

# PATENT JOURNAL

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## Part II of II

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# PATENT JOURNAL

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## 2. PATENTS

## PATENTS

## APPLICATIONS FOR PATENTS

Copies of these specifications cannot be supplied until the applications have been accepted and advertised, or in the case of convention applications, until 18 months from the date of the application in the convention

## THE PARTICULARS APPEAR IN THE FOLLOWING SEQUENCE:

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 2022/10/24 -

2022/11556 ~ Provisional ~54:POT BUDDY ~71:JS Horne, Graceland Farm R102, South Africa ~72: JS Horne~

2022/11558 ~ Provisional ~54:A STRANDED CABLE WITH FILLED BULBS ~71:DAK ENGINEERING PROPRIETARY LIMITED, 22 Pulley Street, Boltonia, Krugersdorp, South Africa ~72: MATHEWS, Thomas Daniel Gurney;POTGIETER, John Adrian~

2022/11563 ~ Complete ~54:METHOD FOR DETECTING WEIGHT OF POULTRY CARCASS AND GRADING SYSTEM DEVICE ~71:CHUZHOU UNIVERSITY, No. 2, Langya West Road, Chuzhou City, Anhui Province, People's Republic of China ~72: BAI Yu;BEN Zongyou;CHEN Kunjie;DONG Yan;SUN Xiao~

2022/11569 ~ Complete ~54:BULK CARGO SURFACE PRESSURE MONITORING DEVICE CAPABLE OF ENSURING SHIP SAFETY ~71:Zhejiang International Maritime College, No. 268, Haitian Avenue, Lincheng,, Zhoushan, Zhejiang, People's Republic of China ~72: Hongjing Liu;Mingwei Xu;Tao Jiang;Xiaoju Liu;Xuefeng Wang~

2022/11560 ~ Complete ~54:PLANET-CARRIER FOR A SHIELD-MACHINE REDUCER ~71:Zheng Zhou Research Institute of Mechanical Engineering CO.,LTD., No.149 Kexue Avenue, Zhengzhou City, Henan Province, 450001, People's Republic of China;Zhongyuan University of Technology, NO.41 Zhongyuan Road (M), Zhengzhou City, Henan Province, 450000, People's Republic of China ~72: Hongyan,Zhao;Lubing,Shi;Mingzhi,Li;Pingping,Qu;Shidang,Yan;Youhua,Li;Zhongming,Liu~ 33:CN ~31:202211178575.3 ~32:27/09/2022

2022/11562 ~ Complete ~54:IRRIGATING-SOWING METHOD OF CORN IN ARID AND SEMI-ARID CULTIVATED LAND AND MATCHING SEEDER ~71:Center for Agricultural Resources Research ,IGDB ,CAS, No.286 Huaizhong Road, Shijiazhuang City, Hebei Province, People's Republic of China ~72: CHEN Suying;DONG Wenxu;LIU Xiuping;WU Hongliang;ZHANG Xiqun~

2022/11606 ~ Complete ~54:SEED COATING AGENT OF SOLANUM TUBEROSUM ~71:SHANGDU YUYUAN AGRICULTURE AND ANIMAL HUSBANDRY CO., LTD., QUANNAO VILLAGE, People's Republic of China ~72: DI, Baoqi;GUAN, Xiaojie;LI, Ailan;LI, Delin;LI, Junzi;LIU, Xiaoping;PENG, Xiaoguang;SONG, Yajing;SUN, Yanfang;WANG, Hua;WANG, Runhai;WANG, Xia;WANG, Xubin;YAN, Yun;ZHAO, Lina;ZHOU, Qi~

2022/11585 ~ Complete ~54:PROCESS, SYSTEM, AND APPARATUS FOR REDUCING ENVIRONMENTAL POLLUTANTS FROM A MOBILE PHASE ~71:Albemarle Corporation, 4250 Congress Street, Suite 900, CHARLOTTE 28209, NC, USA, United States of America ~72: KIM, Se Hye;MILLER, Jon E.;WELZ, Sascha J.;ZHOU, Qunhui~ 33:US ~31:63/023,137 ~32:11/05/2020

2022/11588 ~ Complete ~54:AUTOMATIC POOL CLEANER COVERAGE ENHANCING ACCESSORY  
~71:KENNETH LEWIS HAWKSWORTH, 24 Houtkapper Street, Birchleigh, South Africa ~72: KENNETH LEWIS  
HAWKSWORTH~ 33:ZA ~31:2020/04586 ~32:24/07/2020

2022/11589 ~ Complete ~54:USE OF DOPAMINE D3 PARTIAL AGONISTS FOR TREATING CENTRAL  
NERVOUS SYSTEM DISORDERS ~71:BIOPROJET PHARMA, 9 rue Rameau, France ~72: BERREBI-  
BERTRAND, Isabelle;KRIEF, St&#233;phane;LECOMTE, Isabelle;LECOMTE, Jeanne-Marie;LIGNEAU,  
Xavier;SCHWARTZ, Jean-Charles~ 33:EP ~31:20305429.1 ~32:04/05/2020

2022/11587 ~ Complete ~54:SYNTHESIS OF SULFONAMIDE INTERMEDIATES ~71:Amgen Inc., One Amgen  
Center Drive, THOUSAND OAKS 91320-1799, CA, USA, United States of America ~72: ARENA,  
Alessandro;LANGILLE, Neil Fred;MILBURN, Robert Ronald;TEDROW, Jason S.;TRUONG, Jonathan Vinh-Phu~  
33:US ~31:63/020,951 ~32:06/05/2020

2022/11597 ~ Complete ~54:CYSTEAMINE PRECURSOR COMPOUNDS FOR THE TREATMENT OF  
BETACORONAVIRUS INFECTIONS ~71:THIOGENESIS THERAPEUTICS, INC., 32 Royal Road, Belmont,  
Massachusetts 02478, United States of America ~72: PATRICE P RIOUX~ 33:US ~31:63/003,429  
~32:01/04/2020;33:US ~31:63/021,180 ~32:07/05/2020

2022/11568 ~ Complete ~54:AN AUTOMATIC REFUELING DEVICE FOR SHIPS ~71:Zhejiang International  
Maritime College, No. 268, Haitian Avenue, Lincheng,, Zhoushan, Zhejiang, People's Republic of China ~72:  
Hongjing Liu;Mingwei Xu;Tao Jiang;Xiaoju Liu;Xuefeng Wang~

2022/11571 ~ Complete ~54:MODEL FOR PREDICTING POSTOPERATIVE RECURRENCE RISK OF  
URINARY SYSTEM CALCULUS, EVALUATION SYSTEM AND METHOD THEREOF ~71:Shanghai Gloriousmed  
Co., Ltd., Ground floor, Floor 1-3, No. 11, Lane 100, Banxia Road, Pudong New A, Shanghai, People's Republic  
of China;THE FIRST AFFILIATED HOSPITAL OF GUANGZHOU MEDICAL UNIVERSITY (GUANGZHOU  
RESPIRATORY CENTER), No. 151, Yanjiang Road, Guangzhou, Guangdong, 510000, People's Republic of  
China ~72: Guohua Zeng;Kun Zhuang;Menghuan Zhang;Wei Zhu;Xiaohong Xu;Xin Zhang;Yin Sun;Yining Yang~  
33:CN ~31:202111262715.0 ~32:28/10/2021

2022/11574 ~ Complete ~54:WASTE HEAT RECOVERY TYPE HEAT PUMP DRYING SYSTEM ~71:CHUZHOU  
UNIVERSITY, No. 2, Langya West Road, Chuzhou City, Anhui Province, People's Republic of China ~72: BAI  
Yu;BEN Zongyou;CHEN Kunjie;DONG Yan;SUN Xiao~

2022/11594 ~ Complete ~54:MULTI-CARRIER MEDICAMENT DISPENSERS ~71:LUPIN INC., Harborplace  
Tower, 21st Floor, 111 S. Calvert Street, Baltimore, Maryland, 21202, United States of America ~72: CAMERON  
ALBERG;IMRAN SHAIKH;MUKUL DALVI;TOMAS MATUSAITIS;XIAN MING ZENG~ 33:US ~31:62/994,307  
~32:25/03/2020

2022/11559 ~ Complete ~54:SERVICE ARRANGEMENT ~71:HUIZBESOEK (PTY) LTD, De Bruin Street 10,  
South Africa ~72: Giel Berdus KR&#220;GER~ 33:ZA ~31:2021/08541 ~32:03/11/2021

2022/11561 ~ Complete ~54:CONSTRUCTION METHOD FOR ESTABLISHING MUNICIPAL ROAD DRAINAGE  
SYSTEM ~71:THE SECOND CONSTRUCTION ENGINEERING COMPANY LTD. OF CHINA CONSTRUCTION  
SECOND ENGINEERING BUREAU, No.0169 Qianhai Road, Nanshan subdistrict, Nanshan District, Shenzhen,  
518000, People's Republic of China ~72: DING, Qiang;FAN, Wenzhe;GUO, Zaimin;JIA, Daotong;LIU,  
Hanlong;LIU, Shuwei;YANG, Qingwei;YU, Hao;ZHANG, Wenling;ZHANG, Yihua;ZHAO, Debin;ZHAO, Lianbo~

2022/11566 ~ Complete ~54:PREPARATION METHOD, PRODUCT AND APPLICATION OF  
PHOTOCATALYTIC SELF-CLEANING ARAMID FABRIC ~71:Anhui Polytechnic University, Beijing Middle Road,

Wuhu City, Anhui Province, People's Republic of China; Anhui Suli Technology Co., Ltd, No. 16, Yongzhen Road, Wuhu District, China (Anhui) Pilot Free Trade Zone, Jiujiang District, Wuhu City, Anhui Province, People's Republic of China ~72: CAO Xuejiao; CHENG Ersu; PAN Wei; SU Zhaowei; WAN Zihao; WEI Yuhui; ZHANG Haiyan; ZHANG Zhenlin; ZHAO Shuhan; ZHENG Chen~

2022/11570 ~ Complete ~54: AN AUTOMATIC TELESCOPIC MARINE ANTI-PIRACY GUARDRAIL INSTALLATION ~71: Zhejiang International Maritime College, No. 268, Haitian Avenue, Lincheng,, Zhoushan, Zhejiang, 316021, People's Republic of China ~72: Mingwei Xu; Yibing Wang~

2022/11572 ~ Complete ~54: EDIBLE MUSHROOM FIBER FOR PROMOTING PROBIOTIC PROLIFERATION, PRODUCTION METHOD AND APPLICATION THEREOF ~71: Jiangsu Alphas Bio-technology Co., Ltd., No. 68-A, Zhongyang Road, NETDA, Nantong City, Jiangsu Province, 226009, People's Republic of China; Jiangsu Alphas Science Institute of Medicinal Fungi, No. 83, Ruixing Road, Zhuhang Street, NETDA, Nantong City, Jiangsu Province, 226009, People's Republic of China ~72: CHEN, Hui; CHEN, Jie; HUANG, Tiantian; WU, Weijie; YU, Xiaobing~

2022/11575 ~ Complete ~54: IMPROVED HYDROELECTRIC POWER GENERATION EQUIPMENT ~71: Mingliang Xu, Floor 1, Building D4, Dingjulong Science and Technology Industrial Park,, Fuping North Road, Pingdi Street, Longgang Dist.,, Shenzhen, Guangdong, People's Republic of China ~72: Mingliang Xu~

2022/11578 ~ Complete ~54: STIRRING AND MIXING DEVICE FOR PRODUCTION OF MINE FILLING MATERIAL ~71: BACKFILL ENGINEERING LABORATORY, SHANDONG GOLD MINING TECHNOLOGY CO., LTD., Jiaojia Village, Jincheng Town, Laizhou City, Yantai City, People's Republic of China; SHANDONG GOLD MINING TECHNOLOGY CO., LTD., No. 2503, Jingshi Road, Licheng District, Jinan City, People's Republic of China ~72: Gengjie ZHU; Jiafa DU; Laifa SANG; Xiaodong JING; Yuhang SHENG; Yuliang WANG; Yunpeng KOU; Zaihai WU; Zepu SONG; Zhaojun QI~ 33:CN ~31:202210370967.3 ~32:11/04/2022

2022/11582 ~ Complete ~54: REMOTE TOWER ASSET MONITORING SYSTEM (RTAMS) ~71: OMNIPRESENT GLOBAL (PTY) LTD, 90 Rivonia Road, Sandhurst, South Africa ~72: ADAMS, Aphiwe~ 33:ZA ~31:2020/01852 ~32:24/03/2020

2022/11584 ~ Complete ~54: TREATMENT OF DISEASES WITH CLEVER-1 INHIBITION IN COMBINATION WITH AN INTERLEUKIN INHIBITOR ~71: Faron Pharmaceuticals Oy, Joukahaisenkatu 6, TURKU 20520, FINLAND, Finland ~72: JALKANEN, Juho; KARVONEN, Matti; MANDELIN, Jami~ 33:FI ~31:20205400 ~32:20/04/2020

2022/11600 ~ Complete ~54: COMPOSITIONS AND METHODS FOR PREVENTING, CONTROLLING AND DIAGNOSING MYCOBACTERIAL INFECTIONS ~71: THE UNIVERSITY OF BRITISH COLUMBIA, University-Industry Liaison Office 103-6190 Agronomy Road, Canada; UNIVERSITY OF SASKATCHEWAN, 120 Veterinary Road Saskatoon, Canada ~72: BAINS, Manjeet; CHEN, Jeffrey; FACCIUOLO, Antonio; GERDTS, Volker; GRIEBEL, Philip; HANCOCK, Robert; LEE, Amy; PASTURAL, Elodie; POTTER, Andrew; RAWLYK, Neil; TRIMBLE, Michael~ 33:US ~31:63/012,668 ~32:20/04/2020

2022/11564 ~ Complete ~54: A DEVICE FOR SALVAGING AND COLLECTING FLOATING OBJECTS ON WATER SURFACE AND ITS USING METHOD ~71: Changsha Ecological Environment Monitoring Center of Hunan Province, No. 106, East Jiefang Road, Furong District, Changsha, Hunan province, People's Republic of China; Hunan Yingweierte Environmental Protection Technology Co., Ltd., No. 255, Wanbao Road, Furong District, Changsha, Hunan province, People's Republic of China ~72: Peng Maoyun; Tang Juan; Wang Wei; Yi Yong~

2022/11565 ~ Complete ~54:PHOSPHORIC ACID SKELETON FUNCTIONALIZED FLUORESCENT CARBON DOT, PREPARATION METHOD AND APPLICATION THEREOF ~71:Central South University of Forestry and Technology, No.498, Shaoshan South Road, Tianxin District, Changsha City, Hunan Province, People's Republic of China ~72: GUO Yaping;PENG Yuqing;WU Mao;XIE Lianwu;ZHANG Anlin;ZHOU Hao~

2022/11567 ~ Complete ~54:AN INTEGRATED DEMONSTRATION SYSTEM OF THE BALLAST TRIM WATER TANK FOR SHIPS ~71:Zhejiang International Maritime College, No. 268, Haitian Avenue, Lincheng,, Zhoushan, Zhejiang, People's Republic of China ~72: Hongjing Liu;Mingwei Xu;Tao Jiang;Xiaoju Liu;Xuefeng Wang~

2022/11573 ~ Complete ~54:FOOD BASED ON EDIBLE AND MEDICINAL MUSHROOM DIETARY FIBER ~71:Jiangsu Alphas Bio-technology Co., Ltd., No. 68-A, Zhongyang Road, NETDA, Nantong City, Jiangsu Province, 226009, People's Republic of China;Jiangsu Alphas Science Institute of Medicinal Fungi, No. 83, Ruixing Road, Zhuhang Street, NETDA, Nantong City, Jiangsu Province, 226009, People's Republic of China ~72: CHEN, Hui;CHEN, Jie;WU, Weijie;XU, Chunhua;YU, Xiaobing~

2022/11576 ~ Complete ~54:A WILD-SIMULATED CULTIVATION METHOD OF PARIS POLYPHYLLA VAR. YUNNANENSIS UNDER ARTIFICIAL FORESTS ~71:Ecology and Nature Conservation Institute, Chinese Academy of Forestry, 1 Dongxiaofu, Xiangshan Road, Haidian District, Beijing, People's Republic of China;Institute of Highland Forest Science, Chinese Academy of Forestry, Bailongsi, Panlong District, Kunming City, Yunnan Province, People's Republic of China ~72: Li Zhiguo;Luo Xiang;Su Jianrong;Yang Shiyu;Yang Wenyun;Zhang Weiyin;Zhao Jiejun~

2022/11577 ~ Complete ~54:MULTIVALENT AND MULTISPECIFIC 41BB-BINDING FUSION PROTEINS ~71:Inhibrx, Inc., 11025 N. Torrey Pines Road, Suite 200, La Jolla 92037, CA, USA, United States of America ~72: BECKLUND, Bryan;DEVERAUX, Quinn;ECKELMAN, Brendan P.;HATA, Chelsie;HUSSAIN, Abraham;JONES, Kyle S.;KAPLAN, Mike;PANDIT, Rajay;RASCON, Lucas;RAZAI, Amir S.;TIMMER, John C.~ 33:US ~31:62/277,028 ~32:11/01/2016

2022/11581 ~ Complete ~54:METHODS OF IN VITRO CELL DELIVERY ~71:INTELLIA THERAPEUTICS, INC., 40 Erie Street, Cambridge, United States of America ~72: ARREDOUANI, Mohamed Simo;BURNS, Sean, Michael;GUTIERREZ MARTINEZ, Paula;KANJOLIA, Arti, Mahendra, Prakash;KILI,; &#214;zg&#252;n;LARIVIERE, Reed, Walker;MONTI, Anthony;NARENDRA, Pooja, Kyatsandra;PRODEUS, Aaron;SHARMA, Palak Sushil;STAMPOULOGLOU, Eleni;ZHANG, Qingzhan~ 33:US ~31:63/016,913 ~32:28/04/2020;33:US ~31:63/121,781 ~32:04/12/2020;33:US ~31:63/124,058 ~32:11/12/2020;33:US ~31:63/130,100 ~32:23/12/2020;33:US ~31:63/165,619 ~32:24/03/2021;33:US ~31:63/176,221 ~32:17/04/2021

2022/11592 ~ Complete ~54:HYPONMUNOGENIC NEURAL CELLS FOR THE TREATMENT OF NEUROLOGICAL DISORDERS AND CONDITIONS ~71:SANA BIOTECHNOLOGY, INC., 188 East Blaine Street, Suite 400, Seattle, Washington, 98102, United States of America ~72: REBECA RAMOS-ZAYAS;SONJA SCHREPFER~ 33:US ~31:62/994,750 ~32:25/03/2020

2022/11579 ~ Complete ~54:BIOCAPACITANCE SENSOR ~71:BRUIN BIOMETRICS, LLC, 10877 Wilshire Blvd., Suite 1600, United States of America ~72: BURNS, Martin, F.;GIUNTOLI, David, M.;ROSS, Graham, O.~ 33:US ~31:63/004,822 ~32:03/04/2020

2022/11586 ~ Complete ~54:RING CLOSING SYNTHESIS OF MACROCYCLIC MCL-1 INHIBITOR INTERMEDIATES ~71:Amgen Inc., One Amgen Center Drive, THOUSAND OAKS 91320-1799, CA, USA, United States of America ~72: BAUCOM, Kyle D.;BEAVER, Matthew G.;CHERNEY, Alan H.;COLYER, John T.;CUI, Sheng;ERICSON, Ari;HUANG, Liang;LOVETTE, Michael A.;MILBURN, Robert Ronald;ROOSEN, Philipp



C.;SANGODKAR, Rahul P.;SMITH, Austin G.;ST-PIERRE, Gabrielle;TEDROW, Jason S.;THIEL, Oliver Ralf~  
33:US ~31:63/020,958 ~32:06/05/2020

2022/11593 ~ Complete ~54:MODIFIED B CELLS AND METHODS OF USE THEREOF ~71:WALKING FISH  
THERAPEUTICS, 450 E. Jamie Court, Suite 300, South San Francisco, California 94080, United States of  
America ~72: HANGIL PARK;KATHLEEN BOYLE;LEWIS T WILLIAMS;MARK SELBY;SRINIVAS  
KOTHAKOTA;THOMAS BRENNAN~ 33:US ~31:63/003,120 ~32:31/03/2020

2022/11595 ~ Complete ~54:ANTI-MICROBIAL, DISINFECTION CHAMBER RESPIRATORY FACE  
MASK/SHIELD ~71:BENJAMIN J DAVENPORT, 116 Hendrich Road, Chaparral, New Mexico 88081, United  
States of America;SHARON A KEENE, 3940 N. Campbell Avenue, Tucson, Arizona 85719, United States of  
America ~72: BENJAMIN J DAVENPORT;SHARON A KEENE~ 33:US ~31:62/994,523 ~32:25/03/2020;33:US  
~31:63/143,677 ~32:29/01/2021;33:US ~31:17/169,253 ~32:05/02/2021

2022/11557 ~ Provisional ~54:TRANSPORT OF BULK CARGO ~71:FORD, Malcolm John Rowland, 8 Campbell  
Road, Parktown, South Africa;MCLINTOCK, Kelly Thurstan, 46 Woodlands Avenue, Pecanwood Estate,  
Broederstroom, South Africa ~72: FORD, Malcolm John Rowland;MCLINTOCK, Kelly Thurstan~

2022/11580 ~ Complete ~54:ANTI-PD-1 ANTIBODIES ~71:BOEHRINGER INGELHEIM INTERNATIONAL  
GMBH, Binger Strasse 173, Germany ~72: BLAIR, David, A.;GARAFFA, Nicole, K.;GUPTA, Pankaj;GUPTA,  
Priyanka;HAN, Fei;KARLAK, Aaron, Timothy;LIU, Dongmei;LORENZ, Ivo;MBOW, Mouhamadou  
Lamine;MORENO-GARCIA, Miguel, E.;MOZDZIERZ, Joseph, A.;RALPH, Kerry, L., M.;SHAABAN,  
Abdulsalam;WHITE, Della, M.;WU, Helen, Haixia;YANG, Guangwei~ 33:US ~31:63/029,962  
~32:26/05/2020;33:US ~31:63/039,686 ~32:16/06/2020

2022/11583 ~ Complete ~54:CONTROLLING THE GROWTH OF VEGETATION ~71:BIONOME TECHNOLOGY  
LIMITED, 142A STATION ROAD, CHINGFORD, LONDON E4 6AN, UNITED KINGDOM, United Kingdom ~72:  
CLEARWATER, John;MCCARTHY, Dennis~ 33:GB ~31:2004292.5 ~32:25/03/2020

2022/11590 ~ Complete ~54:ROCKER REINFORCEMENT FOR AN ELECTRIC VEHICLE  
~71:ARCELORMITTAL, 24-26, Boulevard d'Avranches, South Africa ~72: Dan HASENPOUTH;Joel  
WILSIUS;Yohan MERDJI~

2022/11598 ~ Complete ~54:CATIONIC STABILIZATION ~71:ARKEMA FRANCE, 420 rue d'Estienne  
d'Orves, 92700, Colombes, France ~72: LEENDERT HOEKMAN~ 33:FR ~31:FR2006617 ~32:24/06/2020

2022/11591 ~ Complete ~54:FACE MASK AND SYSTEM ~71:Alan Britten, 11 Erridge Road, Merton Park,  
London, Greater London, SW19 3JA, United Kingdom;PH6 Ltd, 11 Erridge Road, Merton Park, London, SW19  
3JA, United Kingdom ~72: Alan Britten~ 33:GB ~31:GB2005856.6 ~32:22/04/2020;33:GB ~31:GB2010507.8  
~32:08/07/2020;33:GB ~31:GB2017809.1 ~32:11/11/2020

2022/11596 ~ Complete ~54:COMPOUNDS, PHARMACEUTICAL COMPOSITIONS, AND METHODS OF  
PREPARING COMPOUNDS AND OF THEIR USE ~71:REPREP THERAPEUTICS INC., 7210 Frederick-Banting,  
Suite 100, Saint-Laurent, Quebec H4S 2A1, Canada ~72: ALEXANDER PERRYMAN;BINGCAN  
LIU;EVELYNE DIETRICH;DANIEL;RIC VALL;E;JANEK SZYCHOWSKI;JEAN-FRANCOIS  
TRUCHON;PATRICK BEAULIEU;ROBERT PAPP~ 33:US ~31:63/003,745 ~32:01/04/2020

2022/11599 ~ Complete ~54:MULTISPECIFIC HEAVY CHAIN ANTIBODIES WITH MODIFIED HEAVY CHAIN  
CONSTANT REGIONS ~71:TENEOBIO, INC., 7999 Gateway Boulevard, Suite 320, Newark, California, 94560,  
United States of America ~72: DUY PHAM;KATHERINE HARRIS;NATHAN TRINKLEIN;OMID VAFA;SHELLEY

FORCE ALDRED;STARLYNN CLARKE;UTE SCHELLENBERGER;WIM VAN SCHOOTEN~ 33:US  
~31:63/017,589 ~32:29/04/2020;33:US ~31:63/108,796 ~32:02/11/2020

- APPLIED ON 2022/10/25 -

2022/11602 ~ Provisional ~54:TREATMENT OF TINNITUS ~71:COETZEE, Cornelis Jacobus, Unit 4B The Ridge Office Park, Off Corner Doordekraal and Durban Roads, South Africa ~72: COETZEE, Cornelis Jacobus~

2022/11604 ~ Provisional ~54:OUR FAMILY REMEMBRANCE BOOK ~71:Daniel Marsh, 55 Rowles Avenue, Waterfall, South Africa ~72: Daniel Marsh~

2022/11605 ~ Provisional ~54:DISPLAY SCREEN ARRANGEMENT ~71:CREATIVE DIGITAL DISPLAYS (PTY) LTD., c/o HANGONE ATTORNEYS,, The Station, Parade on Kloof Office Park,, 1 Parade Street, BEDFORDVIEW, Johannesburg 2007, Gauteng, SOUTH AFRICA, South Africa ~72: THEUNIS, Elcardo Randall~

2022/11610 ~ Complete ~54:UNMANNED AGRICULTURAL MOWER ~71:Jinhua Polytechnic, No. 888, Haitang West Road, Wucheng District, Jinhua City, Zhejiang Province, 321017, People's Republic of China ~72: FU, Yunfeng;SU, Zhan;TIAN, Liquan;WANG, Zhiming;ZHOU, Xuan~ 33:CN ~31:202111329747.8 ~32:11/11/2021

2022/11615 ~ Complete ~54:FOLIAR FERTILIZER FOR REDUCING HIGH-TEMPERATURE STRESS OF RICE ~71:Meteorological Science Research Institute of Jiangxi Province, No.323, Aixi Lake Second Road, High-tech New District, Nanchang City, Jiangxi Province, People's Republic of China ~72: DUAN Licheng;LI Xiangxiang;LIU Dan;WANG Jianjun;YANG Jun;ZHANG Yizhi~

2022/11630 ~ Complete ~54:COMPOSITIONS COMPRISING NANOPARTICLES, METHOD OF MAKING AND USES THEREOF ~71:ORGANICELL REGENERATIVE MEDICINE, INC., 1951 NW 7th Avenue, Suite 300 Miami, Florida, 33136, United States of America ~72: MARIA INES MITRANI~ 33:US ~31:63/008,355 ~32:10/04/2020

2022/11643 ~ Complete ~54:POWDER COATING COMPOSITION AND SUBSTRATE COATED WITH SUCH POWDER COATING COMPOSITION ~71:Akzo Nobel Coatings International B.V., Christian Neefestraat 2, AMSTERDAM 1077 WW, THE NETHERLANDS, Netherlands ~72: DONOGHUE, Andrew;GONZALEZ ALVAREZ, Maria Jose;KITTLE, Kevin Jeffrey~ 33:EP ~31:20177986.5 ~32:03/06/2020

2022/11647 ~ Complete ~54:CHANGE SYSTEM FOR WEAR PARTS OF AN EXCAVATOR BUCKET OF AN EARTHMOVING MACHINE ~71:LIEBHERR-MINING EQUIPMENT COLMAR SAS, 49 rue Fr&#233;d&#233;ric Hartmann, France ~72: VICQ, Martial;WEBER, G&#233;rard~ 33:DE ~31:10 2020 109 010.2 ~32:01/04/2020

2022/11608 ~ Complete ~54:PULL-OUT TEST DEVICE FOR FIBER AND CEMENTING MATERIAL ~71:Jilin Jianzhu University, No.5088, Xincheng Street, Changchun City, Jilin Province, People's Republic of China ~72: JIN Yujie;NIU Lei;QIAN Yongmei;SHI Chenglin;SUN Shuang;TIAN Wei;WANG Jing;XU Lina~

2022/11617 ~ Complete ~54:PROBE FOR ACOUSTIC EMISSION MONITORING OF AMMONIA SYNTHESIS TOWER MATERIAL ~71:Tongling University, No. 1335, Fourth Cuihu Road, Tongling, Anhui Province, 244061, People's Republic of China ~72: CHEN, Zheng;HU, Rongbao~

2022/11618 ~ Complete ~54:INTELLIGENT INSPECTION SYSTEM AND METHOD OF SUBSTATION BASED ON IMAGE RECOGNITION ~71:ELECTRIC POWER RESEARCH INSTITUTE OF STATE GRID ZHEJIANG ELECTRIC POWER CO., LTD, Zhaohui 8 District, Gongshu District, Hangzhou City, People's Republic of China;ZHEJIANG UNIVERSITY OF SCIENCE AND TECHNOLOGY, Zhaohui 8 District, Gongshu District, Hangzhou City, People's Republic of China ~72: DAI, Zheren;HAN, Rui;JIANG, Kaihua;JIANG, Xiongwei;LEI, Jingsheng;LIANG, Suning;LIU, Li;MEI, Bingxiao;QIAN, Shaofeng;SHEN, Jian;SHI, Wenbin;WANG, Wenhao;WU, Xuxiang;YANG, Shengying;ZHENG, Yiming~

2022/11622 ~ Complete ~54:METHOD FOR SELECTION OF HIGH M6P RECOMBINANT PROTEINS  
~71:AMICUS THERAPEUTICS, INC., 1 Cedar Brook Drive, Cranbury, New Jersey, 08512, United States of  
America ~72: HUNG V DO;RUSSELL GOTSCHALL~ 33:US ~31:62/315,400 ~32:30/03/2016;33:US  
~31:62/457,584 ~32:10/02/2017;33:US ~31:15/473,994 ~32:30/03/2017

2022/11631 ~ Complete ~54:AN OUTLET PIECE ASSEMBLY FOR A HORIZONTAL PLATE AND FRAME-TYPE  
FILTER, SUCH AS A TOWER PRESS ~71:METSO OUTOTEC FINLAND OY, Lokomonkatu 3, Tampere, 33900,  
Finland ~72: ISMO JUVONEN;JANNE KAIPAINEN;KARI V&#196;NTTINEN;MIKA ILLI;MIRVA  
MUSTAKANGAS;TEEMU ELORANTA~

2022/11638 ~ Complete ~54:TARGETED INHIBITION USING ENGINEERED OLIGONUCLEOTIDES  
~71:miRecule, Inc., 704 Quince Orchard Rd., Suite 260, GATHERSBURG 20878, MD, USA, United States of  
America ~72: PLACE, Robert;SALEH, Anthony;WILLIAMS, Tishan~ 33:US ~31:63/004,045 ~32:02/04/2020

2022/11642 ~ Complete ~54:DUAL-CHAMBER SPRAY DEVICE ~71:SaNOTize Research and Development  
Corp., 25th Floor, 700 West Georgia, VANCOUVER V7Y-1B3, BC, CANADA, Canada ~72: MILLER, Christopher  
C.;NAGAR, Nir;REGEV, Gilly~ 33:US ~31:63/079,277 ~32:16/09/2020

2022/11648 ~ Complete ~54:GLUED TIMBER TRUSSED JOIST, JOINT AND METHOD  
~71:PATENTTITOIMISTO T. POUTANEN, Kuninkaankatu 41 B60, Finland ~72: POUTANEN, Tuomo~ 33:US  
~31:16/865,763 ~32:04/05/2020

2022/11632 ~ Complete ~54:DEVICE AND METHOD TO EXTRACT WATER FROM HUMID AMBIENT AIR  
~71:ATLAS COPCO AIRPOWER, NAAMLOZE VENNOOTSCHAP, Boomsesteenweg 957, 2610 Wilrijk, Belgium  
~72: ROBERT MIKULANDRIC~ 33:BE ~31:2020/5434 ~32:16/06/2020

2022/11636 ~ Complete ~54:CEMENT-MANUFACTURING PLANT AND PROCESS FOR PRODUCING  
CEMENT CLINKER ~71:thyssenkrupp Industrial Solutions AG, ThyssenKrupp Allee 1, ESSEN 45143,  
GERMANY, Germany ~72: DINKOVA, Anna Ivanova;LAMPE, Karl;LEMKE, Jost;WILLMS, Eike~ 33:BE ~31:BE  
2020/5300 ~32:05/05/2020;33:DE ~31:10 2020 205 672.2 ~32:05/05/2020

2022/11640 ~ Complete ~54:NOVEL COMPOUNDS FOR DIAGNOSIS ~71:AC Immune SA, EPFL Innovation  
Park, Building B, LAUSANNE 1015, SWITZERLAND, Switzerland ~72: MOLETTE, J&#233;r&#244;me~ 33:EP  
~31:20173587.5 ~32:07/05/2020;33:EP ~31:20187551.5 ~32:23/07/2020

2022/11650 ~ Complete ~54:A REACTOR WITH AN ELECTRICALLY HEATED STRUCTURED CERAMIC  
CATALYST ~71:PAULETTO, Gianluca, am Waldrand 3, Germany ~72: PAULETTO, Gianluca~ 33:EP  
~31:20170265.1 ~32:18/04/2020

2022/11611 ~ Complete ~54:MULTI-CHANNEL MICROINJECTOR ~71:Zhejiang University, No. 866, Yuhangtang  
Road, Xihu District, Hangzhou City, Zhejiang Province, 310058, People's Republic of China ~72: LI,  
Xiangyao;LIAN, Yanna;LIU, Li;SHENG, Tao;WANG, Jinghua;WU, Cheng~

2022/11614 ~ Complete ~54:A PLANT INDUCTION CONTROL TECHNOLOGY FOR CONTROLLING  
WHITEFLIES AND APHIDS OF GREENHOUSE TOMATOES ~71:Shijiazhuang academy of agricultural and  
Forestry Sciences, No. 479, Shengli North Street, Shijiazhuang, Hebei province, People's Republic of China ~72:  
Kang Hongxia;LI Yan;Liu Qiong;Pang Yongchao;Qi Lianfen;Shi Jianhua;Su Zhenji;Wang Dandan;Wang  
Zifan;Zhang Qingyin~

2022/11639 ~ Complete ~54:A NEW BAINITIC STEEL ~71:Sandvik Materials Technology Rock Drill Steel AB, SANDVIKEN 811 81, SWEDEN, Sweden ~72: HARALDSSON, Jan;NYL&#214;F, Lars;WESTHOLM, Sofia~ 33:EP ~31:20173354.0 ~32:06/05/2020

2022/11644 ~ Complete ~54:WEAR SUPPORT ASSEMBLIES FOR RAISE BORING TOOLS ~71:Sandvik Mining and Construction Tools AB, SANDVIKEN 81181, SWEDEN, Sweden ~72: LINDBLOM, Anders;LOIKKANEN, Joonas~ 33:EP ~31:20177329.8 ~32:29/05/2020

2022/11613 ~ Complete ~54:LARGE MULTI-SECTION UNDISTURBED SOIL SAMPLER ~71:Jilin Jianzhu University, No.5088, Xincheng Street, Changchun City, Jilin Province, People's Republic of China ~72: JIANG Xin;NIU Lei;QIAN Yongmei;SUN Shuang;TIAN Wei;XU Lina~

2022/11619 ~ Complete ~54:HYDROPONIC CULTURE METHOD OF SYMPODIAL BAMBOO ~71:Zhejiang Subtropical Crop Research Institute, No. 334, Xueshan Road, Ouhai District, Wenzhou City, Zhejiang Province, 325000, People's Republic of China ~72: Chen GuanJu;Jin Chuan;Li XiaoWen;Liang XiuMei;Liu Xing;Liu Yu;Wang JinWang;Wang YueYing;Xia HaiTao~

2022/11635 ~ Complete ~54:RNAI AGENTS FOR INHIBITING EXPRESSION OF PNPLA3, PHARMACEUTICAL COMPOSITIONS THEREOF, AND METHODS OF USE ~71:Arrowhead Pharmaceuticals, Inc., 177 E. Colorado Boulevard, Suite 700, PASADENA 91105, CA, USA, United States of America ~72: DING, Zhi-Ming;NICHOLAS, Anthony;PEI, Tao;SCHIENEBECK, Casi;XU, Zhao~ 33:US ~31:63/000,137 ~32:26/03/2020

2022/11603 ~ Provisional ~54:REAL TIME SLAG TEMPERATURE CONTROL ~71:GREYLING, Frederik Petrus, 5 St George Avenue, Midlands Estate, South Africa;GREYLING, Ruan, 9 Dolerite Crescent, Middelburg, South Africa ~72: GREYLING, Frederik Petrus;GREYLING, Ruan~

2022/11607 ~ Complete ~54:LOADING CALIBRATION DEVICE FOR INDOOR SIMULATION TEST OF SEMI-PILES ~71:Jilin Jianzhu University, No.5088, Xincheng Street, Changchun City, Jilin Province, People's Republic of China ~72: CHEN Yang;JIANG Xin;NIU Lei;QIAN Yongmei;SHI Chenglin;SUN Shuang;TIAN Wei;XU Lina~

2022/11616 ~ Complete ~54:ACOUSTIC EMISSION MONITORING APPARATUS FOR HYDROGEN DAMAGE OF AMMONIA SYNTHESIS TOWER MATERIAL, AND USE METHOD THEREFOR ~71:Tongling University, No. 1335, Fourth Cuihu Road, Tongling, Anhui Province, 244061, People's Republic of China ~72: CHEN, Zheng;HU, Rongbao~

2022/11626 ~ Complete ~54:FERMENTED APPLE CIDER CONTAINING CHINESE PRIVET AND PREPARATION METHOD THEREFOR ~71:TAISHAN UNIVERSITY, No.525 Dongyue Street, Tai &#39;an, Shandong, 271000, People's Republic of China ~72: DONG, Jiaqi;QIN, Weishuai;ZHAI, Heng;ZHANG, Lei;ZHANG, Na~ 33:CN ~31:202110334421.8 ~32:29/03/2021

2022/11601 ~ Provisional ~54:A MECHANICAL SCREW SYSTEM ~71:DOWNES, Harvey, 9 Grebe Rd, Flamingovlei, Cape Town 7439, SOUTH AFRICA, South Africa ~72: DOWNES, Harvey~

2022/11612 ~ Complete ~54:A PARTS PACKAGING DEVICE ~71:YUANJIE LI, No. 270, group 1, Chetian village, Xiaopu Town,, Jiangyong County, Yongzhou City, Hunan Province, 425000, People's Republic of China ~72: YUANJIE LI~

