2021/08119	FRICTION TRANSMISSION-TYPE WALKING DEVICE OF WELDING ROBOT	2021-10-21
2021/08287	THIN LOW-FREQUENCY QUENCHING TRANSFORMER	2021-10-27
2021/08288	QUENCHING INDUCTOR FOR NO-SOFT-ZONE LARGE RING PIECE AND DEVICE HAVING THE SAME	2021-10-27
2021/08456	INTEGRATED SEWAGE TREATMENT EQUIPMENT AND SEWAGE TREATMENT METHOD BASED ON A/O-MBBR PROCESS	2021-10-29
2021/08512	A METHOD FOR INVESTIGATING THE MANIPULATED FINANCIAL STATEMENTS OF AVIATION COMPANY	2021-11-02
2021/08513	A SERVICE MODELING METHOD WITH WORD EMBEDDING AND NON-NEGATIVE MATRIX FACTORIZATION INTEGRATED IN A CLOUD COMPUTING MODE	2021-11-02
2021/08567	APPLICATION OF HIGH-SULFATED GALACTOSAN FUCOIDAN DERIVED FROM BROWN ALGAE IN MEDICINES AND HEALTH PRODUCTS FOR PREVENTING AND TREATING PULMONARY FIBROSIS	2021-11-03
2021/08569	HIGH-TEMPERATURE AND HIGH-PRESSURE PLASTICIZING DEVICE	2021-11-03
2021/08599	ANTI-TNFALPHA-ANTIBODIES AND FUNCTIONAL FRAGMENTS THEREOF	2021-11-04
2021/08600	ANTI-TNFALPHA-ANTIBODIES AND FUNCTIONAL FRAGMENTS THEREOF	2021-11-04
2021/08601	ANTI-TNFALPHA-ANTIBODIES AND FUNCTIONAL FRAGMENTS THEREOF	2021-11-04
2021/08602	ANTI-TNFALPHA-ANTIBODIES AND FUNCTIONAL FRAGMENTS THEREOF	2021-11-04
2021/08603	RIP1 INHIBITORY COMPOUNDS AND METHODS FOR MAKING AND USING THE SAME	2021-11-04
2021/08797	BRICK-CONCRETE MIXED RECYCLED COARSE AGGREGATE CONCRETE AND PREPARATION METHOD THEREOF	2021-11-09
2021/08803	FLOATING VERTICAL-AXIS WIND TURBINE	2021-11-09
2021/08804	UNSUPERVISED LEARNING-BASED DOCUMENT TERM SEGMENTATION METHOD IN FIELD OF IDEOLOGICAL AND POLITICAL EDUCATION AND SYSTEM THEREOF	2021-11-09
2021/08805	BACILLUS MEGATERIUM STRAIN MYB3 AND USE THEREOF IN FERMENTED STRAW FEEDSTUFF	2021-11-09
2021/08806	INSECT-RAISING DEVICE AND USE METHOD THEREOF	2021-11-09
2021/08859	PREPARATION METHOD OF CORDIERITE CRUCIBLE	2021-11-10
2021/08888	A METHOD FOR ANALYZE MUTUAL FUND AND CAUSE OF ITS LOW PENETRATION AMONG INDIVIDUAL INVESTORS	2021-11-10

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2021/08918	PREPARATION METHOD OF HIGH TEMPERATURE CORUNDUM MULLITE CRUCIBLE	2021-11-11
2021/08919	PROPAGATION METHOD OF HELLEBORUS HYBRIDUS	2021-11-11
2021/08920	CONSTRUCTION METHOD OF STEEL FIBER CONCRETE MODEL BASED ON CT SCANNING	2021-11-11
2021/08923	PREPARATION METHOD OF ZINC OXIDE/ZINC GERMANATE-COPPER NANOCOMPOSITE PHOTOCATALYST AND ITS APPLICATION	2021-11-11
2021/08924	CHINESE MEDICINAL COMPOSITION FOR PREVENTING AND TREATING OSTEOPOROSIS AND PREPARATION METHOD AND APPLICATION THEREOF	2021-11-11
2021/08927	LACTOBACILLUS CASEI (L. CASEI) 21 WITH THERAPEUTIC EFFECT ON DIARRHEA, AND USE THEREOF	2021-11-11
2021/08928	GRAVITY TRACTION BRACE FOR UPPER LIMBS	2021-11-11
2021/08930	PREPARATION METHOD OF WO3/ZN2GEO4 NON-NOBLE METAL BIMETALLIC OXIDE PHOTOCATALYST, AND ITS APPLICATION.	2021-11-11
2021/08931	PREPARATION METHOD OF BIMETALLIC NANO PHOSPHATE BASED ON METAL-ORGANIC FRAMEWORKS AND ITS APPLICATION	2021-11-11
2021/08932	AUTOMATIC DISPENSING DEVICE FOR NASOPHARYNGEAL SWABS FOR DETECTING COVID-19	2021-11-11
2021/08933	PLANET SCREW EXTRUDER FOR PROCESSING PVC MATERIAL	2021-11-11
2021/09025	A TRAFFIC DYNAMIC LOAD DEVICE FOR ROCK-SOIL AND UNDERGROUND ENGINEERING MODEL TEST	2021-11-15
2021/09080	METHOD FOR PRODUCING FORMALDEHYDE-FREE AND WATER-RESISTANT WOOD-BASED PANEL	2021-11-15
2021/09084	REAL-TIME THREAT DETECTION FOR ENCRYPTED COMMUNICATIONS	2021-11-16
2021/09085	ADAPTER FORGING FORMING DIE	2021-11-16
2021/09100	EFFICIENT DESLIMING SEPARATION PROCESS	2021-11-16
2021/09107	A PREDICTING AND MONITORING DEVICE OF ROCK CRACK PROPAGATION DIRECTION	2021-11-16
2021/09139	IMAGE FEATURE RECOGNITION METHOD OF YELLOW RIVER ICE DAM	2021-11-17
2021/09167	THIXOTROPIC MUD FOR EARTH PRESSURE BALANCE JACKING PIPE IN ANHYDROUS SAND LAYER, AND PREPARATION METHOD, GROUTING METHOD AND SLURRY REPLACEMENT METHOD THEREOF	2021-11-17
2021/09210	METHOD FOR PREPARING SUPER-AMPHIPHOBIC POLYSULFONE MEMBRANE	2021-11-18
2021/09211	DEVICE FOR DETECTING INFLUENCE OF ALKALI METAL ON REACTIVITY AND POST-REACTION STRENGTH OF COKE	2021-11-18
2021/09212	TUNGSTEN TELLURIDE GROWN WITH NEW RAW	2021-11-18

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	MATERIAL AND PREPARATION METHOD THEREOF	
2021/09214	OPTIMIZED STRUCTURE AND CONTROL METHOD OF ACTIVE NEUTRAL-POINT-CLAMPED INVERTER BASED ON HYBRID DEVICES	2021-11-18
2021/09215	VOLATILE ORGANIC COMPOUND ADSORPTION AND DESORPTION TREATMENT AND RESOURCE RECOVERY DEVICE	2021-11-18
2021/09216	STEEL MESH SKELETON CONCRETE BEAM AND COLUMN AND ITS STRUCTURAL DESIGN METHOD	2021-11-18
2021/09217	METHOD FOR CONSTRUCTING ENERGY MANAGEMENT STRATEGY OF HYBRID ELECTRIC VEHICLE BASED ON INTELLIGENT NETWORK CONNECTION	2021-11-18
2021/09218	APPLICATION OF FUCOIDAN COMBINED WITH DEEP SEA WATER IN PREVENTING AND TREATING DIABETIC COGNITIVE DYSFUNCTION	2021-11-18
2021/09219	WELDED STIRRUP STEEL FRAME BEAM-COLUMN	2021-11-18
2021/09220	BAMBOO BUILDING COMPONENT	2021-11-18
2021/09221	METHOD FOR CONTROLLING SUCCESSION CROPPING OBSTACLE OF SOIL IN PROTECTED CULTIVATION	2021-11-18
2021/09222	MULTIFUNCTIONAL BADGE	2021-11-18
2021/09226	METHOD FOR PREPARING PET-BASED GRAPHENE CONDUCTIVE FIBER	2021-11-18
2021/09227	MULTI-CHANNEL PLANT EVAPOTRANSPIRATION REMOTE MONITORING SYSTEM	2021-11-18
2021/09228	METHOD FOR EVALUATING AND MONITORING THE LOAD-ENERGY EFFICIENCY OF NUMERICALLY-CONTROLLED MACHINE TOOL FOR ENERGY SAVING AND EMISSION REDUCTION	2021-11-18
2021/09229	WATER-SAVING AND HIGH-YIELD CULTIVATION METHOD OF DRYLAND WHEAT	2021-11-18
2021/09230	METHOD FOR IMPROVING CREASE RESISTANCE AND ANTIBACTERIAL PROPERTY OF PURE COTTON FABRIC	2021-11-18
2021/09231	METHOD FOR EVALUATING AND MONITORING QUALITY-ENERGY EFFICIENCY OF COMPUTER NUMERICAL CONTROL MACHINE TOOL MACHINING PROCESS	2021-11-18
2021/09233	SYSTEM AND METHOD FOR TREATING HUMAN AND LIVESTOCK EXCREMENT	2021-11-18
2021/09234	WHEAT-ALFALFA INTERCROPPING METHOD	2021-11-18
2021/09235	ONE-POT NON-ENZYMATIC GLUCOSE COLORIMETRIC DETECTION METHOD BASED ON ENZYME-LIKE NANOMATERIAL	2021-11-18
2021/09236	MODIFIED CHITOSAN MICROGEL AND PREPARATION METHOD AND USE THEREOF	2021-11-18
2021/09269	NOVEL MAGNETIC RESONANCE RADIO FREQUENCY COIL ASSEMBLY	2021-11-19
2021/09270	ROBOT FOR HEAD AND NECK TUMOR SURGERY	2021-11-19
2021/09271	RAINWATER PURIFICATION SYSTEM OF GARDEN ROAD GREENING ISOLATION BELT	2021-11-19

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2021/09274	METHOD FOR PREPARING PHLOROTANNINS-LOADED OLEOGEL AND APPLICATION THEREOF	2021-11-19
2021/09277	PHLOROTANNIN -RICH CAPSULE WITH EASE-CONSTIPATION ACTION AND PROCESSING TECHNOLOGY THEREOF	2021-11-19
2021/09278	ROBOT FISH FOR UNDERWATER DETECTION AND WORKING METHOD THEREOF	2021-11-19
2021/09279	ELECTRONIC MEDAL	2021-11-19
2021/09283	COMPOSITE ENERGY CONSUMPTION SYSTEM WITH SECONDARY DISPLACEMENT MAGNIFICATION AND SELF-RESETTING TRIGGER FUNCTIONS	2021-11-19
2021/09285	MOUNTAIN ROAD SAFETY PATH PLANNING METHOD AND SYSTEM BASED ON FUZZY RANDOM FOREST ALGORITHM	2021-11-19
2021/09377	HANDHELD MEASUREMENT, SEARCH AND SAFETY DEVICE	2021-11-22
2021/09458	PROCESSING HAZARDOUS URBAN WASTE WATER	2021-11-24
2021/09483	A GREEN COMPOSITION FOR PREVENTING AND TREATING AFRICAN SWINE FEVER	2021-11-24
2021/09490	CONSTRUCTION METHOD FOR MIRROR CONCRETE WITH WOODEN POLYPROPYLENE-COATED FLAT FORMWORK	2021-11-24
2021/09519	METHOD FOR CREATING STATISTICS ON CONTENT OF ROCK DEBRIS IN CONGLOMERATE RESERVOIR	2021-11-24
2021/09526	COMPUTER-IMPLEMENTED BIDDING METHOD, COMPUTER EQUIPMENT AND STORAGE MEDIUM	2021-11-25
2021/09563	MEASURING DEVICE FOR SIDE PRESSURE OF CAVED GANGUE IN GOB UNDER LOAD	2021-11-25
2021/09564	MEASURING DEVICE AND METHOD FOR ACCUMULATION CHARACTERISTICS OF CAVED GANGUE IN GOB WITH GOB-SIDE ENTRY RETAINING	2021-11-25
2021/09609	AN IOT BASED MOBILE OPERATED SOLAR BALL MILL SYSTEM	2021-11-26
2021/09610	AUTOMATIC FEEDING DEVICE AND CONVEYING SYSTEM FOR THE ACTION SUPPORT OF TANK TRACK	2021-11-26
2021/09611	PROCESS EQUIPMENT SYSTEM FOR THE ACTION SUPPORT OF TANK TRACK	2021-11-26
2021/09612	METHOD FOR PRODUCING CLONAL SEEDLINGS OF PEACH AND ITS ROOTSTOCK	2021-11-26
2021/09613	PREPARATION METHOD OF SPHERICAL AMMONIUM DINITRAMIDE (ADN) AND ITS COMPOSITE OXIDANT	2021-11-26
2021/09615	CONSTRUCTION METHOD FOR PARTIAL BLEEDER OFF HOLES OF STOPE FACE IN CYCLES	2021-11-26
2021/09616	PREPARATION METHOD OF DIAGNOSTIC ANTIGEN FOR VIRULENT NEWCASTLE DISEASE INFECTION OF CHICKENS	2021-11-26
2021/09618	ENERGY-SAVING WATER SUPPLY SYSTEM AND	2021-11-26

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	ITS WORKING METHOD	
2021/09620	METHOD FOR MEASURING SOIL RESISTIVITY AND METHOD FOR ANALYZING THE LAYERED STRUCTURE OF SOIL	2021-11-26
2021/09621	A SYSTEM USING AI BASED UNMANNED AERIAL VEHICLE FOR SOLID WASTE MANAGEMENT & ENVIRONMENTAL SENSING	2021-11-26
2021/09623	NOVEL COMPOUND FOR IMPROVING PLANT RESISTANCE TO SOIL ALUMINUM TOXICITY AND PREPARATION METHOD THEREOF	2021-11-26
2021/09628	MECHANICAL-HYDRAULIC HYBRID HEAT DISSIPATION SYSTEM	2021-11-26
2021/09629	TRUCK CAB REMOTE CONTROL TIPPING DEVICE	2021-11-26
2021/09630	MODELING CALCULATION METHOD FOR BOLT STRUCTURE	2021-11-26
2021/09631	COMMERCIAL VEHICLE 24V BATTERY ELECTRIC ENERGY MANAGEMENT DEVICE	2021-11-26
2021/09632	AUXILIARY EARLY WARNING DEVICE APPLIED TO HEAVY TRUCK	2021-11-26
2021/09668	APPLE ROOTSTOCK SPECIFIC MOLECULAR MARKER, SCREENING METHOD AND THEIR APPLICATIONS	2021-11-29
2021/09669	LIFTING TYPE LIQUID NITROGEN REFRIGERATION DEVICE FOR AQUATIC PRODUCTS	2021-11-29
2021/09670	HYALURONIC ACID MODIFIED HALLOYSITE NANOTUBE/CHITOSAN ENTERIC-COATED MICROSPHERE LOADED WITH PAEONIFLORIN AND PREPARATION METHOD THEREOF	2021-11-29
2021/09672	STREAMLINE ECOLOGICAL ISLAND BODY FENCE AND CONSTRUCTION METHOD THEREOF	2021-11-29
2021/09674	A VACCINATION MOBILE STATION FOR DISEASE PREVENTION AND CONTROL	2021-11-29
2021/09676	SLUICE WIRE ROPE CLIMBING AND LASER CLEANING ROBOT	2021-11-29
2021/09677	EXPLORATION METHOD FOR ENRICHMENT AREA OF GEOTHERMAL WATER IN GRANITE GEOTHERMAL RESERVOIRS	2021-11-29
2021/09678	MULTIFUNCTIONAL CAR TRANSPORTER WITH MANTIS-ARM-LIKE FRONT AND REAR DOUBLE LIFTING MECHANISMS	2021-11-29
2021/09679	RUNNING STATE DETECTION AND JOINT CONTROL DEVICE OF BELT CONVEYOR AND SCRAPER CONVEYOR	2021-11-29
2021/09680	PREPARATION METHOD OF MICROPOROUS MEMBRANES AND FILTER DEVICE FOR STEEL METALLURGICAL SEWAGE	2021-11-29
2021/09682	A PREPARATION AND APPLICATION OF GATHERER TO ENRICH PHAGE FAST AND DIRECTLY	2021-11-29
2021/09683	TEST SYSTEM AND METHOD FOR WIND SPEED IN WIND TUNNEL OF BRIDGE AND DYNAMOMETRY OF VEHICLE	2021-11-29
2021/09684	BETA-GLUCAN-ENRICHED HIGHLAND BARLEY	2021-11-29