2022/11620 ~ Complete ~54:SIMULATION DEVICE FOR NITROGEN CONVERSION AND APPLICATION METHOD THEREOF ~71:Institute of Hydrogeology and Environmental Geology, Chinese Academy of Geological Sciences, No.268 Zhonghua North Street, Shijiazhuang City, Hebei Province, 050000, People's Republic of China

~72: Li Haigang;Liang Hongcheng;Wang Lijun;Wang Long;Xu Yangsheng;Yang Congcong;Zhai Tianlun;Zheng Dechao~

2022/11623 ~ Complete ~54:A SELF-AID BATHING DEVICE ~71:Jiangnan University, No.1800 Lihu Avenue, Jingkai District, Wuxi City, Jiangsu Province, 214122, People's Republic of China;Qingdao Sino-German Intelligent Technology Institute, Building 7, D-Zone, Sino-German Ecological Park, Tuanjie Road,, West Coast New Area, Qingdao, Shandong, 266426, People's Republic of China;Tongji University, No. 1239, Siping Road, Shanghai, 200092, People's Republic of China;Wuxi University, No. 333, Xishan Avenue, Xishan District, Wuxi City, Jiangsu, 214105, People's Republic of China ~72: Dianjun Fang;Feng Cheng;Hongyan Jiang;Jun Liu;Xinran Feng;Yadong Zhang~

2022/11629 ~ Complete ~54: COSMETIC COMPOSITION WITH ENHANCED COLOR STABILITY FOR RETINOIC ACID PRECURSOR ~71: UNILEVER GLOBAL IP LIMITED, Port Sunlight, Wirral, Merseyside, CH62 4ZD, United Kingdom ~72: HANG NGUYET TRUONG;HASIBA BEKTO;LEI HUANG~ 33:EP ~31:20177510.3 ~32:29/05/2020

2022/11645 ~ Complete ~54: ONE-COMPONENT POWDER COATING COMPOSITION AND SUBSTRATE COATED WITH SUCH POWDER COATING COMPOSITION ~71: Akzo Nobel Coatings International B.V., Christian Neefstraat 2, AMSTERDAM 1077 WW, THE NETHERLANDS, Netherlands ~72: GONZALEZ ALVAREZ, Maria Jose;KITTLE, Kevin Jeffrey~ 33:EP ~31:20177988.1 ~32:03/06/2020

2022/11609 ~ Complete ~54: SIMPLE INDOOR HALF-FACE PILE TEST MODEL BOX MOVING DEVICE ~71: Jilin Jianzhu University, No.5088, Xincheng Street, Changchun City, Jilin Province, People's Republic of China ~72: CHEN Yang;JIANG Xin;JIN Yujie;NIU Lei;QIAN Yongmei;SUN Shuang;TIAN Wei;XU Lina~

2022/11621 ~ Complete ~54: LENS COVER HAVING LENS ELEMENT ~71: HGCI, INC., 3993 Howard Hughes Parkway, United States of America ~72: CAI, Dengke;HUO, Yongfeng~ 33:WO ~31:PCT/CN2020/132703 ~32:30/11/2020

2022/11624 ~ Complete ~54: MULTIFUNCTIONAL POLICE HANDCUFF ~71: MERRY WISER (JINHUA) TECHNOLOGY DEVELOPMENT CO., LTD, ROOM 9-07-08, BUILDING 1, HENGFENG BUILDING, SHUANGXI WEST ROAD, JIANGNAN STREET, People's Republic of China;XINGZHI COLLEGE ZHEJIANG NORMAL UNIVERSITY, NO. 3388, YINGBIN AVENUE, People's Republic of China ~72: DUAN, Zhizhuang;HUANG, Ruiyang;HUANG, Yuyun~

2022/11627 ~ Complete ~54: ADHESION-PREVENTING AGENT AND METHOD FOR PREVENTING ADHESION USING SAME ~71: OTSUKA PHARMACEUTICAL FACTORY, INC., 115 Aza Kuguhara Tateiwa Muya-cho Naruto-shi, Tokushima, 7728601, Japan ~72: ATSUSHI OHHATA;HIROMICHI YAMASHITA;SHIORI FUJIMOTO~ 33:JP ~31:2020-095280 ~32:01/06/2020

2022/11634 ~ Complete ~54: SYSTEMS AND METHODS FOR INTERPRETING HIGH ENERGY INTERACTIONS ~71: DECISION TREE, LLC, 2702 23rd Street, Greeley, Colorado 80634, United States of America ~72: BRANDON LEE GOODCHILD DRAKE~

2022/11633 ~ Complete ~54: METHODS FOR REDUCING RNA IMMUNOGENICITY AND RNA MOLECULES WITH DECREASED IMMUNOGENICITY ~71: RIBOPRO B.V., Morsestraat 23, 4004, JP Tiel, Netherlands ~72: ALEXANDER HENRIK BARON VAN ASBECK;J&#220;RGEN WILHELMUS CAROLUS DIEKER~ 33:NL ~31:2025475 ~32:30/04/2020

2022/11646 ~ Complete ~54:SCREEN TIGHTENING IN MOBILE MULTI-DECK SCREENING DEVICES  
~71:METSO OUTOTEC FINLAND OY, Lokomonkatu 3, Finland ~72: LEINONEN, Timo;RAJALA, Jouni T.~ 33:FI  
~31:20205524 ~32:25/05/2020

2022/11625 ~ Complete ~54:MOBILE SECURE NETWORK SYSTEM AND DEVICE ~71:Securkart LLC, 55  
Capital Boulevard, Suite 203, South Africa ~72: TAN, Alan~ 33:TZ ~31:16/833,396 ~32:27/03/2020

2022/11628 ~ Complete ~54:COMPOSITION ~71:UNILEVER GLOBAL IP LIMITED, Port Sunlight, Wirral,  
Merseyside, CH62 4ZD, United Kingdom ~72: BIJAL DHARMVIRBHAI SHAH;GANESAN  
RAJENDIRAN;GAURAV PATHAK~ 33:IN ~31:202021018884 ~32:04/05/2020;33:EP ~31:20180143.8  
~32:16/06/2020

2022/11637 ~ Complete ~54:AGONISTIC CD28 ANTIGEN BINDING MOLECULES TARGETING HER2 ~71:F.  
Hoffmann-La Roche AG, Grenzacherstrasse 124, BASEL 4070, SWITZERLAND, Switzerland ~72: GASSER,  
Stephan;HOFER, Thomas;JUNTTILA, Teemu Tapani;KLEIN, Christian;KUETTEL, Christine;THOM, Jenny  
Tosca;UMA~209;A, Pablo~ 33:EP ~31:20181730.1 ~32:23/06/2020

2022/11641 ~ Complete ~54:METHODS OF TREATING CONDITIONS RESPONSIVE TO NITRIC OXIDE  
THERAPY ~71:SaNOtize Research and Development Corp., 25th Floor, 700 West Georgia, VANCOUVER V7Y-  
1B3, BC, CANADA, Canada ~72: MILLER, Christopher C.;REGEV, Gilly~ 33:US ~31:63/052,805  
~32:16/07/2020

2022/11649 ~ Complete ~54:CARTRIDGE ~71:KANTUREK-LUCAS, David Christopher, UNIT 3, 2796 MILNER  
RD, GLEN AUSTIN, South Africa ~72: KANTUREK-LUCAS, David Christopher~ 33:GB ~31:2006627.0  
~32:29/04/2020

- APPLIED ON 2022/10/26 -

2022/11695 ~ Complete ~54:SEAWEED CULTIVATION METHOD AND SYSTEM ~71:Cargill, Incorporated,  
15407 McGinty Road West, WAYZATA 55391, MN, USA, United States of America ~72: ALLARD-LATOUR,  
Aur~233;lie Marie;CACERES VILLEGAS, Julian Hermoyner;JAN, S~233;bastien Bernard Marie;TAPIA, Emilio  
Antonio Mercado~ 33:EP ~31:20167539.4 ~32:01/04/2020

2022/11700 ~ Complete ~54:AN ELECTRIC GENERATOR HAVING PLURAL STATORS ~71:The Trustees for  
the time being of the KMN FULFILMENT TRUST, 8 Kestrel Street, Ebotse Golf Estate, Rynfield, BENONI 1504,  
SOUTH AFRICA, South Africa ~72: MAKGERU, Kabu Walter~ 33:ZA ~31:2020/02703 ~32:13/05/2020

2022/11705 ~ Complete ~54:INTEGRAL SIDE SLOPE STRUCTURE OF SOIL COVERING TANK  
~71:SHANDONG CHAMBROAD EQUIPMENT MANUFACTURE INSTALLATION CO.,LTD., Room 1905-1309,  
Building 2, Innovation Building, Gaoshi Road, Xinwu Road, High-Tech Zone, Binzhou, Shandong, 256623,  
People's Republic of China;SHANDONG CHAMBROAD HOLDING GROUP CO., LTD., Boxing Economic  
Development Zone, Binzhou, Shandong, 256500, People's Republic of China ~72: CHENG, Jiatao;GENG,  
Xingfei;MA, Yunsheng;WEI, Shengke;ZHANG, Chenghe;ZHANG, Chongchong;ZHANG, Ziping;ZHAO,  
Liqu;ZHAO, Qingsong~ 33:CN ~31:202011637542.1 ~32:31/12/2020

2022/11679 ~ Complete ~54:SYSTEM FOR OBJECT DETECTION WITH VOICE OUTPUT FOR VISUALLY  
IMPAIRED PEOPLE ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER  
INDIRA NAGAR, BIBWEWADI, PUNE, India ~72: BHALGAT, Kunal K.;BHATLAWANDE, Shripad;KURADE, Sejal  
S.;KUYATE, Atharva B.;LAD, Yogita V.;MAHAJAN, Chandrashekhar;NANDANKAR, Kuntesh U.;SAWANT,  
Sachin S.~

2022/11680 ~ Complete ~54:PERCUTANEOUS ABSORPTION PREPARATION COMPRISING DONEPEZIL WITH IMPROVED STABILITY ~71:DONG-A ST CO., LTD., 64, CHEONHO-DAERO (YONGDU-DONG) DONGDAEMUN-GU, SEOUL 02587, KOREA, Republic of Korea;KM TRANSDERM LTD., 2-3-18, NAKANOSHIMA KITA-KU, OSAKA, JAPAN, Japan ~72: CHA, Kwang-Ho;GOTO, Masaoki;HYUN, Sang-Min;JANG, Sun-Woo;KIM, Hae-Sun;KIM, Hyun-Jung;SHIN, Chang-Yell~ 33:KR ~31:10-2020-0057402 ~32:13/05/2020

2022/11735 ~ Complete ~54:PREVENTATIVE TREATMENT OF MIGRAINE ~71:BIOHAVEN PHARMACEUTICAL IRELAND DAC, 6th Floor South Bank house, Barrow Street, Ireland ~72: CORIC, Vladimir;CROOP, Robert~ 33:US ~31:63/001,341 ~32:29/03/2020;33:US ~31:63/111,138 ~32:09/11/2020;33:US ~31:63/125,247 ~32:14/12/2020

2022/11681 ~ Complete ~54:DRIVE ELEMENT ~71:BONGARTZ, Nicole, JAHNSTRASSE 101, 41464 NEUSS, GERMANY, Germany ~72: BONGARTZ, Nicole~ 33:DE ~31:10 2020 110 450.2 ~32:16/04/2020

2022/11685 ~ Complete ~54:ALKYLAMINOPROLINE DERIVATIVES AS ALFA-2-DELTA-1 BLOCKERS ~71:ACONDICIONAMIENTO TARRASENSE, C/ DE LA INNOVACI&#211;, 2, 08225 TERRASSA, Spain ~72: ALMANSA-ROSALES, Carmen;WEGERT, Anita~ 33:ES ~31:20382342.2 ~32:28/04/2020

2022/11694 ~ Complete ~54:STABLE LIQUID FORMULATIONS FOR NITROGEN-FIXING MICROORGANISMS ~71:Pivot Bio, Inc., 2910 Seventh Street, BERKELEY 94710, CA, USA, United States of America ~72: AMENDOLARA, Tabitha;JOHNSON, Allison Nicole;KREAMER, Naomi;MOHITI-ASLI, Mahsa;REZAEI, Farzaneh~ 33:US ~31:63/019,096 ~32:01/05/2020

2022/11699 ~ Complete ~54:NOVEL LIPIDS AND NANOPARTICLE COMPOSITIONS THEREOF ~71:Generation Bio Co., 301 Binney Street, 4th Floor, CAMBRIDGE 02142, MA, USA, United States of America ~72: NOLTING, Birte;STANTON, Matthew G.~ 33:US ~31:63/000,990 ~32:27/03/2020

2022/11706 ~ Complete ~54:MEDICINE/AGENT FOR THE TREATMENT OF CORONAVIRUS, RETROVIRAL INFECTIONS AND HEPATITIS C ~71:LASKAVYI, Vladislav Nikolaevich, ul. Ust-Kurdyumskaya, d. 4, kv. 174 Saratov, 410018, Russian Federation ~72: LASKAVYI, Vladislav Nikolaevich;SHURDOV, Mikhail Arkadevich~ 33:RU ~31:2020112322 ~32:26/03/2020

2022/11690 ~ Complete ~54:COMPOSITIONS FOR TREATING CANCER WITH KRAS MUTATIONS AND USES THEREOF ~71:AADIGEN, LLC, 1343 Luna Vista Drive, Pacific Palisades, California, 90272, United States of America ~72: GILLES DIVITA;NEIL P DESAI~ 33:FR ~31:FR2004126 ~32:24/04/2020

2022/11703 ~ Complete ~54:FULLY SOIL-COVERED STRUCTURE OF VERTICAL TANK BODY ~71:SHANDONG CHAMBROAD EQUIPMENT MANUFACTURE INSTALLATION CO.,LTD., Room 1905-1309, Building 2, Innovation Building, Gaoshi Road, Xinwu Road, High-Tech Zone, Binzhou, Shandong, 256623, People's Republic of China;SHANDONG CHAMBROAD HOLDING GROUP CO., LTD., Boxing Economic Development Zone, Binzhou, Shandong, 256500, People's Republic of China ~72: MA, Shiheng;MA, Yunsheng;YAN, Bo;ZHANG, Chenghe;ZHANG, Chongchong;ZHAO, Liqiu;ZHAO, Qingsong~ 33:CN ~31:202110280214.9 ~32:16/03/2021

2022/11658 ~ Complete ~54:METHOD AND DEVICE FOR MONITORING EARTHQUAKE RESCUE SITE ENVIRONMENT ~71:National Earthquake Response Support Service, No. 1, Yuquan West Street, Shijingshan District, Beijing City, 100049, People's Republic of China ~72: Li Yigang;Qu Minhao;Yao Yue;Zhang Tao;Zhang Yunchang~

2022/11660 ~ Complete ~54:METHOD FOR SIMULTANEOUS SEPARATION AND RECOVERY OF UREA AND PHOSPHORUS IN FRESH URINE ~71:Tongji University, No. 1239 Siping Road, Yangpu District, Shanghai, 200092, People's Republic of China ~72: DAI, Xiaohu;LIU, Zhigang;WU, Deli;XU, Longqian~ 33:CN ~31:202111383705.2 ~32:22/11/2021

2022/11687 ~ Complete ~54:COMPOSITION COMPRISING AN IGE ANTIBODY ~71:KING'S COLLEGE LONDON, Strand, London, England, WC2R 2LS, United Kingdom ~72: HANNAH GOULD;JAMES SPICER;MARIANGELA FIGINI;SOPHIA KARAGIANNIS~ 33:GB ~31:2006093.5 ~32:24/04/2020

2022/11691 ~ Complete ~54:USE OF TLR4 MODULATOR IN THE TREATMENT OF COCCIDIOSIS ~71:ZIVO BIOSCIENCE, INC., 21 East Long Lake Rd., Suite 100 Bloomfield Hills, Michigan, 48304, United States of America ~72: AMY E STEFFEK;ANDREW A DAHL;WILLIAM P PFUND~ 33:US ~31:63/024,886 ~32:14/05/2020;33:US ~31:17/320,706 ~32:14/05/2021

2022/11702 ~ Complete ~54:NON-ROTATING TYPE DIRECT CURRENT GENERATOR ~71:CHOI, Woo Hee, 302ho, 82, Banghak-ro 5-gil Dobong-gu, Republic of Korea;HWANG, Nan Kyung, 321-31, Tongil-ro Seodaemun-gu, Republic of Korea;YOO, Hyung Ju, 401ho, 6-11, Yeonso-ro 34ga-gil Eunpyeong-gu, Republic of Korea ~72: CHOI, Woo Hee;HWANG, Nan Kyung;YOO, Hyung Ju;YU, Sung Kwon~ 33:KR ~31:10-2020-0038668 ~32:30/03/2020;33:KR ~31:10-2020-0038669 ~32:30/03/2020

2022/11664 ~ Complete ~54:AUTOMATIC DEVICE FOR WATER QUALITY TESTING ~71:Tangshan University, Daxue West Road, Tangshan City 063000, Hebei Province, CHINA (P.R.C.), People's Republic of China ~72: CHENG, Fengmin~

2022/11667 ~ Complete ~54:MULTISPECIFIC HEAVY CHAIN ANTIBODIES WITH MODIFIED HEAVY CHAIN CONSTANT REGIONS ~71:TENEOBIO, INC., 7999 Gateway Boulevard, Suite 320, Newark, California, 94560, United States of America ~72: DUY PHAM;KATHERINE HARRIS;NATHAN TRINKLEIN;OMID VAFA;SHELLEY FORCE ALDRED;STARLYNN CLARKE;UTE SCHELLENBERGER;WIM VAN SCHOOTEN~ 33:US ~31:63/017,589 ~32:29/04/2020;33:US ~31:63/108,796 ~32:02/11/2020

2022/11659 ~ Complete ~54:A PBT FLAME-RETARDANT WEAR-RESISTANT COMPOSITE MATERIAL AND ITS PREPARATION METHOD AND APPLICATION ~71:Guizhou Minzu University, Dongjiayan, Huaxi District, Guiyang City, Guizhou Province, 550025, People's Republic of China ~72: DU Jingyu;LI Kuntian;PEI Meng;TAN Fang;TAN Yanyan;WANG Hongwei;WU Xiao;XU Yuhuan;XUE Yu;YANG Renyuan;ZHAN Xiao;ZHANG Daohai;ZHANG Wenjing~

2022/11698 ~ Complete ~54:COMPOSITIONS AND METHODS FOR DIFFERENTIAL RELEASE OF 1-METHYLCYCLOPROPENE ~71:Verdant Technologies, LLC, 1789 Buerkle Circle, ST. PAUL 55110, MN, USA, United States of America ~72: LUNDGREN, Amanda~ 33:US ~31:16/859,399 ~32:27/04/2020;33:US ~31:17/232,710 ~32:16/04/2021

2022/11651 ~ Provisional ~54:TRAILER REVERSING ADAPTER ~71:NEO MATTHEWS MIDAKA, 1 PARK CRESCENT GERMISTON SOUTH, South Africa ~72: NEO MATTHEWS MIDAKA~

2022/11655 ~ Complete ~54:DEVICE FOR PREPARING IMMOBILIZED PARTICLES IN AQUACULTURE WATER ~71:Yangjiang Polytechnic, No.213 Dongshan Road, Yangjiang City, Guangdong Province, People's Republic of China;Yangjiang Sanyadu High Precision Breeding Co., Ltd, Sanya Biandu, Sanya Village Committee, Dagou Town, Yangdong District, Yangjiang City, Guangdong Province, People's Republic of China ~72: GUO Shenghui;LU Jian;LU Zhenhua;SI Yuanyuan;ZHU Sulian~



2022/11656 ~ Complete ~54:MUTE AND NOISE-REDUCING MANHOLE COVER CONVENIENT TO REPLACE ~71:THE SECOND CONSTRUCTION ENGINEERING COMPANY LTD. OF CHINA CONSTRUCTION SECOND ENGINEERING BUREAU, No.0169 Qianhai Road, Nanshan subdistrict, Nanshan District, Shenzhen, 518000, People's Republic of China ~72: CUI, Yanbo;MA, Lu;WANG, Hongyan;WANG, Kan;WANG, Shanfeng;ZHANG, Shujun;ZHENG, Peng;ZHU, Xiaoli;ZHU, Zhongqing~

2022/11665 ~ Complete ~54:AMMONIA OXIDIZING BACTERIA FOR TREATMENT OF ACNE ~71:AIOBIOME LLC, One Broadway, 14th Floor, Cambridge, Massachusetts, 02142, United States of America ~72: DAVID R WHITLOCK;LARRY WEISS;SPIROS JAMAS~ 33:US ~31:62/188,343 ~32:02/07/2015;33:US ~31:62/189,105 ~32:06/07/2015;33:US ~31:14/882,284 ~32:13/10/2015

2022/11654 ~ Complete ~54:LASER PROCESSING DEVICE ~71:Jinan Senfeng Laser Technology Co.,Ltd, No.2016, Feiyue Avenue, Gaoxin Zone, Jinan City, Shandong Province, People's Republic of China;Shandong Xinguang Photoelectric Technology Co., Ltd, No.2016, Feiyue Avenue, Gaoxin Zone, Jinan City, Shandong Province, People's Republic of China ~72: LI Rongchang;LI Yang;LIU Peng;WANG Cuiping;WANG Huilai;XING Zhenhong~

2022/11661 ~ Complete ~54:A CONDUCTIVE LOW WARPAGE WEAR-RESISTANT PBT COMPOSITE MATERIAL AND ITS PREPARATION METHOD AND APPLICATION ~71:Guizhou Minzu University, Dongjiayan, Huaxi District, Guiyang City, Guizhou Province, 550025, People's Republic of China ~72: DU Jingyu;LI Kuntian;PEI Meng;TAN Fang;TAN Yanyan;WANG Hongwei;WU Xiao;XU Yuhuan;XUE Yu;YANG Renyuan;ZHAN Xiao;ZHANG Daohai;ZHANG Wenjing~

2022/11663 ~ Complete ~54:METHOD FOR PREPARATION OF SILICA FILM WITH HIERARCHICAL PORE STRUCTURE USING EGGSHELL MEMBRANE AS TEMPLATE ~71:Tianjin University of Science and Technology, No. 1038, Dagu South Road, Hexi District, Tianjin 300222, CHINA (P.R.C.), People's Republic of China ~72: LIU, Xinyu;QIAO, Long'ang;SHI, Yuhan;WANG, Suisui;WANG, Xiaocong;ZHANG, Hongfeng~

2022/11712 ~ Complete ~54:NON-HUMAN ANIMALS CAPABLE OF DH-DH REARRANGEMENT IN THE IMMUNOGLOBULIN HEAVY CHAIN CODING SEQUENCES ~71:REGENERON PHARMACEUTICALS, INC., 777 Old Saw Mill River Road, Tarrytown, United States of America ~72: GUO, Chunguang;MACDONALD, Lynn;MCWHIRTER, John;MURPHY, Andrew, J.;VORONINA, Vera~ 33:US ~31:62/685,203 ~32:14/06/2018;33:US ~31:62/702,206 ~32:23/07/2018;33:US ~31:62/812,580 ~32:01/03/2019

2022/11670 ~ Complete ~54:COMPOUND AND APPLICATION THEREOF ~71:BEIJING TECHNOLOGY AND BUSINESS UNIVERSITY, 11 FUCHENG ROAD, HAIDIAN DISTRICT, People's Republic of China;BIO-TEA CO. LTD. OF SHAANXI BIOTECH GROUP, SOUTHWEST CORNER OF MENGJIAQIAO CROSS, People's Republic of China ~72: AI, Nasi;FU, Yan;LI, Honghua;LIU, Xiang;SONG, Fuhang;YANG, Na~

2022/11673 ~ Complete ~54:A MATERIAL TO SOLIDIFY HEAVY METALS IN MUNICIPAL SOLID WASTE INCINERATION FLY ASH BASED ON NANO ALUMINA AND ITS PREPARATION METHOD ~71:DALIAN UNIVERSITY OF TECHNOLOGY, No. 2 Linggong Road, Ganjingzi District, Dalian City, People's Republic of China ~72: AI, Hongmei;CAO, Yuting;FAN, Chengcheng;HAN, Junnan;HAN, Xiao;LI, Tianru;WANG, Baomin;WANG, Wanli;XING, Yunqing;ZHANG, Xiong~ 33:CN ~31:202210136729.6 ~32:15/02/2022

2022/11677 ~ Complete ~54:MOTION DETECTION SYSTEM FOR GAMING AND OTHER APPLICATIONS ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, India ~72: AMONKER, Krishna C.;BHATLAWANDE, Shripad;DESHPANDE, Rupali S.;KOWE, Ayushi;KSHIRSAGAR, Aditya A.;KSHIRSAGAR, Aditya K.;KSHIRSAGAR, Kaushal;MAHAJAN, Chandrashekhar;SADAVARTE, Koushal S.~

2022/11678 ~ Complete ~54:UNIFIED SYSTEM FOR ASSESSMENT AND PROCESSING OF MULTIPLE AGRICULTURAL TASKS ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, India ~72: AHER, Kuldeep;HULWAN, Dattatreya;JOSHI, Kalpesh V.;KSHIRSAGAR, Parag;KSHIRSAGAR, Yash;KULAT, Shruti;KULKARNI, Akhilesh;MAHAJAN, Chandrashekhar~

2022/11704 ~ Complete ~54:BUILT-IN VALVE CHAMBER OF TANK COMPLETELY COVERED WITH SOIL ~71:SHANDONG CHAMBROAD EQUIPMENT MANUFACTURE INSTALLATION CO.,LTD., Room 1905-1309, Building 2, Innovation Building, Gaoshi Road, Xinwu Road, High-Tech Zone, Binzhou, Shandong, 256623, People's Republic of China;SHANDONG CHAMBROAD HOLDING GROUP CO., LTD., Boxing Economic Development Zone, Binzhou, Shandong, 256500, People's Republic of China ~72: CHENG, Jiatao;GENG, Xingfei;MA, Shiheng;MA, Yunsheng;WEI, Shengke;ZHANG, Chongchong;ZHANG, Ziping;ZHAO, Liqiu;ZHAO, Qingsong~ 33:CN ~31:202011640962.5 ~32:31/12/2020

2022/11662 ~ Complete ~54:A HIGH PERFORMANCE SCRATCH RESISTANT PC/ABS COMPOSITE MATERIAL AND ITS PREPARATION METHOD AND APPLICATION ~71:Guizhou Minzu University, Dongjiayan, Huaxi District, Guiyang City, Guizhou Province, 550025, People's Republic of China ~72: DU Jingyu;LI Kuntian;PEI Meng;TAN Fang;TAN Yanyan;WANG Hongwei;WU Xiao;XU Yuhuan;XUE Yu;YANG Renyuan;ZHAN Xiao;ZHANG Daohai;ZHANG Wenjing~

2022/11666 ~ Complete ~54:GLUTARALDEHYDE COMPOSITIONS ~71:ADCOCK INGRAM INTELLECTUAL PROPERTY (PROPRIETARY) LIMITED, 1 New Road, Midrand, 1685, South Africa ~72: ANTONIETTA PAMELA MARTIN~ 33:ZA ~31:2021/05703 ~32:12/08/2021

2022/11668 ~ Complete ~54:WATERPROOFING CONSTRUCTION METHOD FOR BUILDING HOUSING POOL ~71:THE SECOND CONSTRUCTION ENGINEERING COMPANY LTD. OF CHINA CONSTRUCTION SECOND ENGINEERING BUREAU, No.0169 Qianhai Road, Nanshan subdistrict, Nanshan District, Shenzhen, 518000, People's Republic of China ~72: GUO, Zaimin;JIA, Daotong;LIU, Hanlong;LIU, Shuwei;NIU, Bintao;YU, Hao;ZHANG, Yihua;ZHAO, Debin;ZHAO, Lianbo;ZHENG, Guolei;ZHU, Qinglin~

2022/11669 ~ Complete ~54:SOIL SAMPLING EJECTOR ~71:Kunming University of Science and Technology, No.727 South Jingming Rd., Chenggong District, Kunming, 650031, People's Republic of China ~72: Baozhu Li;Guangzhu Cao;Ronggao Qin;Yi Qiang~

2022/11671 ~ Complete ~54:COLD CHAIN LOGISTICS WISDOM DATA SYSTEM ~71:SHANDONG INSTITUTE OF COMMERCE AND TECHNOLOGY, No. 4516, Ivyou Road, Jinan, People's Republic of China ~72: LIU, Yue;ZHANG, Jiong~

2022/11672 ~ Complete ~54:NONDESTRUCTIVE DETECTION SYSTEM FOR AGRICULTURAL PRODUCT FRUIT AND VEGETABLE BASED ON AI TECHNOLOGY ~71:SHANDONG INSTITUTE OF COMMERCE AND TECHNOLOGY, No. 4516, Ivyou Road, Jinan, People's Republic of China ~72: LIU, Yue;ZHANG, Jiong~

2022/11674 ~ Complete ~54:A HYDROELECTRIC INSTALLATION ~71:CUI Jingjin, Building 18, Vanke Jinyuguoji, Changyuan Middle Road, Wuhua District, Kunming City, People's Republic of China;DU Yan, Building 8, Plaza 1, Renmin West Road, Wuhua District, Kunming City, People's Republic of China;HU Xiaying, Building 12, Chuncheng Huigu, Helinpu, Wuhua District, Kunming City, People's Republic of China;LEI Yongquan, Building 12, Chuncheng Huigu, Helinpu, Wuhua District, Kunming City, People's Republic of China;LI Xinzhu, Building 18, Vanke Jinyuguoji, Changyuan Middle Road, Wuhua District, Kunming City, People's Republic of China;SUN Renjie, Building 12, Chuncheng Huigu, Helinpu, Wuhua District, Kunming City, People's Republic of China;XIONG Lili, Building 18, Vanke Jinyuguoji, Changyuan Middle Road, Wuhua District, Kunming City, People's Republic of China ~72: CUI Jingjin;DU Yan;HU Xiaying;LEI Yongquan;LI Xinzhu;SUN Renjie;XIONG Lili~

2022/11676 ~ Complete ~54:PASSENGER COUNTING SYSTEM FOR PUBLIC TRANSPORT  
~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR,  
BIBWEWADI, PUNE, India ~72: KORADE, Prajwal;KORDE, Atharva;KORPADE, Shruti;KOTHEKAR,  
Piyush;KOTWAL, Nagnath;MAHAJAN, Chandrashekhar~

2022/11688 ~ Complete ~54:REPEAT DOSING OF HYPOIMMUNOGENIC CELLS ~71:SANA  
BIOTECHNOLOGY, INC., 188 East Blaine Street, Suite 400, Seattle, Washington, 98102, United States of  
America ~72: SONJA SCHREPFER~ 33:US ~31:63/016,190 ~32:27/04/2020;33:US ~31:63/052,360  
~32:15/07/2020

2022/11692 ~ Complete ~54:DLL3-TARGETING MULTISPECIFIC ANTIGEN-BINDING MOLECULES AND  
USES THEREOF ~71:Chugai Seiyaku Kabushiki Kaisha, 5-1, Ukima 5-chome, Kita-ku, TOKYO 1158543,  
JAPAN, Japan ~72: FENG, Shu;HO, Shu Wen Samantha;IGAWA, Tomoyuki;NAOI, Sotaro~ 33:JP ~31:2020-  
062326 ~32:31/03/2020

2022/11696 ~ Complete ~54:COMPOUNDS USEFUL FOR INHIBITING RET KINASE ~71:Eli Lilly and Company,  
Lilly Corporate Center, INDIANAPOLIS 46285, IN, USA, United States of America ~72: ANDERSON, Erin  
D.;ANDREWS, Steven W.;CONDROSKI, Kevin R.;IRVIN, Thomas C.;KOLAKOWSKI, Gabrielle R.;KUMAR,  
Manoj;MCFADDIN, Elizabeth A.;MCKENNEY, Megan L.;MUNCHHOF, Michael J.;WELCH, Michael B.~ 33:US  
~31:63/015,933 ~32:27/04/2020

2022/11701 ~ Complete ~54:DEFECTIVE INTERFERING VIRAL GENOMES ~71:Institut Pasteur, 25-28, rue du  
Docteur Roux, France ~72: BARBA-SPAETH, Giovanna;BEAUCOURT, Stéphanie;BERNHAEUEROVA,  
Veronika;BLANC, Hervé;LEVI, Laura;MEYER, Björn;PARDIGON, Nathalie;PIEPLU, Tanguy;REZELJ,  
Veronica;SALEH, Maria-Carla;SHENGJULER, Djoshkun;VALLET, Thomas;VIGNUZZI, Marco~ 33:US  
~31:63/000,998 ~32:27/03/2020

2022/11652 ~ Provisional ~54:SELF-LEVELING DEVICE ~71:VAN VUUREN, Marius, 48 Kowi Street,  
Brackendowns, South Africa ~72: VAN VUUREN, Marius~

2022/11653 ~ Provisional ~54:BACTERIAL COMPOSITION AND METHOD FOR SUBSTRATE INOCULATION  
~71:Gerhard Vermaak, 49 Pony Lane, Sun Valley, South Africa ~72: Gerhard Vermaak~

2022/11657 ~ Complete ~54:A SOFT HANDOVER METHOD IN SATELLITE NETWORKS BASED ON THE  
UPLINK NON-ORTHOGONAL MULTIPLE ACCESS (NOMA) IN SATELLITE-GROUND LINKS ~71:Sichuan  
University of Science & Engineering, No.1, Baita Road, Sanjiang New District, Yibin City, Sichuan Province,  
People's Republic of China ~72: Li Yitao~

2022/11675 ~ Complete ~54:SYSTEM FOR DATA TRANSMISSION USING LI-FI TECHNOLOGY  
~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR,  
BIBWEWADI, PUNE, India ~72: JOSHI, Anita S.;JOSHI, Archit A.;KOTHAWADE, Archit V.;KULKARNI, Apoorva  
A.;MUNDHE, Apoorva R.;TYAGI, Arjun J.~

2022/11682 ~ Complete ~54:DIAGNOSIS OF RESPIRATORY DISEASES USING ANALYSIS OF EXHALED  
BREATH AND AEROSOLS ~71:ZETEO TECH, INC., 6935 WARFIELD AVE., SYKESVILLE, MD 21784, USA,  
United States of America ~72: BRYDEN, Wayne, A;CHEN, Dapeng;MCLOUGHLIN, Michael~ 33:US  
~31:63/005,179 ~32:03/04/2020;33:US ~31:63/010,029 ~32:14/04/2020;33:US ~31:63/069,029  
~32:22/08/2020

2022/11683 ~ Complete ~54:DRIVE ELEMENT ~71:BONGARTZ, Nicole, JAHNSTRASSE 101, 41464 NEUSS,  
GERMANY, Germany ~72: BONGARTZ, Nicole~ 33:DE ~31:10 2020 110 450.2 ~32:16/04/2020

2022/11684 ~ Complete ~54:INSULATING HOLDER AND METHOD FOR TRANSPORTING BEVERAGES  
~71:JENSEN, Eugene, 14 BURGER STREET, WELLINGTON 7654, SOUTH AFRICA, South Africa;PEEK,  
Johannes, Samuel, PORTION 2, MOUNTAIN REST, PAARL 7620, SOUTH AFRICA, South Africa ~72: JENSEN,  
Eugene;PEEK, Johannes, Samuel~ 33:ZA ~31:2020/02602 ~32:11/05/2020

2022/11686 ~ Complete ~54:METHOD AND INSPECTION DEVICE FOR OPTICALLY INSPECTING A  
SURFACE ~71:ISRA VISION GMBH, Industriestra&#223;e 14, 64297 Darmstadt, Germany ~72: KOICHI  
HARADA;STEFAN LEUTE~ 33:DE ~31:10 2020 109 945.2 ~32:09/04/2020

2022/11689 ~ Complete ~54:METHOD FOR CONTROLLING POWERTRAIN, AND POWERTRAIN  
~71:NORMET OY, Ahmolantie 6, Iisalmi, FI-74510, Finland ~72: SAMU KUKKONEN~ 33:FI ~31:20205514  
~32:20/05/2020

2022/11693 ~ Complete ~54:CARTRIDGE WITH NICOTINE ~71:McNeil AB, Norrbroplatsen 2, HELSINGBORG  
25109, SWEDEN, Sweden ~72: TASSELLI, Corrado~ 33:SE ~31:2050337-1 ~32:27/03/2020

2022/11697 ~ Complete ~54:COMPOSITIONS AND METHODS FOR DIFFERENTIAL RELEASE OF 1-  
METHYLCYCLOPROPENE ~71:Verdant Technologies, LLC, 1789 Buerkle Circle, ST. PAUL 55110, MN, USA,  
United States of America ~72: KEUTE, Joseph S.;LUNDGREN, Amanda;SARAGENO, Jr., Joseph Frank;WOOD,  
Willard E.~ 33:US ~31:16/859,399 ~32:27/04/2020

- APPLIED ON 2022/10/27 -

2022/11718 ~ Complete ~54:A PET X-RAY FILM RECOGNITION SYSTEM AND ITS METHOD BASED ON  
ARTIFICIAL INTELLIGENCE ~71:Jiaxing Vocational Technical College, No.547, Tongxiang Avenue, Nanhu  
District, Jiaxing City, Zhejiang Province, 314001, People's Republic of China ~72: Jianping Lan;Kun Ma;Mingyu  
Wu~ 33:CN ~31:202211163049.X ~32:23/09/2022

2022/11727 ~ Complete ~54:A METHOD FOR SOCIAL NETWORK ANALYSIS TO QUANTIFY THE LINK  
ANALYSIS IN SOCIAL NETWORK ~71:Dr.ROHINI ARUNACHALAM, Associate Professor, Computer Science  
and Engineering, ANIL NEERUKONDA INSTITUTE OF TECHNOLOGY & SCIENCES, VISAKHAPATNAM,  
India;Dr.SANGEETA VISWANADHAM, Professor, Computer Science and Engineering, ANIL NEERUKONDA  
INSTITUTE OF TECHNOLOGY & SCIENCES, VISAKHAPATNAM, India;KRISHNA BHIMA A VARAPU,  
Assistant Professor, Computer Science and Engineering, ANIL NEERUKONDA INSTITUTE OF TECHNOLOGY  
& SCIENCES, VISAKHAPATNAM, India;KUMARI GORLE, Assistant Professor, Computer Science and  
Engineering, VIGNAN'S INSTITUTE OF INFORMATION TECHNOLOGY, VISAKHAPATNAM, India;Mariammal  
Gopal, Assistant professor, Department of Computer science and engineering, PSNA College of Engineering and  
Technology, Dindigul, India;Preeti Nutipalli, Assistant Professor, Computer Science and Engineering, ANIL  
NEERUKONDA INSTITUTE OF TECHNOLOGY & SCIENCES, VISAKHAPATNAM, India;Ravva Ravi,  
Assistant Professor, Department of Information & Tech, Maharaj Vijayaram Gajapathi Raj, College of  
Engineering, India;SURYAKALA ESWARI GAVIREDDY, Assistant Professor, Computer Science and  
Engineering, ANIL NEERUKONDA INSTITUTE OF TECHNOLOGY & SCIENCES, VISAKHAPATNAM,  
India;Sreelahari Vallamsetla, Assistant Professor, Computer Science and Engineering, ANIL NEERUKONDA  
INSTITUTE OF TECHNOLOGY & SCIENCES, VISAKHAPATNAM, India;Srilatha Yelamati, Assistant  
Professor, Computer Science and Engineering, Vignan's Institute Of Information Technology,  
India;YARRAGUNTALA JAYALAKSHMI, Assistant Professor, Computer Science and Engineering, VIGNAN'S  
INSTITUTE OF INFORMATION TECHNOLOGY, VISAKHAPATNAM, India ~72: Dr.ROHINI  
ARUNACHALAM;Dr.SANGEETA VISWANADHAM;KRISHNA BHIMA A VARAPU;KUMARI GORLE;Mariammal  
Gopal;Preeti Nutipalli;Ravva Ravi;SURYAKALA ESWARI GAVIREDDY;Sreelahari Vallamsetla;Srilatha  
Yelamati;YARRAGUNTALA JAYALAKSHMI~