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	FLOUR	
2021/09686	VEHICLE SAFETY WARNING SYSTEM UNDER LOW VISIBILITY CONDITION	2021-11-29
2021/09687	VEHICULAR UNFAVORABLE WEATHER REAL-TIME PERCEPTION AND ANTI-COLLISION EARLY WARNING METHOD	2021-11-29
2021/09689	PROCESSING METHOD OF HIGH CONTENT GALLIC ACID RIPE PU'ER TEA	2021-11-29
2021/09690	CLASSIFIABLE STORAGE DEVICE FOR SPORTS EQUIPMENT	2021-11-29
2021/09691	UROLOGY CLEANING DEVICE	2021-11-29
2021/09692	METHOD FOR SYNTHESIZING 2,3-DIMETHYL-5ALKYLAMINO-1,4-BENZOQUINONE BY TWO-ENZYME ONE-POT METHOD	2021-11-29
2021/09693	WINE YEAST WITH LOW-YIELD HIGHER ALCOHOLS	2021-11-29
2021/09695	TWO-STAGE LEVER TYPE MECHANICS EXPERIMENTAL DEVICE	2021-11-29
2021/09696	APTAMER RIBOZYME SEQUENCES	2021-11-29
2021/09701	LIQUID LEVEL TRANSMITTER FOR VEHICLE FUEL THEFT PREVENTION	2021-11-29
2021/09702	METHOD FOR DECOUPLING TEST	2021-11-29
2021/09704	METHOD FOR REGULATING CRYSTAL HABIT OF ROPIVACAINE	2021-11-29
2021/09706	AUTOMATED LSP PROCESS EQUIPMENT SYSTEM FOR AERO-ENGINE BLADE	2021-11-29
2021/09707	FERTILIZER GRINDING MECHANISM, WATER AND FERTILIZER MIXING DEVICE, AND AQUEOUS FERTILIZER SOLUTION PREPARATION PRODUCTION LINE	2021-11-29
2021/09708	SYSTEM FOR MACHINING AND POSITIONING AUTOMOBILE HUB AND PRODUCTION LINE FOR INTELLIGENT CLEANING AND PRECISION MACHINING	2021-11-29
2021/09718	FAST INTELLIGENT FINE-ADJUSTMENT SYSTEM AND FINE-ADJUSTMENT METHOD FOR CRTS?-TYPE TRACK SLAB	2021-11-29
2021/09756	INNER SUPPORT OF PIPE GALLERY WITH DOUBLE-SIDED OVERLAP SIDE WALL WITH CONCEALED COLUMN AND INSTALLATION METHOD THEREOF	2021-11-30
2021/09772	FOOD CHOPPER BLADE COLUMN	2021-11-30
2021/09803	A SPARE WHEEL LOCKING MECHANISM	2021-12-01
2021/09868	A NOVEL TECHNIQUE TO TREAT PRIORITY MICRO-POLLUTANTS OF A HAZARDOUS WASTE LANDFILL LEACHATE	2021-12-02
2021/09926	METHOD FOR INCREASING POLYSACCHARIDE EXTRACTION AMOUNT OF DENDROBIUM OFFICINALE UNDER LOW TEMPERATURE STRESS	2021-12-03
2021/09955	THREE-DIMENSIONAL ELECTROOSMOSIS CONSOLIDATED SOFT SOIL COLLECTION AND DRAINAGE DEVICE AND CONSTRUCTION METHOD THEREFOR	2021-12-03
2021/10001	METHOD FOR PREPARING COMPOSITE MATERIAL	2021-12-06

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	CAPABLE OF ABSORBING AND DECOMPOSING FORMALDEHYDE AND VOCS	
2021/10002	A MATH TEACHING BOARD WITH IMPROVED MOVABILITY	2021-12-06
2021/10003	DETECTION PRIMER AND DETECTION METHOD OF SMUT DISEASE-CAUSING PATHOGEN THECAPHORA SCHWARZMANIANA, AND USE THEREOF	2021-12-06
2021/10004	METHOD FOR DETERMINING RELIABILITY OF SYSTEM WITH MULTIPLE WORKING CONDITION ACTING ELEMENTS	2021-12-06
2021/10005	FACTORY RESET METHOD AND DEVICE	2021-12-06
2021/10006	MULTIFUNCTIONAL SPLIT HARMLESS TREATMENT DEVICE FOR AGRICULTURAL AND PASTORAL WASTES	2021-12-06
2021/10007	PURPLE WHEAT BRAN DIETARY FIBER POWDER AND MANUFACTURING METHOD THEREOF	2021-12-06
2021/10008	METHOD FOR DETERMINING MINOR ELEMENTS AND MAJOR INGREDIENTS IN MARINE SEDIMENTS	2021-12-06
2021/10009	EXPERIMENT BENCH FOR INSECT OPERATIONS	2021-12-06
2021/10010	CONDITION PREDICTION METHOD FOR FILLING SLURRY PIPELINE TRANSPORTATION AND APPLICATION	2021-12-06
2021/10011	PREPARATION METHOD OF PHOSPHOLIPASE C SENSOR BASED ON ATRP	2021-12-06
2021/10012	MANAGEMENT METHOD FOR BREEDING SEEDLINGS	2021-12-06
2021/10013	QUICK GERMINATION METHOD OF HYBRID SEEDS FOR FRUIT TREE	2021-12-06
2021/10014	MULBERRY SAPLING LIFTER	2021-12-06
2021/10015	NEW PSEUDOXANTHOMONAS BEIGONGSHANGENSIS STRAIN AND USE THEREOF	2021-12-06
2021/10016	POLLINATION ISOLATION NET COVER FOR APRICOT TREES	2021-12-06
2021/10017	TEMPLATE FIXING DEVICE	2021-12-06
2021/10018	IPN DAMPING MATERIAL CONTAINING HINDERED AMINE AND PREPARATION METHOD THEREOF	2021-12-06
2021/10019	LAVENDER ESSENTIAL OIL HOT-AIR DISTILLATION DEVICE	2021-12-06
2021/10020	RAPID DETECTION KIT AND DETECTION METHOD FOR ESCHERICHIA COLI	2021-12-06
2021/10021	KETOGENIC DIET (KD) COMPOSITION FOR PREVENTING AND/OR TREATING DEMYELINATING DISEASE, AND PREPARATION METHOD AND USE THEREOF	2021-12-06
2021/10023	RHIZOSPHERE REMEDIATION METHOD OF HIGH-CONCENTRATION PETROLEUM CONTAMINATED SALINE-ALKALI SOIL	2021-12-06
2021/10025	FERMENTATION PROCESS FOR REGULATING MORPHOLOGY OF ACTINOMYCETES TO EFFICIENTLY PRODUCE ?-POLY-L-LYSINE (?-PL)	2021-12-06
2021/10028	LOW CASTING AND LOW IMPACT BLASTING	2021-12-06

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	METHOD BASED ON HARD ROCK IN DEEP SHAFT	
2021/10029	DEEP HOLE STEREO MILLISECOND BLASTING METHOD BASED ON WEAK SURROUNDING ROCK IN DEEP SHAFT	2021-12-06
2021/10030	DEEP HOLE VIBRATION REDUCTION BLASTING METHOD BASED ON ARTIFICIAL FROZEN SOFT ROCK IN DEEP SHAFT	2021-12-06
2021/10031	MULTI-AGENT ONLINE CO-DESIGN INTERACTIVE SYSTEM	2021-12-06
2021/10032	WATER-BASED ANTISTATIC LIGHT-CURED COATING AND PREPARATION METHOD THEREOF	2021-12-06
2021/10060	PREPARATION METHOD OF COPPER METAL-ORGANIC COMPLEX BASED ON DIPHENYL ETHER LIGANDS AND APPLICATION THEREOF IN DETECTION OF AL3+ IONS	2021-12-07
2021/10061	DISTRIBUTED COUPLED SIMULATION METHOD OF FLOW AND SEDIMENT PROCESS IN RIVER BASIN	2021-12-07
2021/10062	AUXILIARY DEVICE FOR FORMING AUTOMOBILE DOOR OUTER PANEL	2021-12-07
2021/10063	DEVICE AND METHOD FOR REMOVING VOLATILE ORGANIC COMPOUNDS IN AIR THROUGH PHOTOCATALYSIS	2021-12-07
2021/10064	DROPLET DIGITAL POLYMERASE CHAIN REACTION (DDPCR)-BASED RAPID DETECTION METHOD FOR VIBRIO MIMICUS IN AQUATIC PRODUCT	2021-12-07
2021/10065	CHARCOAL-BASED COMPOUND FERTILIZER DEDICATED FOR COTTON FIELDS IN SALINE SOIL AREAS AND PREPARATION METHOD THEREOF	2021-12-07
2021/10066	WATER-BASED COMPOSITE ADHESIVE FOR LOST FOAM COATING AND PREPARATION METHOD THEREOF AND LOST FOAM COATING	2021-12-07
2021/10067	REINFORCED HIGHLAND BARLEY RED YEAST RICE FOR LOWERING BLOOD PRESSURE, BLOOD LIPID AND BLOOD GLUCOSE AND PREPARATION METHOD THEREOF	2021-12-07
2021/10069	SPECIAL TIGHTENING MECHANISM AND DETECTION CONTROL SYSTEM OF HIGH-SPEED TRAIN BRAKE DISCS	2021-12-07
2021/10070	NIFE-LDHS ULTRATHIN NANOSHEET ASSEMBLY WITH NITROGEN-DOPED CARBON QUANTUM DOTS EMBEDDED AND PREPARATION METHOD	2021-12-07
2021/10071	EMOTIONAL REGULATION TRAINING SYSTEM AND METHOD BASED ON NEURAL FEEDBACK TECHNOLOGY	2021-12-07
2021/10072	A CROSS-INDUSTRY ACCOUNTING DATA PROCESSING METHOD AND SYSTEM	2021-12-07
2021/10073	BACILLUS SUBTILIS KCKB1 WITH BIOCONTROL FUNCTION, BIOCONTROL AGENT AND APPLICATION THEREOF	2021-12-07
2021/10074	BUS PLATFORM	2021-12-07
2021/10075	OXIDE-BASED THERMAL INSULATION CERAMIC COMPOSITE MATERIAL AND PREPARATION	2021-12-07

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	METHOD THEREOF	
2021/10076	MODIFIED XANTHAN GUM AND PREPARATION METHOD AND APPLICATION THEREOF	2021-12-07
2021/10078	VERTICAL PLANE GRIDDING TREE SHAPE AND SHAPING METHOD FOR PEAR TREE PLANTATION AND APPLICATION THEREOF	2021-12-07
2021/10080	WIDE-ANGLE REFLEX REFLECTOR	2021-12-07
2021/10081	AN ANTI-ABRASION FACILITIES AND CONSTRUCTION METHOD AT THE BOTTOM OF DISCHARGE HOLE OF DEBRIS FLOW RETAINING DAM	2021-12-07
2021/10083	HYBRID BROADCASTING DEVICE BASED ON DATA BROADCASTING TECHNOLOGY	2021-12-07
2021/10128	PREPARATION METHOD OF ANTIBIOTIC-FREE ENVIRONMENTAL-FRIENDLY FERMENTED FEED	2021-12-08
2021/10129	FEEDING METHOD FOR ANTIBIOTIC-FREE BROILERS	2021-12-08
2021/10184	COMPOUND PROBIOTICS FEED ADDITIVE FOR GOSLINGS	2021-12-09
2021/10199	SCREENING METHOD OF MARKERS FOR PREDICTION OF PRETERM DELIVERY, PRETERM DELIVERY TEST KIT AND USE THEREOF	2021-12-09
2021/10242	IMPROVED DEVICE FOR REAL-TIME MONITORING COASTAL EROSION	2021-12-10
2021/10244	EARLY DETECTION METHOD OF TRADITIONAL CHINESE MEDICINE NEPHROTOXICITY BASED ON HK-2 MONOLAYER POLAR CELL MODEL CULTURED BY TRANSWELL	2021-12-10
2021/10245	COMPOSITION FOR TREATING POSTPARTUM METABOLIC DISEASES OF DAIRY COWS, AND PREPARATION METHOD AND APPLICATION THEREOF	2021-12-10
2021/10246	COMB-BRUSH SWINGING TYPE BEAN POD REMOVAL DEVICE	2021-12-10
2021/10247	METHOD FOR DETECTING GENETIC TOXICITY OF OIL-BASED DRILL CUTTINGS	2021-12-10
2021/10248	PUSH-TYPE WATER-SAVING FAUCET	2021-12-10
2021/10249	PREPARATION OF TOTAL FLAVONOIDS FROM PHYSALIS PUBESCENS WITH HIGH ANTIOXIDANT ACTIVITY	2021-12-10
2021/10250	PHOTOCURING CERAMIC 3D PRINTING MATERIAL SPREADING DEVICE AND USING METHOD THEREOF	2021-12-10
2021/10251	ULTRASONIC-ASSISTED TRANSIENT LIQUID PHASE BONDING METHOD FOR HIGH-STRENGTH CORROSION-RESISTANT MG/AL JOINT	2021-12-10
2021/10252	DETECTION METHOD AND DETECTION EQUIPMENT OF INORGANIC SELENIUM	2021-12-10
2021/10253	STEAM FLOW DETECTION SYSTEM OF AUTOMATIC SUGAR BOILING CONTROL SYSTEM	2021-12-10
2021/10254	ADDITIVE FOR CORE MAKING OF COMPOSITE HARDENED WATER GLASS SAND AND USE	2021-12-10

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2021/10255	METHOD FOR PREVENTING AND CONTROLLING ROCK BURST IN COAL AREA UNDER THREE-DIMENSIONAL COAL PILLARS	2021-12-10
2021/10308	AN EFFECTIVE METHOD FOR DETECTING AND PREVENTING MALICIOUS NODE FOR COLLABORATIVE GRAYHOLE THREATS IN MOBILE AD-HOC NETWORKS	2021-12-13
2021/10309	SIGN LANGUAGE TRANSLATOR	2021-12-13
2021/10332	COMPOSITION FOR TREATING CORONAVIRUS INFECTION	2021-12-13
2021/10333	CLINICAL EFFICACY OF MEDHYA RASAYANA COMBINATION IN MILD TO MODERATE I.Q. DEFICIT CHILDREN	2021-12-13
2021/10354	OPERATION SCHEDULING METHOD FOR MULTIPLE ENERGY SYSTEMS	2021-12-13
2021/10359	GRAIN DISCHARGING HOPPER AND GRAIN DRIER WITH THE SAID GRAIN DISCHARGING HOPPER	2021-12-13
2021/10359	GRAIN DISCHARGING HOPPER AND GRAIN DRIER WITH THE SAID GRAIN DISCHARGING HOPPER	2021-12-13
2021/10390	DUAL-CHANNEL AUTOMATIC INJECTION DEVICE	2021-12-14
2021/10391	AUTOMATIC DRYING AND LAMINATING DEVICE FOR CELL AND BACTERIAL SPECIMENS	2021-12-14
2021/10398	SELF-RESETTING ROCKING STEEL FRAME STRUCTURE AND METHOD FOR CONSTRUCTING SAME	2021-12-14
2021/10404	METHOD FOR SUPPORTING EXTREMELY BROKEN AND SUPER-LARGE CROSS-SECTION ROADWAY IN HIGH ALTITUDE PERMAFROST LAYER	2021-12-14
2021/10455	COLLISION DETECTION METHOD FOR PICKING ROBOT ARM	2021-12-15
2021/10463	METHOD AND SYSTEM OF SHADOWLESS MEMBRANE INTERLAYER CUP PREPARATION AND STAINING FOR CELL AND BACTERIA DETECTION	2021-12-15
2021/10528	NOVEL DETACHABLE SUPPORTING DEVICE	2021-12-17
2021/10529	TEST BOX FOR DETECTING BRUCELLA AND FAECAL EGGS	2021-12-17
2021/10530	MEDICATED BATHROOM FOR PREVENTING AND TREATING SHEEP PARASITOSIS	2021-12-17
2021/10557	MARINE FUNGUS FERMENTED EXTRACT AND USE THEREOF AS ANTI-SENILE DEMENTIA DRUG	2021-12-17
2021/10558	SELF-ASSEMBLY METHOD OF T7 PHAGE VIRUS-LIKE PARTICLES BASED ON SINGLE PLASMID	2021-12-17
2021/10559	METHOD AND DEVICE FOR PRODUCING LOW-ASH CARBON BLACK THROUGH PYROLYSIS OF WASTE TIRES	2021-12-17
2021/10560	DIRECT REDUCTION IRONMAKING DEVICE AND METHOD BASED ON BIOMASS PYROLYSIS TAR	2021-12-17
2021/10614	APPLICATION OF STAPHYLOCOCCUS NEPALENSIS IN DEGRADING RESIDUAL SUGAR IN ORGANIC WASTEWATER OF FERMENTATION INDUSTRY	2021-12-17
2021/10645	A GROUNDWATER LEVEL OBSERVER FOR	2021-12-20