2022/11732 ~ Complete ~54:IMPLEMENT GROUND ENGAGING TIP ASSEMBLY HAVING TIP WITH TAPERED RETENTION CHANNEL ~71:CATERPILLAR INC., 100 N.E. Adams Street, Peoria, Illinois, 61629-9510, United States of America ~72: DOUGLAS SERRURIER;ERIC SINN;JASON JURA;MIHAI MIRCEA BALAN~ 33:US ~31:62/434,795 ~32:15/12/2016;33:US ~31:15/782,889 ~32:13/10/2017

2022/11739 ~ Complete ~54:ONE-COMPONENT POWDER COATING COMPOSITION AND SUBSTRATE COATED WITH SUCH POWDER COATING COMPOSITION ~71:Akzo Nobel Coatings International B.V., Christian Neefestraat 2, AMSTERDAM 1077 WW, THE NETHERLANDS, Netherlands ~72: GONZALEZ ALVAREZ, Maria Jose;KITTLE, Kevin Jeffrey~ 33:EP ~31:20177987.3 ~32:03/06/2020

2022/11744 ~ Complete ~54:COMPOUNDS AND METHODS TARGETING INTERLEUKIN-34 ~71:Eli Lilly and Company, Lilly Corporate Center, INDIANAPOLIS 46285, IN, USA, United States of America ~72: CHEDID, Marcio;OBUNGU, Victor H.;SKORA, Andrew Dixon;YE, Ming~ 33:US ~31:63/017,748 ~32:30/04/2020

2022/11713 ~ Complete ~54:AN EARLY WARNING MODELING METHOD BASED ON AUTOMATIC SCHEDULING OF CPU AND GPU COMPUTING RESOURCES IN SMART POWER PLANTS ~71:Jiaxing Vocational Technical College, No.547, Tongxiang Avenue, Nanhu District, Jiaxing City, Zhejiang Province, 314001, People's Republic of China ~72: Houjun Zhang;Kun Ma;Lingyu Xu;Mingyu Wu;Xiaoping Shen~ 33:CN ~31:202211118158.X ~32:15/09/2022

2022/11721 ~ Complete ~54:DEVICE FOR CLEANING MANURE IN CATTLE FARM ~71:Gansu Institute of Animal and Veterinary Science, 150 Middle Kongtong Road, Pingliang City, Gansu Province, People's Republic of China ~72: Dong He;Gu Lingrong;Guo Hailong;He Maochang;Sang Guojun;Yang Junxiang~

2022/11726 ~ Complete ~54:STORAGE METHOD FOR CONTROLLING BROWNING OF BUCKWHEAT RICE ~71:Shanxi Institute for Functional Food,Shanxi Agricultural University, 79 Longcheng Street, Taiyuan City, Shanxi Province, People's Republic of China ~72: CHENG Zhe;GUO Hong;HU Junjun;LI Hongmei;LI Min;LI Qi;LI Yunlong;ZHANG Qianfang~

2022/11731 ~ Complete ~54:BACKWARD-COMPATIBLE INTEGRATION OF HARMONIC TRANSPOSER FOR HIGH FREQUENCY RECONSTRUCTION OF AUDIO SIGNALS ~71:DOLBY INTERNATIONAL AB, Apollo Building, 3E Herikerbergweg 1-35, 1101 CN, Amersterdam Zuidoost, Netherlands ~72: HEIKO PURNHAGEN;LARS VILLEMOES;PER EKSTRAND~ 33:US ~31:62/475,619 ~32:23/03/2017

2022/11738 ~ Complete ~54:HIGH-THROUGHPUT LABEL-FREE ENZYMATIC BIOASSAYS USING AUTOMATED DESI-MS ~71:Purdue Research Foundation, 1801 Newman Road, WEST LAFAYETTE 47906, IN, USA, United States of America ~72: COOKS, Robert Graham;HOLDEN, Dylan T.;MORATO, Nicolas M.~ 33:US ~31:63/022,715 ~32:11/05/2020

2022/11746 ~ Complete ~54:HAND-WASHING STATION ~71:LIXIL CORPORATION, 2-1-1 Ojima, Koto-ku, Tokyo, 136-8535, Japan ~72: DAIGO ISHIYAMA~

2022/11750 ~ Complete ~54:AN EMERGENCY DISCHARGE CONTROL METHOD FOR AN INTERNAL COMBUSTION LOCOMOTIVE WITH INTEGRATED MAIN AND AUXILIARY STRUCTURE ~71:CRRC DALIAN CO., LTD., No. 51, Zhongchang Street, Shahekou District, Dalian, Liaoning, 116022, People's Republic of China ~72: CHAOLIN XU;LEI GAO;YANG SONG;ZHAOYU LI;ZHIQIANG WANG;ZHONGWEI LIU~ 33:CN ~31:202111404569.0 ~32:24/11/2021

2022/11710 ~ Provisional ~54:CHICKEN COOP TRAILER ARRANGEMENT ~71:SG ENGINEERING SOLUTIONS (PTY) LTD., 663 Van Gogh Crescent, MORELETA PARK, Pretoria 0044, Gauteng, SOUTH AFRICA, South Africa ~72: CASTLE, Shaun Peter;KHAN, Ilyas Hassan;ROBINSON, Gavin Stuart~

2022/11716 ~ Complete ~54:COMPOSITION AND METHOD FOR IMPROVING FERTILIZATION SUCCESS RATE OF ARTIFICIAL HYBRIDIZATION OF POLYGONATUM, AND USE THEREOF ~71:Guizhou Normal University, Huaxi University Town, Gui'an New District, Guiyang City, Guizhou Province, 550025, People's Republic of China;Guizhou Wuying Agricultural Technology Development Co., Ltd., No. 24-2, No. 2 Villager Group, Guoyuan Village, Majia Town, Baiyun District, Guiyang City, Guizhou Province, 550000, People's Republic of China ~72: GONG, Jiyi;LI, Fei;LI, Yuke;LIU, Jie;LONG, Xinji;TANG, Jiafu;YI, Yin;ZHANG, Yubin~ 33:CN ~31:202210755586.7 ~32:29/06/2022

2022/11723 ~ Complete ~54:HARMLESS FERMENTATION APPARATUS FOR PREPARING FERTILIZER FROM LIVESTOCK AND POULTRY WASTE ~71:Gansu Institute of Animal and Veterinary Science, 150 Middle Kongtong Road, Pingliang City, Gansu Province, People's Republic of China ~72: Dong He;Gu Lingrong;Guo Hailong;He Maochang;Sang Guojun;Yang Junxiang~

2022/11758 ~ Complete ~54:AN ALARM DEVICE ~71:AM Technologies CC, P/O Box 19044, South Africa ~72: Johannes Daniel Petrus Wolfaardt van Vuuren~ 33:ZA ~31:2022/09408 ~32:23/08/2022

2022/11707 ~ Provisional ~54:MULTI-LAYERED BIODEGRADABLE POLYMER NANOCOMPOSITE-BASED FILM ~71:COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH, Meiring Naude Road Brummeria, South Africa ~72: BANDYOPADHYAY, Jayita;BOTLHOKO, Orebotse Joseph;LEKALAKALA, Rakgoshi;MEKOA, Raphaahle;RAY, Suprakas Sinha~

2022/11714 ~ Complete ~54:NOZZLE FOR LASER CUTTING AND LASER PROCESSING DEVICE ~71:Jinan Senfeng Laser Technology Co.,Ltd, No.2016, Feiyue Avenue, Gaoxin Zone, Jinan City, Shandong Province, People's Republic of China;Shandong Xinguang Photoelectric Technology Co., Ltd, No.2016, Feiyue Avenue, Gaoxin Zone, Jinan City, Shandong Province, People's Republic of China ~72: LI Rongchang;LI Yang;LIU Peng;WANG Cuiping;WANG Huilai;XING Zhenhong~

2022/11720 ~ Complete ~54:NUTRITIONAL FERTILIZER FOR MILLET CULTIVATION ~71:High Latitude Crops Institute to Shanxi Academy, Shanxi Agricultural University, No.18 Yingbin East Road, Datong City, Shanxi Province, People's Republic of China ~72: GUO Ruifeng;REN Guangbing;REN Yuemei;YANG Zhong;ZHANG Shou;ZHU Wenjuan~

2022/11725 ~ Complete ~54:AUTOMATIC MONITORING AND EARLY WARNING SYSTEM FOR MINE GEOLOGICAL ENVIRONMENT DISASTERS ~71:Anhui University of Science and Technology, No.168 Taifeng Road, Huainan City, Anhui Province, 232001, People's Republic of China ~72: YU Xuexiang;ZHU Mingfei~

2022/11730 ~ Complete ~54:PROCESS FOR MANUFACTURING BANANA FIBRE ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, India ~72: LAKHKAR, Anish P.;LAKHOTIA, Bhagyesh J.;LAMBAT, Harsh D.;LAMBE, Mansi S.;LANGADE, Niranjana R.;MAHAJAN, Chandrashekhar~

2022/11734 ~ Complete ~54:INTELLIGENT DISINFECTION ROBOT FOR PM2.5 MICROBIOLOGICAL AEROSOL ~71:SHANDONG NORMAL UNIVERSITY, No. 88, Wenhua East Road, Lixia District, Jinan City, People's Republic of China ~72: Guanliu YU;Guiwen YANG;Hua LI;Lei CHEN;Zhicheng SONG~

2022/11737 ~ Complete ~54:DOSAGE REGIMEN FOR THE TREATMENT OF CANCER ~71:AstraZeneca AB, S-161 85, SWEDEN, Sweden ~72: DE ALMEIDA, Camila;GANGL, Eric Todd;MORENTIN GUTIERREZ, Pablo~ 33:US ~31:63/014,914 ~32:24/04/2020

2022/11747 ~ Complete ~54:SUBSTITUTED TOLYL FUNGICIDES AND THEIR MIXTURES ~71:FMC CORPORATION, 2929 Walnut Street, Philadelphia, Pennsylvania, 19104, United States of America ~72:

ANDREW EDMUND TAGGI;BYRON VEGA-JIMENEZ;JAMES FRANCIS BEREZNAK;SRINIVASA RAO UPPALAPATI;STEPHEN P BOLGUNAS~ 33:US ~31:63/020,728 ~32:06/05/2020

2022/11749 ~ Complete ~54:TWO-COMPONENT COMPOSITION FOR FORMING AN INJECTABLE OR PUMPABLE ORGANO-MINERAL MATERIAL, AND ASSOCIATED SEALING METHODS AND USES ~71:WEBER MINING & TUNNELLING, 94 avenue de la Paix, 57520 Rouhling, France ~72: DIDIER KOELLSCH;FRANK WEBER~ 33:FR ~31:FR2004522 ~32:07/05/2020

2022/11711 ~ Provisional ~54:A HELMET ~71:QUINLAN, Stephen John, No 5 Eyton Terrace, 28 Eyton Road, South Africa ~72: QUINLAN, Stephen John~

2022/11719 ~ Complete ~54:CONCRETE COLUMN GEOPOLYMER CONCRETE REINFORCEMENT DEVICE ~71:Huzhou Vocational and Technical College (Huzhou Radio and Television University) (Huzhou Community University), No. 299, Xuefu Road, Wuxing District, Huzhou City, Zhejiang Province, People's Republic of China ~72: BAO Yibei;HUANG Kun;WEI Hai;XIE Enpu;ZHANG Xianjiang~

2022/11724 ~ Complete ~54:RECYCLING TREATMENT APPARATUS FOR LIVESTOCK AND POULTRY WASTE AND USAGE METHOD THEREFOR ~71:Gansu Institute of Animal and Veterinary Science, 150 Middle Kongtong Road, Pingliang City, Gansu Province, People's Republic of China ~72: Dong He;Gu Lingrong;Guo Hailong;He Maochang;Sang Guojun;Yang Junxiang~

2022/11729 ~ Complete ~54:INTELLIGENT LIQUID FEEDING SYSTEM FOR PIG BREEDING ~71:ANHUI SCIENCE AND TECHNOLOGY UNIVERSITY, NO. 9 DONGHUA ROAD, People's Republic of China;FENGYANG XIAOGANG MINYI LAND SHARES COOPERATIVES, NO. 33 XIAOYIN VILLAGERS GROUP, People's Republic of China ~72: DU, Min;JI, Xu;JIN, Erhui;LIU, Xiaodan;WANG, Yue;YIN, Yurong;ZHANG, Feng~

2022/11733 ~ Complete ~54:OUTDOOR PROTECTION ELECTRIC SHOCK BACKPACK ~71:CHINA UNIVERSITY OF MINING AND TECHNOLOGY, No. 1 University Road, Xuzhou City, Jiangsu Province, 221116, People's Republic of China ~72: LILI LIU;XINWEI DONG~ 33:CN ~31:202111256123.8 ~32:27/10/2021

2022/11736 ~ Complete ~54:SYSTEMS AND PROCESSES FOR PEER-TO-PEER FINANCIAL INSTRUMENT TRANSACTIONS ~71:GABRIENNE TRADING SYSTEMS (PTY) LIMITED., 230, 1 Wedgewood Link, Bryanston, South Africa ~72: MAHON, Brett, Lyle;VAN NIEKERK, Tyrone~

2022/11748 ~ Complete ~54:FERMENTATIVE PRODUCTION OF B-KETOADIPATE FROM GASEOUS SUBSTRATES ~71:LANZATECH, INC., 8045 Lamon Avenue, Suite 400, Skokie, Illinois, 60077, United States of America ~72: JAMES DANIELL;MICHAEL KOEPKE;RASMUS. OVERGAARD JENSEN~ 33:US ~31:63/017,408 ~32:29/04/2020

2022/11708 ~ Provisional ~54:PROCESS FOR THE DECOMPOSITION OF A RARE EARTH-BEARING MINERAL ~71:PENSANA PLC, CN 12206525, Rex House, 4 Regent St, United Kingdom;THE WARB TRUST (No.1 TRUST 13337/99), 4 Tambotie Street, Homelake, South Africa ~72: BUISMAN, Reindert;GEORGE, Timothy Ralph~

2022/11715 ~ Complete ~54:METHOD FOR COLLECTING DROPLETS FOR DRUG APPLICATION BY UNMANNED AERIAL VEHICLE ~71:Huangshan University, No. 39, Xihai Road, Tunxi District, Huangshan City, Anhui Province, People's Republic of China ~72: CHENG Donghua;FANG Zheyi;LI Quan;SU Shengrong;WAN Zhibing;YE Shuangfeng;ZHANG Shengwei;ZHANG Ye;ZHENG Lei~ 33:CN ~31:202111583243.9 ~32:22/12/2021

2022/11740 ~ Complete ~54:SYNTHESIS OF VINYLIC PROTECTED ALCOHOL INTERMEDIATES ~71:Amgen Inc., One Amgen Center Drive, THOUSAND OAKS 91320-1799, CA, USA, United States of America ~72: HUANG, Liang;SMITH, Austin G.~ 33:US ~31:63/020,862 ~32:06/05/2020

2022/11745 ~ Complete ~54:AN ELECTRIC FIELD OR ELECTRIC VOLTAGE DELIVERING ELECTRODE SYSTEM FOR THE TREATMENT OF INTERNAL ORGAN OEDEMA ~71:BERLIN HEALS GMBH, Knesebeckstra&#223;e 59-61, 10719, Berlin, Germany ~72: JOHANNES M&#220;LLER~ 33:EP ~31:20166881.1 ~32:30/03/2020;33:US ~31:63/001,780 ~32:30/03/2020

2022/11751 ~ Complete ~54:VARIANT PATHOGENICITY SCORING AND CLASSIFICATION AND USES THEREOF ~71:ILLUMINA, INC., 5200 Illumina Way, United States of America ~72: FARH, Kai-How;GAO, Hong;MCRAE, Jeremy Francis~ 33:US ~31:63/055,731 ~32:23/07/2020

2022/11742 ~ Complete ~54:SYNTHESIS OF VINYL CYCLOBUTYL INTERMEDIATES ~71:Amgen Inc., One Amgen Center Drive, THOUSAND OAKS 91320-1799, CA, USA, United States of America ~72: BAUCOM, Kyle D.;CORBETT, Michael T.;CUI, Sheng;DORNAN, Peter K.;LANGILLE, Neil Fred;PROFETA, Roberto;ROOSEN, Philipp C.;SMITH, Austin G.;ST-PIERRE, Gabrielle~ 33:US ~31:63/020,877 ~32:06/05/2020

2022/11752 ~ Complete ~54:MAGNETIC CARBON NANOMATERIALS AND METHODS OF MAKING SAME ~71:C2CNT LLC, 625 W Venice Ave, United States of America ~72: LICHT, Stuart~ 33:US ~31:63/022,284 ~32:08/05/2020

2022/11717 ~ Complete ~54:FERMENTED AND FREEZE-DRIED CYNANCHUM BUNGEI DECNE SLICES WITH ANTIOXIDANT ACTIVITY AND SURFACE FERMENTATION METHOD THEREOF ~71:Jiangsu Vocational College of Medicine, No. 283, Jiefang South Road, Yancheng City, Jiangsu Province, 224005, People's Republic of China;YANCHENG TEACHERS UNIVERSITY, No. 2, Xiwang Avenue South Road, Development Zone, Yancheng City, Jiangsu Province, 224007, People's Republic of China;Yancheng Tinghu District Dezerui Biotechnology Co., Ltd., Room 407 (6), Laboratory Building 72, Tongyu Campus, Yancheng Teachers University, No. 50, Kaifang Avenue Middle Road, Tinghu District, Yancheng City, Jiangsu Province, 224002, People's Republic of China ~72: BU, Jing;HONG, Jian;KANG, Yijun;SHI, Yun;ZHANG, Yanzhou;ZHU, Dewei~ 33:CN ~31:202210242104.8 ~32:11/03/2022

2022/11722 ~ Complete ~54:APPLICATION OF ALTAY SHEEP TAIL OIL IN PREPARING HALAL LIFE-NOURISHING HOTPOT CONDIMENT ~71:Livestock Workstation in Altay Region, No. 22, Gongyuan Road, Jinshan Road Street, Altay City, Xinjiang, 836500, People's Republic of China ~72: AHEMAITIBAI, Tengnengsi;HEIZHATIDUOLA, Naziguli;KAMAIER, Gulijayinati;REZIBIKE, Nu'erguli;WANG, Yue;WU, Hairong~ 33:CN ~31:202210931589.1 ~32:04/08/2022

2022/11728 ~ Complete ~54:DIRECT INTERFACE SYSTEM FOR CONNECTING AGRICULTURAL PRODUCERS AND CUSTOMERS ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, India ~72: GHADKAR, Premanand;LADDHA, Krishna;LAGAD, Prathamesh;LAGDIVE, Shivam;LAHARE, Shreyash;LAKHANI, Khushi;MAHAJAN, Chandrashekhar;POL, Madhumati~

2022/11709 ~ Provisional ~54:MINE SUPPORT BLOCK ~71:Mining Product Developments (Pty)Ltd, 10 Vegkop Street, Noordheuwel, South Africa ~72: Frans Roelof Petrus Pienaar / Mark Howell / William John Frederick Coote / Mphuru Abinar Zebulon Mashabela~

2022/11741 ~ Complete ~54:SYNTHESIS OF VINYLIC ALCOHOL INTERMEDIATES ~71:Amgen Inc., One Amgen Center Drive, THOUSAND OAKS 91320-1799, CA, USA, United States of America ~72: FARRELL, Robert P.;TEDROW, Jason S.~ 33:US ~31:63/020,888 ~32:06/05/2020



2022/11743 ~ Complete ~54:ALUMINIUM AND ZIRCONIUM-BASED MIXED OXIDE ~71:Rhodia Operations, 9 rue des Cuirassiers, Immeuble Silex 2 Solvay, LYON 69003, FRANCE, France ~72: NISHIMURA, Kaoru;OHTAKE, Naotaka;SASAKI, Toshihiro~ 33:EP ~31:20315276.4 ~32:28/05/2020

- APPLIED ON 2022/10/28 -

2022/11753 ~ Provisional ~54:REVISED ORIENTATION FOR SHRINKWRAP PACKAGING ~71:Martin Hempel, Endeavour Farm, South Africa ~72: Martin Hempel~

2022/11757 ~ Provisional ~54:REGENERATOR ~71:Bruce Mongezi Faku, X1680 Wessie Street Jouberton Extension 2, South Africa ~72: Bruce Mongezi Faku~

2022/11765 ~ Complete ~54:A RICE SEEDLING RAISING SUBSTRATE WITH AURICULARIA AURICULA FUNGUS RESIDUE AS THE MAIN RAW MATERIAL AND ITS PREPARATION METHOD ~71:Yanbian University, No. 977, Gongyuan Road, Yanji City, Jilin Province, People's Republic of China ~72: Fu Minjie~

2022/11782 ~ Complete ~54:ENHANCEMENT OF PRODUCTIVITY IN C3 PLANTS ~71:Oxford University Innovation Limited, Buxton Court, 3 West Way, Botley, OXFORD OX2 0JB, OXFORDSHIRE, UNITED KINGDOM, United Kingdom ~72: HENDRON, Ross;KELLY, Steven;LOPEZ-PEREZ, Enrique~ 33:GB ~31:2007526.3 ~32:20/05/2020

2022/11796 ~ Complete ~54:MODIFIED BACTERIAL STRAINS FOR IMPROVED FIXATION OF NITROGEN ~71:PIVOT BIO, INC., 2910 Seventh Street, United States of America ~72: BLOCH, Sarah;ESKIYENENTURK, Bilge Ozaydin;SHAH, Neal;TAMSIR, Alvin;TEMME, Karsten~ 33:US ~31:63/019,247 ~32:01/05/2020;33:US ~31:PCT/US2020/031201 ~32:01/05/2020;33:US ~31:PCT/US2021/013120 ~32:12/01/2021

2022/11800 ~ Complete ~54:PROCESS FOR THE PREPARATION OF A FLAVOURING ~71:UNILEVER IP HOLDINGS B.V., Weena 455, 3013, AL Rotterdam, Netherlands ~72: JEAN HYPOLITES KOEK~ 33:EP ~31:20172187.5 ~32:29/04/2020

2022/11755 ~ Provisional ~54:SYSTEM FOR DATA PERUSAL ~71:Renier De Jager, 2 Strydom Street, South Africa ~72: Renier De Jager~

2022/11760 ~ Complete ~54:HIGH-DENSITY PLANT CULTIVATION SYSTEMS AND RELATED APPARATUSES AND METHODS ~71:LYSAA HOLDING AS, Kristianiasvingen 42, Oslo, Norway ~72: LYSAA, Per Aage~ 33:US ~31:62/625,014 ~32:01/02/2018

2022/11764 ~ Complete ~54:QUASI-STATIC ANTI-PUNCTURE PERFORMANCE TESTING DEVICE AND METHOD WITH ADJUSTABLE PENETRATION ANGLE ~71:XI'AN POLYTECHNIC UNIVERSITY, No. 19, Jinhua South Road, Beilin District, Xi'an, Shaanxi, People's Republic of China ~72: CHEN Meiyu;CUI Zhongxue;SUN Runjun;WANG Qiushi;WANG Shan;ZHANG Xiaotong~

2022/11770 ~ Complete ~54:A METHOD OF PROMOTING PLANT RESTORATION IN LEAD-ZINC CONTAMINATED SOIL WITH A COMPOUND MODIFIER ~71:CENTRAL SOUTH UNIVERSITY OF FORESTRY & TECHNOLOGY, NO. 498, SHAOSHAN SOUTH ROAD, People's Republic of China ~72: CHEN, Yonghua;LUO, Yiting;MU, Yue;OU, Qiqi;SU, Rongkui~

2022/11775 ~ Complete ~54:A NON-UNIFORM ENHANCED FINNED THERMOELECTRIC GENERATOR BASED ON SEMICONDUCTOR CHARACTERISTICS OF THERMOELECTRIC MATERIAL ~71:TIANJIN UNIVERSITY, No. 92 Weijin Road, Nankai District, People's Republic of China;TIANJIN UNIVERSITY OF COMMERCE, No. 409 Guangrong Road, Hongqiao District, People's Republic of China ~72: GUO, Rui;HE, Wei;LI, Jiamei;LI, Shenming;LIU, Shengchun;YANG, Yurong;ZHU, Yu~

2022/11783 ~ Complete ~54:SYNTHESIS OF HETEROCYCLIC COMPOUNDS ~71:Plexxikon Inc., 211 Mount Airy Road, BASKING RIDGE 07920, NJ, USA, United States of America ~72: LIN, Jack;WALTERS, Jason~ 33:US ~31:63/017,587 ~32:29/04/2020

2022/11790 ~ Complete ~54:VEHICLE SAFETY FEATURE IDENTIFICATION AND CALIBRATION ~71:CalPro ADAS Solutions, LLC, 17920 Shavers Lane, WAYZATA 55391, MN, USA, United States of America ~72: BALAN, Todd-Michael~ 33:US ~31:63/002,889 ~32:31/03/2020;33:US ~31:17/249,025 ~32:17/02/2021

2022/11802 ~ Provisional ~54:HOIST ACCESS AND SELF RESCUE ~71:MARK MANNHEIM, 30 Strelitzia Street, Kidd&#39;s Beach, South Africa ~72: MARK MANNHEIM ~

2022/11767 ~ Complete ~54:ALTAY BIG-TAILED SHEEP BONE CALCIUM TABLET CANDY AND PREPARATION METHOD THEREOF ~71:Livestock Workstation in Altay Region, No. 22, Gongyuan Road, Jinshan Road Street, Altay City, Xinjiang, 836500, People's Republic of China ~72: BIYADI, Ayiguli;HEIZHATIDUOLA, Naziguli;KAMAIER, Adali;KAMAIER, Gulijiyinati;MAHEMUTI, Ye'erjiang;SONG, Fei;YESELIHAN, Wurenqiqige~ 33:CN ~31:202210931282.1 ~32:04/08/2022

2022/11778 ~ Complete ~54:COMTOOL COMMUNICATION SYSTEM ~71:PROZINDU, LLC, P.O. Box 7164, United States of America ~72: KAKAIRE, James Kirunda~ 33:US ~31:63/002,865 ~32:31/03/2020

2022/11786 ~ Complete ~54:3-AZABICYCLO(3.1.0)HEXANE DERIVATIVES HAVING KDM5 INHIBITORY ACTIVITY AND USE THEREOF ~71:Ono Pharmaceutical Co., Ltd., 1-5, Doshomachi 2-chome, Chuo-ku, OSAKA-SHI 541-8526, OSAKA, JAPAN, Japan ~72: ASADA, Masaki;INOYAMA, Daigo;KAKUUCHI, Akito;KONZE, Kyle;KRILOV, Goran;RUVINSKY, Anatoly;SVENSSON, Mats;TAKAHASHI, Hidenori;UMEMURA, Shuhei;ZHANG, Yan~ 33:IB ~31:2020/088925 ~32:07/05/2020

2022/11793 ~ Complete ~54:SURFACTANT PREPARATION PROCESS ~71:Croda International Plc, Cowick Hall, Snaith, GOOLE DN14 9AA, EAST YORKSHIRE, UNITED KINGDOM, United Kingdom;Enza Biotech AB, PO Box 124, LUND 221 00, SWEDEN, Sweden ~72: ANDERSSON, Maria;AXENSTRAND, Magdalena;BARCHAN, Nikolina;COLS, Maria Vilorja;SANDER, Johan;ULVENLUND, Stefan;WELLS, Christian~ 33:GB ~31:2009388.6 ~32:19/06/2020

2022/11798 ~ Complete ~54:MASKED IL-12 CYTOKINES AND THEIR CLEAVAGE PRODUCTS ~71:XILIO DEVELOPMENT, INC., 828 Winter Street, Waltham, Massachusetts, 02451, United States of America ~72: DHEERAJ SINGH TOMAR;HUAWEI QIU;KURT ALLEN JENKINS;MAGALI PEDERZOLI-RIBEIL;PARKER JOHNSON;RAPHAEL ROZENFELD;REBEKAH, KAY O&#39;DONNELL;UGUR ESKIOCAK~ 33:US ~31:63/003,842 ~32:01/04/2020;33:US ~31:63/118,579 ~32:25/11/2020;33:US ~31:63/127,893 ~32:18/12/2020

2022/11801 ~ Complete ~54:SYSTEMS AND METHODS FOR BLOCKING, CONFINING AND DECANTING SUSPENDED DUST PRESENT IN AN AREA ~71:QUANTUM MATRIX SPA, Tom&#225;s Moro 354 Las Condes, Santiago, Chile ~72: GUILLEMO SEBASTI&#193;N GOMEZ VERDEJO~

2022/11781 ~ Complete ~54:APPARATUS AND METHOD FOR DETERMINING A CHARACTERISTIC OF A MATERIAL ~71:Industrial Tomography Systems Ltd, First Floor - Suite 101, Sunlight House, 85 Quay Street, MANCHESTER M3 3JZ, UNITED KINGDOM, United Kingdom ~72: MACHIN, Tom;WEI, Kent~ 33:GB ~31:2004601.7 ~32:30/03/2020

2022/11789 ~ Complete ~54:ANTI-IGF-1 RECEPTOR HUMANIZED ANTIBODY ~71:Teijin Pharma Limited, 2-1, Kasumigaseki 3-chome, CHIYODA-KU 100-0013, TOKYO, JAPAN, Japan ~72: EGUCHI, Hiroshi;MATSUKAWA, Hiroaki;NAMIKI, Naoko;TANOKURA, Akira~ 33:JP ~31:2020-096344 ~32:02/06/2020

2022/11797 ~ Complete ~54:MASKED IL-2 CYTOKINES AND THEIR CLEAVAGE PRODUCTS ~71:XILIO DEVELOPMENT, INC., 828 Winter Street, Waltham, Massachusetts, 02451, United States of America ~72: DHEERAJ SINGH TOMAR;HUAWEI QIU;KURT ALLEN JENKINS;MAGALI PEDERZOLI-RIBEIL;PARKER JOHNSON;RAPHAEL ROZENFELD;REBEKAH, KAY O&#39;DONNELL;UGUR ESKIOCAK~ 33:US ~31:63/003,824 ~32:01/04/2020;33:US ~31:63/118,571 ~32:25/11/2020

2022/11754 ~ Provisional ~54:APPENDIX (1) TO PPA 2022/07929 ~71:Paul Steyn, 183 Hartebeesfontein, South Africa ~72: Paul Steyn~

2022/11759 ~ Complete ~54:HIGH-DENSITY PLANT CULTIVATION SYSTEMS AND RELATED APPARATUSES AND METHODS ~71:LYSAA HOLDING AS, Kristianiasvingen 42, Oslo, Norway ~72: LYSAA, Per Aage~ 33:US ~31:62/625,014 ~32:01/02/2018

2022/11766 ~ Complete ~54:CHINESE HERBAL MEDICINE FORTIFIED FEED FOR IMPROVING IMMUNITY AND MILK YIELD OF CATTLE AND SHEEP ~71:Agricultural Technology Promotion Center in Altay Region, Ili Kazakh Autonomous Prefecture, No. 54 Gongyuan Road, Altay City, Xinjiang, 836500, People's Republic of China ~72: JIANATI, Tasiken;LIU, Su;LIU, Yuling;MA, Wenjun;TANG, Yuqing;TUOLIBIEGEN, Muheiti;YAN, Li;ZHANG, Liang~ 33:CN ~31:202210935157.8 ~32:04/08/2022

2022/11776 ~ Complete ~54:MULTISOURCE MAIN-SUBSIDIARY ENTITY IDENTITY DISCRIMINATION AND DATA SELF-SUPPLEMENTATION PROCESSING METHOD ~71:HEBEI INSTITUTE OF SCIENCE AND TECHNOLOGY INFORMATION (HEBEI INSTITUTE OF SCIENCE AND TECHNOLOGY INNOVATION STRATEGY), No. 233, Qingyuan Street, People's Republic of China ~72: LI, Yinsheng;NIE, Yongchuan;REN, Yan;WANG, Hong;WU, Feng;WU, Pengjie;YANG, Yang;ZHANG, Chaozong~ 33:CN ~31:CN202210592302.7 ~32:27/05/2022

2022/11784 ~ Complete ~54:NITRIC OXIDE OR NITRIC OXIDE RELEASING COMPOSITIONS FOR USE IN TREATING SARS-COV AND SARS-COV-2 ~71:Thirty Respiratory Limited, 1 Red Place, LONDON W1K 6PL , UNITED KINGDOM, United Kingdom ~72: BOOTE, Nicholas David;MUNRO, Hugh Semple;POLL, Chris;WOOD, Christopher Barry~ 33:GB ~31:2005987.9 ~32:23/04/2020;33:GB ~31:2008288.9 ~32:02/06/2020

2022/11791 ~ Complete ~54:LERIGLITAZONE FOR TREATING LUNG INFLAMMATION AND INTERSTITIAL LUNG DISEASE ~71:Minoryx Therapeutics S.L., Av. Ernest Lluch 32, MATAR&#211; E-08302, BARCELONA, SPAIN, Spain ~72: L&#211;PEZ, Estefania Traver;PEDEMONTE, Marc Martinell;PIZCUETA, Maria Pilar;POLI, Sonia Maria;SAURA, Anna Vilalta;USEROS, Nuria Izquierdo~ 33:EP ~31:20382356.2 ~32:30/04/2020

2022/11756 ~ Provisional ~54:CONTROLLER FOR LOCKING MECHANISM ~71:CICCARELLI, Shawn, 13 Venus Road, Fisher Hill, South Africa;ENGELBREG, Jurie Hendrik Johannes, 3399 Coshwood Close, Amberfield Manor, South Africa ~72: CICCARELLI, Shawn~

2022/11761 ~ Complete ~54:TIANSHAN JIMEI REPAIRING AND NOURISHING FACIAL CREAM ~71:Agricultural Technology Promotion Center in Altay Region, Ili Kazakh Autonomous Prefecture, No. 54 Gongyuan Road, Altay City, Xinjiang, 836500, People's Republic of China ~72: CAO, Jianyun;JIANATI, Tasiken;JIAO, Bin;LI, Huan;LV, Xiaoxia;XIAO, Ronghua;YAN, Li~ 33:CN ~31:202210931293.X ~32:04/08/2022

2022/11763 ~ Complete ~54:POLYSACCHARIDE EXTRACT OF PLEUROTUS SAJOR-CAJU, PREPARATION METHOD AND APPLICATION THEREOF ~71:Jilin Agricultural University, No.2888, Xincheng Street, Nangan District, Changchun City, Jilin Province, 130118, People's Republic of China ~72: DAI Yingdi;LIU Mengdi;LIU Yang;SU Ling;WANG Qi~ 33:CN ~31:202211150847.9 ~32:21/09/2022

2022/11762 ~ Complete ~54:PLANT ACID FERTILIZER FOR CONTROLLING SALINE-ALKALI LAND  
~71:Xinjiang Yingshili Technology Co., Ltd., Room 1743, 17/F, Tower A, Shidai Square, Tunhe North Road,  
Changji City, Changji Hui Autonomous Prefecture, Xinjiang, 831100, People's Republic of China;Zhengzhou  
Shengrun Biomass Energy Chemical Research Institute, Room 901, Unit 2, Building 19, CBD Business Inner Ring  
Road, Zhengdong New District, Zhengzhou City, Henan Province, 450046, People's Republic of China ~72: GUO,  
Lanju;MA, Zhaofang;ZHAO, Shandong~

2022/11768 ~ Complete ~54:A LAWN BOWL ~71:COMFITPRO (PTY) LTD, 8 LINDSAY STREET, ROCKDALE,  
SYDNEY, 2216 NSW, AUSTRALIA, South Africa ~72: JACOBS, Walter;PAUL, Robin;WILLIAMS, Gregory~

2022/11771 ~ Complete ~54:A VEHICLE CLEANING ARRANGEMENT ~71:PRETORIUS, Deniel, 135B GREEN  
OLIVE ESTATE, CORONATION STREET, South Africa ~72: PRETORIUS, Deniel~

2022/11773 ~ Complete ~54:APPARATUS FOR CONTROLLING FLUID FLOW ~71:DEKA Products Limited  
Partnership, 340 Commercial Street, MANCHESTER 03101, NH, USA, United States of America ~72: CLARKE,  
Kaitlyn S.;JOHNSON, Matthew J.;KAMEN, Dean;KANE, Derek G.;KERWIN, John M.;LANGENFELD, Christopher  
C.;LANIGAN, Richard J.;MURPHY, Colin H.;PERET, Bob D.;SCHNELLINGER, Thomas S.;SLATE, Michael  
J.;TRACEY, Brian D.;YOO, Brian H.~ 33:IB ~31:2011/066588 ~32:21/12/2011;33:US ~31:13/333,574  
~32:21/12/2011;33:US ~31:61/578,649 ~32:21/12/2011;33:US ~31:61/578,658 ~32:21/12/2011;33:US  
~31:61/578,674 ~32:21/12/2011;33:US ~31:61/651,322 ~32:24/05/2012;33:US ~31:61/679,117  
~32:03/08/2012

2022/11779 ~ Complete ~54:METHOD FOR ADJUSTING VARIABLE-SECTION ADJUSTABLE LINING  
TROLLEY ~71:CHINA RAILWAY NO.5 ENGINEERING GROUP CO., LTD., No.23 Zaoshan Road, Yunyan  
District, Guiyang, Guizhou, 550003, People's Republic of China;CHINA RAILWAY WUJU GROUP NO. 4  
ENGINEERING CO., LTD., Wujiatang, Zhenjiang District, Shaoguan, 512031, People's Republic of China;THE  
ELECTRICAL ENGINEERING CO., LTD UNDER DREC NO.5 GROUP, No.475 West Xianjiahu Road, Yuelu  
District, Changsha, 410205, People's Republic of China ~72: Bin CHEN;Hao ZHOU;Hongguang ZHU;Songzhu  
ZHOU;Zhenwu LIU~ 33:CN ~31:202010245325.1 ~32:31/03/2020

2022/11787 ~ Complete ~54:METHOD OF IMPROVING GOLD RECOVERY IN A CYANIDE LEACHING  
CIRCUIT ~71:Solenis Technologies Cayman, L.P., M&#252;hlentalstrasse 38, SCHAFFHAUSEN 8200,  
SWITZERLAND, Switzerland ~72: BAKEEV, Kirill N.~ 33:US ~31:63/001,615 ~32:30/03/2020

2022/11794 ~ Complete ~54:COOLING SYSTEM AND WIND POWER GENERATOR SET ~71:XINJIANG  
GOLDWIND SCIENCE & TECHNOLOGY CO., LTD., No. 107 Shanghai Road, Economic &  
Technological Development Zone, People's Republic of China ~72: LI, Jinmeng;LIU, Junwei;WANG, Dinghui~  
33:CN ~31:202010516366.X ~32:09/06/2020

2022/11780 ~ Complete ~54:CLAUDIN-6 TARGETING MULTISPECIFIC ANTIGEN-BINDING MOLECULES AND  
USES THEREOF ~71:Chugai Seiyaku Kabushiki Kaisha, 5-1, Ukima 5-chome, Kita-ku, TOKYO 1158543,  
JAPAN, Japan ~72: ISHII, Shinya;KIMURA, Naoki;KODAMA, Tatsushi~ 33:JP ~31:2020-062881  
~32:31/03/2020;33:JP ~31:2020-073335 ~32:16/04/2020

2022/11788 ~ Complete ~54:AMIDE COMPOUNDS AND USES THEREOF ~71:Hutchison MediPharma Limited,  
Building 4, 720 Cailun Road, Pilot Free Trade Zone, SHANGHAI 201203, CHINA (P.R.C.), People's Republic of  
China ~72: SU, Wei-Guo;YANG, Haibin;ZHANG, Weihai~ 33:CN ~31:202010235798.3 ~32:30/03/2020

2022/11795 ~ Complete ~54:PERC CELL PREPARATION METHOD ~71:ZHEJIANG BEYONDSU PV CO., LTD.,  
No. 800 Zhenbei Road, Zhili Town Huzhou, People's Republic of China ~72: HE, Yifeng;LV, Wenhui;QIU,

Xiaoyong;TAN, Xinyu;WANG, Xingzhu;YAN, Wensheng;ZHAO, Qingguo~ 33:CN ~31:202011361940.5  
~32:27/11/2020

2022/11769 ~ Complete ~54:A REMEDIATION METHOD OF LEAD AND ZINC CONTAMINATED SOIL WITH  
INORGANIC MODIFIERS AND PLANTS ~71:CENTRAL SOUTH UNIVERSITY OF FORESTRY &  
TECHNOLOGY, NO. 498, SHAOSHAN SOUTH ROAD, People's Republic of China ~72: CHEN, Yonghua;LI,  
Jianfeng;LUO, Yiting;OU, Qiqi;SU, Rongkui~

2022/11772 ~ Complete ~54:BISULFITE-FREE, BASE-RESOLUTION IDENTIFICATION OF CYTOSINE  
MODIFICATIONS ~71:Ludwig Institute for Cancer Research Ltd., Stadelhoferstrasse 22, ZURICH 8001,  
SWITZERLAND, Switzerland ~72: LIU, Yibin;SONG, Chunxiao~ 33:US ~31:62/614,798 ~32:08/01/2018;33:US  
~31:62/660,523 ~32:20/04/2018;33:US ~31:62/771,409 ~32:26/11/2018

2022/11774 ~ Complete ~54:SYSTEM AND METHOD FOR MEASURING BENDING OF PHOTOVOLTAIC  
MODULE ~71:ZHEJIANG BEYONDSU PV CO., LTD., No. 800 Zhenbei Road, Zhili Town Huzhou, People's  
Republic of China ~72: DA Wei;GAO Yonggang;HE Yifeng;LIU Guilin;QIU Xiaoyong;WANG Xingzhu;YAO  
Chunmei;ZHAO Qingguo;ZHOU Haiquan~ 33:CN ~31:202111567613X ~32:21/12/2021

2022/11777 ~ Complete ~54:NOVEL COMPOUND [2-(DIMETHYLAMINO)-2-PHENYLBUTYL]-3,4,5-  
TRIMETHOXYBENZOATE 4-METHYL-2H-CHROMEN-2-ON-7-YL SULPHATE AND USE THEREOF ~71:LTD  
&quot;VALENTA-INTELLEKT&quot;; ul. Ryabinovaya, d.26, str. 10, k. 6-26, Russian Federation ~72: VLADYKIN,  
Aleksandr Lvovich~ 33:RU ~31:2020114906 ~32:27/04/2020

2022/11785 ~ Complete ~54:TERPENOPHENOLIC COMPOUNDS AND THEIR USE ~71:Alinova Biosciences  
Ltd, Preston Park House, South Road, BRIGHTON BN1 6SB, SUSSEX, UNITED KINGDOM, United  
Kingdom;Phytotherapeutix Ltd, Bretton House, Bell Meadow Business Park, Park Lane, PULFORD CH4 9EP,  
CHESTER, UNITED KINGDOM, United Kingdom ~72: GURUSANKAR, Ramamoorthy;HEAP, Charles R.;STOTT,  
Colin George~ 33:US ~31:63/003,270 ~32:31/03/2020

2022/11792 ~ Complete ~54:INTERNAL HYDROFORMING METHOD FOR MANUFACTURING HEAT PIPE  
WICKS ~71:Westinghouse Electric Company LLC, 1000 Westinghouse Drive, Suite 141, CRANBERRY  
TOWNSHIP 16066, PA, USA, United States of America ~72: BYERS, William A.;LOJEK III, John;SWARTZ,  
Matthew M.~ 33:US ~31:16/853,270 ~32:20/04/2020

2022/11799 ~ Complete ~54:MASKED IL-15 CYTOKINES AND THEIR CLEAVAGE PRODUCTS ~71:XILIO  
DEVELOPMENT, INC., 828 Winter Street, Waltham, Massachusetts, 02451, United States of America ~72:  
DHEERAJ SINGH TOMAR;HUAWEI QIU;KURT ALLEN JENKINS;MAGALI PEDERZOLI-RIBEIL;PARKER  
JOHNSON;RAPHAEL ROZENFELD;REBEKAH, KAY O&#39;DONNELL;UGUR ESKIOCAK~ 33:US  
~31:63/003,845 ~32:01/04/2020;33:US ~31:63/113,751 ~32:13/11/2020;33:US ~31:63/118,582  
~32:25/11/2020

- APPLIED ON 2022/10/31 -

2022/11823 ~ Complete ~54:SOLID PHARMACEUTICAL FORMS OF IRBESARTAN,  
HYDROCHLOROTHIAZIDE AND AMLODIPINE ~71:Win Medica Pharmaceutical S.A., 1-3 Oidipodos Street  
&#39; 33-35 Attiki Odos Turnoff, CHALANDRI 152 38, ATTICA, GREECE, Greece ~72: BAGOURAKIS,  
Georgios-Marios;KOSMIDIS, Marios~

2022/11824 ~ Complete ~54:AUTOMATIC SYSTEM AND METHOD FOR INJECTING A SUBSTANCE INTO AN  
ANIMAL ~71:TARGAN Inc., 350 East Six Forks Road, Raleigh 27609, NC, USA, United States of America ~72:  
KARIMPOUR, Ramin~ 33:US ~31:62/254,737 ~32:13/11/2015;33:US ~31:62/349,981 ~32:14/06/2016

2022/11828 ~ Complete ~54:INTELLIGENT FACE RECOGNITION SYSTEM USING DEEP RECURRENT NEURAL NETWORK ~71:Dr. Kanta Prasad Sharma, Assistant Professor, Department of Computer Engineering and Application, GLA University, 113 Kusum Vatika Phase 1, Mathura, India;Kshitij Joshi, B. Tech, Department of Computer Science and Engineering, 25 Balaji Township New VIP Road near Earth Icon 2, Vadodara, India;Mr. Priyadarshi, Assistant Professor, Computer Science and Engineering, Sanskriti University, Mathura, India;Pearl Miglani, B. Tech (Final Year), Department of Computer Science and Engineering, NIIT University, Neemrana, India;Pujan Soni, B. Tech, Department of Computer Science and Engineering, D9 Avinash Society near Sangam Crossing near Jain Temple, Vadodara, India;Rudra Joshi, B. Tech, Department of Computer Science and Engineering, 34/B Arvind Society New Sama Road Behind EEC Bus Depot, Vadodara, India ~72: Dr. Kanta Prasad Sharma;Kshitij Joshi;Mr. Priyadarshi;Pearl Miglani;Pujan Soni;Rudra Joshi~

2022/11835 ~ Complete ~54:NEW PHARMACEUTICAL COMPOSITION FOR DRUG DELIVERY ~71:OREXO AB, PO Box 303, Sweden ~72: FISCHER, Andreas;R&#214;NN, Robert;S&#196;VMARKER, Jonas~ 33:GB ~31:2007306.0 ~32:18/05/2020;33:GB ~31:2009905.7 ~32:29/06/2020;33:GB ~31:2018901.5 ~32:01/12/2020

2022/11838 ~ Complete ~54:MANAGEMENT OF ELECTRICAL POWER SUPPLY VIA ETHERNET CABLE ~71:ECOGREEN SOFT SPRL, All&#233;e de Menton 12, 5000, Namur, Belgium ~72: OLIVIER HEMERIJCK;XAVIER LALLEMAND~ 33:BE ~31:BE2020/5306 ~32:07/05/2020

2022/11859 ~ Complete ~54:TRANSDERMAL DRUG DELIVERY DEVICES HAVING PSILOCYBIN, LYSERGIC ACID DIETHYLAMIDE OR 3,4-METHYLENEDIOXYMETHAMPHETAMINE COATED MICROPROTRUSIONS ~71:Emergex USA Corporation, 3805 Old Easton Road, DOYLESTOWN 18902, PA, USA, United States of America ~72: AMERI, Mahmoud;LEWIS, Hayley~ 33:US ~31:63/018,759 ~32:01/05/2020

2022/11807 ~ Complete ~54:THE POWDER AND TECHNICAL METHOD USED IN LASER 3D PRINTING OF LIGHT-WEIGHT HIGH-STRENGTH MAGNESIUM ALLOY ~71:Shenyang University of Technology, No.111,Shenliao West Road,Economic&Technological Development Zone, Shenyang, People's Republic of China ~72: Wang Dingchen;Wu Chenliang;Zhang Chunhua;Zhang Song;Zhao Te~

2022/11845 ~ Complete ~54:DIAGNOSTIC CONTROL COMPOSITIONS ~71:UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG, 1 Jan Smuts Avenue, Johannesburg, 2050, South Africa ~72: BAVESH DAVANDARA KANA;EDITH ERIKA MACHOWSKI~ 33:GB ~31:2005985.3 ~32:23/04/2020

2022/11851 ~ Complete ~54:BASE EDITING OF PCSK9 AND METHODS OF USING SAME FOR TREATMENT OF DISEASE ~71:Verve Therapeutics, Inc., 500 Technology Square, Suite 901, CAMBRIDGE 02139, MA, USA, United States of America ~72: CHADWICK, Alexandra;CHENG, Christopher;RAJEEV, Kallanthottathil G.;REISS, Caroline;ROHDE, Ellen~ 33:US ~31:63/007,797 ~32:09/04/2020;33:US ~31:63/007,803 ~32:09/04/2020;33:US ~31:63/045,032 ~32:26/06/2020;33:US ~31:63/045,033 ~32:26/06/2020;33:US ~31:63/136,087 ~32:11/01/2021

2022/11808 ~ Complete ~54:A METHOD FOR CIRCULAR EXTRACTION OF METAL OXIDES ~71:Shenyang University of Technology, No.111,Shenliao West Road,Economic&Technological Development Zone, Shenyang, People's Republic of China ~72: Li Laishi;Wang Yuzheng;Wu Yusheng~

2022/11812 ~ Complete ~54:PREPARATION METHOD OF POROUS ADSORPTION MATERIAL, PRODUCT AND APPLICATION THEREOF ~71:China University of Petroleum (East China), No. 739, Beiyl Road, Dongying District, Dongying City, Shandong Province, People's Republic of China;Shaanxi Honglan Litian Environmental Protection Technology Co. , Ltd., Changhan Aobao Village, Bulanghe Town , Yuyang District, Yulin City, Shaanxi province, People's Republic of China ~72: DING Xinghua;GAO Mingming;LIN Aiguo;REN Guang;ZHANG Xiangdong~

2022/11860 ~ Complete ~54:METHODS AND COMPOSITIONS FOR TREATING AND COMBATING TUBERCULOSIS ~71:Thirty Respiratory Limited, 1 Red Place, LONDON W1K 6PL , UNITED KINGDOM, United Kingdom ~72: BOOTE, Nicholas David;MUNRO, Hugh Semple;POLL, Chris;WOOD, Christopher Barry~ 33:GB ~31:2005986.1 ~32:23/04/2020;33:GB ~31:2008285.5 ~32:02/06/2020

2022/11863 ~ Complete ~54:PROCESS FOR MAKING AMMONIUM NITRATE ~71:Casale SA, Via Pocobelli 6, LUGANO 6900, SWITZERLAND, Switzerland ~72: CEREIA, Iacopo;FILIPPI, Ermanno;PEDON, Flavio;TALARICO, Pasquale~ 33:EP ~31:20174023.0 ~32:12/05/2020

2022/11869 ~ Complete ~54:SGRNA COMPOSITION FOR PORCINE MYELIN BASIC PROTEIN (MBP) GENE KNOCKOUT AND USE THEREOF ~71:WUYI UNIVERSITY, 22 Dongcheng Village, Jiangmen, People's Republic of China ~72: CHEN, Min;LAI, Liangxue;TANG, Chengcheng;ZHOU, Xiaoqing;ZOU, Qingjian~ 33:CN ~31:202010488188.4 ~32:01/06/2020

2022/11803 ~ Provisional ~54:CONTROLLER FOR LOCKING MECHANISM ~71:ETHELE SQD NETWORKS (PTY) LTD, Lower Ground Floor East,, Building 8, Central Park, South Africa ~72: CICCARELLI, Shawn~

2022/11810 ~ Complete ~54:IDENTIFICATION METHOD OF PHYTOPHAGOUS INSECTS DIET BASED ON MULTIPLEX PCR ~71:Hebei Normal University, No.20 Road East, 2nd Ring South, Yuhua District, Shijiazhuang, Hebei, 050024, People's Republic of China ~72: LIU, Jingze;ZHANG, Shaojun;ZHANG, Xiaoman~

2022/11816 ~ Complete ~54:HOMOLOGOUS INTEGRATIVE EXPRESSION VECTOR OF CANDIDA UTILIS, ENGINEERING BACTERIUM, CONSTRUCTION METHODS, AND USE ~71:Inner Mongolia Academy of Agricultural and Animal Husbandry Sciences, No. 22, Zhaojun Road, Yuquan District, Hohhot City, Inner Mongolia Autonomous Region, 010031, People's Republic of China ~72: Gaowa;Huhe;LIU, Hongkui;Qiburi;SU, Shaofeng;Sachula;WANG, Yunhua;WU, Qinghai~

2022/11820 ~ Complete ~54:IMPROVED SEWAGE TREATMENT DEVICE AND SEWAGE TREATMENT PROCESS THEREOF ~71:China Institute of Water Resources and Hydropower Research, A-1, Fuxing Road, Haidian District, Beijing, 100038, People's Republic of China ~72: DU Yanliang;HAN Zhen;LI Budong;LI Kun;LIU Chang;LIU Wei;LIU Xiaobo;MA Xu;WANG Liang;WANG Shiyang;ZHAO Shilin~

2022/11827 ~ Complete ~54:NOVEL PUNCTURE AND DRAINAGE TUBE ~71:XIANGYA HOSPITAL CENTRAL SOUTH UNIVERSITY, 87 Xiangya Road, Kaifu District, Changsha, People's Republic of China ~72: Fujun LI;Honghui YI;Shuyan LI~

2022/11834 ~ Complete ~54:TURBINE WITH SECONDARY ROTORS ~71:EQUINOX OCEAN TURBINES B.V., Sluytermanwei 23, Netherlands ~72: DE HAAS, Pieter Dani&#235;l~ 33:NL ~31:2025538 ~32:08/05/2020

2022/11847 ~ Complete ~54:NUCLEOSIDES AND NUCLEOTIDES WITH 3' ACETAL BLOCKING GROUP ~71:ILLUMINA CAMBRIDGE LIMITED, 19 Granta Park, Great Abington, Cambridge, Cambridgeshire, CB21 6DF, United Kingdom ~72: ADAM CULLEY;ANGELICA MARIANI;ANNO KOETJE;ANTOINE FRANCAIS;ELENA CRESSINA;XIAOHAI LIU~ 33:US ~31:63/042,240 ~32:22/06/2020

2022/11852 ~ Complete ~54:POROUS MATERIALS FOR BATTERY ELECTRODES ~71:Form Energy, Inc., 30 Dane Street, SOMERVILLE 02143, MA, USA, United States of America ~72: CHIANG, Yet-Ming;GIBSON, Michael Andrew;THOMPSON, Annelise Christine;WOODFORD, William Henry~ 33:US ~31:63/013,864 ~32:22/04/2020

2022/11857 ~ Complete ~54:AMIDOPYRIMIDONE DERIVATIVES ~71:F. Hoffmann-La Roche AG, Grenzacherstrasse 124, BASEL 4070, SWITZERLAND, Switzerland ~72: BELL, Andrew Simon;BESNARD,

J&#233;r&#233;my;BRADLEY, Anthony Richard;GREEN, Luke;HAAP, Wolfgang;KOCER, Buelent;KUGLSTATTER, Andreas;LUCAS, Xavier;MATTEI, Patrizio;MAZUNIN, Dmitry;RATNI, Hasane;RIEMER, Claus;VAN HOORN, Willem Paul~ 33:EP ~31:20181341.7 ~32:22/06/2020

2022/11813 ~ Complete ~54:MODELING METHOD OF FOREST BIOMASS GROUND LIDAR ~71:Central South University of Forestry & Technology, No.498, Shaoshan South Road, Changsha City, Hunan Province, People's Republic of China ~72: SUN Hua;ZHU Jia~

2022/11804 ~ Provisional ~54:TOKEN HUNT DIGITAL CURRENCY ~71:Token Hunt Media Solutions, 5th Floor, Bloukrans Building, South Africa ~72: Patrick Mositsa~

2022/11815 ~ Complete ~54:WINDPROOF FIXING DEVICE FOR TREE CULTIVATION ~71:NORTHWEST A&F UNIVERSITY, NO. 3, TAICHENG ROAD, People's Republic of China ~72: GAO, Tianjian~

2022/11817 ~ Complete ~54:HIGH STRENGTH CONCRETE CORE DRILLING SAMPLING DEVICE AND METHOD ~71:China Resources Land Limited, 46/F, China Resources Building, 26 Harbour Road, Wanchai, Hong Kong, People's Republic of China;China University of Mining and Technology, No.1, Daxue Road, Xuzhou City, Jiangsu Province, People's Republic of China;Sinohydro Bureau 12 Co.,LTD, Room 301, No.141, Huancheng North Road, Hangzhou City, Zhejiang Province, People's Republic of China ~72: HE Zhuangzhi;PAN Anqi;YAO Wenjie~

2022/11821 ~ Complete ~54:A SYSTEM AND METHOD FOR PROCESSING A FINANCIAL TRANSACTION IN A FINANCIAL SYSTEM ~71:BOB GROUP (PTY) LTD, Building 2 Silver Point Office Park, 22 Ealing Crescent, Bryanston, Gauteng, 2021, South Africa ~72: ANDREW GORDON HIGGINS;CORNELIUS ABRAHAM RAUTENBACH~ 33:ZA ~31:2021/08461 ~32:02/11/2021

2022/11826 ~ Complete ~54:IMPROVE ANTITUMOR EFFICACY OF CYCLOPHOSPHAMIDE NANOEMULSION BY PARENTERAL DRUG DELIVERY SYSTEM AGAINST BREAST CANCER CELL ~71:Dr. Ganesh Y. Dama, Principal, Shri Gajanan Maharaj Shikshan Prasarak Mandal Sanchalit, Sharadchandra Pawar College of Pharmacy, Dumbarwadi (Otur), Khamundi, Kalyan High way No- 222, Junnar, Pune, India;Dr. Kiran C. Mahajan, Associate Professor, Shri Gajanan Maharaj Shikshan Prasarak Mandal Sanchalit, Sharadchandra Pawar College of Pharmacy, Dumbarwadi (Otur), Khamundi, Kalyan High way No- 222, Junnar, Pune, India;Dr. Shubhrajit Mantry, Professor & HOD, Shri Gajanan Maharaj Shikshan Prasarak Mandal Sanchalit, Sharadchandra Pawar College of Pharmacy, Dumbarwadi (Otur), Khamundi, Kalyan High way No- 222, Junnar, Pune, India;Dr. Swati Sanjay Gaikwad, Assistant professor, Nagpur college of pharmacy, wanadongri, Hingna Road, Nagpur, India;Mrs. Hina Deepak Mehta, Assistant professor, Nagpur college of pharmacy, wanadongri, Hingna Road, Nagpur, India;Ms. Joshi Supriya Chandrakant, Ph.D Research student, The faculty of pharmaceutical Sciences & Technology, Swami Ramanand Teerth Marathwada University, Nanded, India;Ms. Pranita S. Pawar, Research Scholar, Shri Gajanan Maharaj Shikshan Prasarak Mandal Sanchalit, Sharadchandra Pawar College of Pharmacy, Dumbarwadi (Otur), Khamundi, Kalyan High way No- 222, Junnar, Pune, India;Ms. Seema Yuvraj Mendhekar, Assistant Professor, Nagpur college of pharmacy, wanadongri, Hingna Road, Nagpur, India;Ms. Vaishali A. Adsare, Assistant Professor, Shri Gajanan Maharaj Shikshan Prasarak Mandal Sanchalit, Sharadchandra Pawar College of Pharmacy, Dumbarwadi (Otur), Khamundi, Kalyan High way No- 222, Junnar, Pune, India ~72: Dr. Ganesh Y. Dama;Dr. Kiran C. Mahajan;Dr. Shubhrajit Mantry;Dr. Swati Sanjay Gaikwad;Mrs. Hina Deepak Mehta;Ms. Joshi Supriya Chandrakant;Ms. Pranita S. Pawar;Ms. Seema Yuvraj Mendhekar;Ms. Vaishali A. Adsare~

2022/11833 ~ Complete ~54:REDUCING OR INHIBITING OCULAR DAMAGE BY HYALURONIDASE ADMINISTRATION ~71:MED PROGRESS, LLC, 355 PLACENTIA AVENUE, #203, NEWPORT BEACH,



CALIFORNIA 92663, USA, United States of America ~72: YOELIN, Steve~ 33:US ~31:63/004,444  
~32:02/04/2020

2022/11840 ~ Complete ~54:A STRUCTURED CATALYST ~71:TOPSOE A/S, Haldor Topsøe All#233; 1,  
2800, Kgs. Lyngby, Denmark ~72: ANDERS HELBO HANSEN;MICHAEL BOE;PETER M#216;LGAARD  
MORTENSEN;ROBERT KLEIN;S#216;REN GYDE THOMSEN~ 33:EP ~31:20182507.2 ~32:26/06/2020

2022/11843 ~ Complete ~54:ALPHA-SYNUCLEIN PROTOFIBRIL-BINDING ANTIBODIES ~71:BIOARCTIC AB,  
Warfvinges v#228;g 35, 112 51, Stockholm, Sweden ~72: EVA NORDSTR#214;M;JESSICA  
SIGVARDSON;PATRIK NYGREN~ 33:US ~31:63/044,881 ~32:26/06/2020;33:US ~31:63/071,150  
~32:27/08/2020

2022/11848 ~ Complete ~54:STEM CELLS FOR TREATMENT OF RESPIRATORY DISORDERS ~71:XINTELA  
AB, Medicon Village, Sweden ~72: LINDSTEDT, Sandra;LUNDGREN &#197;KERLUND, Evy;RAMOS MORENO,  
Tania;JVEBRANT, Christina~ 33:EP ~31:20173592.5 ~32:07/05/2020

2022/11853 ~ Complete ~54:INTERNAL HYDROFORMING METHOD FOR MANUFACTURING HEAT PIPE  
WICKS UTILIZING A HOLLOW MANDREL AND SHEATH ~71:Westinghouse Electric Company LLC, 1000  
Westinghouse Drive, Suite 141, CRANBERRY TOWNSHIP 16066, PA, USA, United States of America ~72:  
BYERS, William A.;GROSS, David M.;KUSTRA, Gregory A.;LOJEK, John;SWARTZ, Matthew M.~ 33:US  
~31:63/012,725 ~32:20/04/2020

2022/11861 ~ Complete ~54:BASE EDITING OF ANGPTL3 AND METHODS OF USING SAME FOR  
TREATMENT OF DISEASE ~71:Verve Therapeutics, Inc., 500 Technology Square, Suite 901, CAMBRIDGE  
02139, MA, USA, United States of America ~72: CHADWICK, Alexandra;CHENG, Christopher;RAJEEV,  
Kallanthottathil G.;REISS, Caroline;ROHDE, Ellen~ 33:US ~31:63/007,797 ~32:09/04/2020;33:US  
~31:63/007,803 ~32:09/04/2020;33:US ~31:63/045,032 ~32:26/06/2020;33:US ~31:63/045,033  
~32:26/06/2020;33:US ~31:63/136,087 ~32:11/01/2021

2022/11867 ~ Complete ~54:METHOD OF INSTALLING A HEAT PIPE WICK INTO A CONTAINER OF  
DIFFERING THERMAL EXPANSION COEFFICIENT ~71:Westinghouse Electric Company LLC, 1000  
Westinghouse Drive, Suite 141, CRANBERRY TOWNSHIP 16066, PA, USA, United States of America ~72:  
BYERS, William A.;LOJEK III, John;SWARTZ, Matthew M.~ 33:US ~31:16/853,345 ~32:20/04/2020

2022/11805 ~ Complete ~54:COMPOUND PREPARATION OF TRADITIONAL CHINESE MEDICINE AND  
PROBIOTICS FOR FATTENING GOATS AND PREPARATION METHOD THEREOF ~71:JIANGXI  
AGRICULTURAL UNIVERSITY, No. 1101, Zhimin Avenue, Qingshanhu District, Nanchang City, Jiangxi Province,  
People's Republic of China ~72: CHEN Rongrong;LAN Jian;LI Lin;QU Mingren;SONG Xiaozhen;YANG  
Xiujiang;YOU Jinming~

2022/11844 ~ Complete ~54:CD40 BINDING PROTEIN ~71:STRIKE PHARMA AB, Ulls v#228;g 29C 756 51  
Uppsala, Sweden ~72: HELENA PERSSON LOTSHOLM;OSKAR ANDERSSON;SARA MANGSBO~ 33:GB  
~31:2008003.2 ~32:28/05/2020

2022/11850 ~ Complete ~54:LOOM WITH MOVABLE GUIDE BEAMS ~71:CASTENS, Sybille, Alter  
M#252;hlenweg 2, GRO#223;ENKNETEN 26197, GERMANY, Germany ~72: CASTENS, Sybille~ 33:DE  
~31:20 2020 002 061.3 ~32:12/05/2020

2022/11854 ~ Complete ~54:PROCESSES AND SYSTEMS FOR UPGRADING ALKANES AND ALKYL  
AROMATIC HYDROCARBONS ~71:ExxonMobil Chemical Patents Inc., 5200 Bayway Drive, BAYTOWN 77520,

TX, USA, United States of America ~72: BAO, Xiaoying;LATTNER, James R.~ 33:US ~31:63/022,034  
~32:08/05/2020;33:EP ~31:20179510.1 ~32:11/06/2020

2022/11858 ~ Complete ~54:ELECTRICAL POWER CONVERTER ~71:Prodrive Technologies Innovation  
Services B.V., Science Park Eindhoven 5501, SON EN BREUGEL 5692 EM, THE NETHERLANDS, Netherlands  
~72: EVERTS, Jordi;GUACCI, Mattia;KOLAR, Johann Walter;ZHANG, Daifei~ 33:EP ~31:20171937.4  
~32:28/04/2020;33:NL ~31:2026008 ~32:06/07/2020

2022/11862 ~ Complete ~54:PHARMACEUTICAL FORMULATIONS ~71:Blue Earth Diagnostics Ltd, Magdalen  
Centre, The Oxford Science Park, OXFORD OX4 4GA, UNITED KINGDOM, United Kingdom;Siemens Medical  
Solutions USA, Inc., 40 Liberty Blvd, MALVERN 19355, PA, USA, United States of America ~72: ANZELLOTTI,  
Atilio;BEJOT, Romain;HAKA, Michael~ 33:GB ~31:2005282.5 ~32:09/04/2020

2022/11864 ~ Complete ~54:CITRULLINATED NUCLEOPHOSMIN PEPTIDES AS CANCER VACCINES  
~71:Scancell Limited, John Eccless House, Robert Robinson Avenue, Oxford Science Park, OXFORD OX4 4GP,  
OXFORDSHIRE, UNITED KINGDOM, United Kingdom ~72: CHOUDHURY, Ruhul;DURRANT, Linda Gillian~  
33:GB ~31:2005779.0 ~32:21/04/2020

2022/11870 ~ Complete ~54:IMIDAZOLIDINONE DERIVATIVES AND MEDICAL USE THEREOF  
~71:CHENGDU BAIYU PHARMACEUTICAL CO., LTD., 10th Floor, Building B7, Tianfu Life Science Park, No. 88  
Keyuan South Road, High-Tech Zone, People's Republic of China ~72: CHU, Hongzhu;HE, Lvxue;HE, Yang;LEI,  
Feiquan;LIU, Bing;SU, Guizhuan;SUN, Yi;WANG, Meiwei;WEI, Yonggang;XU, Xuezhen;YAN, Jie~ 33:CN  
~31:202010302603.2 ~32:17/04/2020;33:CN ~31:202010679647.7 ~32:15/07/2020;33:CN  
~31:202110360821.6 ~32:02/04/2021

2022/11868 ~ Complete ~54:ANTI-HBV ANTIBODIES AND METHODS OF USE ~71:F. Hoffmann-La Roche AG,  
Grenzacherstrasse 124, BASEL CH-4070, SWITZERLAND, Switzerland;Institut Pasteur, 25-28 rue du Docteur  
Roux, Cedex 15, PARIS 75724, FRANCE, France ~72: AIT-GOUGHOLTE, Malika;BERETTA,  
Maxime;BOURGINE, Maryline;DRIESSEN, Wouter;FISCHER, Jens;GEORGES, Guy;HEHLE,  
Verena;MOUQUET, Hugo;PELLETIER, Nad~33:ge;POL, Stanislas;SCHLOTHAUER, Tilman;STRICK-  
MARCHAND, H~33;i&#232;ne;VAN PUIJENBROEK, Erwin~ 33:EP ~31:20305612.2 ~32:08/06/2020

2022/11872 ~ Complete ~54:HEAT STORE WITH RAILS AS HEAT-STORAGE BODIES ~71:Lumenion GmbH,  
Ella-Barowsky-Str. 11, Berlin, 10829, Germany ~72: Herbert PIEREDER;Peter KORDT~ 33:EP ~31:21153117.3  
~32:22/01/2021

2022/11818 ~ Complete ~54:METHOD OF GENERATING ENGLISH WORD APPEARANCE SHORT FEATURE  
CODE ~71:DONGGUAN CITY UNIVERSITY, 1st Wenchang Road, Liaobu, Dongguan, Guangdong, People's  
Republic of China;DONGGUAN POLYTECHNIC, 3rd Daxue Road, Songshan Lake, Dongguan, Guangdong,  
People's Republic of China;Dongguan Stone Bata Intelligent Technology Co., Ltd, NO.4, Room 403, Building 30,  
No.3 Daxue Road, Songshan Lake Park, Dongguan City, Guangdong Province, People's Republic of China;LUO  
Jianfeng, 3rd Daxue Road, Songshan Lake, Dongguan, Guangdong, People's Republic of China;RUAN Chunyan,  
1st Wenchang Road, Liaobu, Dongguan, Guangdong, People's Republic of China ~72: LUO Jianfeng;RUAN  
Chunyan~

2022/11822 ~ Complete ~54:CABLE ANCHOR TENSIONING ASSEMBLY ~71:INNOVATIVE MINING  
PRODUCTS (PTY) LTD, 109 Adcock Ingram Avenue, South Africa ~72: GREYVENSTEYN, James~ 33:ZA  
~31:2021/06953 ~32:20/09/2021

2022/11830 ~ Complete ~54:DEHP-FREE BLOOD STORAGE AND METHODS OF USE THEREOF  
~71:HEMANEXT INC., 99 Hayden Avenue, Building B, Suite 620, United States of America ~72: SOWEMIMO-  
COKER, Samuel, O.~ 33:US ~31:63/024,190 ~32:13/05/2020

2022/11837 ~ Complete ~54:NOVEL COMPOUNDS USEFUL AS POLY(ADP-RIBOSE) POLYMERASE (PARP)  
INHIBITORS ~71:RHIZEN PHARMACEUTICALS AG, Steinentorstrasse 23, Switzerland ~72: BHUNIYA,  
Debnath;MERIKAPUDI, Gayatri Swaroop;VAKKALANKA, Swaroop Kumar Venkata Satya;VISWANADHA,  
Srikant~ 33:IN ~31:202041018149 ~32:28/04/2020;33:IN ~31:202041047713 ~32:02/11/2020

2022/11806 ~ Complete ~54:METHOD FOR SIMPLIFYING FOREST POINT CLOUD AND EXTRACTING  
PARAMETERS OF GROUND LIDAR ~71:Central South University of Forestry & Technology, No.498,  
Shaoshan South Road, Changsha City, Hunan Province, People's Republic of China ~72: SUN Hua;ZHU Jia~

2022/11814 ~ Complete ~54:A NEW STRUCTURE OF AUTOMATIC TILTING DEVICE ~71:Zhengzhou  
Machinery Research Institute Co. , Ltd., No.149 Kexuedadao High-tech Industrial Development Zone, zhengzhou,  
People's Republic of China ~72: Cai Hua;Huang Hongtao;Liu Shijun;Wang Feng;Xu Wenbo;Zhang Hongzhan~

2022/11819 ~ Complete ~54:AUXILIARY SUPPORTING DEVICE FOR FIELD PLANTING OF CAMELLIA  
SEMISERRATA SEEDLINGS ~71:Hangzhou Agricultural Technology Promotion Center, No. 768, Hanghai Road,  
Shangcheng District, Hangzhou City, Zhejiang Province, 310020, People's Republic of China;Lu~39;an  
Agricultural Science Research Institute, The 25th floor of the Agricultural Science and Technology Building,  
Meishan Road(South), Yu~39;an District, Lu~39;an City, Anhui Province, 237009, People's Republic of  
China;Xinyang Academy of Agricultural Sciences, No. 20, Minquan South Street, Shihe District, Xinyang City,  
Henan, 464000, People's Republic of China;Zhangjiajie Research Institute of Agricultural Science and  
Technology, No.252, Jiaochang Road, Yongding District, Zhangjiajie City, Hunan Province, 427000, People's  
Republic of China;Zhejiang Institute of Garden Plants and Flowers (Zhejiang Xiaoshan Institute of Cotton and  
Bast Fiber Crops Research), No. 508, Cunwang Village, Wangcun, Youhu Line, Linpu Town, Xiaoshan District,  
Hangzhou City, Zhejiang Province, 311251, People's Republic of China ~72: AN, Xia;CHEN, Changli;DONG,  
Guoyun;HU, Wanqun;LI, Wenlue;LIU, Tingting;LUO, Xiahong;WEI, Jiqian;ZHANG, Lixia;ZHU, Guanlin;ZOU,  
Lina~

2022/11825 ~ Complete ~54:A HYBRID AUDIO STEGANOGRAPHY SYSTEM AND ITS METHOD THEREOF  
~71:Ananya Choudhury, House No. 5 Santipur Lane no. 1 NS Avenue Silchar, India;Bhagaban Swain, Saraba,  
P.O. Jirailo, Via Erasama, Dist Jagatsinghpur, India;Pawan Kumar, Village - Gaurapur, Post - Kosdihara, District -  
Jehanabad, India;Sudipta Roy, Kolkata, India;Tapodhir Acharjee, Mohanpur, P.O. Kailashahar, Dist. Unakoti,  
India ~72: Ananya Choudhury;Bhagaban Swain;Pawan Kumar;Sudipta Roy;Tapodhir Acharjee~

2022/11829 ~ Complete ~54:COMPOSITIONS AND METHODS FOR TREATING NONINFLAMMATORY PAIN  
IN SUBJECTS WITH RHEUMATOID ARTHRITIS ~71:SANOFI BIOTECHNOLOGY, 54, rue La Boetie, France  
~72: FORD, Kerri;VAN HOOGSTRAATEN, Hubert~ 33:US ~31:63/032,035 ~32:29/05/2020;33:US  
~31:63/077,378 ~32:11/09/2020;33:EP ~31:21315081.6 ~32:11/05/2021

2022/11832 ~ Complete ~54:ANTI-GLP1R ANTAGONIST ANTIBODIES AND METHODS OF USE THEREOF  
~71:REGENERON PHARMACEUTICALS, INC., 777 Old Saw Mill River Road, Tarrytown, United States of  
America ~72: KIM, Jee, H.;OKAMOTO, Haruka~ 33:US ~31:63/023,307 ~32:12/05/2020

2022/11836 ~ Complete ~54:TWO-DIMENSIONAL ENGINE ~71:CHEN, Xiaohui, No. 234-2 Fuqian Road,  
Lanjiang Street, Lanxi City, Jinhua, People's Republic of China ~72: CHEN, Xiaohui~ 33:CN  
~31:202010764619.5 ~32:25/07/2020

2022/11839 ~ Complete ~54:IDENTIFICATION DEVICE FOR CONNECTION CABLES IN TELECOMMUNICATION-NETWORK JUMPER BOARDS ~71:FURUKAWA ELECTRIC LATAM S.A., Rua Hasdrubal Bellegard, 820 - Cidade Industrial, Curitiba – PR, 81460-120, Brazil ~72: NICOLAS CHUNG~ 33:BR ~31:BR 10 2020 008029 6 ~32:22/04/2020

2022/11842 ~ Complete ~54:IMMUNOSTIMULATORY COMPOSITIONS ~71:BAYER ANIMAL HEALTH GMBH, Kaiser-Wilhelm-Allee 20, 51373, Leverkusen, Germany ~72: ALF LAMPRECHT;ELISABETH FELDHUES;IRIS HEEP;SIMONE MARLENE PUTZKE;THOMAS ILG~ 33:EP ~31:20169224.1 ~32:10/04/2020

2022/11856 ~ Complete ~54:APPARATUS FOR FIXING GOLF TEES ~71:RICHTER, Tino, Ridbacher Str. 23, BERLIN 12623, GERMANY, Germany;WENDLAND, Kai, Margaretenstra&#223;e 8, BERLIN 14193, GERMANY, Germany ~72: RICHTER, Tino;WENDLAND, Kai~ 33:DE ~31:10 2020 003 211.7 ~32:18/05/2020;33:DE ~31:20 2020 002 355.8 ~32:18/05/2020

2022/11866 ~ Complete ~54:ONE-COMPONENT POWDER COATING COMPOSITION AND SUBSTRATE COATED WITH SUCH POWDER COATING COMPOSITION ~71: Akzo Nobel Coatings International B.V., Christian Neefestraat 2, AMSTERDAM 1077 WW, THE NETHERLANDS, Netherlands ~72: GONZALEZ ALVAREZ, Maria Jose;KITTLE, Kevin Jeffrey~ 33:EP ~31:20177987.3 ~32:03/06/2020