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	HYDROGEOLOGICAL EXPLORATION	
2021/10663	HEAT EXCHANGER REFRIGERATION LOW TEMPERATURE COOLING NANO FLUID MINIMUM QUANTITY LUBRICATION SUPPLY SYSTEM AND METHOD	2021-12-20
2021/10664	MINIMUM QUANTITY LUBRICATION INTELLIGENT FOLLOW-UP MACHINE TOOL WITH A WORKPIECE AS THE MAIN MOVEMENT AND WORKING METHOD	2021-12-20
2021/10665	MIMIMUM QUANTITY LUBRICATION INTELLIGENT SPRAYER-HEAD SYSTEM OF CNC HORIZONTAL LATHE BASED ON SIX-AXIS PARALLEL PLATFORM	2021-12-20
2021/10666	LIQUID NITROGEN CIRCULATING COOLING VORTEX PIPE HIGH EFFICIENCY REFRIGERATION SYSTEM	2021-12-20
2021/10667	HAND HELD NEUROSURGICAL ROTARY ULTRASONIC LONGITUDINAL TORSIONAL RESONANCE WATER CATCHING GRINDING DEVICE AND METHOD	2021-12-20
2021/10669	A PRECISION LUBRICATION PUMP FOR CONTINUOUS SUPPLY OF LUBRICANT BY CRANK LINK MECHANISM	2021-12-20
2021/10670	VIBRATING DISC FEEDING DEVICE AND METHOD FOR POCKET LONG-DIAMETER SHELL BREAKING EQUIPMENT	2021-12-20
2021/10671	A NEGATIVE PRESSURE TYPE WALNUT SHELL AND KERNEL SEPARATION DEVICE AND METHOD	2021-12-20
2021/10672	THE UTILITY MODEL RELATES TO A RECIPROCATING OSCILLATING ULTRASONIC HIGH FREQUENCY VIBRATING SCREEN	2021-12-20
2021/10673	MULTI-STAGE NEGATIVE PRESSURE SHELL AND KERNEL SEPARATION EQUIPMENT	2021-12-20
2021/10674	WALNUT PRE-SHELL BREAKING DEVICE	2021-12-20
2021/10675	A SELF-GRADING WALNUT FLEXIBLE SHELL BREAKING DEVICE AND METHOD WITH THE SAME DIRECTION DOUBLE SPIRAL ROOLER	2021-12-20
2021/10700	MAGNETIC NAVIGATION BEACON IMPLANTATION GUIDING PUNCTURE NEEDLE	2021-12-21
2021/10718	FOOD DETECTION STRUCTURE BASED ON BIOSENSOR AND DETECTION METHOD THEREOF	2021-12-21
2021/10724	METHOD FOR GENERATING GRAY IMAGE WITH HIGH FRAME FREQUENCY	2021-12-21
2021/10725	DEVICE FOR GRADED ENRICHMENT OF FLAVONOIDS, TERPENOIDS AND/OR STILBENOID COMPOUNDS IN PEANUT PLANTS	2021-12-21
2021/10726	COMPLETE FEED FOR INCREASING A GROWTH RATE OF BLACK GOAT LAMBS AND PREPARATION METHOD OF COMPLETE FEED	2021-12-21
2021/10727	IRON-REDUCING BACTERIUM DH4 STRAIN AND APPLICATION THEREOF	2021-12-21
2021/10728	METHOD FOR PREPARING MESOPOROUS BASIC NICKEL SILICATE/SILICA SHELL-CORE MICROSPHERES WITH ADJUSTABLE INNER	2021-12-21

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	CHAMBER SPACE SIZE	
2021/10752	METHOD FOR IMPLEMENTATION OF VIRTUAL LABORATORY TEACHING BASED ON 3D SIMULATION AND SYSTEM, MEDIUM AND EQUIPMENT THEREOF	2021-12-21
2021/10759	TESTING METHOD FOR TENSILE-SHEAR BONDING PERFORMANCE OF BASALT FIBER-REINFORCED PLATE AND CONCRETE	2021-12-17
2021/10764	FLOS DOLICHORIS LABLAB-DERIVED FLAVONOIDS AND PREPARATION METHOD THEREOF	2021-12-22
2021/10765	METHOD FOR ETCHING MEDIUM CARBON STEEL MATRIX, ANTIFRICTION AND ANTIWEAR COMPOSITE LUBRICATING FILM, AND PREPARATION METHOD THEREFOR	2021-12-22
2021/10766	WATER QUALITY MONITORING SYSTEM	2021-12-22
2021/10767	LOW-DOSAGE OIL-BASED ASPHALT WARM MIX AGENT AND PREPARATION METHOD THEREOF	2021-12-22
2021/10768	LICKING BRICK FOR PREVENTING AND TREATING COW KETOSIS	2021-12-22
2021/10769	PIEZOELECTRIC-DRIVEN LIQUID MEDICINE SYRINGE AND CONTROL METHOD THEREOF	2021-12-22
2021/10770	ENERGY MANAGEMENT METHOD OF MULTI ENERGY COMPLEMENTARY SYSTEM BASED ON CONTROLLABLE LOAD	2021-12-22
2021/10771	NON-TRAUMATIC KNEE JOINT STIFFNESS FUNCTION RECOVERY DEVICE	2021-12-22
2021/10772	MONITORING DEVICE FOR BRIDGE CONSTRUCTION DEFORMATION	2021-12-22
2021/10773	HANDBAG ZIPPER ANTENNA FOR INTERNET OF THINGS	2021-12-22
2021/10774	SPHERICAL POLYMER TREATING AGENT FOR HIGH-TEMPERATURE RESISTANT DRILLING FLUID AND PREPARATION METHOD THEREOF	2021-12-22
2021/10775	PREPARATION METHOD OF HYDROXYL-CONTAINING PHOSPHAZENE RESIN	2021-12-22
2021/10776	COMBINED PREDICTION METHOD AND APPARATUS FOR DEMAND POTENTIAL OF REGIONAL DATA CENTER (RDC)	2021-12-22
2021/10777	LAYERED WATER PUMPING DEVICE FOR HYDROLOGICAL-ENGINEERING-ENVIRONMENTAL GEOLOGICAL DRILLING	2021-12-22
2021/10779	AN INTERACTIVE LANGUAGE EDUCATION SYSTEM FOR INTERNATIONAL STUDENTS	2021-12-22
2021/10781	METHOD FOR PREPARING MONATOMIC SILICON BY UTILIZING JOULE HEAT	2021-12-22
2021/10782	METHOD FOR INDUCING MICROEVOLUTION OF DRUG RESISTANCE IN GRAM-NEGATIVE FOOD-BORNE BACTERIAL PATHOGENS	2021-12-22
2021/10783	FULL-AUTOMATIC OILING DEVICE FOR ELECTRIC MOTOR	2021-12-22
2021/10784	ALLOY TARGET MATERIAL CONTAINING RARE EARTH ELEMENTS AND PREPARATION METHOD	2021-12-22

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2021/10785	SECONDARY COATING METHOD FOR STEEL PLATE WITH COATING DEFECT	2021-12-22
2021/10786	REPAIR AND REGENERATION PRETREATMENT METHOD FOR CORRODED AREA OF STEEL STRUCTURE BRIDGE	2021-12-22
2021/10787	COATING PRETREATMENT METHOD FOR STEEL STRUCTURE BRIDGE	2021-12-22
2021/10788	SPINE MINIMALLY INVASIVE SINGLE-QUADRANT ECCENTRIC MULTIPOINT NAIL ENTRY POSITIONING AND GUIDING DEVICE	2021-12-22
2021/10789	PROCESSING TECHNOLOGY FOR IMPROVING GABA CONTENT IN GREEN TEA AND PRODUCT THEREOF	2021-12-22
2021/10790	METHOD FOR PROCESSING HIGH-GABA FAMOUS GREEN TEA AND PRODUCT THEREOF	2021-12-22
2021/10796	SANITARY PAD WITH FOLD OUT ABRASION PROTECTION	2021-12-22
2021/10812	INFRARED FILTER	2021-12-22
2021/10814	COMBINED BLOCKING AND DREDGING METHOD FOR DRAINAGE CHUTE AND DRAINAGE CULVERT OF TAILINGS POND	2021-12-22
2021/10815	METHOD FOR PREPARING MICRON-SIZED SPHERICAL WEIGHTING MATERIAL BY TAKING IRON ORE CONCENTRATE POWDER AS RAW MATERIAL	2021-12-22
2021/10816	METHOD FOR PREPARING MICRON-SIZED SPHERICAL WEIGHTING MATERIAL	2021-12-22
2021/10822	AUTOMATIC DETECTION ALL-IN-ONE MACHINE FOR TULIPA EDULIS AND DETECTION METHOD	2021-12-23
2021/10824	A NEW METHOD FOR CULTIVATING CHINESE TOON SPROUTS	2021-12-23
2021/10825	SYSTEM AND METHOD OF FLOOD MANAGEMENT	2021-12-23
2021/10826	ADJUSTMENT SCREENING TYPE UNDERGROUND COAL GANGUE SEPARATION DEVICE	2021-12-23
2021/10827	ONE-RECEIVING FIVE-TRANSMITTING LIGHT GUIDE CIRCUIT AND USING METHOD THEREOF	2021-12-23
2021/10828	LIGHT-GUIDE METERING DEVICE DETECTION APPARATUS AND METHOD	2021-12-23
2021/10829	COAL GANGUE SEPARATION DEVICE BASED ON DUAL ENERGY X-RAY	2021-12-23
2021/10830	KITCHEN WASTE DEGRADATION AGENT AND PREPARATION METHOD THEREOF	2021-12-23
2021/10831	COMPOSITE GEL FOR PLANT CAPSULES AND PREPARATION METHOD THEREOF	2021-12-23
2021/10832	QUICKLY MOUNTED AND DISMOUNTED PNEUMATIC LIFTING PLATFORM	2021-12-23
2021/10833	ASSEMBLED INTELLIGENTLY DAMPING DEVICES AND CONSTRUCTION METHOD FOR SEISMIC REINFORCEMENT OF SLOPE	2021-12-23
2021/10834	PRIMER/PROBE COMBINATION AND KIT FOR DUAL REAL-TIME FLUORESCENT QUANTITATIVE PCR	2021-12-23

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	DETECTION OF ENTEROCYTOZOON HEPATOPENAEI (EHP) AND SHRIMP HEMOCYTE IRIDESCENT VIRUS (SHIV)	
2021/10835	TEMPERATURE SENSITIVE INHIBITOR OF HIGH STRENGTH COMPOSITE PHASE CHANGE SHELL AND PREPARATION METHOD THEREOF	2021-12-23
2021/10836	PREPARATION METHOD OF SULFUR DIOXIDE ABSORBENT FOR FLUE GAS TREATMENT	2021-12-23
2021/10837	FLUE GAS DESULFURIZATION ADSORPTION DEVICE BASED ON SILICON-BASED MESOPOROUS MATERIAL AND METHOD OF USING SAME	2021-12-23
2021/10838	COMPOUND BACTERIA FERMENTED PROTEIN FEED AND PREPARATION METHOD THEREOF	2021-12-23
2021/10839	DEVICE FOR CUTTING DRIP TAPES ON COTTON SOWER	2021-12-23
2021/10840	VARIABLE KERNEL FUNCTION TARGET TRACKING METHOD BASED ON BILATERAL FILTERING	2021-12-23
2021/10841	MINE DIGITAL TWIN MODEL AND ITS CONSTRUCTION METHOD	2021-12-23
2021/10842	METHOD FOR DETECTING DAMAGE OF CABLE STRUCTURE BASED ON STRESS WAVE TECHNIQUE	2021-12-23
2021/10844	A REMOTE WATER LEVEL MONITORING SYSTEM BASED ON WIRELESS COMMUNICATION	2021-12-23
2021/10845	METHOD CAPABLE OF REALIZING UNDERWATER DINING	2021-12-23
2021/10846	BEAUVERIA BASSIANA STRAIN HTN01 AND ITS APPLICATION	2021-12-23
2021/10847	METHOD FOR FORMING ROADWAY ANTI-IMPACT SOFT STRUCTURE LAYER BY COAL-ROCK PULSE CONTROLLABLE STRONG WAVE FRACTURING COAL-ROCK MASS	2021-12-23
2021/10848	INCLINED PIPE TYPE UNDERWATER PRE-DEHYDRATION AND DEGASIFICATION SEPARATION DEVICE	2021-12-23
2021/10849	ROOTING AGENT FOR CUTTING PROPAGATION OF DWARFING APPLE ROOTSTOCK M9T337, PREPARATION METHOD, AND PROPAGATION METHOD	2021-12-23
2021/10850	LIGHT ENERGY RECEIVING METER	2021-12-23
2021/10851	METHOD FOR DETECTING ENTEROCOCCUS HIRAE IN MEDICAL FOOD BY DROPLET DIGITAL PCR	2021-12-23
2021/10852	METHOD FOR DETECTING ENTEROCOCCUS FAECALIS IN MEDICAL FOOD BY DROPLET DIGITAL PCR	2021-12-23
2021/10855	AUTOMATIC PNEUMATIC SLUICE STEEL WIRE ROPE CLIMBING APPARATUS FOR NARROW SPACE	2021-12-23
2021/10861	SYSTEM OF INTELLIGENT EXPERT MANAGEMENT FOR STORAGE BATTERIES IN ELECTRIC LOCOMOTIVE AND METHOD THEREOF	2021-12-23
2021/10862	SYSTEM FOR OPTIMIZING PASSENGER FLOW	2021-12-23

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	LINES AND DYNAMIC GUIDANCE INDICATOR BOARD IN SUBWAY STATIONS AND DESIGN METHOD THEREOF	
2021/10863	SYSTEM OF ASSISTED DECISION-MAKING FOR CROWD EVACUATION BASED ON ANT COLONY ALGORITHM AND IMPROVED SOCIAL FORCE MODEL	2021-12-23
2021/10867	APPLICATION OF RICE QUIESCIN SULFHYDRYL OXIDASE IN IMPROVING FLOUR PROCESSING QUALITY	2021-12-23
2021/10907	SOLAR TOWER AND TROUGH COMBINED POWER GENERATION	2021-12-23
2021/10907	SOLAR TOWER AND TROUGH COMBINED POWER GENERATION	2021-12-23
2021/10914	AUTOMATIC SEWAGE TREATMENT DEVICE	2021-12-24
2021/10915	MEDICAL THERMOSTATIC VACUUM SHAPING PAD	2021-12-24
2021/10916	METHOD AND DEVICE FOR FIXING HORIZONTALLY PLACED MOTORIZED SPINDLE	2021-12-24
2021/10919	METHOD FOR IDENTIFYING EFFECTIVE RESERVOIR OF SALT LAKE BRINE	2021-12-24
2021/10920	PREPARATION METHOD OF HIGH-TEMPERATURE RESISTANT AND TOUGH ADHESIVE	2021-12-24
2021/10921	SPECIAL FERTILIZER FOR PLANTING ECONOMIC CROPS IN SALINE-ALKALI LAND, AND PREPARATION METHOD AND APPLICATION THEREOF	2021-12-24
2021/10922	VERTICAL TYPE BOX MOTION HORIZONTAL SEALING DEVICE WITH AUTOMATIC CONVEYING	2021-12-24
2021/10923	METHOD FOR IN-SITU REMEDIATION OF CR(VI)-CONTAINING SITE BY USING ORGANIC WASTE	2021-12-24
2021/10924	INVERTED GRAFTING TECHNOLOGY FOR CHINESE CHESTNUT TREES	2021-12-24
2021/10925	IN-VITRO TRANSDERMAL TEST METHOD OF BORON-CONTAINING DERMATITIS DRUG	2021-12-24
2021/10927	BIOMASS WATER-MAKING MACHINE BASED ON LITHIUM BROMIDE HEAT PUMP AND WATER-MAKING METHOD THEREOF	2021-12-24
2021/10928	METHOD OF EFFECTIVELY SEPARATING AND PURIFYING SEVEN FLAVONOID COMPOUNDS FROM OUGAN FLAVEDO	2021-12-24
2021/10929	PREDICTION METHOD FOR AN OCEAN WAVE HEIGHT	2021-12-24
2021/10930	COOPERATIVE TREATMENT SYSTEM FOR POLLUTION AND CARBON REDUCTION OF PORT SEWAGE	2021-12-24
2021/10931	SURROUNDING ROCK TUNNEL TUNNELING CONSTRUCTION METHOD	2021-12-24
2021/10932	MULTIFUNCTIONAL TRANSVERSE PASSAGE STRUCTURE FOR TUNNEL AND CONSTRUCTION METHOD THEREOF	2021-12-24
2021/10933	A MONITORING AND ALARM SYSTEM FOR VESSEL ENGINE ROOM	2021-12-24