2022/11809 ~ Complete ~54:THE PREPARATION METHOD OF THE ORGANOID EXTRANODAL NATURAL KILLER (NK)/T-CELL LYMPHOMA, NASAL TYPE , ENKTL ~71:Chongqing University Cancer Hospital, No. 181, Hanyu Road, Shapingba, Chongqing, 400030, People's Republic of China ~72: Chu Rui;Li Zheng;Wang Hongling;Wang Hui;Zhang Yuhan~

2022/11811 ~ Complete ~54:METHOD FOR PREPARING SODIUM BISULFATE FROM SOLID SLAG SALT OF COAL CHEMICAL INDUSTRY ~71:China University of Petroleum (East China), No. 739, Beiyi Road, Dongying District, Dongying City, Shandong Province, People's Republic of China;Erdos Guanghui Renewable Resources Co., LTD, Room 201, Sulige Investment Building, Ulam Tolgo town,Uxin Banner, Erdos City, Inner Mongolia Autonomous Region, People's Republic of China ~72: LIN Aiguo;LU Tao;YANG Miaomiao;ZHANG Xiangdong~

2022/11831 ~ Complete ~54:VIRAL CLEARANCE BY LOW PH HOLD ~71:REGENERON PHARMACEUTICALS, INC., 777 Old Saw Mill River Road, Tarrytown, United States of America ~72: CUSICK, Valerie Ann;DAYA, Jena;MATTILA, John~ 33:US ~31:63/023,154 ~32:11/05/2020

2022/11841 ~ Complete ~54:MULTIPLEX DETECTION OF NUCLEIC ACIDS USING MIXED REPORTERS ~71:SPEEDX PTY LTD, Suite G16, National Innovation Centre, Australian Technology Park, 4 Cornwallis Street, Eveleigh, New South Wales, 2015, Australia ~72: ALISON VELYIAN TODD;ANDREA LEE LAWRENCE;NICOLE JANE HASICK;RYUNG RAE KIM~

2022/11846 ~ Complete ~54:COMPARING COPIES OF POLYNUCLEOTIDES WITH DIFFERENT FEATURES ~71:ILLUMINA, INC., 5200 Illumina Way, San Diego, California, 92122, United States of America ~72: HUIHONG YOU;TAN YERPENG~ 33:US ~31:63/031,230 ~32:28/05/2020

2022/11849 ~ Complete ~54:BIDIRECTIONAL REUSABLE FILTERING FACE MASK ~71:UPBIOCARE S.R.L., Via XX Settembre 3, Interno 10, Italy ~72: MESCHI, Oscar~ 33:IT ~31:102020000009631 ~32:04/05/2020

2022/11855 ~ Complete ~54:A LAUNDRY CARE OR DISH CARE COMPOSITION COMPRISING A POLY ALPHA-1,6-GLUCAN ESTER ~71:The Procter & Gamble Company, One Procter & Gamble Plaza, CINCINNATI 45202, OH, USA, United States of America ~72: ADELMAN, Douglas;BOUTIQUE, Jean-Pol;CHILTON, Ruth;FAIRWEATHER, Neil Thomas;FLITER, Kristine Lynn;GOOD, David;HUANG, Zheng-

Zheng;LU, Helen;SI, Gang;SIVIK, Mark Robert~ 33:US ~31:63/037,012 ~32:10/06/2020;33:EP  
~31:20180321.0 ~32:16/06/2020

2022/11865 ~ Complete ~54:ALIGNMENT PORTIONS ON MAIN LINER FOR A PUMP ~71:Weir Slurry Group, Inc., 2701 South Stoughton Road, MADISON 53716, WI, USA, United States of America ~72: BOURGEOIS, Ronald Joseph;KOSMICKI, Randy James~ 33:US ~31:63/032,104 ~32:29/05/2020;33:AU ~31:2020902178  
~32:29/06/2020

2022/11871 ~ Complete ~54:SYSTEM, METHOD AND APPARATUS FOR IRRIGATION CONTROL AND DATA MANAGEMENT ~71:VALMONT INDUSTRIES, INC., One Valmont Plaza, United States of America ~72: ANDERSON, Ashley E.;ANDERSON, Christopher M.~ 33:US ~31:63/021,175 ~32:07/05/2020

- APPLIED ON 2022/11/01 -

2022/11898 ~ Provisional ~54:CANOPY WINDOW GAP WASHER ~71:ROBERT MOORE BRUWER, 35A GERALD DREYER STREET, OLYMPIA, Namibia ~72: ROBERT MOORE BRUWER~

2022/11874 ~ Provisional ~54:A DUAL ATTACHMENT DEVICE ~71:LANCE EGON SKELLY, UNIT 6 ASPEN CREEK 18 KIRSCHNER ROAD, BRENTWOOD PARK, South Africa ~72: LANCE EGON SKELLY~

2022/11875 ~ Complete ~54:FLEXIBLE CARBON-BASED/POLYMER COMPOSITE CONDUCTIVE FUNCTIONAL MATERIAL AND PREPARATION METHOD THEREOF ~71:LI Kexun, No. 1, Rainbow Street, Xiaodian District, Taiyuan City, Shanxi Province, People's Republic of China ~72: LI Kexun~

2022/11877 ~ Complete ~54:PLASTIC PIPE FOR HIGH-THERMAL CONDUCTIVITY CABLE, PREPARATION METHOD AND APPLICATION THEREOF ~71:GUANGDONG UNIVERSITY OF TECHNOLOGY, No. 100, West Outer Ring Road, Guangzhou University Town, Panyu District, Guangzhou, Guangdong, People's Republic of China ~72: ZHANG Jingjing~

2022/11879 ~ Complete ~54:A NEW TYPE OF WATERWAY WATER LEVEL TEST AND ALARM DEVICE ~71:Zhejiang International Maritime College, No. 268, Haitian Avenue, Lincheng, Dinghai District, Zhoushan City, Zhejiang Province, People's Republic of China ~72: Hao Yongzhi;Liu Shuangdong;Xu Chao;Yang Qilei;Zheng Kaiyu~

2022/11881 ~ Complete ~54:AN EARLY WARNING AND EMERGENCY SYSTEM FOR HEAVY METAL POLLUTION IN THE PROCESSING AND SMELTING SLAG DISPOSAL SITE ~71:BGRIMM TECHNOLOGY GROUP, Building 23, Zone 18 of ABP, No. 188, South 4th Ring Road West, Xicheng District, Beijing, People's Republic of China;China University of Geosciences (Beijing), No.29, Xueyuan Road, Haidian District, Beijing, People's Republic of China;SINOSTEEL MAANSHAN GENERAL INSTITUTE OF MINING RESEARCH CO., LTD, No. 666, Xitang Road, Economic Development Zone, Ma'anshan City, Anhui Province, People's Republic of China ~72: Cui Wei Hua;Hua Shao Guang;Li Shu Qin;Pei De Jian;Wang Da Ya;Wang Fang;Wang Qiong;Yang Yue Qing;Yao Jun;Zhang Hua~ 33:CN ~31:202210268387.3 ~32:18/03/2022

2022/11885 ~ Complete ~54:COMPOSITIONS FOR PROMOTING HAIR GROWTH ~71:MNGUNI, Zanoxolo, 321A Hillcrest Boulevard, 170 Lonnon Road, South Africa ~72: MNGUNI, Zanoxolo~ 33:ZA ~31:2021/09202  
~32:18/11/2021

2022/11888 ~ Complete ~54:REPORTING BEAM FAILURE ~71:NOKIA TECHNOLOGIES OY, KARAKAARI 7, 02610 ESPOO, FINLAND, Finland ~72: KOSKELA, Timo;TURTINEN, Samuli;WU, Chunli~

2022/11894 ~ Complete ~54:CONTROLLING METHOD FOR INFECTIOUS DISEASE VECTOR ~71:SUMITOMO CHEMICAL COMPANY, LIMITED, 2-7-1, Nihonbashi, Chuo-ku, Tokyo, 103-6020, Japan ~72: MIKA NIIDE;TSUGUAKI UEBAYASHI~ 33:JP ~31:2020-099174 ~32:08/06/2020

2022/11873 ~ Provisional ~54:MR & MISS KARIEGA ~71:Ebrahim Wicks, 31 Pheasant Drive, Mountainview, South Africa ~72: Ebrahim Wicks~ 33:ZA ~31:1 ~32:31/10/2022

2022/11892 ~ Complete ~54:COMBINATION THERAPIES COMPRISING A HYPOMETHYLATION AGENT FOR TREATING CANCER ~71:ALX ONCOLOGY INC., 323 Allerton Avenue, South San Francisco, California, 94080, United States of America ~72: HONG WAN;JAUME PONS;SOPHIA RANDOLPH~ 33:US ~31:63/033,074 ~32:01/06/2020;33:US ~31:63/106,285 ~32:27/10/2020;33:US ~31:63/109,083 ~32:03/11/2020;33:US ~31:63/114,959 ~32:17/11/2020;33:US ~31:63/145,925 ~32:04/02/2021

2022/11883 ~ Complete ~54:A PORTABLE AIR BUBBLE BASED INSECTICIDE DIFFUSER ~71:SAHOO, Devabrata, AT/PO- PADMAPUR, VIA - RAISUAN, DIST – KEONJHAR, India;SALUNKE, Samruddhi Prakash, C/102, RADHIKA HOUSING SOCIETY, OPPOSITE TO ROHAN KRITIKA, SINHGAD ROAD PUNE, India;SUDE, Shrikant Dnyandev, 'TIRUMALA NIVAS', BEHIND RELIANCE PETROL PUMP, BARSHI ROAD, SUBHASH NAGAR, LATUR, India ~72: KHANDELWAL, Ayush;SAHOO, Devabrata;SALUNKE, Samruddhi Prakash;SHINDE, Suryapratap Shyam;SUDE, Shrikant Dnyandev~

2022/11887 ~ Complete ~54:BILAYER OF RETINAL PIGMENTED EPITHELIUM AND PHOTORECEPTORS AND USE THEREOF ~71:FUJIFILM CELLULAR DYNAMICS, INC., 525 Science Drive, Suite 200, Madison, United States of America;THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES, 6011 Executive Blvd., Suite 325, United States of America ~72: AMARAL, Juan;BERNDT, Erich;BHARTI, Kapil;CHASE, Lucas;DIAS, Andrew;MAMINISHKIS, Arvydas~ 33:US ~31:63/032,346 ~32:29/05/2020

2022/11890 ~ Complete ~54:COOLING SYSTEM ~71:BEIJING GOLDWIND SCIENCE & CREATION WINDPOWER EQUIPMENT CO., LTD., No. 19 Kangding Road, Beijing Economic & Technological Development Zone, Daxing, Beijing, 100176, People's Republic of China ~72: DINGHUI WANG;JINMENG LI;RAN YIN~ 33:CN ~31:202010516498.2 ~32:09/06/2020

2022/11896 ~ Complete ~54:HETEROCYCLIC COMPOUNDS AS TRIGGERING RECEPTOR EXPRESSED ON MYELOID CELLS 2 AGONISTS AND METHODS OF USE ~71:Amgen Inc., One Amgen Center Drive, THOUSAND OAKS 91320-1799, CA, USA, United States of America;Vigil Neuroscience, Inc., 400 Technology Square, 10th Floor, CAMBRIDGE 02139, MA, USA, United States of America ~72: BOS, Maxence;CZABANIUK, Lara C.;FRANZONI, Ivan;HOPPER, Timothy;HOUZE, Jonathan B.;MANCUSO, John;PANTELEEY, Jane;RESCOURIO, Gwenaella;SANTORA, Vincent;WANG, Haoxuan;WHITE, Ryan D.;WONG, Alice R.;WU, Yongwei~ 33:US ~31:63/019,772 ~32:04/05/2020

2022/11900 ~ Provisional ~54:ADAPTIVE RECYCLING CADDY AND SYSTEM. ~71:Theo Arthur, 27 Karee Street, South Africa ~72: Theo Arthur~

2022/11878 ~ Complete ~54:A PROCESS FOR CREATING MANGANESE SULFATE FROM WASTE ACID IN INDUSTRIAL WASTE WATER ~71:Hunan QingChong New Materials Co., Ltd, 21 / F, Caifu Building, 77 Ji#39;an Road, Yuetang District, Xiangtan, Hunan, 411101, People's Republic of China ~72: Chen Changhui;Wang Jiancun~ 33:CN ~31:202210186508.X ~32:28/02/2022

2022/11880 ~ Complete ~54:DEVICE FOR USE IN A RETAIL PRODUCT DISPLAY ~71:THREE NIGHT OWLS (PTY) LTD, 1 Homestead Road Kya Sands, South Africa ~72: Woodley, Ryan~

2022/11882 ~ Complete ~54:A SOIL IMPROVEMENT MATERIAL, ITS PREPARATION METHOD AND APPLICATION ~71:Beijing General Research Institute of Mining & Metallurgy, Building 23, Zone 18 of ABP, No. 188, South 4th Ring Road West, Xicheng District, Beijing, People's Republic of China ~72: Gao Wenqian;Wang Fang;Wang Qiong;Wu Liangliang;Zhang Hua~ 33:CN ~31:202210502195.4 ~32:09/05/2022

2022/11886 ~ Complete ~54:A DRUG DELIVERY SYSTEM BY USING ARTIFICIAL INTELLIGENCE INTERFACES FOR PREPARING MICROEMULSIONS TO ENHANCE BIOAVAILABILITY ~71:Dr.Bibhuti Bhusana Panigrahi, Principal and Professor, Department of Pharmaceutics, Om Sai Institute of Paramedical Sciences (Biju Patnaik University of Technology), Dukura, Mayurbhanj, India;Dr.Goje Arjun, Associate Professor and HOD, Teegala Ram Reddy College of Pharmacy (JNTUH-Hyderabad), Meerpet, Saroornagar, Hyderabad, India;Dr.Himansu Bhusan Samal, Associate Professor, Department of Pharmaceutics, School of Pharmacy and Life Sciences, Centurion University of Technology and Management, Ramchandrapur, Jatni, Bhubaneswar, India;Dr.Kanchana N.Dussa, Professor and Head, Department of Pharmacy Practice, Anwarul Uloom College of Pharmacy, Osmania University, New Mallepally, Hyderabad, India;Dr.Niranjan Panda, Professor and HOD, Department of Pharmaceutics, Anwarul Uloom College of Pharmacy, Osmania University, New Mallepally, Hyderabad, India;Dr.Satyajit Panda, Assistant Professor, Department of Pharmaceutics, Institute of Pharmacy and Technology, Salipur, (Biju Patnaik University of Technology), Cuttack, India;Mr.Satyabrata Jena, Associate Professor, Bhaskar Pharmacy College (JNTUH-Hyderabad), Yenkapally, Moinabad, Hyderabad, India;Mr.Sourab Ghosh, Head Quality Assurance, Ace Healthcare Ltd, No: 72/A, Illimba-Kandana Road, Kandana, Sri Lanka;Mr.Sribatsa Lanchhana Dash, Associate Professor, Department of Pharmaceutical Chemistry, Maharana Pratap College of Pharmacy, Kothi, Mandhana, Kanpur, Uttar Pradesh, (Dr. A.P.J. Abdul Kalam Technical University), Kanpur, India;Mr.Tankadhar Mishra, Assistant Professor, Pharmacognosy, The Pharmaceutical College, Samaleswari vihar, Tingipali, Barpali, (Biju Patnaik University of Technology), Bargarh District, India ~72: Dr.Bibhuti Bhusana Panigrahi;Dr.Goje Arjun;Dr.Himansu Bhusan Samal;Dr.Kanchana N.Dussa;Dr.Niranjan Panda;Dr.Satyajit Panda;Mr.Satyabrata Jena;Mr.Sourab Ghosh;Mr.Sribatsa Lanchhana Dash;Mr.Tankadhar Mishra~

2022/11889 ~ Complete ~54:ANTIBODY TO HUMAN INTERLEUKIN-4 RECEPTOR A, PREPARATION METHOD THEREFOR AND USE THEREOF ~71:SHANGHAIMABGEEKBIOTECH.CO., LTD., Room 304, No. 1011 Halei Road, Zhangjiang Hi-TechPark, Shanghai 201203, People's Republic of China ~72: CHENGHAI ZHANG;JINLIN GUO;YUJING YUAN~ 33:CN ~31:202010309238.8 ~32:17/04/2020

2022/11895 ~ Complete ~54:PLASTIC CONTAINER ~71:ALPLA WERKE ALWIN LEHNER GMBH & CO. KG, Allmendstrasse 81, Austria ~72: Christian ZM&#214;LNIG;Daniel SCHNETZER;Thomas BOHLE~ 33:CH ~31:00598/20 ~32:18/05/2020

2022/11891 ~ Complete ~54:COMPOSITIONS AND METHODS FOR TREATING NEUROPSYCHIATRIC DISORDERS ~71:HONEYBRAINS, LLC, 372 Lafayette Avenue, New York, New York 10012, United States of America ~72: ALON SEIFAN~ 33:US ~31:63/011,932 ~32:17/04/2020;33:US ~31:63/111,156 ~32:09/11/2020

2022/11897 ~ Complete ~54:HETEROCYCLIC COMPOUNDS AS TRIGGERING RECEPTOR EXPRESSED ON MYELOID CELLS 2 AGONISTS AND METHODS OF USE ~71:Amgen Inc., One Amgen Center Drive, THOUSAND OAKS 91320-1799, CA, USA, United States of America;Vigil Neuroscience, Inc., 400 Technology Square, 10th Floor, CAMBRIDGE 02139, MA, USA, United States of America ~72: CZABANIUK, Lara C.;HOPPER, Timothy;HOUZE, Jonathan B.;RESCOURIO, Gwenaella;SANTORA, Vincent;WANG, Haoxuan;WHITE, Ryan D.;WONG, Alice R.;WU, Yongwei~ 33:US ~31:63/019,768 ~32:04/05/2020

2022/11899 ~ Provisional ~54:KINETIC ENERGY PRODUCE ENERGY BY WATER GREECE AIR COMPRESSOR AND GENERATOR ~71:MEHLOLO YALEFASE ELECTRICAL AND PROJECTS PTY LTD,

RIVER BEND PLOT 14 LEPHALALE, South Africa ~72: JACQUES FRANCOIS DUTOIT;JOHAN VAN RENSBURG;THAPEDI STEPHEN MOKIBA~

2022/11876 ~ Complete ~54:HLPC METHOD FOR DETECTING MCPA-ISOOCTYL AND FLUROXYPYR-MEPTYL ~71:Shandong Academy of Pesticide Sciences, No. 234, Beiyuan Street, Jinan, Shandong, 250000, People's Republic of China ~72: HAN Zengrui;LI Ruijuan;LIU Wei;LIU Yu;WANG Hongyan;XU Yumei~

2022/11884 ~ Complete ~54:MOBILE SAFETY COVER PROTECTION FOR DANGEROUS UNUSABLE MOBILE FREQUENCY ~71:Dr.Bose Sundan, Professor, Department of Computer Science and Engineering, College of Engineering Guindy, Anna University, Chennai, India;Dr.Buvaneswari Natarajan, Data Scientist, International Systems Technologies, 1249 South River Road, Suit No: 205, East Windsor, United States of America ~72: Dr.Bose Sundan;Dr.Buvaneswari Natarajan~

2022/11893 ~ Complete ~54:METHODS OF TREATING PULMONARY FIBROSIS ~71:AMPLIA THERAPEUTICS PTY LTD, Level 21, 90 Collins Street, Melbourne, Victoria, 3000, Australia ~72: CHRIS BURNS;JOHN LAMBERT;MARK GRAEME DEVLIN~ 33:AU ~31:2020901743 ~32:28/05/2020

- APPLIED ON 2022/11/02 -

2022/11933 ~ Complete ~54:A VIRTUAL MOUSE CONTROL SYSTEM ENABLED WITH HAND GESTURES ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, India ~72: MAHORE, Nishad;MALANI, Himani;MALI, Rushikesh;MALI, Yash;MANE, Vijay M.;MORE, Manisha~

2022/11906 ~ Complete ~54:QUIET REMINDER FOR SCHOOL STUDY ROOMS ~71:Liupanshui Normal University, No.288 Minghu Road, Zhongshan District, Liupanshui City, Guizhou Province, People's Republic of China ~72: DING Ke;YU Chengbin~

2022/11907 ~ Complete ~54:THREE-LAYER FIRE-FIGHTING CLOTHING WITH SELF-CLEANING FUNCTION AND PRODUCTION METHOD THEREOF ~71:Anhui Polytechnic University, Beijing Middle Road, Wuhu City, Anhui Province, People's Republic of China;HANG ZHOU VOCATIONAL & TECHNICAL COLLEGE, No.68 Xueyuan Street, Xiasha Higher Education Park, Hangzhou City, Zhejiang Province, People's Republic of China ~72: SU Zhaowei;WEI Yuhui;ZHANG Zhenlin~

2022/11910 ~ Complete ~54:PYROLYSIS AND GASIFICATION HYDROGEN PRODUCTION DEVICE WITH LOW TAR CONTENT AND HIGH GAS PURIFICATION ~71:North China University of Science and Technology, 21 Bohai Road, Caofeidian Xincheng, Tangshan, Hebei, 063210, People's Republic of China ~72: CHEN, Liansheng;JI, Aimin;LI, Haiying;LIU, Yun;TIAN, Yaqiang;WANG, Hongli;YAO, Xin;ZHANG, Yuan~ 33:CN ~31:202221484113.X ~32:15/06/2022

2022/11912 ~ Complete ~54:A RIBBED ANTI-FATIGUE DETACHABLE STEEL BRIDGE DECK ~71:China Railway Bridge Engineering Bureau Group Co. Ltd., No. 32 Zhonghuan West Road, Tianjin Airport Economic Zone, Tianjin, People's Republic of China;China Railway Construction Bridge Engineering Bureau Group 4th Engineering Co., Ltd., No 459, Xianfeng Road, Nangang District, Harbin, People's Republic of China;Guangzhou Nansha District Housing and Urban Construction Bureau, 4th Floor, Building D, Administrative Center, NO.1 Fenghuang Avenue, Huangge Town,Nansha District, Guangzhou, People's Republic of China;Shenyang University of Technology, No. 111, Shenliao West Road, Economic&Technological Development Zone, Shenyang, People's Republic of China;Tsinghua University, Tsinghua #160;University, Haidian District, Beijing, People's Republic of China ~72: AN,Luming;CHEN,Yixuan;GUI,Jianwen;LIU,Peng;REN,Yanlong;WANG,Lei;WANG,Yuanqing;ZHANG,Pengzhi;ZHAO,Jian;ZHOU,Tianxi~



2022/11913 ~ Complete ~54:DESERTIFICATION CONTROL LAND FACILITY WITH IMPROVED STRUCTURE ~71:Gansu Institute of Desert Control, No. 1856 Qilian Avenue, Liangzhou District, Wuwei City, Gansu Province, 733000, People's Republic of China ~72: Du Juan;Li JingJing;Liu HuJun;Liu ShuJuan;Wang YuQi~

2022/11934 ~ Complete ~54:AUTOMATIC DETECTION SYSTEM USING PYTHON ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, India ~72: MANE, Shruti S.;MANE, Vaishnavi S.;MANE, Vedant R.;MANE, Vijay M.;MANGLE, Shrihari K.;MORE, Manisha;P., Umesh~

2022/11919 ~ Complete ~54:ARCH BRIDGE HANGER FOR SECONDARY ANCHORAGE AND SHOCK ABSORPTION ~71:China Railway Bridge Engineering Bureau Group Co. Ltd., No. 32 Zhonghuan West Road, Tianjin Airport Economic Zone, Tianjin, People's Republic of China;China Railway Construction Bridge Engineering Bureau Group 4th Engineering Co., Ltd., No 459, Xianfeng Road, Nangang District, Harbin, People's Republic of China;Guangzhou Nansha District Housing and Urban Construction Bureau, 4th Floor, Building D, Administrative Center, NO.1 Fenghuang Avenue, Huangge Town,Nansha District, Guangzhou, People's Republic of China;Shenyang University of Technology, No. 111, Shenliao West Road, Economic&Technological Development Zone, Shenyang, People's Republic of China;Tsinghua University, Tsinghua University, Haidian District, Beijing, People's Republic of China ~72: AN,Luming;CHEN,Gang;CHEN,Meiyu;GUI,Jianwen;LIU,Peng;LU,Hongping;REN,Yanlong;WANG,Yuanqing;ZHA O,Jian;ZHOU,Tianxi~

2022/11922 ~ Complete ~54:DRIVER SAFETY SYSTEM ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, India ~72: JOSHI, Kalpesh V.;MAHAJAN, Chandrashekhar;SOMAN, Koustubh P.;SOMANI, Venkatesh R;SONAR, Parikshit M.;SONAWANE, Mohan L.;SONAWANE, Pushkar L.~

2022/11945 ~ Complete ~54:SYSTEMS AND METHODS FOR TCI STATE ACTIVATION AND CODEPOINT TO TCI STATE MAPPING ~71:TELEFONAKTIEBOLAGET LM ERICSSON (PUBL), SE-164 83 STOCKHOLM, SWEDEN, Sweden ~72: GAO, Shiwei;M&#196;&#196;TT&#196;NEN, Helka-Liina;MURUGANATHAN, Siva~ 33:US ~31:63/007,746 ~32:09/04/2020

2022/11901 ~ Provisional ~54:METHOD OF AND SYSTEM FOR ASSESSING AN ANSWER ~71:SIEBRITZ, Stantin William, Unit No. 6, Serenity Complex, Burger Street, Namibia ~72: SIEBRITZ, Stantin William~

2022/11905 ~ Complete ~54:WET CARBONIZATION SYSTEM AND METHOD, AND METHOD FOR SAMPLING, TESTING AND EVALUATION THEREOF ~71:Shenzhen University, No. 3688, Nanhai Avenue, Yuehai Street, Nanshan District, Shenzhen City, Guangdong, 518060, People's Republic of China ~72: CUI, Peng;KOU, Shicong;XING, Feng;YU, Yong;ZHAN, Baojian~

2022/11956 ~ Complete ~54:APOLIPOPROTEIN E (APOE) IRNA AGENT COMPOSITIONS AND METHODS OF USE THEREOF ~71:ALNYLAM PHARMACEUTICALS, INC., 675 West Kendall Street, Henri A. Termeer Square, Cambridge, Massachusetts, 02142, United States of America ~72: ADAM CASTORENO;BRET LEE BOSTWICK;HAIYAN PENG;JAMES D MCININCH;MARK K SCHLEGEL~ 33:US ~31:63/015,867 ~32:27/04/2020

2022/11965 ~ Complete ~54:DEEP LEARNING PLATFORMS FOR AUTOMATED VISUAL INSPECTION ~71:Amgen Inc., One Amgen Center Drive, THOUSAND OAKS 91320-1799, CA, USA, United States of America ~72: BERNACKI, Joseph Peter;FINE, Jordan Ray;HAMPSHIRE, Kenneth E.;MILNE, Graham F.;PEARSON, Thomas Clark;QUINLAN, Mark~ 33:US ~31:63/020,232 ~32:05/05/2020;33:US ~31:63/120,505 ~32:02/12/2020

2022/11966 ~ Complete ~54:FORMULATIONS OF PYRIMIDINE CYCLOHEXYL GLUCOCORTICOID RECEPTOR MODULATORS ~71:CORCEPT THERAPEUTICS INCORPORATED, 149 Commonwealth Drive, United States of America ~72: ALSMEYER, Yan;ARBOLEDA, Stephen;CHIA, Yip-Fong;CLIKEMAN, Tyler;DAVIS, Gordon~ 33:US ~31:63/020,919 ~32:06/05/2020

2022/11968 ~ Provisional ~54:AUTO MOTIVE HAIL PROTECTOR ~71:QUINTON ANGELO DU PLESSIS, 120 VLEILOERIE KOMPLEKS, GANE STR, KILNERPARK, South Africa ~72: QUINTON ANGELO DU PLESSIS~

2022/11902 ~ Provisional ~54:A ROCK BOLT ~71:JOZISCAPE (PTY) LTD, CNR OF MAIN 6TH STREET, GARANKUWA INDUSTRIAL PARK, GA-RANKUWA, GAUTENG, 0208, South Africa ~72: BOTHA, Raymond, Mark;MARSHALL, Elton;MARSHALL, Garth~

2022/11904 ~ Complete ~54:MODELING METHOD OF FORECASTING MODEL FOR REPRESENTING INTENTION OF DRIVER ~71:Changchun University of Technology, No. 2055, Yan'an Street, Changchun City, Jilin Province, 130000, People's Republic of China ~72: LI, Binglin;LI, Yan;LIAN, Yufeng;LIU, Keping;LIU, Shuaishi;SUN, Hongliang;SUN, Zhongbo~ 33:CN ~31:202111364777.2 ~32:17/11/2021

2022/11937 ~ Complete ~54:SELF-RESTORING PLASTIC HINGE BEARING STRUCTURE FOR BRIDGES ~71:China Railway Bridge Engineering Bureau Group Co. Ltd., No. 32 Zhonghuan West Road, Tianjin Airport Economic Zone, Tianjin, People's Republic of China;China Railway Construction Bridge Engineering Bureau Group 4th Engineering Co., Ltd., No 459, Xianfeng Road, Nangang District, Harbin, People's Republic of China;Guangzhou Nansha District Construction Center, 6th Floor, Nansha Media Building, Jingang Avenue, Nansha District, Guangzhou, People's Republic of China;Shenyang University of Technology, No. 111, Shenliao West Road, Economic&Technological Development Zone, Shenyang, People's Republic of China;Tsinghua University, Tsinghua University, Haidian District, Beijing, People's Republic of China ~72: AN,Luming;CHEN,Gang;CHEN,Meiyu;DU,Pingzhi;HE,Huirong;LIU,Peng;QU, Jiacheng;REN,Yanlong;WANG,Yuan qing;ZHAO,Jian~

2022/11948 ~ Complete ~54:MICROSCOPIC OPTICAL IMAGING SYSTEM FOR LIVING CELL ~71:CLINX SCIENCE INSTRUMENTS CO., LTD, Room 5C102-1, Building 5, No.258, SongXing Road (West), BaoShan District, Shanghai, 200940, People's Republic of China ~72: DEBAO CHU;HUIMING WANG;JIE GAO;QI ZHANG;RONGWEI CAI;XIONGQUN CHEN;YIJUN CHU~ 33:CN ~31:202010260880.1 ~32:03/04/2020

2022/11949 ~ Complete ~54:ANTI-CD40 ANTIBODY COMBINATION TREATMENT FOR CANCER ~71:MSD INTERNATIONAL GMBH, Weyrstrasse 20, 6000, Lucerne 6, Switzerland;SEAGEN INC., 21823 30th Drive SE, Bothell, Washington, 98021, United States of America ~72: MICHAEL SCHMITT;SHYRA GARDAI~ 33:US ~31:63/016,247 ~32:27/04/2020

2022/11950 ~ Complete ~54:REINFORCEMENT LEARNING BASED RATE CONTROL ~71:MICROSOFT TECHNOLOGY LICENSING, LLC, One Microsoft Way, Redmond, Washington, 98052, United States of America ~72: ANDREY MEZENTSEV;BIN LI;JIAHAO LI;MEI-HSUAN LU;MING-CHIEH LEE;W. TOM HOLCOMB;YAN LU~

2022/11955 ~ Complete ~54:A HIGH SPF SKIN CLEANSING COMPOSITION ~71:UNILEVER GLOBAL IP LIMITED, Port Sunlight, Wirral, Merseyside, CH62 4ZD, United Kingdom ~72: ASHISH ANANT VAIDYA;MOHINI ANAND BAPAT;NIKITA TOMAR;PRAFUL GULAB RAO LAHORKAR;RAJKUMAR PERUMAL~ 33:IN ~31:202021023193 ~32:02/06/2020;33:EP ~31:20185857.8 ~32:15/07/2020

2022/11903 ~ Provisional ~54:GATE AUTOMATION ~71:BOUWER, Gert Johannes, Plot 81 Shere AH, Lynnwood Road, South Africa ~72: BOUWER, Gert Johannes~

2022/11911 ~ Complete ~54: SORTING MECHANISM FOR CRUSHED WASTE SHOE PRODUCTS  
~71: Donghua University, No. 2999 North Renmin Road, Songjiang District, Shanghai City, 201620, People's Republic of China ~72: BAO, Jinsong; FENG, Pei; LI, Jie; LI, Lei; NI, Ping; YU, Yingjia ~ 33: CN  
~31: 202210821770.7 ~32: 12/07/2022

2022/11914 ~ Complete ~54: ORGANIC FERTILIZER FOR REDUCING NITRATE CONTENT OF LETTUCE LEAVES AND PREPARATION METHOD THEREOF ~71: Nanchang Institute of Technology, No. 289, Tianxiang Avenue, High tech Zone, Nanchang City, Jiangxi Province, People's Republic of China ~72: Hou Jiexi; Jin Zhinong; Liu Jia; Liu Ming; Xiao Changlong; Zhang Beihong; Zhang Jie; Zhao Jiao ~ 33: CN ~31: 202210358318.1  
~32: 06/04/2022

2022/11926 ~ Complete ~54: PROCESS TO ASSESS THE VIABILITY AND FEASIBILITY OF ONLINE FUND RAISING ~71: VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, India ~72: CHAVHAN, Nishant S.; CHAWARE, Aman N.; CHAWARE, Bhushan P.; CHHAJED, Ashish A.; MAHAJAN, Chandrashekhar; POL, Madhumati; RATHI, Chetanya A.; SONDKAR, Shilpa ~

2022/11931 ~ Complete ~54: A SYSTEM FOR DONATING OLD GOODS ~71: VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, India ~72: GAIKWAD, Vijay D.; GATKE, Mandar R.; GAVADE, Vikram V.; GAVALI, Vishal H.; GAVHANE, Swapnil; GAVIT, Chinmay V.; MOONA, Gaurav P.; POL, Madhumati ~

2022/11935 ~ Complete ~54: A STEEL-WOOD ENERGY-DISSIPATING JOINT STRUCTURE CONTAINING MEMORY ALLOY ~71: China Railway Bridge Engineering Bureau Group Co. Ltd., No. 32 Zhonghuan West Road, Tianjin Airport Economic Zone, Tianjin, People's Republic of China; China Railway Construction Bridge Engineering Bureau Group 4th Engineering Co., Ltd., No 459, Xianfeng Road, Nangang District, Harbin, People's Republic of China; Guangzhou Nansha District Construction Center, 6th Floor, Nansha Media Building, Jingang Avenue, Nansha District, Guangzhou, People's Republic of China; Shenyang University of Technology, No. 111, Shenliao West Road, Economic & Technological Development Zone, Shenyang, People's Republic of China; Tsinghua University, Tsinghua University, Haidian District, Beijing, People's Republic of China ~72: AN, Luming; LIU, Peng; QU, Jiacheng; REN, Yanlong; WANG, Fusheng; WANG, Lei; WANG, Yuanqing; ZHAN, Guofu; ZHANG, Pengzhi; ZHAO, Jian ~

2022/11939 ~ Complete ~54: METHODS FOR INCREASING YIELD OF SEQUENCING LIBRARIES  
~71: ILLUMINA CAMBRIDGE LIMITED, 19 Granta Park Great Abington, United Kingdom; ILLUMINA, INC., 5200 Illumina Way, San Diego, California 92122, United States of America; OREGON HEALTH & SCIENCE UNIVERSITY, 3181 S.W. Sam Jackson Park Rd, United States of America ~72: ADEY, Andrew C; MULQUEEN, Ryan; MUSGRAVE-BROWN, Esther; POKHOLOK, Dmitry K; STEEMERS, Frank; ZHANG, Fan ~ 33: US  
~31: 63/036,710 ~32: 09/06/2020

2022/11942 ~ Complete ~54: PAPER PACKAGING MATERIAL HAVING IMPROVED RESUSPENDABILITY OF THE CELLULOSE FIBRES ~71: CONSTANTIA PIRK GMBH & CO. KG, PIRKM&#220;HLE 14-16, 92712 PIRK, GERMANY, Germany ~72: GREFENSTEIN, Achim; KESMARSZKY, Thomas; KICK, Markus; SCHECK, Matthias ~ 33: DE ~31: 10 2020 112 672.7 ~32: 11/05/2020

2022/11960 ~ Complete ~54: PHARMACEUTICAL FORMULATIONS POLYETHYLENE GLYCOL-BASED PRODRUGS OF ADRENOMEDULLIN AND USE ~71: Bayer Aktiengesellschaft, Kaiser-Wilhelm-Allee 1, LEVERKUSEN 51373, GERMANY, Germany ~72: HAASBACH, Carina; MOTZKUS, Hans-Walter; SCHNEID, Stefan Christian; UNGER, Florian ~ 33: EP ~31: 20168075.8 ~32: 03/04/2020

2022/11909 ~ Complete ~54: FIVE-AXIS LINKED 3D PRINTER ~71: WUXI YOUTINN WUWEI ADDITIVE TECHNOLOGY CO., LTD., No. 108-111, Qianrong Road, Qinxin Science And Technology Pioneer Park, Wuxi,

Jiangsu, 214000, People's Republic of China ~72: XIAO, Guodong;YU, Qian~ 33:CN ~31:202111362273.7  
~32:17/11/2021

2022/11916 ~ Complete ~54:A CLAMPING CLAW TYPE DEEP-SEA PIPELINE AUTOMATIC CONNECTING  
MACHINE ~71:Southwest Petroleum University, No. 8 Xindu Avenue, Xindu District, Chengdu City, Sichuan  
Province, 610500, People's Republic of China ~72: Jie Qiu;Kun Hu;Wenjie Xie;Xian Qin;Zhixu Zhou~

2022/11918 ~ Complete ~54:SYSTEM FOR DETECTION OF COLOUR BLINDNESS ~71:VISHWAKARMA  
INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, India  
~72: BIRLA, Shrivinayak;DHAKAR, Siddharth;MAHAJAN, Chandrashekhar;MANDE, Smita S.;MANGRULE,  
Shubham;SHAH, Shubham;SINDHKHEDE, Shubham~

2022/11920 ~ Complete ~54:A CONCRETE-TIMBER BEAM-COLUMN ENERGY DISSIPATION SELF-  
RECOVERY JOINT STRUCTURE ~71:China Railway Bridge Engineering Bureau Group Co. Ltd., No. 32  
Zhonghuan West Road, Tianjin Airport Economic Zone, Tianjin, People's Republic of China;China Railway  
Construction Bridge Engineering Bureau Group 4th Engineering Co., Ltd., No 459, Xianfeng Road, Nangang  
District, Harbin, People's Republic of China;Guangzhou Nansha District Construction Center, 6th Floor, Nansha  
Media Building, Jingang Avenue, Nansha District, Guangzhou, People's Republic of China;Shenyang University of  
Technology, No. 111, Shenliao West Road, Economic&Technological Development Zone, Shenyang,  
People's Republic of China;Tsinghua University, Tsinghua University, Haidian District, Beijing, People's  
Republic of China ~72:  
AN,Luming;DU,Pingzhi;LIU,Peng;REN,Yanlong;WANG,Haining;WANG,Lei;WANG,Yuanqing;XIE,Yihua;ZHANG,P  
engzhi;ZHAO,Jian~

2022/11923 ~ Complete ~54:SOLAR POWERED GRASS CUTTER ~71:VISHWAKARMA INSTITUTE OF  
TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, India ~72:  
BHANDARI, Shantanu N.;BHOSALE, Karan B.;BHOSALE, Pranav D.;BHOSALE, Vedant L.;BHURUK, Tanushri  
S.;JALNEKAR, Rajesh M.;MAHAJAN, Chandrashekhar;SHINDE, Sandip~

2022/11908 ~ Complete ~54:APPLICATION OF GAMBOGIC ACID IN PREPARING DRUGS FOR TREATING  
OVARIAN CANCER ~71:The Second People's Hospital of Haidong, Yinsheng Road, Nianbo Town, Ledu  
District, Haidong City, Qinghai Province, People's Republic of China;Wuxi Maternal and Child Health Hospital,  
No.48 Huaishu Lane, Liangxi District, Wuxi City, Jiangsu Province, People's Republic of China ~72: CHEN  
Daozhen;JIA Zhen;LU Mudan;MA Yulian;YANG Rui~

2022/11915 ~ Complete ~54:TRENCH-BASED STRUCTURE FOR WETLAND PROTECTION AND  
RESTORATION AND CONSTRUCTION METHOD THEREOF ~71:SHANDAN COUNTY WETLAND  
PROTECTION STATION, CHANGQING GARDEN, NANHU PARK, People's Republic of China ~72: CHEN,  
Yuqin;LU, Yinlu;MAO, Ying;TIAN, Bin;XU, Fahui;ZHANG, Yuling~

2022/11917 ~ Complete ~54:BIOCONTROL STRAIN LB-1 OF PLANT DISEASE AND METHOD FOR  
OBTAINING ANTIFUNGAL CRUDE EXTRACT THEREOF ~71:WEIFANG UNIVERSITY, No. 5147, Dongfeng  
East Street, Weifang City, People's Republic of China ~72: CAO, Hui;HAN, Ruidong;LIANG, Zengwen;LIU,  
Caiyun;WANG, Chaoran;ZHANG, Shuyu;ZHAO, Jing~

2022/11921 ~ Complete ~54:A HEADREST ADVERTISING MEANS ~71:Alon Nussbaum, 73 Mejon Street,  
Glenhazel, South Africa;Farrel Nussbaum, 73 Mejon Street, Glenhazel, South Africa ~72: Alon Nussbaum;Farrel  
Nussbaum~

2022/11929 ~ Complete ~54:BLUETOOTH CONTROLLED WHEELCHAIR ~71:VISHWAKARMA INSTITUTE OF  
TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, India ~72:

GAIKWAD, Vijay D.;SAWANT, Atharvsinh;SAWANT, Avadhut;SAWANT, Sahil;SAWANT, Yashraj;SAWARKAR, Sanchit;THOPATE, Kaushalya~

2022/11936 ~ Complete ~54:A MEMORY ALLOY-RUBBER ENERGY DISSIPATION SELF-RECOVERY BRIDGE ASEISMATIC BEARING STRUCTURE ~71:China Railway Bridge Engineering Bureau Group Co. Ltd., No. 32 Zhonghuan West Road, Tianjin Airport Economic Zone, Tianjin, People's Republic of China;China Railway Construction Bridge Engineering Bureau Group 4th Engineering Co., Ltd., No 459, Xianfeng Road, Nangang District, Harbin, People's Republic of China;Guangzhou Nansha District Construction Center, 6th Floor, Nansha Media Building, Jingang Avenue, Nansha District, Guangzhou, People's Republic of China;Shenyang University of Technology, No. 111, Shenliao West Road, Economic&Technological Development Zone, Shenyang, People's Republic of China;Tsinghua University, Tsinghua University, Haidian District, Beijing, People's Republic of China ~72:

AN,Luming;CHEN,Gang;CHEN,Meiyu;FAN,Lilong;LIU,Peng;WANG,Haining;WANG,Yuanqing;WEN,Zhicheng;ZHANG,Changkai;ZHAO,Jian~

2022/11943 ~ Complete ~54:URCHIN CULLING MECHANISM AND ATTRACTANT METHOD ~71:COASTAL WATERS BIOTECHNOLOGY 2, INC., 75 5TH ST NW, SUITE 3405, ATLANTA, GA 30308, USA, United States of America ~72: MCCLUNG, Arthur, III;YANCEY, Dennis Dwayne, Jr.~ 33:US ~31:63/005,615 ~32:06/04/2020

2022/11952 ~ Complete ~54:USING FREE-SPACE OPTICS TO INTERCONNECT A PLURALITY OF COMPUTING NODES ~71:MICROSOFT TECHNOLOGY LICENSING, LLC, One Microsoft Way, Redmond, Washington, 98052-6399, United States of America ~72: CHRISTIAN L BELADY;DOUGLAS CARMEAN;HITESH BALLANI;LISA R HSU;PAOLO COSTA;WINSTON ALLEN SAUNDERS~ 33:US ~31:16/917,875 ~32:30/06/2020

2022/11959 ~ Complete ~54:LIQUID PHARMACEUTICAL FORMULATIONS POLYETHYLENE GLYCOL-BASED PRODRUGS OF ADRENOMEDULLIN AND USE ~71:Bayer Aktiengesellschaft, Kaiser-Wilhelm-Allee 1, LEVERKUSEN 51373, GERMANY, Germany ~72: HAASBACH, Carina;MOTZKUS, Hans-Walter;SCHNEID, Stefan Christian;UNGER, Florian~ 33:EP ~31:20168068.3 ~32:03/04/2020

2022/11962 ~ Complete ~54:NON-AQUEOUS DISPERSIONS COMPRISING INHIBITORS OF HYDROXYPHENYLPYRUVATE-DIOXYGENASE AND CITRIC ACID ~71:Bayer Aktiengesellschaft, Kaiser-Wilhelm-Allee 1, LEVERKUSEN 51373, GERMANY, Germany ~72: MARTELLETTI, Arianna~ 33:EP ~31:20168105.3 ~32:03/04/2020

2022/11971 ~ Provisional ~54:LOW AMPERAGE HOB 4 PLATE SPIRAL + SOLID ~71:LEONARD PETERSEN FAMILY TRUST I/T132/2004, No45 30TH AVE ELSIES RIVER, South Africa ~72: LEONARD PETERSEN~

2022/11924 ~ Complete ~54:AUTOMATIC IRRIGATION SYSTEM USING SOLAR ENERGY ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, India ~72: CHAVAN, Akshay;CHAVAN, Kunal;CHAVAN, Paritosh;CHAVAN, Pradnya;CHAVAN, Siddhi;CHAVAN, Sumedh;MAHAJAN, Chandrashekhar;MANDE, Smita S.~

2022/11927 ~ Complete ~54:ARDUINO BASED ANTI- THEFT FACE RECOGNITION SYSTEM ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, India ~72: JOSHI, Anita S.;JOSHI, Kalpesh;PAWAR, Shantanu;PAWAR, Tanishka;PAWAR, Tejas;PAWAR, Varun;PAWAR, Vedant~

2022/11928 ~ Complete ~54:MEMORY ALLOY CRASH BARRIER ~71:China Railway Bridge Engineering Bureau Group Co. Ltd., No. 32 Zhonghuan West Road, Tianjin Airport Economic Zone, Tianjin, People's Republic of China;China Railway Construction Bridge Engineering Bureau Group 4th Engineering Co., Ltd., No 459, Xianfeng Road, Nangang District, Harbin, People's Republic of China;Guangzhou Nansha District Construction Center, 6th

Floor, Nansha Media Building, Jingang Avenue, Nansha District, Guangzhou, People's Republic of China;Shenyang University of Technology, No. 111, Shenliao West Road, Economic&Technological Development Zone, Shenyang, People's Republic of China;Tsinghua University, Tsinghua University, Haidian District, Beijing, People's Republic of China ~72:  
AN,Luming;FAN,Lilong;FAN,Mengqi;HUANG,Kuanhong;LI,Canlun;LIU,Peng;REN,Yanlong;WANG,Yuanqing;ZHANG,Changkai;ZHAO,Jian~

2022/11932 ~ Complete ~54:A SYSTEM FOR SMART CITY MANAGEMENT ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, India ~72: AKOTKAR, Soham;ALDAR, Prathamesh;ALEKAR, Pratham;JADHAV, Akshay;MANE, Vijay M.;MORE, Manisha M.;SHAIKH, Al-Hussain~

2022/11941 ~ Complete ~54:BETA-LACTAMS AND THEIR USE AS HERBICIDES ~71:BASF SE, CARL BOSCH STRASSE 38, 67056 LUDWIGSHAFEN AM RHEIN, GERMANY, Germany ~72: CAMPE, Ruth;JOHNEN, Philipp, Rudi;KORDES, Markus;KRAEMER, Gerd;NEWTON, Trevor, William;SEISER, Tobias;SEITZ, Thomas;ZIMMERMANN, Gunther~ 33:EP ~31:20169421.3 ~32:14/04/2020

2022/11946 ~ Complete ~54:RELEASABLE ATTACHMENT OF SCRAPER MODULES ~71:KILL-FRECH, Cornelia, TILBECK 23, 48329 HAVIXBECK, GERMANY, Germany ~72: KIEL, Martin;WEIMANN, Claus~ 33:DE ~31:10 2020 112 875.4 ~32:12/05/2020

2022/11961 ~ Complete ~54:PLANTS WITH IMPROVED NEMATODE RESISTANCE ~71:Centre National de la Recherche Scientifique, 3 rue Michel-Ange, PARIS 75016, FRANCE, France;Institut National de Recherche pour l'Agriculture, l'Alimentation et l'Environnement, 147 rue de l'Université, PARIS 75007, FRANCE, France;Syngenta Crop Protection AG, Rosentalstrasse 67, BASEL 4058, SWITZERLAND, Switzerland;Université de Bordeaux, 351 Avenue M. Aiguier, 33076 BORDEAUX CEDEX 2, FRANCE, France ~72: ABAD, Pierre;BONNET, Gregori;FAVERY, Bruno;MEJIAS, Joffrey;QUENTIN, Michaël;TRUONG, Nhat-My~ 33:EP ~31:20167882.8 ~32:03/04/2020

2022/11967 ~ Provisional ~54:ADJUSTABLE BRAAI STAND ~71:QUINTON ANGELO DU PLESSIS, 120 VLEILOERIE KOMPLEKS, GANE STR, KILNERPARK, South Africa ~72: QUINTON ANGELO DU PLESSIS~

2022/11970 ~ Provisional ~54:BUILDERS BROOM ~71:QUINTON ANGELO DU PLESSIS, 120 VLEILOERIE KOMPLEKS, GANE STR, KILNERPARK, South Africa ~72: QUINTON ANGELO DU PLESSIS~

2022/11925 ~ Complete ~54:EARLY-WARNING SYSTEM DEVICE FOR FOREST AND GRASSLAND FIRE PREVENTION ~71:Gansu Province Academy of Qilian Water Resource Conservation Forests Research Institute, No.3, East Ring Road, Ganzhou District, Zhangye City, Gansu, 734000, People's Republic of China;Minle Forestry and Grassland Bureau, Century Avenue, Minle County, Zhangye City, Gansu, 734500, People's Republic of China ~72: De Deng;Dong He;Wanlin Tang;Wanqi Zeng;Zhijin Liang~

2022/11930 ~ Complete ~54:SYSTEM FOR THE VISUALLY IMPAIRED PEOPLE WITH VOICE ASSISTANT ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, India ~72: DONGE, Aditya;DOSHI, Harsh;DUBE, Suhas;DUDUL, Aryan;DUGAD, Raj;GAIKWAD, Vijay D.;POL, Madhumati~

2022/11938 ~ Complete ~54:BETAMETHASONE SODIUM PHOSPHATE CRYSTAL, AND PREPARATION METHOD THEREFOR AND USE THEREOF ~71:JINING UNIVERSITY, NO.1, Xingtian Road, Qufu City,, Jining,, Shandong, 273155, People's Republic of China ~72: LI, Mingli;XIAO, Chuan~

2022/11944 ~ Complete ~54: CARD SLOT DETECTION METHOD AND APPARATUS, AND STORAGE MEDIUM ~71: YIMEIDE TECHNOLOGY CO., LTD., NO. 15, SHUANGLOULI ROAD, INDUSTRIAL PARK SUZHOU, JIANGSU 215000, CHINA, People's Republic of China ~72: GU, Yongqiang; JIN, Dengke; ZHANG, Shenfeng; ZHOU, Yajie ~ 33: CN ~31: 202110881264.2 ~32: 02/08/2021

2022/11947 ~ Complete ~54: COOLING SYSTEM AND WIND-DRIVEN GENERATOR SYSTEM ~71: XINJIANG GOLDWIND SCIENCE & TECHNOLOGY CO., LTD., No. 107 Shanghai Road, Economic & Technological Development Zone, People's Republic of China ~72: FANG, Tao; LI, Jinmeng; WANG, Dinghui ~ 33: CN ~31: 202010516556.1 ~32: 09/06/2020

2022/11951 ~ Complete ~54: COMPUTER NODE OPTICAL FREE SPACE INTERCONNECTION ~71: MICROSOFT TECHNOLOGY LICENSING, LLC, One Microsoft Way, Redmond, Washington, 98052-6399, United States of America ~72: CHRISTIAN L BELADY; DOUGLAS M CARMEAN; HITESH BALLANI; LISA RU-FENG HSU; PAOLO COSTA; WINSTON ALLEN SAUNDERS ~ 33: US ~31: 16/917,829 ~32: 30/06/2020

2022/11954 ~ Complete ~54: MYRISTOYL DERIVATIVES OF 9-AMINO-DOXYCYCLINE FOR TARGETING CANCER STEM CELLS AND PREVENTING METASTASIS ~71: LUNELLA BIOTECH, INC., 145 Richmond Road, Ottawa, Ontario, K1Z 1A1, Canada ~72: B&#201; LA OZSVARI; FEDERICA SOTGIA; JUSSI KANGASMETS&#201; MICHAEL P LISANTI ~ 33: US ~31: 63/024,216 ~32: 13/05/2020

2022/11957 ~ Complete ~54: MULTICAST ENCRYPTION SCHEME FOR DATA-OWNERSHIP PLATFORM ~71: ECOSTEER SRL, via del Macello 36B, 39100 Bolzano, Italy ~72: DANIELE GRAZIOLI; ELENA PASQUALI ~ 33: US ~31: 16/861,760 ~32: 29/04/2020

2022/11964 ~ Complete ~54: DRIVE SIDE LINER FOR A CENTRIFUGAL PUMP ~71: Weir Slurry Group, Inc., 2701 South Stoughton Road, MADISON 53716, WI, USA, United States of America ~72: KOSMICKI, Randy James ~ 33: US ~31: 63/032,073 ~32: 29/05/2020; 33: AU ~31: 2020902180 ~32: 29/06/2020

2022/11969 ~ Provisional ~54: OFF CENTRE JUNCTION BOX ~71: QUINTON ANGELO DU PLESSIS, 120 VLEILOERIE KOMPLEKS, GANE STR, KILNERPARK, South Africa ~72: QUINTON ANGELO DU PLESSIS ~

2022/11940 ~ Complete ~54: METHODS FOR IDENTIFYING A MEDICAL CONDITION IN A HUMAN SUBJECT ~71: 23 IKIGAI PTE LTD, 30 Cecil Street, #19-08, Prudential Tower, Singapore ~72: TRIPATHI, Ashish ~ 33: SG ~31: 10202004280V ~32: 08/05/2020

2022/11953 ~ Complete ~54: NEW COMPOSITIONS AND METHODS OF TREATING COVID-19 DISEASE ~71: 4LIVING BIOTECH, Campus Pasteur Lille 1 rue du professeur Calmette 59000 Lille, France; CENTRE HOSPITALIER DE BORDEAUX, 12, rue Dubernat 33404 Talence, France; CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, 3 rue Michel-Ange, 75016, Paris, France; INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE (INSERM), 101 rue de Tolbiac, 75013, Paris, France; INSTITUT PASTEUR DE LILLE, Campus de l'Institut Pasteur de Lille 1 rue du Professeur Calmette 59000 Lille, France; UNIVERSIT&#201; DE LILLE, 42 Rue Paul Duez 59000 Lille, France; UNIVERSITE DE BORDEAUX, 35, place Pey Berland, 33000, Bordeaux, France ~72: CHLO&#201; JAMES; FRANCOIS TROTTEIN; ISABELLE DUPIN; J&#201;R&#212; ME BRETON; KEREN BISMUTH; PATRICK BERGER; PIERRE-OLIVIER GIRODET; RENAUD PREVEL; REVITAL RATTENBACH; VALENTIN SENCIO ~ 33: EP ~31: 20173595.8 ~32: 07/05/2020

2022/11958 ~ Complete ~54: METHOD FOR OBTAINING LOW-MOLECULAR-WEIGHT HEPARINS AND LOW-MOLECULAR-WEIGHT HEPARINS THEREBY OBTAINED ~71: LABORATORIOS FARMAC&#201; UTICOS ROVI, S.A., Juli&#225;n Camarillo, 35 28037, Spain ~72: FRANCO RODR&#205; GUEZ, Guillermo; GUTIERRO ADURIZ, Ibon ~ 33: ES ~31: PCT/ES2020/070271 ~32: 27/04/2020

2022/11963 ~ Complete ~54:COATING FOR A DEVICE ~71:Tractivus SL, Via Augusta 394, BARCELONA 08017, SPAIN, Spain ~72: BORR&#211;S G&#211;MEZ, Salvador;GILABERT PORRES, Joan;TEXID&#211; BARTES, Robert~ 33:EP ~31:20382268.9 ~32:03/04/2020

2022/12011 ~ Complete ~54:RECHARGEABLE ELECTRICAL STORAGE DEVICES ~71:LUKATIT INVESTMENTS 12 (PTY) LTD, Postnet Suit 423, Private Bag X5, South Africa ~72: HUMAN, Jan Petrus~ 33:ZA ~31:2020/00734 ~32:04/04/2020

- APPLIED ON 2022/11/03 -

2022/12004 ~ Complete ~54:SYSTEM FOR ORGANIZING AND MANAGEMENT OF HEALTH CARE FRAMEWORK ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, India ~72: CHOLKE, Pooja;TEKADE, Om V.;TEKADE, Shreyash V.;TEKAM, Anurag N.;TEKAWADE, Pratik;THAKARE, Prathamesh D.;UPKARE, Makarand U.~

2022/11992 ~ Complete ~54:A COUNTING METHOD OF BRUCELLA LIVING BACTERIA BASED ON PMA-QPCR TECHNOLOGY ~71:JILIN PROVINCE BIOSCI DEVELOPMENT CO., LTD., BUILDING 15# 1104 ROOM, XINCHENG WUYUE Mall, LVYUAN DISTRICT, CHANGCHUN CITY, JILIN PROVINCE, People's Republic of China;JILIN UNIVERSITY, QIANJIN STREET 2699#, CHAOYANG DISTRICT, CHANGCHUN CITY, JILIN PROVINCE, People's Republic of China;WEIFANG XIASHAN WEITAI BIOTECHNOLOGY CO., LTD., BUILDING 2#, FENGHUANG LING STREET 197#, XIASHAN DISTRICT, WEIFANG CITY, SHANDONG PROVINCE, People's Republic of China ~72: HU PAN;LI YANSONG;LIU XILIN;LIU ZENGSHAN;LU SHIYING;REN HONGLIN;WANG HAIBO;WANG MIDONG;ZHANG SHIJUN;ZHANG YING~

2022/12001 ~ Complete ~54:ADSORPTION MATERIAL FOR TREATING WASTE WATER CONTAINING ARSENIC, ANTIMONY AND MOLYBDENUM, PREPARATION METHOD THEREOF AND METHOD FOR TREATING WASTE WATER CONTAINING ARSENIC, ANTIMONY AND MOLYBDENUM THEREWITH ~71:BGRIMM TECHNOLOGY GROUP, BUILDING 23, DISTRICT 18, HEADQUARTERS BASE, NO. 188, SOUTH FOURTH RING WEST ROAD, People's Republic of China ~72: LI, Yonghui;SHAO, Linan;YANG, Xiaosong~ 33:CN ~31:202210611173.1 ~32:01/06/2022

2022/12008 ~ Complete ~54:A COMPOSITION AND A METHOD FOR EXTRACTION OF PECTIN FROM BANANA ~71:GAJANAN PANDEY, (Head Dept. of Chemistry) Babasaheb Bhimrao Ambedkar University (A Central University), Vidya Vihar Rae Bareli Road, India;MA FIRDAUS, (Research Scholar Dept. of Food & Nutrition) Babasaheb Bhimrao Ambedkar University (A Central University), Vidya Vihar Rae Bareli Road, India;MONIKA PATEL, (Research Scholar Dept. of Food & Nutrition) Babasaheb Bhimrao Ambedkar University (A Central University), Vidya Vihar Rae Bareli Road, India;SRISHTI TRIPATHI, (Student Dept. of Food & Nutrition) Babasaheb Bhimrao Ambedkar University (A Central University), Vidya Vihar Rae Bareli Road, India;SUNITA MISHRA, (Dean School of Home Science & Head Dept. of Food & Nutrition) Babasaheb Bhimrao Ambedkar University (A Central University), Vidya Vihar Rae Bareli Road, India ~72: GAJANAN PANDEY;MA FIRDAUS;MONIKA PATEL;SRISHTI TRIPATHI;SUNITA MISHRA~

2022/12010 ~ Complete ~54:A SYSTEM FOR SYNTHESIS OF SULFONAMIDES ~71:Dr. Ahmad Salawi, Department of Pharmaceutics, College of Pharmacy, Jazan University, Saudi Arabia;Dr. Arin Natania, Junior Research Officer, Department of Pulmonary Medicine, Christian Medical College and Hospital, Vellore, India;Dr. Arshad Farid, Gomal Center of Biochemistry and Biotechnology, University of Agriculture, Pakistan;Dr. Bijili Arifa Farzana, Jamal Mohamed College (Autonomous), Tiruchirappalli, India;Dr. Chinnam Sampath, Department of Chemistry, M. S. Ramaiah Institute of Technology (Affiliated to Visvesvaraya Technological University, Belgaum), Bengaluru, India;Dr. Mithun Rudrapal, Department of Pharmaceutical Chemistry, Rasiklal M. Dhariwal Institute of Pharmaceutical Education & Research, Pune, India;Dr. Mohammed Saad Almuhayawi, Department of



Medical Microbiology and Parasitology, Yousef Abdullatif Jameel Scientific Chair of Prophetic Medicine Application, Faculty of Medicine, King Abdulaziz University, Saudi Arabia;Dr. Mushira Banu Ahmed Meeran, Jamal Mohamed College (Autonomous), Tiruchirappalli, India;Dr. Sangeetha Shivakumar, BGS College of Engineering and Technology, Department of Chemistry, BGSCET, Mahalaxmipuram, Bengaluru, India;M. S. Ramaiah Institute of Technology, M. S. Ramaiah Nagar, M. S. R. I. T. post, Bengaluru, India;Prof. Dr. Samy Selim, Department of Clinical Laboratory Sciences, College of Applied Medical Sciences, Jouf University, Saudi Arabia ~72: Dr. Ahmad Salawi;Dr. Arin Natania;Dr. Arshad Farid;Dr. Bijili Arifa Farzana;Dr. Chinnam Sampath;Dr. Mithun Rudrapal;Dr. Mohammed Saad Almuhayawi;Dr. Mushira Banu Ahmed Meeran;Dr. Sangeetha Shivakumar;Prof. Dr. Samy Selim~

2022/12012 ~ Complete ~54:RETINAL PIGMENTED EPITHELIUM AND PHOTORECEPTOR DUAL CELL AGGREGATES AND METHODS OF USE THEREOF ~71:FUJIFILM CELLULAR DYNAMICS, INC., 525 Science Drive, Suite 200, Madison, United States of America ~72: BERNDT, Erich;CHASE, Lucas;DIAS, Andrew~ 33:US ~31:63/032,368 ~32:29/05/2020

2022/12015 ~ Complete ~54:TELEPHONE NUMBER VERIFICATION ~71:ANBARCHIAN, Vida, D&#220;SSELDORFER STR. 6, 10719 BERLIN, GERMANY, Germany ~72: HOMBURG, Karl-Wilhelm~ 33:EP ~31:20169014.6 ~32:09/04/2020

2022/12020 ~ Complete ~54:THERAPEUTIC INTERFERING PARTICLES FOR CORONA VIRUS ~71:THE J. DAVID GLADSTONE INSTITUTES, A TESTAMENTARY TRUST ESTABLISHED UNDER THE WILL OF J. DAVID GLADSTONE, 1650 Owens Street, San Francisco, California, 94158, United States of America;VXBIOSCIENCES, INC., 1569 Solano Ave #281, Berkeley, California 94707, United States of America ~72: LEOR S WEINBERGER;ROBERT RODICK;SONALI CHATURVEDI~ 33:US ~31:63/014,394 ~32:23/04/2020

2022/12024 ~ Complete ~54:NON-LYSOSOMAL GLUCOSYLCERAMIDASE INHIBITORS AND USES THEREOF ~71:ALECTOS THERAPEUTICS, INC., 8999 Nelson Way, Burnaby, British Columbia, V5A 4B5, Canada ~72: DAVID J VOCADLO;ERNEST J MCEACHERN;JIANYU SUN;RAMESH KAUL;YONGBAO ZHU;YUANXI ZHOU~ 33:US ~31:63/021,401 ~32:07/05/2020;33:US ~31:63/110,751 ~32:06/11/2020

2022/12030 ~ Complete ~54:DRILLING RATE OF PENETRATION ~71:Globaltech Corporation Pty Ltd, 1st Floor, 883 Abernethy Road, FORRESTFIELD 6058, WESTERN AUSTRALIA, AUSTRALIA, Australia ~72: STEWART, Gordon~ 33:AU ~31:2020901410 ~32:04/05/2020

2022/12017 ~ Complete ~54:CD38 INHIBITORS ~71:MITOBRIDGE, INC., 1030 Massachusetts Avenue, Suite 200, Cambridge, Massachusetts, 02138, United States of America ~72: BHARAT LAGU;SANTOSH S KULKARNI;XINYUAN WU~ 33:IN ~31:202041015255 ~32:07/04/2020

2022/12041 ~ Complete ~54:CHIMERIC ANTIGEN AND T CELL RECEPTORS AND METHODS OF USE ~71:KITE PHARMA, INC., 2225 COLORADO AVENUE, SANTA MONICA, United States of America ~72: WILTZIUS, JED~ 33:US ~31:62/317,258 ~32:01/04/2016

2022/11989 ~ Complete ~54:A METHOD FOR IDENTIFYING DNA ENHANCER ELEMENTS BASED ON SEQUENCE FREQUENCY INFORMATION ~71:Central South University, No.932 South Lushan Road, Changsha City, Hunan Province, 410083, People's Republic of China ~72: Fei GUO~

2022/11994 ~ Complete ~54:A BATTERY HEAT-TRANSFER MODULE BASED ON PULSATING HEAT PIPE ~71:Southwest Petroleum University, No. 8 Xindu Avenue, Xindu District, Chengdu City, Sichuan Province, 610500, People's Republic of China ~72: Jie Qiu;Kun Hu;Wenjie Xie;Xian Qin;Zhixu Zhou~

2022/11973 ~ Complete ~54:METHOD FOR CREATING DIPLOID GERMLASM RESOURCES BY USING TETRAPLOID CHINESE CABBAGE ~71:Economic Crop Research Institute of Hebei Academy of Agriculture and Forestry Sciences, No. 598, Heping West Road, Shijiazhuang, Hebei, 050051, People's Republic of China ~72: CHEN, Zhanliang;LIU, Xiaodong;MA, Lei;MENG, Chuan;MU, Jingui;WANG, Mingqiu;WANG, Yuhai;WU, Fang~

2022/11975 ~ Complete ~54:METHOD FOR PREPARING CHROMOSOME SPECIMEN OF ERIANTHUS ARUNDINACEUS (RETZ.) JESWIET. ROOT TIP MERISTEM ~71:Institute of Nanfan and Seed Industry, Guangdong Academy of Sciences, No. 10 Shiliugang Road, Haizhu District, Guangzhou City, Guangdong Province, 510316, People's Republic of China ~72: CHANG, Hailong;CHEN, Junlv;LING, Qiuping;QIU, Yongsheng;WANG, Qinnan;WU, Jiayun;XIE, Jing;ZHANG, Wei~

2022/11982 ~ Complete ~54:A RECEPTACLE FOR WASHING ~71:VAN DER MERWE, Nicolaas, Johannes, 235 VONKPROP ROAD, WALTLOO, 0184, SOUTH AFRICA, South Africa ~72: VAN DER MERWE, Nicolaas, Johannes;VAN NIEKERK, Andre, Louis~ 33:ZA ~31:2021/05660 ~32:05/08/2021

2022/11985 ~ Complete ~54:METHOD FOR MONITORING GEOTECHNICAL STRUCTURE OF LANDFILL ~71:INSTITUTE OF ROCK AND SOIL MECHANICS, CHINESE ACADEMY OF SCIENCES, Xiaohongshan, Wuchang, Wuhan City, Hubei Province, 430071, People's Republic of China ~72: CHEN Zhixiang;HE Xingxing;LIU Lei;LUO Rui;WAN Yong;XUE Qiang;YU Huayue~ 33:CN ~31:202210042067.6 ~32:14/01/2022

2022/11974 ~ Complete ~54:THREE-DIMENSIONAL PLANTING METHOD OF SWEET SORGHUM IN COASTAL BEACH ~71:Jiangsu Coastal Area Institute of Agricultural Sciences, No.9, North Road, Kaifang Avenue, Yancheng City, Jiangsu Province, People's Republic of China ~72: CHEN Wenbin;CHEN Yingjiang;CHENG Fangmei;GAO Jin;JIANG Peng;LU Zhenwei;PAN Zongjin;QIAO Hailong;QIN Guangwei;SHI Yang;SUN Jianxiong;WANG Haiyang;WANG Wei;YANG Hua;YU Aihua~

2022/11984 ~ Complete ~54:COMPREHENSIVE AGRONOMIC REGULATION AND CONTROL METHOD FOR PRODUCING RICE WITH LOW HEAVY METAL POLLUTION ~71:Soil and Fertilizer Research Institute, Fujian Academy of Agricultural Sciences, Pudang Xindian Town, Jin'an District, Fuzhou City 350013, Fujian Province, CHINA (P.R.C.), People's Republic of China ~72: HUANG, Dongfeng;WANG, Limin~

2022/11987 ~ Complete ~54:A METHOD FOR IDENTIFYING CANCER SUBTYPES BASED ON MULTI-OMICS DATA ~71:Central South University, No.932 South Lushan Road, Changsha City, Hunan Province, 410083, People's Republic of China ~72: Fei GUO~

2022/11998 ~ Complete ~54:VOCS (VOLATILE ORGANIC COMPOUNDS) STAGED AUTOMATIC COLLECTION DEVICE AND SAMPLING METHOD OF AUTOMOBILE TAIL GAS ~71:China Automotive Technology and Research Center Co., Ltd., No.68, Xianfeng East Road, Dongli District, Tianjin, 300000, People's Republic of China;Zhengzhou University, No.100 Science Avenue, Zhengzhou City, Henan Province, 450001, People's Republic of China ~72: Bowen Zhang;Hanming Wu;Kaixiang Li;Peiyuan Xie;Qingqing Kang;Rencheng Zhu;Rongkun Du;Shunyi Li;Xiaoning Ren;Yan Yan;Yuankai Shao;Zhengjun Yang;Zhenguo Li~

2022/12000 ~ Complete ~54:A MODIFIED HEAT SINK DEVICE ~71:Abhishek Kumar Verma, Electronics & Telecommunication Engineering, Jhada Sirha Government Engineering College, Jagdalpur, (Chhattisgarh), India;Dr. Dushyant Singh, Faculty in Department of Mechanical Engineering, National Institute of Technology, Manipur Langol, Imphal West, India;Dr. Hemlata Sinha, Department of Electronics and Telecommunications, Shri Shankaracharya Institute of Professional Management and Technology, (Chhattisgarh), India;Dr. Sachin Kumar Gupta, School of Electronics and Communication Engineering, Shri Mata Vaishno Devi University, Kakryal, (Jammu & Kashmir), UT, India;Dr. Vijay Kumar Sharma, School of Electronics and Communication Engineering, Shri Mata Vaishno Devi University, Kakryal, (Jammu & Kashmir), UT, India;Dushyant Kumar Sahu, Department of Civil Engineering, Jhada Sirha Government Engineering College, (Chhattisgarh),

India;Piyush Tiwari, Department of Mechanical Engineering, Jhada Sirha Government Engineering College, Jagdalpur, (Chhattisgarh), India;Pradeep Kumar Dadsena, Department of Mathematics, Jhada Sirha Government Engineering College, Jagdalpur, (Chhattisgarh), India;Pukhraj Sahu, Department of Civil Engineering, Jhada Sirha Government Engineering College, Jagdalpur,(Chhattisgarh), India;Rahul Gupta, Department of Electronics and Telecommunications, Government Engineering College, Koni, (Chhattisgarh), India ~72: Abhishek Kumar Verma;Dr. Dushyant Singh;Dr. Hemlata Sinha;Dr. Sachin Kumar Gupta;Dr. Vijay Kumar Sharma;Dushyant Kumar Sahu;Piyush Tiwari;Pradeep Kumar Dadsena;Pukhraj Sahu;Rahul Gupta~

2022/12013 ~ Complete ~54:ACTIVATABLE CYTOKINE CONSTRUCTS AND RELATED COMPOSITIONS AND METHODS ~71:CYTOMX THERAPEUTICS, INC., 151 OYSTER POINT BOULEVARD, SUITE 400, SOUTH SAN FRANCISCO, CALIFORNIA 94080, USA, United States of America ~72: ASSI, Hikmat, Haizar;BOGDANOFF, Walter, A.;CAI, Na;DANIEL, Dylan, L.;LAPUYADE, Nicole, G.;LE SCOLAN, Erwan;MITRA, Sayantan;PAIDHUNGAT, Madan, M.;WANG, Hsin~ 33:US ~31:63/008,542 ~32:10/04/2020;33:US ~31:63/161,889 ~32:16/03/2021;33:US ~31:63/164,849 ~32:23/03/2021

2022/12014 ~ Complete ~54:COMPOSITIONS CONTAINING ACTIVATABLE ANTIBODIES ~71:CYTOMX THERAPEUTICS, INC., 151 OYSTER POINT BOULEVARD, SUITE 400, SOUTH SAN FRANCISCO, CALIFORNIA 94080, USA, United States of America ~72: DUVUR, Shanti Gonela;KREBBER, Claus;PATRICK, Sarah;URENO, Eric;VISWANATHAN, Sridhar~ 33:US ~31:63/007,776 ~32:09/04/2020

2022/12018 ~ Complete ~54:PROCESS FOR DRY BENEFICIATION OF FINE AND VERY FINE IRON ORE BY SIZE AND ELECTROSTATIC SEGREGATION ~71:SEPARATION TECHNOLOGIES LLC, 101 Hampton Avenue, Needham, Massachusetts, 02494, United States of America ~72: ABHISHEK GUPTA;KYLE P FLYNN;LUCAS ROJAS MENDOZA~ 33:US ~31:63/042,261 ~32:22/06/2020

2022/12021 ~ Complete ~54:TREATMENT OF CONDITIONS ASSOCIATED WITH THYROID HORMONE ~71:LINZY O SCOTT III, 940 Regency Crest Drive. Atlanta, Georgia 30331, United States of America ~72: LINZY O SCOTT III~ 33:US ~31:63/013,960 ~32:22/04/2020;33:US ~31:63/088,523 ~32:07/10/2020;33:US ~31:63/135,118 ~32:08/01/2021

2022/12026 ~ Complete ~54:EASY-TO-EXTRACT BONE ANCHORING IMPLANT ~71:Lock-In SA, ZA La Pi&#232;ce 1 - A5, ROLLE, SWITZERLAND, Switzerland ~72: LACAZE, Guillaume~ 33:FR ~31:2003581 ~32:09/04/2020

2022/12028 ~ Complete ~54:PROTEINS BINDING NKG2D, CD16 AND CLEC12A ~71:Dragonfly Therapeutics, Inc., 35 Gatehouse Drive, WALTHAM 02451, MA, USA, United States of America ~72: BARUAH, Hemanta;CHANG, Gregory P.;CHEUNG, Ann F.;FALLON, Daniel;GRINBERG, Asya;JUO, Zong Sean;MORGAN, Christopher Ryan~ 33:US ~31:63/020,798 ~32:06/05/2020

2022/12031 ~ Complete ~54:APPLICATION OF COMPOSITION OF BERGAPTEN AND QUERCETIN FLAVONE IN PREPARING MEDICINE FOR TREATING CANCER ~71:Anhui Science And Technology University, No.9 Donghua Road, Fengyang County, Chuzhou, Anhui, 233100, People's Republic of China ~72: DOU Jinfeng;FANG Yanxi;GUO Zhenchao;LU Jiawen;WANG Haibo;ZHANG Xinyong;ZHOU Lili~

2022/12033 ~ Provisional ~54:ECERTIFY ~71:Thabang Mamantsebe, 939 Sedibeng section, South Africa ~72: Thabang Mamantsebe;Thabang Mamantsebe~ 33:ZA ~31:1 ~32:02/11/2022

2022/11972 ~ Provisional ~54:RAZOR WIRE ~71:COCHRANE INDUSTRIES UK LIMITED, 132 Hartlebury Trading Estate, Hartlebury,, United Kingdom ~72: BUCARIZZA, Vlado~

2022/11976 ~ Complete ~54:GREEN PLANTING METHOD OF SWEET SORGHUM IN COASTAL BEACH ~71:Jiangsu Coastal Area Institute of Agricultural Sciences, No.9, North Road, Kaifang Avenue, Yancheng City, Jiangsu Province, People's Republic of China ~72: CHEN Wenbin;CHEN Yingjiang;CHENG Fangmei;GAO Jin;JIANG Peng;LU Zhenwei;PAN Zongjin;QIN Guangwei;SHI Yang;SUN Jianxiong;WANG Haiyang;WANG Wei;YANG Hua;YU Aihua;ZHANG Xiao~

2022/11980 ~ Complete ~54:METHODS AND TREATMENT OF TRAUMA ~71:HEMANEXT INC., 99 Hayden Avenue, Building B, Suite 620, United States of America ~72: DUNHAM, Andrew;YOSHIDA, Tatsuro~ 33:US ~31:62/508,783 ~32:19/05/2017

2022/11986 ~ Complete ~54:CLEANING PROCESS FOR MEDIUM PIPELINE OF CONTINUOUS CASTING EQUIPMENT ~71:North China University of Science and Technology, No. 21, Bohai Avenue, Caofeidian District, Tangshan City, Hebei Province, 063210, People's Republic of China ~72: CAI, Shuo;CUI, Zhe;JI, Hongchao;LIU, Boxuan;LONG, Haiyang;PEI, Weichi;WU, Jiatong;ZHU, Fengyun~ 33:CN ~31:202111385509.9 ~32:22/11/2021