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2021/10934	METHOD FOR DETERMINING MINOR ELEMENTS AND RARE EARTH ELEMENTS IN MARINE SEDIMENTS AND SOILS	2021-12-24
2021/10935	HEALTH-PRESERVING FRUIT WINE BASED ON FRUCTUS MORI AND PREPARATION METHOD THEREOF	2021-12-24
2021/10936	BLASTING TECHNOLOGY FOR HARD ROCK MULTI-ARCH TUNNELS	2021-12-24
2021/10937	REVERSE-GRADIENT DRAINAGE SYSTEM OUTSIDE ENTRANCES OF SINGLE-WAY GRADIENT SINGLE AND TWIN TUNNELS	2021-12-24
2021/10938	METHOD FOR DETERMINING SULFUR DIOXIDE IN FOOD	2021-12-24
2021/10939	AN OPTIMUM WEAKENING COEFFICIENT DETERMINATION METHOD FOR THE STRENGTH PARAMETER OF RESERVOIR BANK SLOPES ROCK-SOIL	2021-12-24
2021/10940	A CAMERA LENS PROTECTIVE DEVICE CAPABLE OF CLEARLY RECORDING FOR MACHINE VISION	2021-12-24
2021/10941	OIL POWDER EMBEDDED WITH CAROTENE AND ITS APPLICATION IN PREPARING INSTANT MILK TEA	2021-12-24
2021/10942	METHOD FOR PREPARING PASSIFLORA EDULIS SIMS. CHARACTERISTIC FERMENTED FRUIT WINE	2021-12-24
2021/10943	PREPARATION METHOD OF NANOPOROUS COPPER CATALYST FOR ACETYLENE HYDROCHLORINATION AND USE THEREOF	2021-12-24
2021/10944	GLUTEN-FREE HUNGER-RESISTANT COMPRESSED BISCUIT AND PREPARATION METHOD THEREOF	2021-12-24
2021/10945	METHOD AND DEVICE FOR MEASURING RADIAL INTERNAL CLEARANCE OF BEARING BASED ON LASER TRANSMISSION	2021-12-24
2021/10946	METHOD AND SYSTEM FOR TESTING RESPONSE DELAY OF HIGH-SPEED CAMERA	2021-12-24
2022/00011	INCLINED T-TYPE PIPE MULTI-LEVEL HIGH-VOLTAGE ELECTRIC FIELD SEABED SEPARATION METHOD	2022-01-03
2022/00012	SCREENING METHOD AND SCREENING SYSTEM FOR ISLAND HOUSEHOLD WASTE TREATMENT SOLUTIONS SELECTION	2022-01-03
2022/00013	METHOD FOR CULTURING CANINE BONE MARROW MESENCHYMAL STEM CELLS	2022-01-03
2022/00014	SEAWATER DESALINATION SYSTEM BASED ON HORIZONTAL TUBE FALLING FILM EVAPORATION	2022-01-03
2022/00015	ADJUSTABLE BUILDING GEOMATICS PLATFORM	2022-01-03
2022/00016	METHOD AND KIT FOR PAPER-BASED ELECTROCHEMICAL DETECTION OF LACTIC ACID IN SWEAT BASED ON CU-TCPP(FE)/AU METAL-ORGANIC FRAMEWORK HYBRID NANOSHEETS	2022-01-03
2022/00017	ESTIMATION METHOD OF ECOLOGICAL WATER DEMAND OF FOREST VEGETATION IN MOUNTAIN ECOSYSTEM BASED ON EVAPOTRANSPIRATION	2022-01-03

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2022/00018	METHOD FOR SYNTHESIZING M-METHOXYPHENOL	2022-01-03
2022/00019	SANITARY CERAMIC GREEN BODY	2022-01-03
2022/00020	METHOD FOR INHIBITING HIGH-TEMPERATURE CORROSION OF HEAT EXCHANGE SURFACE OF BIOMASS FIRING BOILER	2022-01-03
2022/00021	PRE-DRESSING METHOD OF LIQUID POTASSIUM ORE	2022-01-03
2022/00022	BIOGAS RESIDUE-BASED IN SITU AND ECTOPIC COUPLED DETOXIFICATION METHOD FOR HEXAVALENT CHROMIUM SITE	2022-01-03
2022/00023	AN EXOSKELETON ROBOT DEDICATED BALANCE COMPONENT	2022-01-03
2022/00024	APPLICATION OF BIOMASS ASH AS FRAMEWORK CONSTRUCTION BODY IN SLUDGE DEWATERING AND METHOD FOR IMPROVING DEWATERING PERFORMANCE OF PAPERMAKING EXCESS SLUDGE	2022-01-03
2022/00025	HORIZONTAL WELL SELF-CENTERING MOVABLE PLUG TYPE CONE VALVE PUMP	2022-01-03
2022/00028	LOW-SUBMERGENCE COAL-DUST RESISTANT DRAINAGE AND GAS PRODUCTION PUMP FOR COAL-BED METHANE WELL	2022-01-03
2022/00029	ISOLATED MONOMER COMPOUND OF TRICHODERMA POLYSPORUM STRAIN, PREPARATION METHOD AND APPLICATION THEREOF	2022-01-03
2022/00030	INSECT-RICE SYMBIOTIC COMPREHENSIVE PLANTING AND BREEDING METHOD MAINLY BASED ON TYLORRHYNCHUS PROLIFERATION	2022-01-03
2022/00031	SYSTEM FOR PREPARING FERTILIZER FROM LIVESTOCK AND POULTRY MANURE WASTES AND APPLICATION	2022-01-03
2022/00032	TEMPERATURE REGULATION HIGH-PRESSURE WATER SUPPLY SYSTEM IN THREE-DIMENSIONAL SIMULATED TEST FOR REDUCED-PRESSURE PILOT PRODUCTION OF DEEP-WATER COMBUSTIBLE ICE	2022-01-03
2022/00033	INFILTRATING MOLD AND INFILTRATION PROCESS OF LONG-FIBER REINFORCED THERMOPLASTIC COMPOSITES	2022-01-03
2022/00034	MEDICAL ANTIBACTERIAL AND DISINFECTING BIODRESSING	2022-01-03
2022/00035	ADDITIVE OF SELENIUM-RICH BIO-ORGANIC FERTILIZER, AND PRODUCTION AND USE METHODS OF SELENIUM-RICH BIO-ORGANIC COMPOUND FERTILIZER	2022-01-03
2022/00036	MOBILE AUXILIARY EQUIPMENT FOR AIR BED	2022-01-03
2022/00037	PREPARATION AND APPLICATION METHOD OF SCATTERED NON-FERROUS METAL TAILINGS IMPROVER	2022-01-03
2022/00039	SIDE RETAINING DEVICE FOR REDUCING SIDE SLOPE SLIDING DEGREE OF A COAL MINING	2022-01-03

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2022/00040	PLANT PROTECTION UAV LANDING GEAR	2022-01-03
2022/00041	DAMPING VALVE PLATE STRUCTURE OF HYDRO-PNEUMATIC SPRING	2022-01-03
2022/00042	UNATTENDED AND SMART CLOUD PLATFORM FOR PLACER QUARRY	2022-01-03
2022/00043	COVALENT ORGANIC FRAMEWORK MATERIALS AND SYNTHESIS METHOD AND APPLICATION THEREOF	2022-01-03
2022/00044	INFORMATION-BASED INTELLIGENT CONTROL SYSTEM AND A CONTROL METHOD FOR SAFELY MONITORING TAILINGS PONDS	2022-01-03
2022/00046	BUILDING DAMPER	2022-01-03
2022/00047	PERFORMANCE RECORDING SYSTEM FOR HUMAN RESOURCE MANAGEMENT	2022-01-03
2022/00048	PLUG-IN ASSEMBLY TYPE WALL-ANCHORING EXPANSION BOLT	2022-01-03
2022/00049	FLAME-RETARDANT POLYSTYRENE BOARD AND METHOD FOR PRODUCING THE SAME	2022-01-03
2022/00050	HIERARCHICAL POROUS PHOSPHATE MATERIAL AND PREPARATION METHOD AND USE THEREOF	2022-01-03
2022/00054	ASPHERIC SHORT-WAVE INFRARED LENS	2022-01-03
2022/00055	MOVABLE ROTARY DEHUMIDIFIER	2022-01-03
2022/00056	METHOD FOR SELECTING MAJOR QTL AND MOLECULAR MARKERS OF RICE GERMINATION AND FLOOD TOLERANCE	2022-01-03
2022/00057	AUTOMATIC RAIN-PROOF DRAINAGE DEVICE FOR SLOPES	2022-01-03
2022/00058	NOVEL CONSTRUCTION WASTEWATER TREATMENT DEVICE	2022-01-03
2022/00059	BRAND-NEW DOUBLE WISHBONE SUSPENSION STRUCTURE WITH LARGE STROKE AND HIGH LOAD	2022-01-03
2022/00061	SEABED POLYMETALLIC SULFIDE CUTTING HEAD	2022-01-03
2022/00062	EMERGENCY EVALUATION METHOD AND SYSTEM FOR LANDSLIDE AND COLLAPSE	2022-01-03
2022/00063	ELECTRICITY GENERATING DEVICE	2022-01-03
2022/00064	METHOD FOR MEASURING THE POROSITY OF IONIC RARE EARTH ORES AND DEVICE THEREOF	2022-01-03
2022/00065	RV SPEED REDUCER PERFORMANCE TESTING DEVICE BASED ON MECHANICAL ARMS	2022-01-03
2022/00066	MANUFACTURING METHOD AND DEVICE OF GRINDING WHEEL FOR CHAMFERING SILICON WAFER	2022-01-03
2022/00067	ELASTIC WAVE DETECTION DEVICE BASED ON DYNAMIC DEFORMATION MEASUREMENT	2022-01-03
2022/00068	DRIP IRRIGATION METHOD OF SALINE WATER FOR PREVENTION OF SALT ACCUMULATION IN PROTECTION FOREST	2022-01-03
2022/00070	METHOD FOR LASER CLADDING NANO-CERAMIC COATING ON METAL SURFACE ASSISTED BY ULTRASONIC FIXED-POINT FOCUSING	2022-01-03

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2022/00071	METHOD FOR IDENTIFYING AND ADJUSTING SCALY BUDS IN PRECISION DIRECTIONAL PLANTING OF ZINGER OFFICINALE ROSCOE	2022-01-03
2022/00072	RETAIL INTERACTIVE SERVICE SYSTEM BASED ON INTERNET OF THINGS	2022-01-03
2022/00074	MOVABLE CHINESE YAM PLANTING BOX AND INDUSTRIALIZED METHOD FOR PLANTING CHINESE YAM	2022-01-03
2022/00075	TENSILE TEST DEVICE FOR ENGINEERING STRUCTURAL COMPONENTS	2022-01-03
2022/00076	COAL MICROWAVE DESULFURIZATION PROCESS APPLIED TO DESULFURIZATION OF HIGH-SULFUR COAL	2022-01-03
2022/00077	A FRICTION TESTING DEVICE FOR TESTING FRICTION PERFORMANCE OF CUTTING TOOL COATING	2022-01-03
2022/00078	DOUBLE PROTEIN GOAT MILK YOGURT BASED ON ROSA ROXBURGHII TRATT FRUIT AND BLACK GARLIC AND PREPARATION METHOD THEREOF	2022-01-03
2022/00079	SLOPE MONITORING SYSTEM BASED ON BIG DATA ANALYSIS FOR OBTAINING THREE-DIMENSIONAL DATA OF SLOPE DEFORMATION	2022-01-03
2022/00080	PREPARATION METHOD OF PEROVSKITE MICROCRYSTAL	2022-01-03
2022/00081	AFFORESTATION METHOD FOR SERIOUSLY SALINIZED LAND IN MID-LATITUDE DESERT GRASSLAND	2022-01-03
2022/00082	HIGH DIETARY FIBER, POLYPHENOL SAUSAGE AND PREPARATION METHOD THEREOF	2022-01-03
2022/00083	METHOD FOR PREPARING STANDARD SUBSTANCE FOR POTASSIUM, SODIUM, CALCIUM AND MAGNESIUM ELEMENTS IN GROUNDWATER	2022-01-03
2022/00084	METHOD FOR PREPARING CANDIDATE OF STANDARD SUBSTANCE FOR BRINE	2022-01-03
2022/00085	MAGNESIUM IONS BATTERY CATHODE MATERIAL PVP-VS4 ACQUIRED BY PVP INDUCING MICROSTRUCTURE MODULATION OF VS4 AND APPLICATION THEREOF	2022-01-03
2022/00086	FULLY-AUTOMATIC INTELLIGENT KEYBOARD MANUFACTURING DEVICE	2022-01-03
2022/00087	DISPERSION OF OXYGEN-CONTAINING GROUPS SUPPORTED ON CARBON NANOTUBE AND PREPARATION METHOD THEREOF	2022-01-03
2022/00088	INTELLIGENT VOLUME MONITORING DEVICE FOR WINE BREWING	2022-01-03
2022/00091	ONLINE TESTING DEVICE FOR SPEED REDUCER	2022-01-03
2022/00092	METHOD FOR COMPREHENSIVELY TREATING WATER-BASED MUD AND CONSTRUCTION WASTE DERIVED FROM OIL AND GAS EXPLOITATION	2022-01-03
2022/00095	METHOD FOR THREE-DIMENSIONALLY PLANTING ROSA RUGOSA AND MEDICAGO SATIVA LINN UNDER JUGLANS REGIA TREES	2022-01-03

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2022/00096	ANTENNA APPARATUS AND ELECTRONIC DEVICE	2022-01-03
2022/00096	ANTENNA APPARATUS AND ELECTRONIC DEVICE	2022-01-03
2022/00097	SIMPLIFIED CULTIVATION METHOD FOR WINE BREWING VINEYARD	2022-01-03
2022/00098	SYSTEM FOR COMPREHENSIVELY TREATING KITCHEN CLEANING WASTEWATER AND KITCHEN GARBAGE	2022-01-03
2022/00099	METHOD FOR COMPREHENSIVELY TREATING KITCHEN CLEANING WASTEWATER AND KITCHEN GARBAGE	2022-01-03
2022/00101	METHOD FOR PREPARING MESOPOROUS SILICA/ BASIC COPPER SILICATE CORE-SHELL COMPOSITE MATERIAL	2022-01-03
2022/00103	COMPOSITE WOOD BEAM	2022-01-03
2022/00104	DEVICE AND METHOD FOR SIMULATING FLUID-ROCK EXPERIMENT	2022-01-03
2022/00105	INTELLIGENT MONITORING AND EARLY WARNING DEVICE FOR HIGHWAY SLOPE SAFETY BASED ON DEPTH CAMERA	2022-01-03
2022/00106	METHOD FOR TRANSPLANTING PHYLLOSPADIX IWATENSIS	2022-01-03
2022/00107	PRESSURE DETECTION AND EARLY WARNING DEVICE FOR HIGHWAY SLOPE	2022-01-03
2022/00110	OXYGEN SUPPLY DEVICE FOR FRESHWATER FISH CULTURE	2022-01-03
2022/00111	PORTABLE THREE-IN-ONE ORGANOPHOSPHATE PESTICIDE ASSAY DEVICE BASED ON MINERALIZED MICROBIAL SURFACE-DISPLAYED ENZYMES AND ITS APPLICATION	2022-01-03
2022/00112	A SOLUTION OF CALIBRATION PARAMETERS FOR THE QUASI-FULL-SPECTRAL ANALYSIS (QFSA) OF URANIUM QUANTIFICATION GAMMA-RAY LOGGING	2022-01-03
2022/00113	WHITE NANOZYME AND ITS APPLICATION ON ANTI-INTERFERENCE COLORIMETRIC ASSAY	2022-01-03
2022/00114	EFFICIENT MUTAGENESIS METHOD FOR BREEDING APPLE POLYPLOID	2022-01-03
2022/00115	IMITATIVE WILD PLANTING TECHNIQUE OF BUPLEURUM CHINENSE ON BARREN HILLS	2022-01-03
2022/00116	THE PREPARATION METHOD OF MAGNETIC GRAPHENE OXIDE/CARBOXYMETHYL CHITOSAN COMPOUND CORROSION INHIBITOR AND ITS APPLICATION	2022-01-03
2022/00117	UNIVERSAL PARAMETER FOR CORRECTING CONSTITUTIVE RELATIONSHIP OF LOADED COAL ROCK MATERIAL AND DETERMINING METHOD THEREOF	2022-01-03
2022/00120	INFILTRATION AND SEEPAGE SIMULATION EXPERIMENT MEASURING DEVICE	2022-01-03
2022/00121	ORGANOSILICON RUBBER WITH HIGH THERMAL CONDUCTIVITY PHASE CHANGE AND	2022-01-03