2022/11988 ~ Complete ~54:A METHOD FOR IDENTIFYING DNA PROMOTER ELEMENTS BASED ON INFORMATION THEORY ~71:Central South University, No.932 South Lushan Road, Changsha City, Hunan Province, 410083, People's Republic of China ~72: Fei GUO~

2022/11978 ~ Complete ~54:COMMUNICATION METHOD, DEVICE AND STORAGE MEDIUM OF MARITIME SEARCH AND RESCUE WIRELESS SENSOR NETWORK ~71:Shanghai Maritime University, 1550 Haigang Avenue, Pudong New District, Shanghai City, People's Republic of China ~72: CHEN Xinqiang;LI Chaofeng;MA Junling;MEI Xiaojun;WU Huafeng;XIAN Jiangfeng;YANG Yongsheng;ZHANG Yuanyuan~ 33:CN ~31:202210840637.6 ~32:18/07/2022

2022/11979 ~ Complete ~54:SAFETY MANAGEMENT SYSTEM OF ARCHITECTURAL ENGINEERING ~71:Hebei University of Architecture, No.13,Chaoyang West Street, Zhangjiakou City, Hebei Province, People's Republic of China ~72: DI Suwei;DU Wenjing;GUO Chunhua;GUO Quanhua;LI Fengyun;LI Yue;LIU Yining~

2022/11981 ~ Complete ~54:MONITORING AND EARLY-WARNING SYSTEM FOR DEEP-SEA CAGE AQUACULTURE ENVIRONMENT AND FISH DISEASES ~71:GUANGXI ACADEMY OF SCIENCES, NO. 98 DALING ROAD, People's Republic of China;INSTITUTE OF BEIBU GULF MARINE INDUSTRY, SHAMUWAN SEASIDE, XIWAN, People's Republic of China;REMOTE SENSING CENTER OF GUANGXI, NO. 34 JIANZHENG ROAD, People's Republic of China ~72: DING, Xiaoyan;LAI, Junxiang;LUO, Wanci;MEI, Weiping;ZENG, Jun;ZENG, Yongbin;ZHANG, Sheng~ 33:CN ~31:202211346646.6 ~32:31/10/2022

2022/11991 ~ Complete ~54:AN EARLY DESIGN AND SIMULATION METHOD OF ELECTRO-HYDRAULIC COMPOSITE CONTROL SYSTEM FOR UNDERWATER TREE BASED ON DIGITAL PROTOTYPE TECHNOLOGY ~71:Southwest Petroleum University, No. 8 Xindu Avenue, Xindu District, Chengdu City, Sichuan Province, 610500, People's Republic of China ~72: Jia Cao;Zhen Song~

2022/11995 ~ Complete ~54:A METHOD, SYSTEM AND STORABLE MEDIUM FOR CYBER ATTACK ATTRIBUTION ~71:EAST CHINA UNIVERSITY OF TECHNOLOGY, No. 418 Guanglan Avenue, Nanchang City, Jiangxi Province, 330013, People's Republic of China ~72: HE, Linlin;HE, Yueshun~

2022/11996 ~ Complete ~54:A METHOD, A SYSTEM AND A STORABLE MEDIUM FOR PRECISE COUNTERATTACK FOR CYBERSPACES IN BIG DATA ENVIRONMENT ~71:EAST CHINA UNIVERSITY OF TECHNOLOGY, No. 418 Guanglan Avenue, Nanchang City, Jiangxi Province, 330013, People's Republic of China ~72: HE, Linlin;HE, Yueshun;LI, Weidong~

2022/12002 ~ Complete ~54:SELECTIVE ADSORPTION MATERIAL FOR TREATING WASTE WATER CONTAINING THALLIUM AND MERCURY, PREPARATION METHOD THEREOF AND METHOD FOR TREATING WASTE WATER CONTAINING THALLIUM AND MERCURY THEREWITH ~71:BGRIMM TECHNOLOGY GROUP, BUILDING 23, DISTRICT 18, HEADQUARTERS BASE, NO. 188, SOUTH FOURTH RING WEST ROAD, People's Republic of China ~72: LI, Yonghui;SHAO, Linan;YANG, Xiaosong~ 33:CN ~31:202210611135.6 ~32:01/06/2022

2022/12005 ~ Complete ~54:SECURE VOTING SYSTEM ENABLED WITH BLOCK CHAIN TECHNOLOGY ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, India ~72: CHOLKE, Pooja;THEMASKAR, Mayank;THENGRE, Mohit;THIPSAY, Yash;THITE, Sanket;THOMBRE, Balganes;THORAT, Anjali;UPKARE, Makarand U.~

2022/11990 ~ Complete ~54:NOVEL COMPOUND FLOTATION AGENT FOR COPPER-NICKEL SULFIDE ORE FLOTATION ~71:Henan University of Urban Construction, Longxiang Avenue, Xincheng District, Pingdingshan City, Henan Province, 467041, People's Republic of China ~72: BAO, Yun;LIU, Zubang;WANG, Jina;WU, Xuyang;XU, Kaidong;ZHU, Ningning~

2022/11999 ~ Complete ~54:A METHOD FOR IDENTIFYING THE MOST DURABLE PLASTIC MATERIAL USING RADIAL BASIS FUNCTION BIPOLEAR FUZZY NEURAL NETWORK ~71:Anuradha Sabharwal, Assistant Professor, Department of Mathematics, Government College, Bahadurgarh, India;Dr Anil Kumar, Assistant professor, Bharati Vidyapeeth's College of Engineering, Paschim Vihar, India;Dr. Chandra Mohan, Assistant Professor, Deptt. of Chemistry, SBAS, K R Mangalam University, Gurugram, India;Dr. Nitu Sehrawat, Assistant professor, Bharati Vidyapeeth's College of Engineering, Paschim Vihar, India;Dr. Rahul Boadh, Assistant Professor, Department of Mathematics, K. R. Mangalam University, Sohna Road, Gurugram, India;Dr. Rupali, Assistant Professor, Department of Mathematics, K. R. Mangalam University, India;Dr. SUKHVINDER SINGH BAMBER, ASSISTANT PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE ENGINEERING, PANJAB UNIVERSITY SSG REGIONAL CENTRE, India;Dr. Satish Kumar, Assistant Professor, Department of Applied Sciences, UIET, Panjab University SSG Regional Centre, Hoshiarpur, Affiliated to Panjab University Chandigarh, India;Dr. Seema Saini, Professor, Department of Mathematics, Graphic Era Deemed to be University Dehradun, India;Dr. Soniya, Research Scholar, Applied Mathematics and Scientific Computing Department, Saharanpur Campus, I.I.T. Roorkee, India;Dr. Sunil Madhukar Kumbhar, M. Phil. (Mathematics), Pusegaon road (Opposite to the Court) Vaduj, Tal. Khatav, Dist: Satara, India;Dr. Yogendra Kumar Rajoria, Assistant Professor, Department of Mathematics, School of Basic & Applied Sciences, K. R. Mangalam University, Gurugram, India;Reena, Assistant Professor, Department of Mathematics, Govt college sector 9, Gurugram, India ~72: Anuradha Sabharwal;Dr Anil Kumar;Dr. Chandra Mohan;Dr. Nitu Sehrawat;Dr. Rahul Boadh;Dr. Rupali;Dr. SUKHVINDER SINGH BAMBER;Dr. Satish Kumar;Dr. Seema Saini;Dr. Soniya;Dr. Sunil Madhukar Kumbhar;Dr. Yogendra Kumar Rajoria;Reena~

2022/12003 ~ Complete ~54:SELECTIVE ADSORPTION MATERIAL FOR TREATING WASTE WATER CONTAINING LEAD AND CADMIUM, PREPARATION METHOD THEREOF AND METHOD FOR TREATING WASTE WATER CONTAINING LEAD AND CADMIUM THEREWITH ~71:BGRIMM TECHNOLOGY GROUP, BUILDING 23, DISTRICT 18, HEADQUARTERS BASE, NO. 188, SOUTH FOURTH RING WEST ROAD, People's Republic of China ~72: LI, Yonghui;SHAO, Linan;YANG, Xiaosong~ 33:CN ~31:202210611164.2 ~32:01/06/2022

2022/12007 ~ Complete ~54:AN IOT BASED SMART IRRIGATION SYSTEM ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, India ~72: GHADKAR, Premanand;GOLE, Mihir;MHASWADE, Yogiraj;MHOPREKAR, Swapnil;MITRA, Arnab;MODAK, Aditya;SHINDE, Prajakta~

2022/12009 ~ Complete ~54:A METHOD FOR DETERMINING THE EFFECTS OF PHYTOBIOTIC ESSENTIAL OILS ON GROWTH PERFORMANCE, HEMATOLOGICAL PARAMETER AND EGG QUALITY OF POULTRY BIRDS ~71:Dr. Satyasis Mishra, Department of ECE, Centurion University of Technology & Management, Bhubaneswar, India;Dr. Sunita Satapathy, Department of Zoology, Centurion University of Technology & Management, Bhubaneswar, India;Dr.Yashaswi Nayak, Department of Zoology, Centurion University of Technology & Management, Bhubaneswar, India;Lopamudra Samantray, Department of Zoology, Centurion University of Technology & Management, Bhubaneswar, India ~72: Dr. Satyasis Mishra;Dr. Sunita Satapathy;Dr.Yashaswi Nayak;Lopamudra Samantray~

2022/12016 ~ Complete ~54:A SEALED PACKAGE FOR STACKABLE CANDLES ~71:AROMAT FRAGRANCES INDUSTRIES LTD, 4 AMAL STREET, 4951304 PETAH, TIKVA, ISRAEL, Israel ~72: BASSA, Joseph~ 33:IL ~31:273866 ~32:07/04/2020

2022/12019 ~ Complete ~54:CYCLIN-DEPENDENT KINASE INHIBITING COMPOUNDS FOR THE TREATMENT OF MEDICAL DISORDERS ~71:G1 THERAPEUTICS, INC., 700 Park Offices Drive, Suite 200 , Research Triangle Park, North Carolina, 27709, United States of America ~72: JAY COPELAND STRUM~ 33:US ~31:63/027,113 ~32:19/05/2020;33:US ~31:63/085,672 ~32:30/09/2020

2022/12022 ~ Complete ~54:SUBSTITUTED PYRAZOLYL COMPOUNDS AND METHODS OF USE THEREOF ~71:CHINOOK THERAPEUTICS CANADA, INC., 210-887 Great Northern Way, Vancouver, British Columbia, V5T 4T5, Canada ~72: DAVID ANDREW POWELL;JINYUE DING;MARC-OLIVIER BOILY;ROBERT GOMEZ;TAO SHENG~ 33:US ~31:63/026,301 ~32:18/05/2020

2022/12025 ~ Complete ~54:BONE ANCHORING IMPLANT WITH OPTIMISED EXPANSION ~71:Lock-In SA, ZA La Pi&#232;ce 1 - A5, ROLLE, SWITZERLAND, Switzerland ~72: LACAZE, Guillaume~ 33:FR ~31:2003577 ~32:09/04/2020

2022/12027 ~ Complete ~54:CORTICALLY STABILIZED BONE ANCHORING IMPLANT ~71:Lock-In SA, ZA La Pi&#232;ce 1 - A5, ROLLE, SWITZERLAND, Switzerland ~72: LACAZE, Guillaume~ 33:FR ~31:2003579 ~32:09/04/2020

2022/12029 ~ Complete ~54:NEW MACROCYCLIC LRRK2 KINASE INHIBITORS ~71:Les Laboratoires Servier, 35 rue de Verdun, SURESNES 92284, FRANCE, France;Oncodesign Precision Medicine (OPM), 18 Rue Jean Mazen, DIJON 21000, FRANCE, France ~72: BLOM, Petra Marcella;BOTEZ, Iuliana;CHRISTENSEN, Kenneth;DAUGAN, Alain;DENIS, Alexis;DUMOULIN, Audrey;FAUCHER, Nicolas;HOUSSEMAN, Christopher Ga&#233;tan;LAMOTTE, Yann;LAUGEOIS, Maxime;LE TIRAN, Arnaud~ 33:EP ~31:20315236.8 ~32:06/05/2020;33:EP ~31:21305112.1 ~32:28/01/2021

2022/11977 ~ Complete ~54:EPIDEMIC PREVENTION AND DISINFECTION DEVICE BASED ON CATERPILLAR BIONICS ~71:Shanghai Maritime University, 1550 Haigang Avenue, Pudong New District, Shanghai City, People's Republic of China ~72: GU Bangping;SHI Yujie;WANG Junshuo;XIAO Guangnian;ZHANG Yan~ 33:CN ~31:202210684011.0 ~32:17/06/2022

2022/11983 ~ Complete ~54:CORD AND TIRE WITH SPECIFIED CORD CONSTRUCTION ~71:The Goodyear Tire & Rubber Company, 200 Innovation Way, AKRON 44316-0001, OH, USA, United States of America ~72: LIONETTI, Robert~ 33:US ~31:17/519,031 ~32:04/11/2021

2022/12023 ~ Complete ~54:RNA-GUIDED NUCLEASES AND ACTIVE FRAGMENTS AND VARIANTS THEREOF AND METHODS OF USE ~71:LIFEEDIT THERAPEUTICS, INC., 507 Airport Blvd., Suite 101, Morrisville, North Carolina, 27560, United States of America ~72: ALEXANDRA BRINER CRAWLEY;MICHAEL

COYLE;TEDD D ELICH;TYSON D BOWEN~ 33:US ~31:63/014,970 ~32:24/04/2020;33:US ~31:63/077,211  
~32:11/09/2020

2022/12032 ~ Complete ~54:DEPLOYMENT DEVICE FOR AN INSERTABLE AND ASSOCIATED METHODS  
~71:MEDITATI PTY LTD, 50B Oxford Street, Paddington, NSW 2021, Australia ~72: PRICE, Tonia~ 33:AU  
~31:2020901683 ~32:25/05/2020

2022/11993 ~ Complete ~54:PERMANENT MAGNET POSITIONING STRUCTURE OF SURFACE-MOUNTED  
PERMANENT MAGNET SYNCHRONOUS MOTOR ~71:China University of Petroleum (East China), No. 66,  
West Changjiang Road, Huangdao District, Qingdao, Shandong Province, 266580, People's Republic of China  
~72: CUI, Junguo;HOU, Guojian;HU, Changmiao;LIN, Yunfei;LU, Zhongqi;MA, Yixin;SHAO, Jianxin;XIAO,  
Wensheng;YANG, Huiwen;ZHANG, Jun~ 33:CN ~31:202210607489.3 ~32:31/05/2022

2022/11997 ~ Complete ~54:A SEALING MECHANISM FOR AN ENCLOSURE ~71:Jacob Johannes Francois  
Botha., 45 Crane Way Cranfield, United Kingdom;Mark Thomas Kellett, 75 Willow Drive, Dunshaughlin, Ireland  
~72: Jacob Johannes Francois Botha;Mark Thomas Kellett~

2022/12006 ~ Complete ~54:A DUAL AXIS SOLAR TRACKING SYSTEM ~71:VISHWAKARMA INSTITUTE OF  
TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, India ~72: CHOLKE,  
Pooja;DONGRE, Ganesh G.;NASERY, Tushar M.;TIWARI, Janhavi H.;TODKAR, Ashlesha S.;TONAPE, Shreya  
S.;TRIPATHI, Ankur D.~

- APPLIED ON 2022/11/04 -

2022/12034 ~ Provisional ~54:POWER CUT NOTIFICATION SYSTEM ~71:ERASMUS, Coert Johannes Rosmus,  
164 Ring Road, Three Rivers, South Africa;SCHULTE, Brian Nelson, 39 Rubenstein Street, Verwoerdpark, South  
Africa ~72: DURWIN-SMITH, Gerard;ERASMUS, Coert Johannes Rosmus;PAROU, Daniel Quintin  
Rocna;SCHULTE, Brian Nelson~

2022/12094 ~ Complete ~54:INTEGRAL MEMBRANE PROTEIN DISPLAY ON POXVIRUS EXTRACELLULAR  
ENVELOPED VIRIONS ~71:Vaccinex, Inc., 1895 Mt. Hope Avenue, ROCHESTER 14620, NY, USA, United  
States of America ~72: BALCH, Leslie A.;MUELLER, Loretta;SCRIVENS, Maria G.M.;SHI, Shuying;SMITH,  
Ernest S.~ 33:US ~31:63/020,818 ~32:06/05/2020

2022/12098 ~ Complete ~54:5G MULTICAST BROADCAST SERVICE HANDOVER  
~71:TELEFONAKTIEBOLAGET LM ERICSSON (PUBL), SE-164 83, Sweden ~72: RÖNNEKE, Hans  
Bertil;SCHLIWA-BERTLING, Paul;VESELY, Alexander~ 33:US ~31:63/029,116 ~32:22/05/2020

2022/12066 ~ Complete ~54:METAL-MOLYBDATE AND METHOD FOR MAKING THE SAME ~71:BWXT  
ISOTOPE TECHNOLOGY GROUP, INC., 800 Main Street, Lynchburg, Virginia, 24504, United States of America  
~72: BARBARA B BOHANNON;BENJAMIN I BISHOP;BRYAN BLAKE WIGGINS;CHRISTOPHER SEAN  
FEWOX;EARL BRIAN BARGER;ERIK T NYGAARD;JAMES B INMAN;ROGER D RIDGEWAY;STEPHEN D  
PREITE;STEVE W SCHILTHELM;TIMOTHY A POLICKE;WILLIAM EARL RUSSELL II~ 33:US ~31:62/463,020  
~32:24/02/2017;33:US ~31:62/592,737 ~32:30/11/2017;33:US ~31:15/902,140 ~32:22/02/2018

2022/12073 ~ Complete ~54:HTT MODULATORS FOR TREATING HUNTINGTON'S DISEASE ~71:CHDI  
FOUNDATION, INC., c/o CHDI Management, Inc., 350 Seventh Avenue, United States of America ~72:  
BRECCIA, Perla;CHAMBERS, Mark, Stuart;DOHERTY, Elizabeth M;DOMINGUEZ, Celia;ESMIEU, William, R.  
K;HAUGHAN, Alan, F.;LEE, Matthew;LIU, Longbin;MALAGU, Karine, Fabienne;STOTT, Andrew, J.;VAN DE  
PO&#203;L, Amanda;VATER, Huw D;WEBSTER, Stephen, John~ 33:US ~31:63/024,052 ~32:13/05/2020

2022/12075 ~ Complete ~54:DAMPING INTEGRATED DEVICE, DAMPER AND WIND TURBINE ~71:BEIJING GOLDWIND SCIENCE & CREATION WINDPOWER EQUIPMENT CO., LTD., No. 19, Kangding Road Beijing Economic & Technological Development Zone, People's Republic of China ~72: GAO, Yang;LI, Shuanghu;XU, Zhiliang;ZHANG, Zhihong~ 33:CN ~31:202010469339.1 ~32:28/05/2020

2022/12036 ~ Provisional ~54:FLOATING BARRIER ~71:COCHRANE STEEL PRODUCTS (PTY) LTD, 125 Fitter Road, South Africa ~72: TBA~

2022/12042 ~ Complete ~54:BENZAEPINE COMPOUND AND SYNTHESIS METHOD THEREOF ~71:China Pharmaceutical University, 24 Tongjiaxiang, Gulou District, Nanjing City, Jiangsu Province, 210009, People's Republic of China ~72: HAN, Fang;HAO, Siyuan;TANG, Yujiang;WANG, Bichuan;WU, Ke;WU, Tianzhi;ZHOU, Qingfa;ZHU, Jin~ 33:CN ~31:202210342897.0 ~32:31/03/2022

2022/12045 ~ Complete ~54:SALT-ALKALI RESISTANT COMPOSITE MICROBIAL INOCULUM, PREPARATION METHOD AND APPLICATION THEREOF ~71:Institute of Biology, Gansu Academy of Sciences, 197 Dingxi South Road, Chengguan District, Lanzhou City, Gansu Province, 730000, People's Republic of China ~72: JI Bin;LIANG Yan;PENG Yinan;QI Hongshan;SHEN Lijun;SONG Jie;XI Peng;YE Ze;ZHAO Tingwei~

2022/12057 ~ Complete ~54:PUSHING AND CONVEYING DEVICE FOR SPHERICAL SPORTS EQUIPMENT ~71:Gansu Agricultural University, No.1 Yingmen Village, Anning District, Lanzhou City, Gansu Province, People's Republic of China ~72: GUO Qing;HU Baohui~

2022/12062 ~ Complete ~54:ORGANIC-INORGANIC COMPLEX FERTILIZER OF DENDROCALAMOPSIS OLDHAMI ~71:Zhejiang Subtropical Crop Research Institute, No. 334, Xueshan Road, Ouhai District, Wenzhou City, Zhejiang Province, 325006, People's Republic of China ~72: Jin Xin;Liu Yu;Wang YueYing;Xia HaiTao~

2022/12063 ~ Complete ~54:DEVELOPMENT OF HERBAL TABLETS DERIVED FROM TERMINALIA CHEBULA EXTRACT: IN VITRO CHARACTERIZATION USING ALLOXAN INDUCED ANTIDIABETIC MODEL IN MALE WISTAR RATS ~71:AJAY, ASSISTANT PROFESSOR, GEETA INSTITUTE OF PHARMACY, GEETA UNIVERSITY NAULHA, PANIPAT, HARYANA, 132145, India;ALOK BHATT, ASSISTANT PROFESSOR, SCHOOL OF PHARMACEUTICAL SCIENCES, HIMGIRI ZEE UNIVERSITY, DEHRADUN, UTTARAKHAND, 248001, India;ANJALI BISHT, ASSISTANT PROFESSOR, SCHOOL OF PHARMACEUTICAL SCIENCE, HIMGIRI ZEE UNIVERSITY, DEHRADUN, UTTARAKHAND, 248001, India;DEEPAK PRABHAKAR BHAGWAT, DEPARTMENT OF PHARMACY, PANIPAT INSTITUTE OF ENGINEERING AND TECHNOLOGY PATTIKALYANA, PANIPAT, HARYANA, 132102, India;DR. DIVYA NEGI RAWAT, ASSISTANT PROFESSOR, SCHOOL OF PHARMACEUTICAL SCIENCE, HIMGIRI ZEE UNIVERSITY, DEHRADUN, UTTARAKHAND, 248001, India;MR VIJAY KASHYAP, ASSOCIATE PROFESSOR, MAYA COLLEGE OF PHARMACY, NH 72, SELAQUI, DEHRADUN, UTTARAKHAND, India;NEERAJ RANI, DEPARTMENT OF PHARMACEUTICAL SCIENCES, CHAUDHARY BANSILAL UNIVERSITY, BHIWANI, HARYANA, India;NIDHI CHAUDHARY, ASSISTANT PROFESSOR, SCHOOL OF PHARMACEUTICAL SCIENCES, HIMGIRI ZEE UNIVERSITY, DEHRADUN, UTTARAKHAND, 248001, India;PRINKA DESWAL, ASSISTANT PROFESSOR, ADARSH VIJENDRA INSTITUTE OF PHARMACEUTICAL SCIENCES, SHOBHIT UNIVERSITY, BABU VIJENDRA MARG, GANGOH, SAHARANPUR, UTTAR PRADESH, 247341, India;RAHUL, ASSISTANT PROFESSOR, BDM COLLEGE OF PHARMACY, VILLAGE CHHUCHHAKWAS, CHARKHI DADRI TO JHAJJAR, JHAJJAR, HARYANA, 124106, India;REKHA KHATRI, ASSISTANT PROFESSOR, GEETA INSTITUTE OF PHARMACY, GEETA UNIVERSITY, NAULHA, PANIPAT, HARYANA, 132145, India;SONIA NARWAL, DEPARTMENT OF PHARMACY, PANIPAT INSTITUTE OF ENGINEERING AND TECHNOLOGY PATTIKALYANA, PANIPAT, HARYANA, 132102, India ~72: AJAY;ALOK BHATT;ANJALI BISHT;DEEPAK PRABHAKAR BHAGWAT;DR. DIVYA NEGI RAWAT;MR VIJAY KASHYAP;NEERAJ RANI;NIDHI CHAUDHARY;PRINKA DESWAL;RAHUL;REKHA KHATRI;SONIA NARWAL~



2022/12069 ~ Complete ~54:A COMPOSITE THERMOELECTRIC GENERATOR WITH NON-UNIFORM FLOW RATE BASED ON THE TEMPERATURE DEPENDENCE OF THERMOELECTRIC MATERIAL ~71:TIANJIN UNIVERSITY, No. 92 Weijin Road, Nankai District, Tianjin, 300072, People's Republic of China;TIANJIN UNIVERSITY OF COMMERCE, No. 409 Guangrong Road, Hongqiao District, Tianjin, 300400, People's Republic of China ~72: GUO, Rui;HE, Wei;LI, Jiamei;LI, Shenming;LIU, Shengchun;YANG, Yurong;ZHU, Yu~

2022/12074 ~ Complete ~54:COMPOUNDS AND METHODS FOR MODULATING ATXN1 ~71:IONIS PHARMACEUTICALS, INC., 2855 Gazelle Court, Carlsbad, United States of America ~72: COLE, Tracy, A;FREIER, Susan, M.;KORDASIEWICZ, Holly;ZHOU, Keming~ 33:US ~31:63/019,089 ~32:01/05/2020

2022/12076 ~ Complete ~54:COOLING SYSTEM AND WIND POWER GENERATOR SET ~71:XINJIANG GOLDWIND SCIENCE & TECHNOLOGY CO., LTD., No. 107 Shanghai Road, Economic & Technological Development Zone, People's Republic of China ~72: GAO, Si;LIU, Junwei;WANG, Dinghui~ 33:CN ~31:202010516571.6 ~32:09/06/2020

2022/12081 ~ Complete ~54:STABLE FORMULATION FOR RECOMBINANT ANTI-PD-1 MONOCLONAL ANTIBODY ~71:SINOCELLTECH LTD., No.31 Kechuang 7th St., BDA, Beijing, 100176, People's Republic of China ~72: CHUNYUN SUN;MINGZHEN TAO;PING HU;QINGRU HUAI;SHAOMEI TIAN;YAN LIU~ 33:CN ~31:202010566153.8 ~32:19/06/2020

2022/12079 ~ Complete ~54:COMPOSITIONS AND METHODS FOR TREATING COMPLICATIONS OF VIRAL INFECTIONS AND OTHER RESPIRATORY DISORDERS ~71:XEQUEL BIO, INC., 1501 Belle Isle Ave, Suite 220, Mount Pleasant, South Carolina, 29464, United States of America ~72: CARISSA JAMES;CHRISTINA GREK;GAUTAM GHATNEKAR;TRAVIS MCQUISTON~ 33:US ~31:63/006,498 ~32:07/04/2020;33:US ~31:63/134,462 ~32:06/01/2021

2022/12082 ~ Complete ~54:COMPOSITE WEAR PART ~71:MAGOTTEAUX INTERNATIONAL S.A., Rue Adolphe Dumont, 4051, Vaux-sous-Ch&#232;vremont, Belgium ~72: GUY BERTON~ 33:EP ~31:20177458.5 ~32:29/05/2020

2022/12092 ~ Complete ~54:POLYMORPHIC FORMS OF (R)-OXYBUTYNIN HYDROCHLORIDE ~71:Apnimed, Inc. (Delaware), 20 Holyoke Street, CAMBRIDGE 02138, MA, USA, United States of America ~72: JOHNSTON, Sean;MOLNAR, Dennis~ 33:US ~31:63/020,301 ~32:05/05/2020;33:US ~31:63/136,691 ~32:13/01/2021

2022/12096 ~ Complete ~54:ROOT CROP HARVESTER ~71:Grimme Landmaschinenfabrik GmbH & Co. KG, Hunteburger Stra&#223;e 32, DAMME 49401, GERMANY, Germany ~72: ROSS, Julian;STROTHMANN, Wolfram~ 33:DE ~31:10 2020 112 427.9 ~32:07/05/2020

2022/12038 ~ Provisional ~54:PROTECTIVE MATERIAL AND PRODUCT MADE THEREFROM ~71:DE HARDE, Barend Hendrik, 123 Road Number 3, Victory Park, South Africa ~72: DE HARDE, Barend Hendrik~

2022/12044 ~ Complete ~54:METHOD AND SYSTEM FOR PREDICTING SURFACE COMBUSTIBLE MOISTURE CONTENT OF PINUS YUNNANENSIS BASED ON MULTIPLE REGRESSION AND PARAMETER CORRECTION ~71:Southwest Forestry University, NO.300, Bailong Temple,Bailong Road, Panlong District, Kunming City, Yunnan Province, People's Republic of China ~72: CAO Yufei;DIAO Jianpeng;DONG Kaixun;GAO Zhongliang;HAN Li;MA Zenan;SHU Lifu;WANG Hechenyang;WANG Qiuhua;YU Wentian~

2022/12049 ~ Complete ~54:NON-RESISTANT FUNCTIONAL NUTRITIONAL LICKING BRICK FOR CATTLE AND SHEEP AND PREPARATION METHOD THEREOF ~71:Institute of Animal Husbandry and Veterinary Medicine, NingXia Academy of Agricultural and Forestry Sciences (Co., Ltd.), No.100 ningqin lane, middle Beijing Road, Jinfeng District, Yinchuan City, Ningxia Hui Autonomous Region, People's Republic of China;Yinchuan

Animal Husbandry Technology Promotion Service Center, No.8 Qinyue Road, Xingqing District, Yinchuan City, Ningxia Hui Autonomous Region, People's Republic of China ~72: CAO Xiaozhen;LIU Weiping;LIU Xiyuan;LIU Zixin;MEI Ning;XU Jun;YAN Yuping;YUN Hua;ZHOU Ying~

2022/12051 ~ Complete ~54:LANDSLIDE MONITORING AND EARLY-WARNING EQUIPMENT ~71:GANSU DESERT CONTROL RESEARCH INSTITUTE, NO. 1856 QILIAN AVENUE, XIGUAN STREET, People's Republic of China;GANSU EARTHQUAKE AGENCY (LANZHOU EARTHQUAKE RESEARCH INSTITUTE), NO. 450, DONGGANG WEST ROAD, People's Republic of China ~72: WU, Zhen;ZHANG, Huiwen~

2022/12053 ~ Complete ~54:METHOD FOR ADJUSTING AND CONTROLLING PROPORTIONS OF PHASES IN TC4 TITANIUM ALLOY THROUGH THERMAL TREATMENT ~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, Lijia;HE, Zhenghua;TAN, Bing;ZHANG, Haoyu;ZHANG, Nannan;ZHANG, Siqian;ZHOU, Ge;ZUO, Xiaojiao~

2022/12095 ~ Complete ~54:IL41 INHIBITORS AND METHODS OF USE ~71:Merck Sharp & Dohme LLC, 126 East Lincoln Avenue, RAHWAY 07065, NJ, USA, United States of America ~72: CASH, Brandon D.;FU, Wenlang;GIAMBASU, George Madalin;HAIDLE, Andrew M.;HOPKINS, Brett A.;LARSEN, Matthew A.;LESBURG, Charles A.;LIU, Ping;MCGOWAN, Meredith A.;PU, Qinglin;SANYAL, Sulagna;SILIPHAIVANH, Phieng;WHITE, Catherine M.;YAN, Xin~ 33:US ~31:63/020,614 ~32:06/05/2020

2022/12061 ~ Complete ~54:BIMOLECULAR MARKER FOR RICE LEAF SHEATH COLOR IDENTIFICATION, PRIMER COMBINATION, KIT AND IDENTIFICATION METHOD THEREOF ~71:Tropical Crops Genetic Resources Institute, Chinese Academy of Tropical Agricultural Sciences, No. 4, Xueyuan Road, Longhua District, Haikou, Hainan, 571101, People's Republic of China ~72: He ZhiZhou;Hu Wei;Lin QiuYun;Long KaiYi;Xie ZhenYu;Zhou YuJie~

2022/12072 ~ Complete ~54:PERSONAL CLEANSING COMPOSITION ~71:DANIEL BYRNE, Rathcastle House, Ireland ~72: BYRNE, Daniel~

2022/12039 ~ Provisional ~54:A DEVICE FOR DISPENSING MONEY ~71:Wonder Ndlovu, Mark Shuttleworth Street, South Africa ~72: Wonder Ndlovu~

2022/12043 ~ Complete ~54:A BATTERY SHIELDING WEAR-RESISTANT LONG CARBON FIBER REINFORCED PBT COMPOSITE MATERIAL AND ITS PREPARATION METHOD AND APPLICATION ~71:Guizhou Minzu University, Dongjiayan, Huaxi District, Guiyang City, Guizhou Province, 550025, People's Republic of China ~72: Daohai ZHANG;Fang TAN;Hongwei WANG;Jiakui ZHANG;Jingyu DU;Kuntian LI;Meng PEI;Renyuan YANG;Wenjing ZHANG;Xiao WU;Xiao ZHAN;Yanyan TAN;Yu XUE;Yuhuan XU~

2022/12046 ~ Complete ~54:PALMPRINT RECOGNITION METHOD BASED ON FUSION DEPTH NETWORK ~71:JIANGSU UNIVERSITY OF TECHNOLOGY, 1801 Zhongwu Avenue, Zhonglou District, Changzhou City, Jiangsu Province, People's Republic of China ~72: WANG Xiaolan;YAO Keming~ 33:CN ~31:202111330782.1 ~32:11/11/2021

2022/12048 ~ Complete ~54:CORE-SHEATH MXENE FIBER AEROGEL AND PREPARATION METHOD THEREOF ~71:Anhui Polytechnic University, Beijing Middle Road, Wuhu City, Anhui Province, People's Republic of China ~72: HE You;HU Qiaole;LI Changlong;LI Zhiying;LIU Tongshuang;NIE Wenqi;TANG Jinhao;WANG Peng;ZHENG Xianhong~

2022/12059 ~ Complete ~54:AUTOMATIC SAND SCRAPE DEVICE ~71:Qingdao Shengmei Machinery Co.,Ltd, No.6 Wangjialou Industrial area, Huangdao, Qingdao City, Shandong Province, People's Republic of China ~72:

Meng Xianfeng;Pang Zengmiao;Pang Zonggang;Wei Taijun;Yang Changchun~ 33:CN ~31:202221085246.X  
~32:07/05/2022

2022/12068 ~ Complete ~54:AN ISOMETRIC ATTENUATION INDEX SCALE FOR URBAN ECONOMIC CIRCLES ~71:INSTITUTE OF MOUNTAIN HAZARDS AND ENVIRONMENT, CAS, No. 189, Qunxian South Street, Tianfu New District, Chengdu City, Sichuan Province, 610213, People's Republic of China ~72: FANG, Yiping;ZHANG, Yike;ZHU, Ran~

2022/12078 ~ Complete ~54:MULTI-MODE PROPULSION SYSTEM ~71:ATLANTIS RESEARCH LABS INC., 1115 Brier Park Way NW, Medicine Hat, Canada ~72: HINMAN, William Schuyler;JOHANSEN, Craig;MRAVCAK, Vladimir~ 33:US ~31:63/020,327 ~32:05/05/2020

2022/12086 ~ Complete ~54:CONDITIONAL RECONFIGURATION BASED ON DATA TRAFFIC ~71:TELEFONAKTIEBOLAGET LM ERICSSON (PUBL), 164 83, Sweden ~72: BERGQVIST, Jens;DA SILVA, Icaro Leonardo;EKL&#214;F, Cecilia;TEYEB, Oumer;WAGER, Stefan;WALLENTIN, Pontus~ 33:US ~31:63/050,213 ~32:10/07/2020

2022/12087 ~ Complete ~54:SYSTEMS AND METHODS FOR TRACKING REFILLABLE PACKAGES FILLED AT A BOTTLING FACILITY ~71:The Coca-Cola Company, One Coca-Cola Plaza, NW, ATLANTA 30313, GA, USA, United States of America ~72: BAKER, Matthew William;PARK, Kuil;SCHWARBER, Joshua Casey~ 33:US ~31:63/007,083 ~32:08/04/2020

2022/12090 ~ Complete ~54:PEPTIDES CONTAINING A PCNA INTERACTING MOTIF FOR USE IN THE TREATMENT OF SOLID CANCER ~71:Therapim Pty Ltd, COHORT, Health & Knowledge Precinct, 16 Nexus Way, SOUTHPORT 4215, QUEENSLAND, AUSTRALIA, Australia ~72: ALEVIZOPOULOS, Konstantinos;OTTERLEI, Marit~ 33:GB ~31:2006699.9 ~32:06/05/2020

2022/12070 ~ Complete ~54:A SYSTEM FOR DATA ENCRYPTION BASED ON CLOUD CRYPTOGRAPHY AND METHOD THEREOF ~71:Dr.K.Ravindranath, Associate Professor, Koneru Lakshmaiah Education Foundation, Green Fields, Vaddeswaram, Andhra Pradesh, 522302, India;Dr.Mridul Dharwal, Professor, Sharda School of Business Studies, Sharda University, Greater Noida, Uttar Pradesh, 201310, India;Dr.Sreenivas Alluri, Associate Professor, Department of EECE, GIT, GITAM University, Visakhapatnam, Andhra Pradesh, 530045, India;Dr.Sushma Jaiswal, Assistant Professor, Department of Computer Science & Information Technology (CSIT), Guru Ghasidas Vishwavidyalaya (A Central University), Koni, Bilaspur, Chhattisgarh, 495009, India;Mr.Jaydip Kumar, Assistant Professor, Department of Computer Science and Engineering, Sanskriti University, 28 K.M.Stone Mathura, Uttar Pradesh, 281401, India;Mr.N.Raghava Rao, Assistant Professor, Department of Information Technology, Institute of Aeronautical Engineering, Hyderabad, Telangana, 500043, India;Mr.Srikanth Parikibandla, Research Scholar, GITAM (Deemed to be University), Visakhapatnam, Assistant Professor, Department of IOT, Malla Reddy University, Hyderabad, Telangana, 500100, India;Mr.Tarun Jaiswal, Research Scholar, Department of Computer Application, National Institute of Technology (NITRR), Raipur, Chhattisgarh, 492010, India;Mr.Yogendra Kumar, Assistant Professor, Department of Physics, VSP Government (PG) College, Kairana, Shamli, Uttar Pradesh, 247774, India;Ms.Rashmi K.Dixit, Research Scholar, Koneru Lakshmaiah Education Foundation, Green Fields, Vaddeswaram, Andhra Pradesh, Assistant Professor, Walchand Institute of Technology, Solapur, Maharashtra, 413006, India ~72: Dr.K.Ravindranath;Dr.Mridul Dharwal;Dr.Sreenivas Alluri;Dr.Sushma Jaiswal;Mr.Jaydip Kumar;Mr.N.Raghava Rao;Mr.Srikanth Parikibandla;Mr.Tarun Jaiswal;Mr.Yogendra Kumar;Ms.Rashmi K.Dixit~

2022/12091 ~ Complete ~54:A METHOD, A SYSTEM, AND AN APPARATUS FOR PREPARING MANGANESE SULFATE ~71:Befesa Zinc Metal LLC, 484 Hicks Grove Road, MOORESBORO 28114, NC, USA, United States

of America ~72: CASHWELL II , William Joseph;DE WET, Jacobus Rudolph;OLIPHANT, Kendall Lee~ 33:US  
~31:63/021,157 ~32:07/05/2020