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	PREPARATION METHOD AND APPLICATION THEREOF	
2022/00122	SELF-POSITIONING MULTILAYER STORAGE BOOKCASE AND A SYSTEM THEREOF	2022-01-03
2022/00124	PERSONALITY DISORDER CHARACTERISTIC MATCHING SYSTEM BASED ON EEG SIGNAL ACQUISITION	2022-01-03
2022/00125	ANTI-SLIDING NET FOR IMPROVING SLOPE STABILITY COEFFICIENT	2022-01-03
2022/00126	SELF-SERVICE RECEIPT PRINTING DEVICE	2022-01-03
2022/00127	DEVICE AND METHOD FOR ALGAE REMOVAL AND STERILIZATION OF BALLAST WATER BASED ON CESIUM 137 IRRADIATION AND ULTRAVIOLET IRRADIATION	2022-01-03
2022/00129	TWO-PURPOSE BOX TYPE ULTRAVIOLET DISINFECTION REPLACEABLE HANDLE DEVICE	2022-01-03
2022/00130	SOLUTION OF CALIBRATION PARAMETERS IN COMBINED NEUTRON/GAMMA LOGGING FOR URANIUM QUANTIFICATION (CNGU)	2022-01-03
2022/00132	METHOD FOR FLORAL INDUCTION FROM AXILLARY BUDS OF YOUNG CARYA ILLINOENSIS TREES	2022-01-03
2022/00133	METHOD FOR PREPARING TITANIUM DIOXIDE/TALCUM POWDER COMPOSITE FILLER BY MICROEMULSION METHOD	2022-01-03
2022/00134	METHOD FOR PREPARING ARCTIGENIN FROM SAUSSUREA MEDUSA AND APPLICATION THEREOF	2022-01-03
2022/00135	CROWN EXTRACTION METHOD BASED ON MULTI-SOURCE REMOTE SENSING OF UNMANNED AERIAL VEHICLE	2022-01-03
2022/00144	A MODIFIED MAXIMUM POWER POINT (MPP) TRACKING MODULE FOR PHOTOVOLTAIC SYSTEM AND A METHOD THEREOF	2022-01-03
2022/00147	AN AUTOMATIC METHOD FOR REPOSITIONING DEFORMED NOTE OF MUSICAL INSTRUMENTS IN CLASSICAL MUSIC	2022-01-03
2022/00148	A FORMULATION FOR SYNTHESIS OF SILYMARIN CONJUGATED GOLD NANOPARTICLE TO HEAL WOUND AND A METHOD THEREOF	2022-01-03
2022/00150	SHELLFISH-ALGA ECOLOGICAL REEF	2022-01-03
2022/00151	CONSECUTIVE OPERATION DEVICE FOR EXTRACTION SEPARATION AND PURIFICATION OF HIGH-ACTIVITY FUNCTIONAL POLYSACCHARIDES IN PLANT-BASED MEAL	2022-01-03
2022/00153	IMPROVED INTRINSIC MODE FUNCTION JUDGMENT METHOD IN EMPIRICAL MODE DECOMPOSITION PROCESS BASED ON INDEPENDENT COMPONENT ANALYSIS	2022-01-03
2022/00154	LAMP PRIMER FOR RAPIDLY DETECTING VENTURIA INAEQUALIS, AND KIT AND DETECTION METHOD THEREOF	2022-01-03
2022/00155	LAMP PRIMER FOR RAPIDLY DETECTING	2022-01-03

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	MARSSONINA CORONARIA, AND DETECTION METHOD AND KIT THEREOF	
2022/00156	PREPARATION METHOD AND APPLICATION OF CUXO NANOROD WITH NADH PEROXIDASE MIMICS	2022-01-03
2022/00157	STORAGE METHOD FOR ANTHERAEA PERNYI EGGS	2022-01-03
2022/00159	RIVER BANK SLOPE WATER DRAINAGE SYSTEM	2022-01-03
2022/00165	ELECTROMAGNETIC VARIABLE-RADIOFREQUENCY COMPENSATOR DEVICE FOR THE PROTECTION OF THE BLADES OF WIND TURBINE TOWERS OR OTHER MOVABLE OR STATIC STRUCTURES	2022-01-03
2022/00200	MONITORING DEVICE FOR ECOLOGICAL ENVIRONMENT MANAGEMENT	2022-01-04
2022/00201	BREWING METHOD OF CABERNET SAUVIGNON SWEET WHITE WINE	2022-01-04
2022/00202	ENVIRONMENT-FRIENDLY WALL	2022-01-04
2022/00203	SPECIFIC DNA MOLECULAR MARKER FOR SEX IDENTIFICATION OF POPULUS EUPHRATICA OLIV. BASED ON BULKED-SEGREGANT ANALYSIS SEQUENCING (BSA-SEQ) ANALYSIS	2022-01-04
2022/00204	NANO-COMPOSITE GEL MATRIX MULTILAYER FABRIC PUNCTURE-RESISTANT COMPOSITE MATERIAL AND PREPARATION METHOD THEREOF	2022-01-04
2022/00205	GYPSUM SELF-LEVELING MORTAR FOR UNDERFLOOR HEATING BACKFILL AND PREPARATION METHOD THEREOF	2022-01-04
2022/00206	METHOD FOR FIRING CERAMSITE FROM MARINE SLUDGE WITH HIGH SALT CONTENT AND HIGH ORGANIC MATTER	2022-01-04
2022/00207	SAFETY FOREWARNING METHOD FOR AVOIDING VEHICLE HITTING VULNERABLE TRAFFIC PARTICIPANT	2022-01-04
2022/00208	ASSEMBLY METHOD OF OIL SEAL AND GUIDER ASSEMBLY	2022-01-04
2022/00209	WATER TREATMENT FILLER AND PREPARATION METHOD THEREOF	2022-01-04
2022/00210	METHOD AND SYSTEM FOR COLLABORATIVELY PLOTTING SITUATION MAP	2022-01-04
2022/00211	PRE-CASTED CONCRETE STRUCTURE WITH BEAM-SLAB INTEGRATION AND CONSTRUCTION METHOD	2022-01-04
2022/00212	LANDING GEAR UPPER LOCK STRUCTURE FOR AVIATION EMERGENCY	2022-01-04
2022/00213	METHOD FOR CONTROLLING LARVAE AND PUPAE OF LASIODERMA SERRICORNE (FABRICIUS) BY USING SCLERODERMA GUANI XIAO ET WU	2022-01-04
2022/00215	MULTI-AGENT SIMULATION-BASED TECHNOLOGY TRANSFER EVALUATION METHOD	2022-01-04
2022/00216	URBAN-SCALE ACCOUNTING METHOD FOR RENEWABLE RESOURCE POTENTIAL DEVELOPMENT AND CARBON EMISSION	2022-01-04
2022/00217	IMAGE RECOGNITION SYSTEM AND IMAGE	2022-01-04

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	RECOGNITION DEVICE	
2022/00218	FRUIT GRADING DEVICE BASED ON COMPUTER VISION	2022-01-04
2022/00219	PREPARATION METHOD OF ORDERED TRANSITION METAL HYDROXIDE NANOSHEET BASED ON MAGNETIC FIELD INDUCTION AND USE	2022-01-04
2022/00235	REDUCER TURNING TEST MACHINE	2022-01-04
2022/00235	REDUCER TURNING TEST MACHINE	2022-01-04
2022/00242	MULTI-STAGE PARALLEL FINNED COOLING DEVICE FOR HIGH-TEMPERATURE CALCINED COKE OF POT CALCINER	2022-01-05
2022/00243	A SOIL WIND EROSION MEASURING DEVICE AND ITS METHOD FOR MEASURING THE SOIL WIND EROSION	2022-01-05
2022/00244	URBAN PLANNING LAYOUT DISPLAY DEVICE WITH CLEANING FUNCTION	2022-01-05
2022/00245	A LOW-LAND REPLANTING METHOD AMONG NITRARIA TANGUTORUM NEBKHAS IN FAMILY PASTURES IN DESERTIFIED GRASSLAND AREAS	2022-01-05
2022/00246	EFFICIENT MOUSE TAIL VEIN INJECTION DEVICE	2022-01-05
2022/00247	A ROTATABLE SAND SAMPLER FOR MEASURING WIND-DRIFT SAND FLOW AND SAND TRANSPORT FLUX ON ICE SURFACES	2022-01-05
2022/00248	ENGINEERING COST DATA MANAGEMENT SYSTEM	2022-01-05
2022/00249	INTELLIGENT ANALYSIS AND EARLY WARNING SYSTEM FOR MOUNTAIN FLOOD DISASTERS	2022-01-05
2022/00250	PRODUCTION METHOD OF ENDOGLUCANASE BY FERMENTATION OF COARSE FODDER FROM A NATURALLY SYMBIOTIC MIXED CULTURE	2022-01-05
2022/00251	SCREENING METHOD AND CULTIVATION STRUCTURE OF PLANT DISEASE BIOLOGICAL CONTROL STRAIN	2022-01-05
2022/00255	OPTIMIZED WATER BODY EXTRACTION METHOD USING HIGH-PRECISION TOPOGRAPHIC INFORMATION TO ELIMINATE CLOUD INTERFERENCE	2022-01-05
2022/00256	IMPERMEABLE CONCRETE ADDED WITH POLYPROPYLENE FIBERS AND WASTE TIRE RUBBER PARTICLES AND PREPARATION METHOD THEREOF	2022-01-05
2022/00257	HIGH-STRENGTH CONCRETE ADDED WITH PVA FIBER AND GRAPHENE AND PREPARATION METHOD THEREOF	2022-01-05
2022/00258	COOPERATIVE SCHEDULING METHOD AND SYSTEM FOR COMPUTING RESOURCE AND NETWORK RESOURCE OF CONTAINER CLOUD PLATFORM	2022-01-05
2022/00259	METHOD FOR HIGH-CONTRAST DIAGNOSIS OF CANCER CELL/TISSUE AND PREPARATION METHOD OF FLUORESCENT PROBE	2022-01-05
2022/00260	A METHOD FOR PREPARING FISH CARTILAGE COLLAGEN PEPTIDE	2022-01-05

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2022/00261	A PCR METHOD FOR TRACEABILITY IDENTIFICATION OF 8 ANIMAL-DERIVED COMPONENTS	2022-01-05
2022/00293	SEALED COBALT LEACHING DEVICE, REAGENT FOR COBALT LEACHING, METHOD USING DEVICE, USE OF METHOD	2022-01-05
2022/00351	NOVEL USE OF PRODIGIOSIN LOADED BY FRAMEWORK NUCLEIC ACIDS FOR COMPREHENSIVE CONTROLLING COMMON VIRAL DISEASES IN SOLANACEAE PLANTS	2022-01-07
2022/00352	MODIFIED CELLULOSE NANOWHISKER, FIBER AND PREPARATION METHOD THEREOF	2022-01-07
2022/00353	METAL SURFACE HEAT TREATMENT DEVICE	2022-01-07
2022/00355	CRAYFISH DRIED MEAT FLOSS AND PREPARATION METHOD THEREOF	2022-01-07
2022/00356	PATH PLANNING METHOD OF MOBILE ROBOTS WITH FINITE ELEMENT MAPS	2022-01-07
2022/00357	A BIOMARKER RELATED TO ASTHMA AND ITS APPLICATION	2022-01-07
2022/00358	COAL MICROWAVE DESULFURIZATION EQUIPMENT AND METHOD	2022-01-07
2022/00359	ELECTROMAGNETIC RADIATION DETECTION DEVICE AND METHOD BASED ON INTELLIGENT FLIGHT TRAJECTORY CONTROL OF UNMANNED AERIAL VEHICLE	2022-01-07
2022/00361	METHOD FOR PROMOTING FRUIT COLORATION	2022-01-07
2022/00362	PREPARATION AND APPLICATION OF PTIR ALLOY AND TIO2 COATED GRAPHENE COMPOSITE MATERIAL	2022-01-07
2022/00363	DISSOLVING DEVICE FOR CHEMICAL MATERIAL PRODUCTION	2022-01-07
2022/00364	WHEELCHAIR TRAVELING MECHANISM CAPABLE OF AUTOMATICALLY ADAPTING TO ROAD CONDITIONS	2022-01-07
2022/00365	FUNCTIONAL FEED FOR POULTRY AND PREPARATION METHOD THEREOF	2022-01-07
2022/00366	METHOD AND DEVICE FOR EACH SPEED SEGMENT OF SCANNING WORKING TABLE TO PERFORM LASER DIRECT WRITING ON BINARY PATTERN	2022-01-07
2022/00367	INTERFACE REGULATION METHOD FOR FLOTATION SEPARATION OF COPPER-MOLYBDENUM MIXED CONCENTRATE	2022-01-07
2022/00368	METHOD FOR PREPARING NANO COMPOSITE CODEPOSITION REINFORCED METAL-BASED GRADIENT COATING	2022-01-07
2022/00369	BIOLOGICAL PHOSPHORUS AND NITROGEN REMOVAL DEVICE BASED ON AAO PROCESS	2022-01-07
2022/00370	PURE NATURAL PLANT-DERIVED FEED ADDITIVE FOR PREVENTING WEANING STRESS OF LAMBS	2022-01-07
2022/00371	METHOD FOR QUICKLY CONSTRUCTING THE LIGHTWEIGHT THREE-DIMENSIONAL GEOLOGIC	2022-01-07

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	BODY MODEL IN REAL TIME	
2022/00372	EQUAL-STRENGTH BEAM PIEZOELECTRIC VIBRATION ENERGY COLLECTOR	2022-01-07
2022/00373	FLOTATION METHOD FOR INTERFACE COMPLEXING ZINC SULFIDE ORES	2022-01-07
2022/00374	SHORT COHERENT ILLUMINATION AND POLARIZATION COMBINED UNDERWATER LONG-RANGE OPTICAL IMAGING DEVICE AND METHOD	2022-01-07
2022/00375	DYNAMIC COMPENSATION DEVICE FOR HANDHELD LASER CLEANING	2022-01-07
2022/00376	LASER CLEANING DEVICE SUITABLE FOR HOLES WITH VARIOUS DIAMETERS AND TYPES	2022-01-07
2022/00377	METHOD FOR PREPARING PERSONALIZED THREE DIMENSIONAL (3D) PRINTING MASK SUPPORT	2022-01-07
2022/00378	METHOD FOR TREATING SEEDLINGS BEFORE FIELD PLANTING OF PAEONIA SUFFRUTICOSA ANDR	2022-01-07
2022/00379	METHOD FOR ACCELERATING GERMINATION OF LARGE-SCALE SEEDLING-CULTURING SEEDS OF PAEONIA SUFFRUTICOSA ANDR	2022-01-07
2022/00380	A HANDOVER DECISION SYSTEM AND METHOD FOR NEXT GENERATION	2022-01-07
2022/00381	EMBEDDED GATEWAY FOR FLAME DETECTION USING YOLOV5 AND OPENVINO AND DEPLOYMENT METHOD THEREOF	2022-01-07
2022/00382	STROKE REHABILITATION TRAINING SYSTEM BASED ON MIND-CONTROLLED POWERED EXOSKELETON	2022-01-07
2022/00383	BASKETBALL STAND	2022-01-07
2022/00384	ANTI-CRACKING AGENT FOR FRUITS AND APPLICATION THEREOF	2022-01-07
2022/00385	A METHOD FOR RAPID DEHYDRATION OF FRESH JELLYFISH	2022-01-07
2022/00418	NANO KIT AND PRIMERS FOR SIMULTANEOUSLY DETECTING BVDV-1, BVDV-2 AND BVDV-3	2022-01-10
2022/00419	DRUG APPLICATION DEVICE FOR PREVENTION AND CONTROL OF SOYBEAN ROOT ROT	2022-01-10
2022/00426	METHOD FOR LOW-TEMPERATURE DYEING OF HIGH-PERFORMANCE FIBER	2022-01-10
2022/00427	METHOD AND SYSTEM FOR IDENTIFYING STRATIGRAPHIC RHYTHM	2022-01-10
2022/00428	TRADITIONAL CHINESE MEDICINE AROMATHERAPY PRODUCT FOR RELIEVING THE SYMPTOMS OF ALLERGIC RHINITIS	2022-01-10
2022/00429	PORTABLE COLLECTING DEVICE FOR FIELD COLLECTION OF FRUITING BODY OF MACRO FUNGI	2022-01-10
2022/00430	DUAL-MODE SIMULTANEOUS FOCUSING META-LENS BASED ON PHASE CHANGE MATERIAL THAT CAN BE DYNAMICALLY TUNED WITH ARBITRARY POLARIZATION	2022-01-10
2022/00431	METHOD FOR PREPARING HEAT STORAGE	2022-01-10

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	CONCRETE BY USING SMELTING STEEL SLAG	
2022/00432	METHOD FOR PREPARING NANOCRYSTALLINE VANADIUM NITRIDE POWDER	2022-01-10
2022/00433	TANK CALCINER HIGH TEMPERATURE POST-CALCINER MULTI-STAGE TANDEM FINNED COOLING DEVICE	2022-01-10
2022/00434	INTELLIGENT CALCULATION METHOD, SYSTEM, EQUIPMENT AND MEDIUM FOR APPEARANCE SIMILARITY OF TWO ENGLISH WORDS	2022-01-10
2022/00435	NUMERICAL CONTROL AUTOMATIC CONSTRUCTION DEVICE FOR LARGE-SCALE GEOPHYSICAL EXPLORATION TEST	2022-01-10
2022/00436	DYNAMIC SEALING DEVICE FOR THE SHAFT END OF GEARBOX	2022-01-10
2022/00437	RECONFIGURABLE META-SURFACE INVISIBILITY CLOAK BASED ON PHASE CHANGE MATERIAL GE2SB2TE5	2022-01-10
2022/00438	AN INTELLIGENT TRASH CAN	2022-01-10
2022/00439	NOVEL THREE-DIMENSIONAL SELF-RESETTING FRICTION SLIDING SEISMIC ISOLATOR	2022-01-10
2022/00440	METHOD FOR PREPARING BLACK SOYABEAN TAR BASED ON SUPERCRITICAL CARBON DIOXIDE EXTRACTION	2022-01-10
2022/00443	INTELLIGENT STONE CUTTING SYSTEM BASED ON MACHINE VISION	2022-01-10
2022/00444	METHOD OF PREPARING LITHIUM-ION BATTERY PRECURSORS AND USE THEREOF	2022-01-10
2022/00445	METHOD OF MODIFYING POSITIVE ELECTRODE MATERIALS FOR LITHIUM-ION BATTERIES BY CO-PRECIPITATION	2022-01-10
2022/00446	LOCKED NUCLEIC ACID PROBE-BASED FLUORESCENCE QUANTITATIVE PCR COMPOSITION FOR PORCINE EPIDEMIC DIARRHEA VIRUS AND DETECTION METHOD	2022-01-10
2022/00447	A SYSTEM FOR INVESTIGATING THE ROLE AND IMPACT OF CLOUD COMPUTING SYSTEM	2022-01-10
2022/00448	THRUST SLIDING BEARING SUPPORTING MECHANISM OF VERTICAL MILL REDUCER	2022-01-10
2022/00449	DEVICE FOR PREVENTING BEARING NYLON RETAINER FROM BEING DAMAGED DURING PRESS FITTING	2022-01-10
2022/00474	ENVIRONMENT-FRIENDLY AND ENERGY-SAVING STREET LAMP	2022-01-11
2022/00475	INDUCTIVE STREET LAMP	2022-01-11
2022/00476	VERTICAL ALN SCHOTTKY DIODE BASED ON ION IMPLANTATION EDGE TERMINAL AND MANUFACTURING METHOD THEREOF	2022-01-11
2022/00477	VERTICAL ALN SCHOTTKY DIODE BASED ON FIELD PLATE STRUCTURE AND MANUFACTURING METHOD THEREOF	2022-01-11
2022/00478	SOLID WASTE LARGE-MIXING-AMOUNT CONCRETE PREFABRICATED LAMINATED SLAB AND	2022-01-11

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	PREPARATION METHOD THEREOF	
2022/00479	METHOD FOR DESIGNING TOPSOIL COVERING THICKNESS FOR COAL GANGUE FILLING AND RECLAMATION IN A COAL MINING SUBSIDENCE AREA	2022-01-11
2022/00481	PROCESS FOR FLOTATION SEPARATION OF COPPER-MOLYBDENUM MIXED CONCENTRATE BY OXIDATION	2022-01-11
2022/00482	CRITICAL TIME DETERMINATION AND ENERGY-SAVING METHOD OF STALLING FOR ENERGY-SAVING OF NC MACHINE TOOL SPINDLE	2022-01-11
2022/00483	KIT FOR DETECTING DUST MITE COMPONENT-SPECIFIC ANTIBODIES	2022-01-11
2022/00484	ARONIA MELANOCARPA EXTRACT FOR RESISTING INFLAMMATORY BOWEL DISEASE	2022-01-11
2022/00485	PRIMER PROBE SET FOR HUMAN HISTAMINE RECEPTOR HRH1 MRNA DETECTION, KIT AND USE	2022-01-11
2022/00486	KIT FOR QUANTITATIVE DETECTION USING FLUORESCENT MICROARRAY	2022-01-11
2022/00487	PRIMER PROBE SET AND KIT FOR RT-PCR DETECTION OF HUMAN LEUKOTRIENE RECEPTOR CYSLTR1 MRNA	2022-01-11
2022/00488	HIGH CORROSION RESISTANCE PPF CONCRETE AND ITS PREPARATION METHOD	2022-01-11
2022/00489	PRIMER PROBE SET AND KIT FOR RT-PCR DETECTION OF HUMAN TRYPTASE BETA (TPSB) MRNA	2022-01-11
2022/00490	REAGENT FOR DETECTING EXPRESSION LEVEL OF HUMAN HISTAMINE RECEPTOR HRH4 MRNA, KIT AND USE	2022-01-11
2022/00491	PRIMER PROBE SET AND KIT FOR RT-PCR DETECTION OF HUMAN LEUKOTRIENE RECEPTOR CYSLTR2 MRNA	2022-01-11
2022/00492	STRESS-RESISTANT AND HIGH-YIELD NUTRIENT SOLUTION FOR WHEAT AND ITS APPLICATION	2022-01-11
2022/00493	PRIMER SET FOR DETECTION OF EXPRESSION OF HUMAN EOSINOPHIL CATIONIC PROTEIN (ECP) MRNA AND KIT	2022-01-11
2022/00494	SIMPLIFIED CULTIVATION METHOD WITH DOUBLE CROPPING IN ONE YEAR FOR COTTON AND GARLIC	2022-01-11
2022/00495	PREPARATION METHOD OF A HIGHLY-BRANCHED WOLFBERRY PECTIC POLYSACCHARIDE	2022-01-11
2022/00496	METAL GRID STRETCHABLE TRANSPARENT ELECTRODE FOR SHELL-CORE STRUCTURE, PREPARATION METHOD THEREFOR, AND APPLICATION	2022-01-11
2022/00497	CONSTRUCTION METHOD OF CEREAL CROP GROWTH MEASUREMENT MODEL	2022-01-11
2022/00498	HIGH-PERFORMANCE LARGE-AREA FLEXIBLE TRANSPARENT ELECTRODE, PREPARATION METHOD AND APPLICATION THEREOF	2022-01-11

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2022/00500	BIONIC DRAG REDUCTION STRUCTURE FOR UNDERWATER VEHICLES AND SURFACE SHIPS	2022-01-11
2022/00501	HYDROLOGICAL CONNECTIVITY-BASED REGULATION AND CONTROL METHOD FOR WATER AND SOIL CONSERVATION OF RIPARIAN BUFFER STRIP	2022-01-11
2022/00502	HINGE MECHANISM FOR DOORS AND WINDOWS	2022-01-11
2022/00503	VEST-TYPE CONVENIENT FIRST AID CLOTHING	2022-01-11
2022/00504	METHOD FOR DYEING HIGH-PERFORMANCE AROMATIC FIBER	2022-01-11
2022/00505	METHOD FOR INDUSTRIALIZED PRODUCTION OF PROPRIOSEIOPSIS ASETUS USING ARTIFICIAL ALTERNATIVE FEED	2022-01-11
2022/00506	A POTATO SEED CUTTING MACHINE	2022-01-11
2022/00507	PLUG-VALVE INTEGRATED PUMP OF DOUBLE-CYLINDER, DOUBLE-PLUG AND DOUBLE-ACTION VALVE TYPE	2022-01-11
2022/00508	EXTERNAL PREPARATION OF IMIDACLOPRID, PREPARATION METHOD AND USE THEREOF	2022-01-11
2022/00509	SHARED CONTROL METHOD FOR SERVICE ROBOT BASED ON ELECTROOCULAR SIGNAL INTENTION EXPRESSION	2022-01-11
2022/00510	TOILET SEAT	2022-01-11
2022/00515	REMEDIATION AGENT OF OIL-CONTAMINATED COASTAL SOIL AND APPLICATION THEREOF	2022-01-11
2022/00516	CORN STARCH FILM CONTAINING RUTIN COMPOSITE NANOPARTICLES AND PREPARATION METHOD THEREOF	2022-01-11
2022/00517	REINFORCED RADIATING TUBE AND PROCESSING PROCESS	2022-01-11
2022/00518	METHOD FOR FORMING ROADWAY ANTI-IMPACT SOFT STRUCTURE LAYER BY REPEATED COAL-ROCK DRILLING FRACTURING	2022-01-11
2022/00547	HIGH–STABILITY SOLID ACID BASED ON METAL ORGANIC FRAMEWORK WITH PREPARATION METHOD AND APPLICATION	2022-01-12
2022/00549	PREPARATION METHOD OF PYRITE ACTIVATOR	2022-01-12
2022/00550	MIXING HEATING DEVICE FOR RECYCLED CONCRETE	2022-01-12
2022/00551	PREPARATION METHOD OF COPPER-ARSENIC FLOTATION SEPARATION INHIBITOR FOR COMPOUND COPPER ORE	2022-01-12
2022/00552	METHOD, SYSTEM AND TERMINAL FOR CONTROLLING AND ANALYZING CRITICAL PUMPING RATE OF HORIZONTAL WELL PUMPING PERFORATION	2022-01-12
2022/00553	COW DUNG-BASED PLANT GROWTH-PROMOTING CULTIVATION SUBSTRATE AND ITS PREPARATION METHOD	2022-01-12
2022/00554	HYPERSPECTRAL IMAGE CLASSIFICATION METHOD BASED ON TRIPLET LOSS AND CONVOLUTIONAL NEURAL NETWORK	2022-01-12

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2022/00555	METHOD AND DEVICE FOR LOGISTICS DISTRIBUTION MANAGEMENT	2022-01-12
2022/00556	MRNA DETECTION PRIMER SET, PROBE, KIT AND APPLICATION FOR EARLY SCREENING OF PNEUMOCONIOSIS PATIENTS	2022-01-12
2022/00557	METHOD FOR PREPARING MODIFIED PERFLUOROALCOHOL POLYOXYETHYLENE ETHER HEAVY OIL DEMULSIFIER	2022-01-12
2022/00558	LOW-VALUE-FISH-ORIGINATED PEPTIDE WITH ACE INHIBITORY ACTIVITY AND PREPARATION METHOD THEREOF	2022-01-12
2022/00559	SPECIAL WATER-SOLUBLE FERTILIZER FOR LYCIUM CHINENSE IN THE FLOWERING AND FRUITING STAGES	2022-01-12
2022/00560	SELENIZED SURFACE MODIFIED RUTHENIUM DIOXIDE NANOPARTICLE CATALYST, AND ITS PREPARATION METHOD AND APPLICATION	2022-01-12
2022/00561	APPLICATION OF CACTUS FRUIT EXTRACT AS QUORUM SENSING INHIBITOR OF SHEWANELLA PUTREFACIENS AND TRACHINOTUS OVATUS PRESERVATIVE	2022-01-12
2022/00562	FORMULA OF ETHYL LAUROYL ARGINATE-CHITOSAN EDIBLE FRESH-KEEPING COATING FILM AND PREPARATION METHOD THEREOF	2022-01-12
2022/00563	PREPARATION METHOD OF SULFOXIDE FLAVONOIDS AND SULFONE FLAVONOIDS	2022-01-12
2022/00564	BLANK BLANKET COATING GLUE FORMULA AND BLANK BLANKET PRE-COATING PROCESS	2022-01-12
2022/00565	PREPARATION METHOD OF 8-BENZENESULFONYL SUBSTITUTED FLAVONE GLUCOSIDE	2022-01-12
2022/00566	WHEAT BRAN-FERMENTING APPARATUS FOR PROCESSING WHOLE WHEAT FLOUR	2022-01-12
2022/00567	LIBRARY SELF-SERVICE SYSTEM	2022-01-12
2022/00568	ENVIRONMENT-FRIENDLY LIGHTWEIGHT AGGREGATE CONCRETE AND PREPARATION METHOD THEREOF	2022-01-12
2022/00569	PET/PE COMPOSITE SHEET FOR ENCAPSULATION OF NUCLEIC ACID DETECTION REAGENTS AND PREPARATION METHOD THEREOF	2022-01-12
2022/00571	STEAM MEDICATED BATH DEVICE FOR TREATING GENERAL SURGERY DEPARTMENT ANORECTAL HEMORRHOID AND FISTULA	2022-01-12
2022/00572	SUCKER-ASSISTED DELIVERY DEVICE FOR OBSTETRICS	2022-01-12
2022/00574	10% PROBIOTIC NUTRITIVE PREMIX FEED FOR GROWING AND FATTENING PIGS	2022-01-12
2022/00575	8% PROBIOTIC NUTRITIVE PREMIX FEED FOR PIGLETS	2022-01-12
2022/00576	5% PROBIOTIC NUTRITIVE PREMIX FEED FOR PEAK EGG-LAYING PERIOD OF LAYING HENS	2022-01-12
2022/00577	PROCESS SYSTEM OF FOLLOWER FIXTURE FOR TANK MOVING SUPPORT AND AUTOMATIC	2022-01-12

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	PROCESSING PRODUCTION LINE THEREOF	
2022/00578	CERAMIC DENTAL IMPLANT AND MANUFACTURING METHOD	2022-01-12
2022/00579	SNP MARKERS FOR DISCRIMINATING DONKEY BREEDS, PRIMER SET AND REAGENT KIT THEREOF	2022-01-12
2022/00599	IMITATION CARVED KNITTED FABRIC AND KNITTING METHOD THEREOF	2022-01-12
2022/00711	NON-IONIC COLLECTOR, PREPARATION METHOD AND APPLICATION THEREOF	2022-01-14
2022/00746	MODULAR COMBINED ADJUSTABLE VIBRATION DAMPING TRACK	2022-01-17
2022/00747	LASER PROPULSION METHOD OF GRAPHENE IN RARE GAS	2022-01-17
2022/00748	FLAME RETARDANT THERMAL INSULATION MATERIAL AND PREPARATION METHOD THEREOF	2022-01-17
2022/00749	PROCESSING METHOD OF OYSTER INSTANT FOOD	2022-01-17
2022/00750	PREPARATION METHOD OF A HEAVY METAL TRAPPING AGENT FOR MINERAL PROCESSING WASTEWATER	2022-01-17
2022/00752	POLYVINYL ALCOHOL (PVA) MODIFIED WITH DEGRADABLE COMPOUND PLASTICIZER AND PREPARATION METHOD THEREFOR	2022-01-17
2022/00753	A ROBOT MOVING METHOD BASED ON FIREFLY OPTIMIZED PATH WITH VARIABLE OBJECTIVE FUNCTION	2022-01-17
2022/00754	VALVE BODY SEPARATION ALARM SYSTEM FOR NON-MAGNETIC TEMPERATURE CONTROL VALVE AND CONTROL METHOD THEREOF	2022-01-17
2022/00755	INTELLIGENT TEMPERATURE CONTROL SYSTEM BASED ON FLOW CONTROL AND CONTROL METHOD THEREOF	2022-01-17
2022/00756	CREEP EXPERIMENT SYSTEM THAT AUTOMATICALLY CONTROLS THE NUMBER OF DISTURBANCES	2022-01-17
2022/00768	BEVERAGE CONTAINING FRUCTUS TRICHOSANTHIS FRUIT EXTRACT AND ITS PREPARATION METHOD	2022-01-17
2022/00769	DEEP-LEARNING-BASED FAILURE DIAGNOSIS METHOD FOR IGBT TYPE COMMON DIRECT-CURRENT BUS CHARGING DEVICE OF ELECTRIC VEHICLE	2022-01-17
2022/00770	METHOD FOR BLASTING-FREE ROOF CUTTING AND PRESSURE RELIEF OF GOB-SIDE ENTRY IN SOFT ROOF COAL SEAM	2022-01-17
2022/00771	FAST METHOD FOR SOLVING WIDE ANGLE ELECTROMAGNETIC SCATTERING CHARACTERISTICS OF CONDUCTOR OBJECTS	2022-01-17
2022/00772	A METHOD FOR EVALUATING WATER TRAFFIC CONDITIONS BASED ON FUZZY RULES	2022-01-17
2022/00774	PREPARATION METHOD OF 2-FORMATE	2022-01-17

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	INDOLIZINE COMPOUND	
2022/00796	AUTOMATIC DETECTION SYSTEM OF VISUAL DEFECTS	2022-01-18
2022/00797	POROUS ALUMINIUM OXIDE-TIN CERAMIC MATERIAL AND PREPARATION METHOD THEREOF	2022-01-18
2022/00798	ULTRAVIOLET IRRADIATION DEVICE FOR ANORECTAL IRRADIATION	2022-01-18
2022/00799	REUTILIZATION MECHANISM OF SLM PRINTER POWDER FOR CONFORMAL WATERWAY FORMING	2022-01-18
2022/00800	ZIRCONIA CERAMIC PASTE AND PREPARATION METHOD THEREOF	2022-01-18
2022/00801	MOLECULAR MARKER PRIMER COMBINATIONS FOR RAPIDLY IDENTIFYING MYRICA RUBRA SUPER-LARGE FRUIT TYPE CHARACTER AND APPLICATION THEREOF	2022-01-18
2022/00802	NOVEL NON-HEAT-SEALABLE TEA FILTER PAPER AND PREPARATION METHOD THEREOF	2022-01-18
2022/00803	MOLECULAR MARKER PRIMER COMBINATIONS FOR RAPIDLY IDENTIFYING MYRICA RUBRA LEAF SHAPE CHARACTERS AND APPLICATION THEREOF	2022-01-18
2022/00804	SAMPLING AND DETECTION ROBOT FOR TOXIC ENVIRONMENTAL GAS	2022-01-18
2022/00805	SMALL-SIZED WIDE PARTICLE SIZE COAL GANGUE SORTING DEVICE	2022-01-18
2022/00806	EFFICIENT AND ENVIRONMENT-FRIENDLY NEGATIVE OXYGEN ION GENERATING AGENT AND PREPARATION METHOD THEREOF	2022-01-18
2022/00807	INTELLIGENT FINANCIAL SERVICE TERMINAL SYSTEM BASED ON INTERNET OF THINGS AND BIG DATA DUAL CHANNELS	2022-01-18
2022/00808	MULTI-LAYER REINFORCED DREDGING PIPE AND MOLDING PROCESS THEREOF	2022-01-18
2022/00809	DEVICE, METHOD AND EARLY WARNING SYSTEM FOR MONITORING BLOCK BRAKE CLEARANCE OF ELEVATOR	2022-01-18
2022/00810	A METHOD FOR IMPROVING THE NATURAL HYBRIDIZATION POLLINATION RATE OF GRAPES BY APPLYING A LIGHT-TRANSMITTING FILM	2022-01-18
2022/00813	A METHOD FOR MONITORING THE SAFETY OF THE EXISTING INTERSECTING TUNNEL WHEN CONSTRUCTING AN UNDERCROSSING HIGH-SPEED RAILWAY TUNNEL	2022-01-18
2022/00814	A SEEDLING SUBSTRATE AND ITS PREPARATION METHOD AND APPLICATION	2022-01-18
2022/00815	ACQUISITION METHOD FOR SOYBEAN PROTEIN CONTENT-RELATED QTL AND MOLECULAR MARKER, MOLECULAR MARKER, AND APPLICATION	2022-01-18
2022/00816	STEEP ROCK FACE WATER VAPOR CONDENSATION MONITORING METHOD	2022-01-18
2022/00817	METHOD AND APPARATUS FOR PREPARING FOOD GRADE NANOFIBER PRESERVATION FILM	2022-01-18

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2022/00855	SECURITY TESTING SYSTEM AND METHOD FOR INDUSTRIAL CONTROL DEVICE	2022-01-19
2022/00856	CONSTRUCTION METHOD OF INSECTICIDAL ENGINEERING STRAIN OF BEAUVERIA BASSIANA	2022-01-19
2022/00857	HIGH-EFFICIENCY NANO AERATION AND OXYGENATION DEVICE	2022-01-19
2022/00858	SNP MOLECULAR MARKER RELATED TO JUJUBE CITRIC ACID AND ITS APPLICATION	2022-01-19
2022/00859	FLAP-NET FILTER, FILTRATION SYSTEM AND USING METHOD THEREOF	2022-01-19
2022/00860	DEVICE FOR IMPROVING BIOLOGICAL ACTIVITY OF FUNCTIONAL WATER-PURIFYING MICROORGANISMS BY MICRO-ELECTRIC FIELD	2022-01-19
2022/00861	PREPARATION DEVICE OF IMMOBILIZED MICROORGANISM PARTICLES FOR WATER REMEDIATION	2022-01-19
2022/00862	CONTINUOUS DIGITAL LIGHT PROCESSING-BASED DEVICE FOR 3D PRINTING OF CERAMIC AND OPERATION METHOD THEREFOR	2022-01-19
2022/00863	NOVEL COMPOSITE BIODEGRADABLE PLASTIC MATERIAL FOR INJECTION MOLDING AND PREPARATION METHOD THEREFOR	2022-01-19
2022/00864	SELF-INDUCED ELECTROSTATIC FIELD DRIVEN JETTING DEPOSITION 3D PRINTING DEVICE, WORKING METHOD AND USE THEREFOR	2022-01-19
2022/00865	PREPARATION METHOD FOR ULTRAFINE GRID TRANSPARENT ELECTRODE WITH HIGH-ASPECT-RATIO	2022-01-19
2022/00868	FIRE RESISTANCE TESTING DEVICE FOR HFRC (REPLACING RC) T-BEAMS	2022-01-19
2022/00870	HIGH SPEED IMAGING METHOD FOR TIME DIVISION MULTIPLEXING ILLUMINATION OF MONOCHROMATIC NARROW PULSE ACTIVE LIGHT SOURCE	2022-01-19
2022/00871	INTEGRATED CYLINDRICAL LED STREETLIGHT SOURCE	2022-01-19
2022/00872	PROBIOTIC MILK REPLACER FOR CALVES AND PREPARATION METHOD THEREOF	2022-01-19
2022/00873	SIT-UP MOTION INFORMATION MANAGEMENT SYSTEM AND DETECTION METHOD BASED ON INTERNET OF THINGS	2022-01-19
2022/00874	DEVICE FOR RESCUING PEOPLE FALLING INTO WATER	2022-01-19
2022/00875	RECYCLABLE AND DEGRADABLE COMPOSITE SOLID PROPELLANT, PREPARATION AND DEGRADATION METHOD THEREOF	2022-01-19
2022/00876	GAS DRAINAGE DEVICE FOR COAL MINE GAS CONTROL AND APPLICATION METHOD THEREOF	2022-01-19
2022/00877	HYDRAULIC CONTROL SYSTEM FOR SELF-BALANCING OF SPEED RATIO OF DOUBLE METAL BELT TYPE CONTINUOUSLY VARIABLE TRANSMISSION (BCVT)	2022-01-19

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2022/00878	DUAL SUPPLY AND DUAL DISCHARGE CYCLE SYSTEM FOR THE COMPREHENSIVE USE OF URBAN WATER RESOURCES	2022-01-19
2022/00879	BIM PROJECT COST MANAGEMENT SYSTEM	2022-01-19
2022/00880	HIGH AND LOW TEMPERATURE RESISTANT HYDRAULIC OIL AND PREPARATION METHOD THEREFOR	2022-01-19
2022/00881	MODIFIED GEAR OIL AND PREPARATION METHOD THEREFOR	2022-01-19
2022/00882	DEVICE FOR GENERATING POWER FROM OCEAN THERMAL ENERGY AND UNDERWATER DETECTOR	2022-01-19
2022/00883	NEGATIVE PRESSURE VARIABLE CHIP SUCTION DEVICE	2022-01-19
2022/00884	TWO-STAGE AXIAL-FLOW TYPE ONLINE GAS-LIQUID SEPARATION DEVICE FOR UNDERWATER PIPELINE	2022-01-19
2022/00885	DEVICE FOR CONTROLLING UPS AND DOWNS OF UNDERWATER FIXING EQUIPMENT	2022-01-19
2022/00887	METHOD AND SYSTEM FOR EARLY WARNING OF VEHICLE INTRUSION EVENT IN CONSTRUCTION OPERATION AREA	2022-01-19
2022/00888	SYSTEM FOR MONITORING AND CONTROLLING GROUNDWATER LEVEL	2022-01-19
2022/00889	SIPHON DRAINAGE STRUCTURE AND USING METHOD THEREOF	2022-01-19
2022/00890	DEVICE FOR CONSTRUCTION SIMULATION USING BIM	2022-01-19
2022/01034	TERBINAFINE AGENT AND APPLICATION THEREOF IN INCREASING SQUALENE CONTENT IN TOBACCO LEAVES	2022-01-24
2022/01036	ADAPTIVE SPEED BUMP FOR SIGNALIZED INTERSECTION	2022-01-24
2022/01037	A KIND OF STRATUM SOIL SAMPLE STORAGE DEVICE FOR GEOLOGICAL EXPLORATION AND USING METHOD THEREOF	2022-01-24
2022/01038	METHOD FOR CONSTRUCTION OF TOBACCO FIELD FERTILE PLOUGH LAYER OF RED SOIL SLOPING FARMLAND	2022-01-24
2022/01039	FUZZY CLUSTERING METHOD OF GRAPH DATA BASED ON ROUGH SET THEORY	2022-01-24
2022/01040	METHOD AND DEVICE FOR MODELING NONLINEAR TIME-VARYING OBJECT OF INDUCTION MOTOR VARIABLE FREQUENCY SPEED REGULATION SYSTEM	2022-01-24
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2022/01042	STIFFNESS ADJUSTMENT DEVICE FOR PILED RAFT FOUNDATION	2022-01-24
2022/01043	FOUNDATION PIT SUPPORTING DEVICE FOR TUNNEL DRAINAGE IN CONSTRUCTION WORKS	2022-01-24
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2022/01045	ILLUSTRATIVE STRESS ANALYSIS METHOD FOR ADDITIVE MANUFACTURING	2022-01-24
2022/01046	GEOLOGICAL EXPLORATION SAMPLING DEVICE AND USING METHOD THEREOF	2022-01-24
2022/01047	LAMP PRIMER SET, KIT AND APPLICATION FOR DETECTING PORCINE CIRCOVIRUS TYPE 3	2022-01-24
2022/01048	DEVICE AND METHOD FOR PROCESSING GLASS SLIDES CONTAINING CHINESE MEDICINAL MATERIALS	2022-01-24
2022/01049	A METHOD FOR RAPIDLY DETECTING THE CONCENTRATIONS OF ORGANOPHOSPHORUS FLAME RETARDANTS IN BODY FLUIDS	2022-01-24
2022/01050	CONTINUOUS SEAWATER URANIUM EXTRACTION DEVICE	2022-01-24
2022/01051	LABORATORY TABLECLOTH AUTOMATIC REPLACEMENT DEVICE	2022-01-24
2022/01054	FAULT EARLY WARNING METHOD OF AN ELECTRIC VEHICLE DURING A CHARGING PROCESS BASED ON AN ADAPTIVE DEEP BELIEF NETWORK	2022-01-24
2022/01056	OXYGEN-RICH MOTIOX CATALYST AND PREPARATION METHOD AND APPLICATION THEREOF	2022-01-24
2022/01057	CROSS-INTERFACE LIQUID 3D PRINTING DEVICE AND METHOD	2022-01-24
2022/01061	A SMART CUTLERY FOR PREVENTING SCALDING DURING CONSUMPTION OF FOOD	2022-01-24
2022/01062	A PORTABLE AND RAPID MALARIA DETECTING DEVICE	2022-01-24
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2022/01064	A PORTABLE SOLID FERTILIZER SPREADER	2022-01-24
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2022/01148	LIVING BODY STORAGE TECHNOLOGY FOR ANASTATUS SP.	2022-01-25
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2022/01186	PROTEIN IDENTIFICATION SYSTEM BASED ON CONVOLUTIONAL NEURAL NETWORK	2022-01-26
2022/01187	METHOD FOR EXTRACTING GARDENIA FRUIT OIL BASED ON UNIFORM DESIGN METHOD	2022-01-26
2022/01188	SYSTEM AND METHOD FOR REGULATING LEVITATION FORCE OF RARE-EARTH PERMANENT MAGNETIC LEVITATION RAIL	2022-01-26
2022/01189	MICROBIAL AGENT FOR PREVENTING AND CONTROLLING PLANT DISEASES AND ENHANCING PLANT STRESS RESISTANCE, AND PREPARATION METHOD AND APPLICATION	2022-01-26

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2022/01192	INTELLIGENT DYNAMIC GUIDANCE DEVICE FOR LARGE PARKING LOT BASED ON WIRELESS COMMUNICATION	2022-01-26
2022/01193	METHOD FOR PREPARING A COMPOSITE	2022-01-26
2022/01194	SEMI-AUTOMATIC SOLAR COLLECTOR PLATE INCLINATION ADJUSTING DEVICE	2022-01-26
2022/01195	THREE-STAGE DECOMPRESSION TYPE V-SHAPED HYDROCYCLONE GAS FLOATING DEVICE	2022-01-26
2022/01198	SMART PARKING SYSTEM FOR NON-MOTOR VEHICLES BASED ON IPARK SMART LOCK	2022-01-26
2022/01200	CA/FE/GO/BIOMASS CHARCOAL, SPECIAL CHARCOAL-BASED SLOW RELEASE FERTILIZER FOR CORN AND APPLICATION THEREOF	2022-01-26
2022/01201	METHOD FOR QUICKLY DETECTING THE CONCENTRATION OF HEAVY METALS IN BODY FLUID	2022-01-26
2022/01202	METHOD FOR PREPARING MICROEMULSION CLEANUP ADDITIVE FOR ULTRA-LOW PERMEABILITY RESERVOIR FRACTURING	2022-01-26
2022/01205	SYSTEM FOR INTELLIGENTLY AND RAPIDLY IDENTIFYING MARINE PLANKTON	2022-01-26
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2022/01210	METHOD FOR FERTILIZING SOIL AND INHIBITING ORCHARD WEEDS	2022-01-26
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2022/01217	COMPOUND SOLUTION FOR REDUCING DUST CONCENTRATION, PREPARATION METHOD AND APPLICATION	2022-01-26
2022/01218	ECOLOGICAL RESTORATION AND SUSTAINABLE MANAGEMENT METHOD FOR SHRUB-ENCROACHED GRASSLAND	2022-01-26
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2022/01226	CONSOLIDATION TYPE BEAD SAW AND MANUFACTURING METHOD THEREOF	2022-01-26
2022/01263	A MICROBIAL CHINESE HERBAL MEDICINE FEED FOR DETOXIFYING AND DEODORIZING AND ENHANCING AROMA AND IMPROVING MUTTON QUALITY	2022-01-27
2022/01267	PREPARATION METHOD AND APPLICATION OF CEMENTED BACKFILL MATERIALS BY USING STEEL SLAG-DESULFURIZATION BY-PRODUCT AGENT	2022-01-27
2022/01268	AN ADAPTIVE FCM LICENSE PLATE LOCALIZATION METHOD AND SYSTEM	2022-01-27
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2022/01270	METHOD FOR PREPARING CHIRAL OXINDOLE COMPOUND CONTAINING ALL-CARBON QUATERNARY CENTER	2022-01-27
2022/01271	SMART STRAWBERRY MICRO-LANDSCAPE SOILLESS CULTIVATION SYSTEM	2022-01-27
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2022/01273	METHOD FOR PREPARING CHIRAL 3,3'-DISUBSTITUTED OXINDOLE COMPOUND CONTAINING CYANO STRUCTURE	2022-01-27
2022/01274	AN ECOLOGICAL BUILDING ENERGY SYSTEM BASED ON SOLAR ENERGY HEAT UTILIZATION	2022-01-27
2022/01275	A PREPARATION METHOD AND MACHINED PARTS FOR CERMETS	2022-01-27
2022/01276	ALL-WEATHER SELF-SUPPORTING INTELLIGENT HIGHWAY SYSTEM	2022-01-27
2022/01277	METHOD FOR PREPARING GOLD-LEAD FLUORESCENT NANOCLUSTER AND APPLICATION IN NABAM DETECTION	2022-01-27
2022/01278	A COASTAL BUILDING CURTAIN WALL AND METHOD FOR MANUFACTURING THE SAME	2022-01-27
2022/01279	METHOD FOR COLLECTING OUTDOOR THERMAL ENVIRONMENT DATA OF URBAN BUILDING GROUP BASED ON INFRARED DETECTION	2022-01-27
2022/01280	SMALL ULTRAVIOLET AGING CHAMBER AND TEST METHOD	2022-01-27
2022/01281	DEGRADABLE SHOCKPROOF BUBBLE FILM AND PREPARATION METHOD THEREOF	2022-01-27
2022/01282	DEVICE FOR COLLECTING, DETECTING AND COMPREHENSIVELY TREATING LEACHATE	2022-01-27
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2022/01287	APPLICATION OF TREM 2 PROTEIN ANTIBODY COATED MAGNETIC BEADS IN EXTRACTION OF MICROGLIA-DERIVED EXOSOMES IN SERUM	2022-01-27
2022/01288	SIMPLE PENDULUM VIBRATION DAMPING DEVICE USED INSIDE LARGE WIND POWER GENERATOR TOWER	2022-01-27
2022/01289	DEVICE FOR SEPARATING FINE SILT IN SEWAGE	2022-01-27
2022/01290	METHOD FOR PREPARING TEXTILE FABRICS WITH FLAME-RETARDANT AND ANTI-MOLTEN-DRIPPING COATING	2022-01-27
2022/01291	SHOCK-ABSORBING FABRICATED SUSPENDED STAIRCASE STRUCTURE	2022-01-27
2022/01292	EXPERIMENTAL SYSTEM AND METHOD FOR SIMULATING SPONTANEOUS COMBUSTION AND THREE-ZONE DISTRIBUTION IN GOAF	2022-01-27
2022/01293	PREPARATION METHOD OF A PRE-VASCULARIZED BRAIN ACELLULAR STENT	2022-01-27
2022/01295	MOVABLE FIXED TELESCOPIC BOX TYPE INTELLIGENT TEMPERATURE-CONTROLLED ROOM	2022-01-27
2022/01296	HYDANTOIN PHARMACEUTICAL CO-CRYSTAL AND PREPARATION METHOD THEREOF	2022-01-27
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2022/01302	PAIR-ROLLER AUXILIARY ARTIFICIAL WINTER JUJUBE PICKING DEVICE AND LIFTING LOCKING MECHANISM	2022-01-27
2022/01303	TAKE-OUT HEATING AND HEAT PRESERVATION TRANSPORTATION EQUIPMENT THAT CAN UTILIZE SOLAR ENERGY	2022-01-27
2022/01304	A SMART WARDROBE INTEGRATING THE FUNCTIONS OF VACUUM PACKAGING, AUTOMATIC ACCESS AND IRONING	2022-01-27
2022/01305	THE AGRICULTURAL MACHINERY EQUIPMENT AND METHOD FOR THE INTEGRATION OF FINE SEED FERTILIZER AND SHALLOW BURIED DRIP IRRIGATION PIPE LAYING AND FILM MULCHING	2022-01-27
2022/01306	THE INVENTION RELATES TO AN ELECTRONIC SCALE, AN AUTOMATIC WEIGHING PACKAGING CODING SYSTEM AND A WORKING METHOD THEREOF	2022-01-27
2022/01307	AN INTELLIGENT PROCESSING SYSTEM AND METHOD FOR RESOURCE REUSE OF ANIMAL FECES	2022-01-27

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2022/01309	CASHMERE CARDING MACHINE TRANSMISSION SYSTEM AND CARDING MACHINE	2022-01-27
2022/01310	AN ECCENTRIC WHEEL CONNECTING ROD PUNCHING AND SEPARATING DEVICE FOR AUXILIARY SEED POTATO CUTTING TUBER	2022-01-27
2022/01311	POTATO PLANTING MACHINE WITH PRECISE SCREENING, INTELLIGENT RECOGNITION OF CUTTING AND MIXING	2022-01-27
2022/01312	AUTOMATIC KNIFE ARRANGEMENT AND CUTTING DEVICE, CUTTING MACHINE AND ITS WORKING METHOD AND APPLICATION	2022-01-27
2022/01313	ADAPTIVE OPPOSITE OBLIQUE CUTTING EXTRUSION PEELING AND FRICTION CLEANING DEVICE AND METHOD	2022-01-27
2022/01314	FIBER CARDING MACHINE BASED ON ROLLER TYPE CARDING STRUCTURE	2022-01-27
2022/01315	A SELF-ARRANGING KNIFE CUTTING DEVICE AND WORKING METHOD FOR ROOT CROPS	2022-01-27
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2022/01323	WATERPROOF METHOD AND WATERPROOF FLOW GUIDE DEVICE FOR COAL MINE ROOF	2022-01-27
2022/01337	APPLICATION OF ?-CASEIN A2 AND COMPOSITION THEREOF IN PROMOTING PROLIFERATION OF BIFIDOBACTERIUM	2022-01-27
2022/01522	A METHOD OF MODIFIED GENETIC OPTIMIZATION TECHNIQUE FOR MIMO BROADCAST SCHEDULING.	2022-02-03
2022/01524	A METHOD OF MULTI-BIT QUANTIZED FEEDBACK MIMO SCHEDULING FOR HETEROGENEOUS BROADCAST NETWORK.	2022-02-03
2022/01615	PLANT LAYOUT AND PROCESS FOR EXTRACTING FINE CHROME	2022-02-07
2022/01806	FEED ADDITIVE FOR PREVENTING AND TREATING GASTRITIS OF NORTHEAST MIN PIGS AS WELL AS PREPARATION METHOD AND APPLICATION THEREOF	2022-02-11
2022/01808	PREPARATION METHOD AND APPLICATION OF COLLAGEN PEPTIDE CHELATED FERROUS HYDROGEL	2022-02-11
2022/01809	COMPOUND DESULFURIZER, PREPARATION METHOD AND APPLICATION THEREOF	2022-02-11
2022/01810	SMART SWEEPING ROBOT AND SWEEPING EXECUTION CONTROL METHOD THEREOF	2022-02-11
2022/01811	MULTI-GENE VECTOR SYSTEM AND ITS APPLICATION	2022-02-11
2022/01812	APPLICATION OF PLATEAU GREEN ALGAE IN SEWAGE TREATMENT	2022-02-11

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2022/01815	AUTOMATICALLY-CONTROLLED BEVERAGE BLENDING APPARATUS	2022-02-11
2022/01816	SHIELD-TYPE RAPID TUNNELING SYSTEM AND DEVICE	2022-02-11
2022/01817	METHOD FOR PREPARING DEMULSIFIER SUITABLE FOR TERNARY COMPOUND FLOODING CRUDE OIL	2022-02-11
2022/01818	WAVELENGTH DEMODULATION SYSTEM OF FIBER GRATING ACCELERATION SENSOR AND WAVELENGTH DEMODULATION METHOD	2022-02-11
2022/01819	RAPID IMMUNOASSAY TEST STRIP FOR RALSTONIA SOLANACEARUM AND PREPARATION METHOD AND APPLICATION THEREOF	2022-02-11
2022/01820	TARGET TREE MANAGEMENT THINNING TREE INTELLIGENT SELECTION ALGORITHM	2022-02-11
2022/01821	NOVEL REVERSIBLE HAMMER CRUSHER WITH UNPOWERED DISTRIBUTOR	2022-02-11
2022/01822	PLANT BEVERAGE FERMENTED BY LACTOBACILLUS PLANTARUM SF-L-28 FOR PROTECTING LIVER AND REDUCING LIPID AND PREPARATION PROCESS THEREOF	2022-02-11
2022/01823	DENTAL IMPLANT	2022-02-11
2022/01825	HIGH-EFFICIENCY XANTHOCERAS SORBIFOLIA PICKING DEVICE	2022-02-11
2022/01826	MEGASTIGMUS SABINAE XU ET HE BEHAVIOR OBSERVATION DEVICE	2022-02-11
2022/01840	SUCKING PIG FEED PREPARED BY MICROBIAL FERMENTATION AND PREPARATION METHOD THEREFOR	2022-02-11
2022/01875	SHORT-CHAIN RIBONUCLEIC ACID INTERFERING WITH EXPRESSION OF IAG GENE OF MACROBRACHIUM ROSENBERGII AND USE THEREOF	2022-02-14
2022/02013	MULTIFUNCTIONAL IDEOLOGICAL AND POLITICAL EDUCATION MOBILE PROPAGANDA DEVICE	2022-02-17
2022/02014	METHOD AND SYSTEM FOR DETERMINING OPEN-PIT MINING SCHEME IN CONSIDERATION OF EQUIPMENT CONFIGURATION	2022-02-17
2022/02015	METEORITE ACTIVATED WATER AND PREPARATION METHOD THEREOF	2022-02-17
2022/02016	DUST-EXTRACTING SYSTEM FOR LIBRARY BOOKSHELVES	2022-02-17
2022/02017	METHOD FOR CULTIVATING PLEUROTUS EDIBLE MUSHROOM WITH MARSH PHRAGMITES AUSTRALIS	2022-02-17
2022/02018	FATIGUE LIFE MODEL OF HOIST BEARING BASED ON AXIAL LOAD	2022-02-17
2022/02019	INTEGRATED OPTIMIZATION METHOD AND SYSTEM FOR METAL OPEN-PIT MINE BOUNDARY AND MINING PLAN	2022-02-17
2022/02020	ANTI-DROPPING DEVICE FOR OXYGEN	2022-02-17

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2022/02021	CONSTANT TEMPERATURE AND CONSTANT PRESSURE WASHING NURSING DEVICE FOR UROLOGY	2022-02-17
2022/02022	MULTIFUNCTIONAL INFUSION SET	2022-02-17
2022/02023	NASAL CAVITY COLD COMPRESS GEL PATCH	2022-02-17
2022/02024	MAGNESIA DOMESTIC FINE PORCELAIN GREEN BODY	2022-02-17
2022/02102	FEATURE DIVISION-BASED METHOD OF DIMENSIONALITY REDUCTION AND SIMPLIFIED REPRESENTATION FOR STREAMING TIME SERIES	2022-02-18
2022/02104	EARLY WARNING METHOD OF ROADWAY ROOF INSTABILITY AND COLLAPSE WITH ANCHOR CABLE SUPPORTING	2022-02-18
2022/02136	INTELLIGENT MONITORING AND DE-ICING INTEGRATION SYSTEM AND METHOD	2022-02-21
2022/02388	PORTABLE FETAL HEART MONITOR	2022-02-25
2022/02401	A FILLING MATERIAL AND ITS PREPARATION METHOD, AND A METHOD FOR PREPARING ELECTROLYTIC COPPER FOILS FOR HIGH-FREQUENCY SIGNAL TRANSMISSION	2022-02-25
2022/02402	AN ELECTROPLATING PROCESS FOR BLACKENING OF ULTRA-LOW-PROFILE COPPER FOILS	2022-02-25
2022/02404	SEMI-AUTOMATIC MANIPULATOR TRANSPORT VEHICLE AND USE METHOD THEREOF	2022-02-25
2022/02405	MARKER FOR TESTING ADULTERATING COW MILK IN HORSE MILK BASED ON BOVINE-DERIVED POLYPEPTIDE AND APPLICATION THEREOF	2022-02-25
2022/02406	METHOD FOR PRODUCING FEED ADDITIVE FOR IMPROVING HEALTH STATUS OF LACTATING DAIRY COWS AND APPLICATION THEREOF	2022-02-25
2022/02408	IDENTIFYING COLOSTRUM AND ORDINARY MILK OF GOAT BASED ON BRANCHED-CHAIN FATTY ACIDS AND APPLICATION THEREOF	2022-02-25
2022/02409	FRY COUNTING APPARATUS BASED ON INFRARED COUNTING AND ITS APPLICATION	2022-02-25
2022/02411	STRAW EFFICIENT FERMENTATION BACTERIA AGENT AND STRAW BIOLOGICAL FEED	2022-02-25

DESIGNS

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A2018/01150	PAYMENT TERMINAL	2018-07-24
A2018/01613	GEMSTONE	2018-10-19

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A2018/01964	MY TRUE NORTH SET	2018-12-20
A2018/01965	BLUSHING PROTEA RING	2018-12-20
A2019/00189	PLUG POINT ADAPTER	2019-02-06
A2019/01749	JEWELLERY	2019-12-04
A2020/01432	CONTAINER	2020-11-05
A2021/00230	TABLE	2021-03-05
A2021/00390	TEXTILE	2021-04-14
A2021/00391	TEXTILE	2021-04-14
A2021/00392	TEXTILE	2021-04-14
A2021/00394	TEXTILE	2021-04-14
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A2021/00396	TEXTILE	2021-04-14
A2021/00397	TEXTILE	2021-04-14
A2021/00398	TEXTILE	2021-04-14
A2021/00399	TEXTILE	2021-04-14
A2021/00400	TEXTILE	2021-04-14
A2021/00401	TEXTILE	2021-04-14
A2021/00402	TEXTILE	2021-04-14
A2021/00403	TEXTILE	2021-04-14
A2021/00404	TEXTILE	2021-04-14
A2021/00437	EGG CARTONS	2021-04-23
A2021/00440	FRONT BUMPER FOR VEHICLE	2021-04-23
A2021/00552	GAME BOARD	2021-05-24
A2021/00589	WATER SPRAYER COMPONENT	2021-05-25
A2021/00596	A HOUSING	2021-05-28
A2021/00616	TRAYS FOR PACKING FOODS	2021-05-31
A2021/00617	TRAYS FOR PACKING FOOD	2021-05-31
A2021/00672	BOTTLE	2021-06-08
A2021/00673	BOTTLE	2021-06-08
A2021/00674	BOTTLE	2021-06-08
A2021/00675	BOTTLE	2021-06-08
A2021/00676	BOTTLE	2021-06-08
A2021/00677	BOTTLE	2021-06-08
A2021/00678	BOTTLE	2021-06-08
A2021/00679	BOTTLE	2021-06-08
A2021/00680	BOTTLE	2021-06-08
A2021/00681	BOTTLE	2021-06-08
A2021/00682	CONTAINER	2021-06-09
A2021/00683	CONTAINER	2021-06-09
A2021/00693	BOTTLE	2021-06-11
A2021/00840	HOOK HANGER TOOL COMPONENT	2021-07-19
A2021/00842	HOOK HANGER TOOL COMPONENT	2021-07-19
A2021/00849	DESICCANT MANUFACTURING ARRANGEMENT	2021-07-20
A2021/00856	A RESERVIOR BLADDER	2021-07-23
A2021/00861	WOUND DRESSING	2021-07-23
A2021/00878	LOCKER	2021-07-27
A2021/00879	LOCKER	2021-07-27
A2021/00880	LOCKER	2021-07-27
A2021/00884	LOCKER	2021-07-27

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A2021/00885	LOCKER	2021-07-27
A2021/00886	LOCKER	2021-07-27
A2021/00908	LOGO	2021-07-29
A2021/00909	LOGO	2021-07-29
F2017/01045	A SHOWER RAIL ASSEMBLY	2017-06-29
F2020/01433	CONTAINER	2020-11-05
F2020/01668	MEDICAL GARMENT	2020-12-22
F2021/00553	GAME BOARD	2021-05-24
F2021/00590	WATER SPRAYER COMPONENT	2021-05-25
F2021/00593	CURTAIN	2021-05-27
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F2021/00599	CONSTRUCTION SYSTEM	2021-05-28
F2021/00600	CONSTRUCTION SYSTEM	2021-05-28
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F2021/00633	FEMALE CONDOM	2021-06-03
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F2021/00636	FEMALE CONDOM	2021-06-03
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F2021/00639	FEMALE CONDOM	2021-06-03
F2021/00644	DRAINAGE GULLY SURROUND	2021-06-03
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F2021/00685	SECURE STORAGE CABINET	2021-06-10
F2021/00694	CONTAINER FORMING MECHANISM	2021-06-14
F2021/00700	A MEDICAL SYRINGE	2021-06-15
F2021/00716	DAMPER ARRANGEMENT	2021-06-18
F2021/00746	ROOFTOP TENTS FOR VEHICLES	2021-06-22
F2021/00747	AIR DIFFUSER	2021-06-22
F2021/00749	CLOTHES HANGER STABILIZERS	2021-06-24
F2021/00750	APPARATUS FOR MEASURING FOULING PARAMETERS IN A FLUID	2021-06-24
F2021/00751	APPARATUS FOR MEASURING FOULING PARAMETERS IN A FLUID	2021-06-24
F2021/00757	FRAME FOR USE IN A SOLAR PANEL	2021-06-28
F2021/00758	BRICK BOTTLE	2021-06-28
F2021/00783	PLANT- GROWING TRAY	2021-07-01
F2021/00786	SPLICE ENCLOSURE	2021-07-06
F2021/00839	HOOK HANGER COMPONENT	2021-07-19
F2021/00841	HOOK HANGER TOOL COMPONENT	2021-07-19
F2021/00843	HOOK HANGER TOOL COMPONENT	2021-07-19
F2021/00850	DESICCANT MANUFACTURING ARRANGEMENT	2021-07-20
F2021/00855	ENGINE	2021-07-22
F2021/00857	A RESERVIOR BLADDER	2021-07-23
F2021/00858	FLAT PATTERN FOR A RESERVIOR BLADDER	2021-07-23
F2021/00862	WOUND DRESSING	2021-07-23
F2021/00881	LOCKER	2021-07-27

Application Number	Design Articles	Filing Date
F2021/00882	LOCKER	2021-07-27
F2021/00883	LOCKER	2021-07-27
F2021/00887	LOCKER	2021-07-27
F2021/00888	LOCKER	2021-07-27
F2021/00889	LOCKER	2021-07-27
F2021/00958	WORKSTATION	2021-08-12
F2021/00983	CARTON	2021-08-23
F2021/00984	CARTON	2021-08-23
F2021/01014	DISPENSING CLOSURE	2021-08-31
F2022/00145	ELECTROLYZER	2022-02-11