2022/12037 ~ Provisional ~54:HELMET ~71:DE HARDE, Barend Hendrik, 123 Road Number 3, Victory Park,  
South Africa ~72: DE HARDE, Barend Hendrik~

2022/12040 ~ Provisional ~54:GYROSCOPIC (GIMBAL TORQUE & HYDRAULIC FORCE) AND SHM-  
DAMPENING AND FORCE-BALANCING STABILIZATION SYSTEMS, LOCKING SYSTEM AND  
AERODYNAMIC LAYER/SYSTEM ~71:Mike Junior McKerson, 7 Quibeba, Arboretum, South Africa ~72: Mike  
Junior McKerson~ 33:ZA ~31:2020/02593 ~32:03/03/2022

2022/12056 ~ Complete ~54:A FIRE-MEASURING DEVICE, METHOD, AND APPLICATION OF ELECTRIC  
VEHICLES IN THE GARAGE ~71:Shenzhen Polytechnic, No. 7098 Liuxian Avenue, Nanshan District, Shenzhen,  
Guangdong, 518055, People's Republic of China ~72: Hao CHANG;Haoliang XIE;Ruichao WEI;Shaozhang  
CHEN;Shenshi HUANG;Zhurong DONG~

2022/12058 ~ Complete ~54:A METHOD FOR REMOVING DRUGS AND PERSONAL CARE PRODUCTS  
FROM WATER BODY BY ULTRAVIOLET ACTIVATED PERSULFATE ~71:HUNAN FIRST NORMAL  
UNIVERSITY, NO. 1015, FENGLIN 3RD ROAD, People's Republic of China ~72: LUO, Yiting;MA, Hui;SU,  
Rongkui;WANG, Zhaohui;XIAO, Chenjie~

2022/12064 ~ Complete ~54:A REUSABLE TELESCOPIC REAMING-WHILE-DRILLING DEVICE ~71:Southwest  
Petroleum University, No. 8 Xindu Avenue, Xindu District, Chengdu City, Sichuan Province, 610500, People's  
Republic of China ~72: Haifeng Ma;Jie Qiu;Wenjie Xie;Xian Qin;Zhixu Zhou~

2022/12067 ~ Complete ~54:TITANIUM-MOLYBDATE AND METHOD FOR MAKING THE SAME ~71:BWXT  
ISOTOPE TECHNOLOGY GROUP, INC., 800 Main Street, Lynchburg, Virginia, 24504, United States of America  
~72: BARBARA B BOHANNON;BENJAMIN I BISHOP;BRYAN BLAKE WIGGINS;CHRISTOPHER SEAN  
FEWOX;EARL BRIAN BARGER;ERIK T NYGAARD;JAMES B INMAN;ROGER D RIDGEWAY;STEPHEN D  
PREITE;STEVE W SCHILTHELM;TIMOTHY A POLICKE;WILLIAM EARL RUSSELL II~ 33:US ~31:62/463,020  
~32:24/02/2017;33:US ~31:62/592,737 ~32:30/11/2017;33:US ~31:15/902,086 ~32:22/02/2018

2022/12080 ~ Complete ~54:CERAMIC-METAL COMPOSITE WEAR PART ~71:MAGOTTEAUX  
INTERNATIONAL S.A., Rue Adolphe Dumont, 4051, Vaux-sous-Ch&#232;vremont, Belgium ~72: GUY  
BERTON~ 33:EP ~31:20177457.7 ~32:29/05/2020

2022/12055 ~ Complete ~54:A BIODEGRADABLE HEAT RESISTANT PLA/PBS COMPOSITE MATERIAL AND  
ITS PREPARATION METHOD ~71:Guizhou Minzu University, Dongjiayan, Huaxi District, Guiyang City, Guizhou  
Province, 550025, People's Republic of China;The Affiliated Hospital of Guizhou Medical University, No.28 Guiyi  
Street, Yunqu District, Guiyang City, Guizhou Province, 550000, People's Republic of China ~72: Daohai  
ZHANG;Fang TAN;Hongwei WANG;Jiakui ZHANG;Jingyu DU;Kuntian LI;Meng PEI;Renyuan YANG;Wenjing  
ZHANG;Xiao WU;Xiao ZHAN;Xiaonan LIU;Yanyan TAN;Yu XUE;Yuhuan XU~

2022/12083 ~ Complete ~54:COAL-BASED GRAPHENE BIOSENSORS ~71:CARBON HOLDINGS  
INTELLECTUAL PROPERTIES, LLC, 1101 Sugarview Drive, Ste. 201, Sheridan, Wyoming, 82801, United States  
of America ~72: CHARLES ATKINS;GARRETT LINDEMANN~ 33:US ~31:63/018,302 ~32:30/04/2020

2022/12084 ~ Complete ~54:NON-LYSOSOMAL GLUCOSYL CERAMIDASE INHIBITORS AND USES  
THEREOF ~71:ALECTOS THERAPEUTICS, INC., 8999 Nelson Way, Burnaby, British Columbia, V5A 4B5,  
Canada ~72: DAVID J VOCADLO;ERNEST J MCEACHERN;JIANYU SUN;RAMESH KAUL;YONGBAO  
ZHU;YUANXI ZHOU~ 33:US ~31:63/021,432 ~32:07/05/2020

2022/12085 ~ Complete ~54:COOLING PERSONAL CARE COMPOSITION COMPRISING A POLYOL AND A POLYOXYEHTYLENE-POLYOXYPROPYLENE BLOCK COPOLYMER ~71:UNILEVER GLOBAL IP LIMITED, Port Sunlight, Wirral, Merseyside, CH62 4ZD, United Kingdom ~72: BRIAN ANDREW CROTTY;MATTHEW DAVID ELLISON;NICHOLAS ARTHUR VELEZIS;THOMAS NIKOLAOS MORIKIS~ 33:EP ~31:20178260.4 ~32:04/06/2020

2022/12088 ~ Complete ~54:AN OPTICAL ELEMENT AND A METHOD OF VISUALLY AUTHENTICATING AN OBJECT ~71:SICPA HOLDING SA, Avenue de Florissant 41, PRILLY 1008, SWITZERLAND, Switzerland ~72: CALLEGARI, Andrea;SCHWARTZBURG, Yuliy;TESTUZ, Romain~ 33:EP ~31:20168421.4 ~32:07/04/2020

2022/12089 ~ Complete ~54:METHOD FOR PROVIDING A REACTIVE CEMENT COMPONENT OR CONCRETE ADDITIVE ~71:Rheinisch-Westf&#228;lische Technische Hochschule (RWTH) Aachen, Templergraben 55, AACHEN 52062, GERMANY, Germany ~72: GO&#223;MANN, Dirk;JUNGMANN, Andreas;RAUSCH, Martin;VOLLPRACHT, Anya;WEITK&#196;MPER, Lars;WOTRUBA, Hermann~ 33:DE ~31:10 2020 112 207.1 ~32:06/05/2020

2022/12093 ~ Complete ~54:NOVEL ANKYRIN REPEAT BINDING PROTEINS AND THEIR USES ~71:Molecular Partners AG, Wagistrasse 14, ZURICH-SCHLIEREN 8952, SWITZERLAND, Switzerland ~72: AMSTUTZ, Patrick;CALABRO, Valerie Perrine;WALSER, Marcel~ 33:US ~31:63/020,882 ~32:06/05/2020;33:US ~31:63/021,024 ~32:06/05/2020;33:US ~31:63/057,477 ~32:28/07/2020;33:US ~31:63/069,174 ~32:24/08/2020;33:US ~31:63/145,192 ~32:03/02/2021

2022/12097 ~ Complete ~54:CROSS-SPECIES COMPATIBLE ADENO-ASSOCIATED VIRUS COMPOSITIONS AND METHODS OF USE THEREOF ~71:Duke University, 2812 Erwin Road, Suite 306, DURHAM 27705, NC, USA, United States of America ~72: ASOKAN, Aravind;GONZALEZ, Trevor;HAVLIK, Lawrence Patrick~ 33:US ~31:63/020,062 ~32:05/05/2020

2022/12035 ~ Provisional ~54:A DISPENSER ~71:DE VILLIERS, Albertus, Johannes, 29A BURGER STREET, POTCHEFSTROOM, 2526, South Africa ~72: DE VILLIERS, Albertus, Johannes~

2022/12047 ~ Complete ~54:EFFICIENT TREATMENT DEVICE FOR BUILDING CONSTRUCTION DUST ~71:Hebei University of Architecture, No.13,Chaoyang West Street, Zhangjiakou City, Hebei Province, People's Republic of China ~72: GE Lijie;SHI Ying;XU Lingling;ZHANG Huan~

2022/12050 ~ Complete ~54:CULTIVATION METHOD FOR RESISTING TOMATO FUSARIUM WILT AND IMPROVING TOMATO YIELD ~71:Shanghai Academy of Agricultural Sciences, 2901 Beidi Road, Minhang District, Shanghai, 201106, People's Republic of China ~72: LIU, Yahui;WANG, Qiancheng;YOU, Jiaqi;ZHANG, Yingying;ZHU, Weimin~ 33:CN ~31:202111318342.4 ~32:09/11/2021

2022/12052 ~ Complete ~54:STRIKE-OFF DEVICE FOR CONTROLLING UNEVEN SETTLEMENT OF COLLAPSIBLE LOESS FOUNDATION ~71:Henan University of Urban Construction, Longxiang Avenue, Xincheng District, Pingdingshan City, Henan Province, 467036, People's Republic of China ~72: HAO, Yanzhou;HE, Ruixia;JIA, Mingzhao;LONG, Zhe;WANG, Jinlong;WANG, Yaoxuan;ZHANG, Shuo;ZHAO, Wenxian~ 33:CN ~31:202210186430.1 ~32:28/02/2022

2022/12054 ~ Complete ~54:A HIGH PERFORMANCE HEAT RESISTANT PHA COMPOSITE MATERIAL AND ITS PREPARATION METHOD AND APPLICATION ~71:Guizhou Minzu University, Dongjiayan, Huaxi District, Guiyang City, Guizhou Province, 550025, People's Republic of China;The Affiliated Hospital of Guizhou Medical University, No.28 Guiyi Street, Yunqu District, Guiyang City, Guizhou Province, 550000, People's Republic of China ~72: Daohai ZHANG;Fang TAN;Hongwei WANG;Jiakui ZHANG;Jingyu DU;Kuntian LI;Meng PEI;Renyuan YANG;Wenjing ZHANG;Xiao WU;Xiao ZHAN;Xiaonan LIU;Yanyan TAN;Yu XUE;Yuhuan XU~

2022/12060 ~ Complete ~54:INDEL MOLECULAR MARKER OF RICE AROMA GENE BADH2, PRIMER, KIT AND DETECTION METHOD THEREOF ~71:Tropical Crops Genetic Resources Institute, Chinese Academy of Tropical Agricultural Sciences, No. 4, Xueyuan Road, Longhua District, Haikou, Hainan, 571101, People's Republic of China ~72: He ZhiZhou;Hu Wei;Lin QiuYun;Long KaiYi;Xie ZhenYu;Zhou YuJie~

2022/12065 ~ Complete ~54:ROLL-ON APPLICATORS ~71:EVOTEC PLASTICS PROPRIETARY LIMITED, 11 Link Close, Montague Gardens, 7441, SOUTH AFRICA, South Africa ~72: LIEBENTRITT, Gernot~

2022/12071 ~ Complete ~54:PREPARATION METHOD OF COMPOUND TRADITIONAL CHINESE MEDICINE DAHUANG QINYU EFFERVESCENT TABLETS ~71:JINZHOU MEDICAL UNIVERSITY, No. 40, Section 3, Songpo Road, Linghe District, Jinzhou, Liaoning, 121001, People's Republic of China ~72: Hong JIANG;Hongjun WANG;Hongying LI;Tiezhong ZHOU;Xinguo LI;Yiya SUN~

2022/12077 ~ Complete ~54:METHOD AND APPARATUS FOR ENERGY CONVERSION ~71:CILL AB, Box 9, Sweden ~72: PELTOLA, Pekka~ 33:EP ~31:20168985.8 ~32:09/04/2020

- APPLIED ON 2022/11/07 -

2022/12111 ~ Complete ~54:METHOD FOR PRETREAT OF YOUNG MONOPTERUS ALBUS BEFORE STOCKING ~71:Shanghai Academy of Agricultural Sciences, No.1000, Jinqi Road, Fengxian District, Shanghai, People's Republic of China ~72: Quan YUAN;Weiwei HUANG;Weiwei LV;Wenzong ZHOU;Xiao WANG;Xiaolin SUN;Yaqin LIU~

2022/12112 ~ Complete ~54:A BALANCED INSOLE STRUCTURE WITH MASSAGE FUNCTION ~71:DONGGUAN QI QI CLOTHING CO., LTD, Room 201, Building 3, No.6, Houjie Section, Gangkou Avenue, People's Republic of China ~72: YIN, JiQi~ 33:CN ~31:202210239663.3 ~32:11/03/2022

2022/12119 ~ Complete ~54:SYNTHESIS PROCESS OF ORANGE-DEEP RED EMITTING SM3+, EU3+, PR3+ TRIPLE ACTIVATED KBA2(PO3)5 PHOSPHITE GLASS FOR WLEDs ~71:DABRE, Kamlesh V., DEPARTMENT OF PHYSICS, TAYWADE COLLEGE, KORADI, NAGPUR, MAHARASHTRA, 441111, India;DHOBLE, Sanjay J., DEPARTMENT OF PHYSICS, R. T. M. NAGPUR UNIVERSITY, NAGPUR, MAHARASHTRA, 440033, India;KADAM, Abhijeet R., DEPARTMENT OF PHYSICS, R. T. M. NAGPUR UNIVERSITY, NAGPUR, MAHARASHTRA, 440033, India;NAKHATE, Abhivilas S., DEPARTMENT OF PHYSICS, TAYWADE COLLEGE, KORADI, NAGPUR, MAHARASHTRA, 441111, India;PARALE, Prashant N., DEPARTMENT OF PHYSICS, R. T. M. NAGPUR UNIVERSITY, NAGPUR – 440033, INDIA; 2DEPARTMENT OF PHYSICS, TAYWADE COLLEGE, KORADI, NAGPUR, MAHARASHTRA, 441111, India ~72: DABRE, Kamlesh V.;DHOBLE, Sanjay J.;KADAM, Abhijeet R.;NAKHATE, Abhivilas S.;PARALE, Prashant N.~

2022/12125 ~ Complete ~54:IL-2 FUSION POLYPEPTIDE COMPOSITIONS AND METHODS OF MAKING AND USING THE SAME ~71:ALKERMES PHARMA IRELAND LIMITED, One Burlington Road, Connaught House, Ireland ~72: GBORMITTAH, Francisca O.;ZEIDAN, Tarek A.~ 33:US ~31:63/022,860 ~32:11/05/2020

2022/12126 ~ Complete ~54:COMBINATION THERAPY WITH MODIFIED PBMCS AND AN IMMUNOCONJUGATE ~71:F. HOFFMANN-LA ROCHE AG, Grenzacherstrasse 124, 4070, Basel, Switzerland ~72: CHRISTIAN KLEIN;CHRISTINE TRUMPFHELLER;LAURA CODARRI DEAK;MATTHEW BOOTY;PABLO UMA&#209;A;SCOTT LOUGHHEAD;VALERIA G NICOLINI~ 33:US ~31:63/023,193 ~32:11/05/2020;33:US ~31:63/105,135 ~32:23/10/2020

2022/12128 ~ Complete ~54:COMBINATION OF ALCAFTADINE AND A CORTICOSTEROID ~71:ALKEM LABORATORIES LIMITED, Alkem House, Senapati Bapat Marg Lower Parel Maharashtra, Mumbai, 400013,

India ~72: AKHILESH SHARMA;AMOL AIWALE;BABASAHEB AWARE;ULHAS DHUPPAD;VIRAJ SHAH~ 33:IN  
~31:201921053286 ~32:15/06/2020

2022/12146 ~ Complete ~54:INHIBITORS OF NEK7 KINASE ~71:Halia Therapeutics, Inc., 1865 W 2100 S, Suite  
100, SALT LAKE CITY 84119, UT, USA, United States of America ~72: BEARSS, David James;KAUWE III, John  
Sai Keong;MOLLARD, Alexis Henri Abel~ 33:US ~31:63/022,159 ~32:08/05/2020;33:US ~31:63/170,761  
~32:05/04/2021

2022/12147 ~ Complete ~54:4-(2,6-DIFLUOROPHENOXY)-6-(TRIFLUOROMETHYL)PYRI ML DIN-2 -AMINE  
DERIVATIVES AS POTENTIATORS OF TH HMRGX1 RECEPTOR FOR THE TREATMENT OF PAIN ~71:Eli  
Lilly and Company, Lilly Corporate Center, INDIANAPOLIS 46206-6288, IN, USA, United States of America ~72:  
SMITH, Daryl Lynn;WINNEROSKI, Jr., Leonard Larry~ 33:US ~31:63/021,806 ~32:08/05/2020

2022/12150 ~ Complete ~54:TRICYCLIC COMPOUNDS AS EGFR INHIBITORS ~71:QILU PHARMACEUTICAL  
CO., LTD., No. 317, Xinluo Street, High Technical Zone Jinan, People's Republic of China ~72: CAMPOS,  
Sebastien Andre;DENG, Wei;FU, Jianmin;LI, Leilei;TIAN, Zhenhua;WU, Guosheng;YANG, Yingying;ZHAO,  
Shuyong;ZHAO, Zhiwei;ZHENG, Qingmei;ZHENG, Shansong~ 33:CN ~31:202010292186.8  
~32:14/04/2020;33:CN ~31:202010852717.4 ~32:22/08/2020;33:CN ~31:202110175424.1  
~32:09/02/2021;33:CN ~31:202110312259.X ~32:24/03/2021

2022/12314 ~ Provisional ~54:HELLOBEE ~71:Nkululeko Lloyd Moya, 144 Mayibuye Drive, Umlazi, South Africa  
~72: Nkululeko Lloyd Moya~ 33:ZA ~31:1 ~32:04/11/2022

2022/12109 ~ Complete ~54:METHOD FOR PREDICTING HAIR COLORS OF BREEDING PIG OFFSPRING  
BASED ON HAPLOTYPE MC1R\*31 GENES ~71:Sichuan Animal Science Academy, NO.7 Niusha Road, Jinjiang  
District, Chengdu, People's Republic of China ~72: Jianjun GONG;Xiaohui CHEN;Xuan TAO;Xuebin LV;Xuemei  
YANG;Yan LIANG;Yan WANG;Yiren GU;Yuekui YANG;Zhijun ZHONG;Zhiping HE~

2022/12113 ~ Complete ~54:ANAEROBIC BLOOD STORAGE AND PATHOGEN INACTIVATION METHOD  
~71:HEMANEXT INC., 99 Hayden Avenue, Building B, Suite 620, United States of America ~72: SOWEMIMO-  
COKER, Samuel, O.;SUTTON, Jeffrey;YOSHIDA, Tatsuro~ 33:US ~31:62/342,756 ~32:27/05/2016;33:US  
~31:62/445,081 ~32:11/01/2017

2022/12116 ~ Complete ~54:TERAHERTZ FREQUENCY BAND FEED HORN ~71:NANJING CHIYUN  
TECHNOLOGY DEVELOPMENT CO., LTD, No. 136, North Ningqiao Road, Jiangning Street, Jiangning District,  
Nanjing, Jiangsu, People's Republic of China ~72: FU XU;SHUAI ZHANG;SIFENG KUANG;WEI WANG;YONG  
SHI~

2022/12130 ~ Complete ~54:CRUSHING STATE DETERMINATION DEVICE AND CRUSHING STATE  
DETERMINATION METHOD ~71:KABUSHIKI KAISHA EARTHTECHNICA, 2-4, Kandajinbo-cho, Chiyoda-ku,  
Tokyo, 1010051, Japan ~72: JUN KOBAYASHI;TAKASHI KIJIMA;TAKAYUKI MASUDA;YOSHICHIKA SATO~  
33:JP ~31:2020-102437 ~32:12/06/2020

2022/12136 ~ Complete ~54:ANTI-BK VIRUS ANTIBODY MOLECULES ~71:MEMO THERAPEUTICS AG,  
Wagistrasse 27, Switzerland;UNIVERSITÄT BERN, Verwaltungsdirektion Hochschulstrasse 6,  
Switzerland;UNIVERSITÄT ZÜRICH, Prorektorat Forschung Rämistrasse 71, Switzerland ~72:  
Christoph ESSLINGER;Marcel WEBER;Maurizio PROVENZANO;Simone SCHMITT;Thomas  
SCHACHTNER;Uyen HUYNH-DO~ 33:EP ~31:20179041.7 ~32:09/06/2020;33:EP ~31:20179044.1  
~32:09/06/2020

2022/12140 ~ Complete ~54:ANTI-PHF-TAU ANTIBODIES AND USES THEREOF ~71:Janssen Biotech, Inc., 800/850 Ridgeview Drive, HORSHAM 19044, PA, USA, United States of America ~72: GANESAN, Rajkumar;JAIPRASART, Pharavee;LA PORTE, Sherry;LUO, Jinquan;MERCKEN, Marc;NANJUNDA, Rupesh;SINGH, Sanjaya;VAN KOLEN, Kristof;VENKATARAMANI, Sathyadevi~ 33:US ~31:63/007,118 ~32:08/04/2020;33:US ~31:63/026,387 ~32:18/05/2020

2022/12152 ~ Complete ~54:PRODUCTS OF MANUFACTURE AND METHODS FOR TREATING, AMELIORATING OR PREVENTING MICROBIAL INFECTIONS ~71:TOPELIA AUST LIMITED, Level 1, 229 Great North Road Five Dock, Australia ~72: BORODY, Thomas Julius~ 33:US ~31:63/015,294 ~32:24/04/2020;33:US ~31:63/019,813 ~32:04/05/2020;33:US ~31:63/060,508 ~32:03/08/2020;33:US ~31:63/109,242 ~32:03/11/2020;33:US ~31:63/123,416 ~32:09/12/2020

2022/12099 ~ Provisional ~54:A MINING METHOD FOR DRILLING AND BLASTING OF A TRAVELLING WAY OF A MINE ~71:ROOTS SEUTLWADI INVESTMENTS (PTY) LTD, SUITE 23 1ST FLOOR SOUTH DOWNS RIDGE OFFICE PARK, South Africa ~72: PEGA, Patrick;SCHMUCKER, Charles~

2022/12100 ~ Provisional ~54:9 ENGINES (HEAT ENGINE, RACK PISTON ENGINE, HYDRAULIC ENGINE, BELTED PISTON ENGINE, TORQUE PISTON ENGINE, AC MOTORS AND DC SOLE WIRE MOTOR) AND A NON-NEWTONIAN FLUID SYSTEM ~71:Mike Junior McKerson, 7 Quibeba, Arboretum, South Africa ~72: Mike Junior McKerson~ 33:ZA ~31:2022/09410 ~32:23/08/2022

2022/12102 ~ Provisional ~54:A SYSTEM AND METHOD FOR TEACHING A STUDENT SELF-DISCIPLINE, DEDICATION, DRIVE, AND APPRECIATION OF FINANCES ~71:Thuto Education Online (Pty) Ltd., 7 Carnoustie, Jackal Creek Golf Estate, North Riding, South Africa ~72: TEMBA, Nkosinathi;WENTWORTH, Nicholas~

2022/12106 ~ Complete ~54:TEMPERATURE ADJUSTMENT AND CONTROL METHOD FOR GRAPE FORCING CULTURE GREENHOUSE ~71:Zhejiang Academy of Agricultural Sciences, No. 198, Shiqiao Road, Hangzhou, Zhejiang, 310021, People's Republic of China ~72: CHENG, Jianhui;HE, Fengjie;WEI, Lingzhu;WU, Jiang;XIANG, Jiang;XU, Xiaojun;ZHENG, Ting;ZHOU, Haiqing~

2022/12107 ~ Complete ~54:CULTURE MEDIUM FOR SCREENING BACILLUS BACTERIA DEGRADING NITROGEN IN RIVER SEDIMENT, SCREENING METHOD AND APPLICATION THEREOF ~71:Environmental Technology Development of TIWTE (Tianjin) Co., Ltd., NO. 2618 Xin#39;gang 2nd Road, Binhai New District, Tianjin City, People's Republic of China;Tianjin Research Institute for Water Transport Engineering,M.O.T., NO. 2618 Xin#39;gang 2nd Road, Binhai New District, Tianjin City, People's Republic of China ~72: CAO Lihua;LI Guangtao;LI Mingming;LI Mingzhe;LI Xiuli;LI Yang;LU Dan;WANG Jiangong;ZHANG Lingyan;ZHAO Hongyan~

2022/12121 ~ Complete ~54:AN APPLICATION OF RNA CIRC\_0000615 AS A MARKER IN THE PREPARATION OF CRC DETECTION KIT ~71:THE FIRST AFFILIATED HOSPITAL OF XINXIANG MEDICAL UNIVERSITY, No. 88, Weihui Health Road, Xinxiang, Henan Province, 453100, People's Republic of China ~72: Jiateng ZHONG;Qingzu GAO;Shuang DING;Wei SU;Xinyu ZHANG;Yao ZHAO;Yuhan HU~

2022/12123 ~ Complete ~54:NOVEL CABLE EXPLOSION-PROOF BOX ~71:ANHUI YIFALA ELECTRIC CO., LTD, Intersection Of Tangwang Avenue And Weisan Road, Bowu Modern Industrial Park, Bozhou, Anhui, 236800, People's Republic of China ~72: DAI, Chao;DAI, Wenzhong;DAI, Yu;DAI, Zhang;WANG, Youqun;WU, Yujian;XU, Wenzong;ZAITSEV, Nikolai Konkodievich~ 33:CN ~31:202110430333.8 ~32:21/04/2021

2022/12135 ~ Complete ~54:COLD ROLLED AND HEAT-TREATED STEEL SHEET AND A METHOD OF MANUFACTURING THEREOF ~71:ARCELORMITTAL, 24-26, Boulevard d#39;Avranches, Luxembourg ~72: Etienne HOFFMANN;V#233;ronique HEBERT~



2022/12142 ~ Complete ~54:TREATMENT OF PROSTATE CANCER WITH A COMBINATION OF ABIRATERONE ACETATE AND NIRAPARIB ~71:Janssen Pharmaceutica NV, Turnhoutseweg 30, BEERSE 2340, BELGIUM, Belgium ~72: BERTELS, Johnny;DELAET, Urbain Alfons C.;HARTMAN KOK, Paul J. A.;HEYNS, Philip Erna H.;LOPEZ-GITLITZ, Angela;LUYTEN, Katrien;MARCOZZI, Tatiana;QUINTEN, Thomas Ronald A.;TAMBWEKAR, Kaustubh Ramesh~ 33:EP ~31:20173749.1 ~32:08/05/2020;33:US ~31:63/142,919 ~32:28/01/2021;33:US ~31:63/174,282 ~32:13/04/2021

2022/12144 ~ Complete ~54:ROCKFALL CONTROL STRUCTURE ~71:Trumer Schutzbauten Ges.m.b.H, Maria-B&#252;hel-Stra&#223;e 7, OBERNDORF A-5110, AUSTRIA, Austria ~72: BICHLER, Ahren;STELZER, Gernot~ 33:EP ~31:20173750.9 ~32:08/05/2020

2022/12110 ~ Complete ~54:A PREPARATION METHOD FOR ELECTRODEPOSITION OF HIGHLY PREFERRED ORIENTATION COPPER FOIL AT ROOM TEMPERATURE ~71:Nankai University, 94, Weijin Road, Nankai District, Tianjin City, 300071, People's Republic of China ~72: Fangyi CHENG;Haixia LI;Jun CHEN;Junfeng WANG;Pingyuan LIAO;Zhenhua YAN;Zhongyue LUO~

2022/12117 ~ Complete ~54:WASTE MANAGEMENT SYSTEM AND WASTE MANAGEMENT METHOD ~71:MARY PHILLIPS UNLIMITED (PTY) LTD, 11 LAVENDER PLACE PARKSIDE, South Africa ~72: PHILLIPS, Mary Magdalene~ 33:ZA ~31:2021/09023 ~32:15/11/2021

2022/12141 ~ Complete ~54:COMPOSITIONS AND METHODS FOR BLOOD-BRAIN BARRIER DELIVERY ~71:Aliada Therapeutics, Inc., 200 Berkeley Street, 23rd Floor, BOSTON 02116, MA, USA, United States of America ~72: CEJUDO-MARTIN, Pilar;DOMINGO, Derrick;EDAVETTAL, Suzanne;GEIST, Brian;JAIPRASART, Pharavee;SINGH, Sanjaya;WILKINSON, Deepti~ 33:US ~31:63/006,998 ~32:08/04/2020;33:US ~31:63/036,020 ~32:08/06/2020

2022/12143 ~ Complete ~54:TREATMENTS OF PROSTATE CANCER WITH COMBINATIONS OF ABIRATERONE ACETATE AND NIRAPARIB ~71:Janssen Pharmaceutica NV, Turnhoutseweg 30, BEERSE B-2340, BELGIUM, Belgium ~72: BERTELS, Johnny;DELAET, Urbain Alfons C.;HARTMAN KOK, Paul J. A.;HEYNS, Philip Erna H.;LOPEZ-GITLITZ, Angela;LUYTEN, Katrien;MARCOZZI, Tatiana;QUINTEN, Thomas Ronald A.;TAMBWEKAR, Kaustubh Ramesh~ 33:EP ~31:20173749.1 ~32:08/05/2020;33:US ~31:63/142,919 ~32:28/01/2021;33:US ~31:63/174,282 ~32:13/04/2021

2022/12148 ~ Complete ~54:CONTAINER MANIPULATION DEVICE AND HOISTING DEVICE ~71:HAULDER S.A., Pasaje Echevarriarza 3535, Uruguay ~72: IDZERDA, Paul~ 33:NL ~31:2025613 ~32:19/05/2020

2022/12104 ~ Complete ~54:VOICE ASSISTANT SYSTEM WITH VOICE RECOGNITION INTELLIGENCE ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA - 411037, India ~72: DESHPANDE, Rupali S.;MAHAJAN, Chandrashekhar;SHINDE, Sandip;SINGH, Shruti Ajaykumar;SINHA, Akash Amrendrakumar;SIRSAT, Amitabh Bhanudas;SIRSHIKAR, Shreyas Santosh;SIRVI, Vishal Shesharam;SISODIYA, Ritika Gajendra~

2022/12105 ~ Complete ~54:A DEVICE FOR DESIGNING HAFNIUM (IV) OXIDE (HFO<sub>2</sub>)/ SILICON DIOXIDE (SiO<sub>2</sub>) ENCAPSULATION-BASED III-NITRIDE MULTI-QUANTUM WELL NANOWIRE WHITE-LED ~71:Gadadasu Purnachandra Rao, Dept. of Electronics & Communication Engineering, National Institute of Technology Silchar, Assam, 788010, India;Prof. Fazal Ahmed Talukdar, Dept. of Electronics & Communication Engineering, National Institute of Technology Silchar, Assam, 788010, India;Prof. Hieu Pham Trung Nguyen, Helen and John C. Hartmann Department of Electrical and Computer Engineering, Room 305 ECEC New Jersey Institute of Technology University Heights, Newark, NJ 07102, United States of America;Prof. Trupti Ranjan Lenka, Dept. of Electronics & Communication Engineering, National Institute of Technology Silchar, Assam, 788010, India;Rabin Paul, Dept. of Electronics & Communication Engineering, National

Institute of Technology Silchar, Assam, 788010, India;Ravi Teja Velpula, Helen and John C. Hartmann Department of Electrical and Computer Engineering, Room 305 ECEC New Jersey Institute of Technology University Heights, Newark, NJ 07102, United States of America;Samadrita Das, Dept. of Electronics & Communication Engineering, National Institute of Technology Silchar, Assam, 788010, India ~72: Gadadasu Purnachandra Rao;Prof. Fazal Ahmed Talukdar;Prof. Hieu Pham Trung Nguyen;Prof. Trupti Ranjan Lenka;Rabin Paul;Ravi Teja Velpula;Samadrita Das~

2022/12108 ~ Complete ~54:ROSELLE SEED FERTILIZER SEPARATION SEEDER ~71:Xinyang Academy of Agricultural Sciences, No. 20, Minquan South Street, Shihe District, Xinyang City, Henan, 464000, People's Republic of China;Yunnan University Institute of Plant Resources, Institute of Plant Resources, Chenggong Campus of Yunnan University, Kunming, Yunnan Province, 650504, People's Republic of China;Zhangjiajie Research Institute of Agricultural Sciences and Technology, No. 252, Jiaochang Road, Yongding District, Zhangjiajie City, Hunan Province, 427000, People's Republic of China;Zhejiang Institute of Garden Plants and Flowers (Zhejiang Xiaoshan Institute of Cotton and Bast Fiber Crops Research), No. 508, Cunwang Village, Wangcun, Youhu Line, Linpu Town, Xiaoshan District, Hangzhou City, Zhejiang Province, 311251, People's Republic of China ~72: AN, Xia;CHEN, Changli;DONG, Guoyun;LI, Wenlue;LIU, Qin;LIU, Tingting;LUO, Xiahong;YU, Lijun;ZHANG, Lixia;ZHU, Guanlin;ZOU, Lina~

2022/12114 ~ Complete ~54:METHOD AND SYSTEM FOR EXTRACTING FRACTIONAL VEGETATION COVER AND DENSITY OF CROPS BASED ON MOBILE PHONE CAMERA ~71:Inner Mongolia Normal University, No.81, Zhaowuda Road, Saihan District, Hohhot, Inner Mongolia Autonomous Region, 010022, People's Republic of China ~72: CAO, Yin;MENG, Fanhao;MIAO, Ping;WANG, Yong;WEI, Baocheng;YE, Zhigang;YIN, Shan;YUAN, Zhihui~ 33:CN ~31:202211224398.8 ~32:09/10/2022

2022/12115 ~ Complete ~54:WAVE-ENERGIZED DIODE PUMP ~71:LONE GULL HOLDINGS, LTD., Suite 258-332, 5331 SW Macadam Avenue, Portland, Oregon, 97239, United States of America ~72: BRIAN LEE MOFFAT;GARTH ALEXANDER SHELDON-COULSON~ 33:US ~31:62/809,566 ~32:23/02/2019;33:US ~31:62/834,964 ~32:17/04/2019;33:US ~31:62/971,963 ~32:08/02/2020;33:US ~31:16/796,724 ~32:20/02/2020

2022/12122 ~ Complete ~54:BIOMARKERS FOR DIAGNOSING TUBERCULOSIS ~71:STELLENBOSCH UNIVERSITY, Admin B, Victoria Street, Stellenbosch, South Africa ~72: CHEGOU, Novel Njweipi;MANYELO, Masilo Charles;SOLOMONS, Regan Shane;WALZL, Gerhard~ 33:ZA ~31:2021/07508 ~32:06/10/2021

2022/12127 ~ Complete ~54:CANNABICHROMENE FORMULATION FOR PAIN MANAGEMENT ~71:ZYUS LIFE SCIENCES INC., 407 Downey Road, Suite 204, Saskatoon, Saskatchewan S7N 4L8, Canada ~72: MAHSA ABRISHAMI~ 33:US ~31:63/015,039 ~32:24/04/2020;33:US ~31:17/038,048 ~32:30/09/2020;33:US ~31:63/145,040 ~32:03/02/2021

2022/12129 ~ Complete ~54:COSMETIC COMPOSITION FOR IMPROVING APPEARANCE OF SKIN ~71:UNILEVER GLOBAL IP LIMITED, Port Sunlight, Wirral, Merseyside, CH62 4ZD, United Kingdom ~72: ADITI JAYAVANT KULKARNI;ANKITA RUTU PAWAR~ 33:EP ~31:20181717.8 ~32:23/06/2020

2022/12133 ~ Complete ~54:ANTI-CD200R1 ANTIBODIES AND METHODS OF USE THEREOF ~71:23ANDME, INC., 223 N. Mathilda Ave. Sunnyvale, California 94086, United States of America ~72: CECILIA LAY;ERIK EDWARD KARRER;GERMAINE FUH-KELLY;JILEAN BETH FENAUX;LOUISE SCHARF;STEVEN J PITTS;WEI-JEN CHUNG;YAO-MING HUANG;YU CHEN~ 33:US ~31:63/032,508 ~32:29/05/2020

2022/12137 ~ Complete ~54:N-CYANOPYRROLIDINES WITH ACTIVITY AS USP30 INHIBITORS ~71:Mission Therapeutics Limited, Babraham Hall, Babraham, CAMBRIDGE CB22 3AT, UNITED KINGDOM, United Kingdom

~72: KEMP, Mark Ian;LUCKHURST, Christopher Andrew;THOMPSON, Paul William~ 33:GB ~31:2005250.2  
~32:08/04/2020;33:GB ~31:2016607.0 ~32:20/10/2020

2022/12139 ~ Complete ~54:METHODS AND COMPOSITIONS FOR SIMULTANEOUS EDITING OF BOTH STRANDS OF A TARGET DOUBLE-STRANDED NUCLEOTIDE SEQUENCE ~71:President and Fellows of Harvard College, 17 Quincy Street, CAMBRIDGE 02138, MA, USA, United States of America;The Broad Institute, Inc., 415 Main Street, CAMBRIDGE 02142, MA, USA, United States of America ~72: ANZALONE, Andrew Vito;GAO, Xin;LEVY, Jonathan Ma;LIU, David R.;PODRACKY, Christopher J.~ 33:US ~31:63/022,397  
~32:08/05/2020;33:US ~31:63/116,785 ~32:20/11/2020

2022/12149 ~ Complete ~54:COMBINED CATALYST AND METHOD FOR TREATING NITROGEN-CONTAINING VOLATILE ORGANIC COMPOUNDS BASED COMPOSITE POLLUTANTS ~71:UNIVERSITY OF CHINESE ACADEMY OF SCIENCES, No. 19 (A) Yuquan Road, Shijingshan District, Beijing, 100049, People's Republic of China ~72: Jie CHENG;Ting ZHAO;Zhengping HAO;Zhongshen ZHANG~ 33:CN  
~31:202110504624.7 ~32:10/05/2021

2022/12103 ~ Complete ~54:GESTURE LANCE ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA - 411037, India ~72: DESHPANDE, Rupali S.;MAHAJAN, Chandrashekhar;SHINDE, Nupur S.;SHINDE, Prathamesh U.;SHINDE, Pratik P.;SHINDE, Rutuja S.;SHINDE, Samiksha S.~

2022/12151 ~ Complete ~54:OPA1 ANTISENSE OLIGOMERS FOR TREATMENT OF CONDITIONS AND DISEASES ~71:STOKE THERAPEUTICS, INC., 45 Wiggins Avenue, United States of America ~72: AZNAREZ, Isabel;LIAU, Gene;VENKATESH, Aditya~ 33:US ~31:63/023,013 ~32:11/05/2020;33:US ~31:63/112,458  
~32:11/11/2020

2022/12118 ~ Complete ~54:AN AUTOMATIC LIBRARY BOOKSHELF CLEANING ROBOTIC DEVICE ~71:DHOBLE, Sanjay J., DEPARTMENT OF PHYSICS, R.T.M. NAGPUR UNIVERSITY, NAGPUR, MAHARASHTRA, INDIA - 440033, India;DUBEY, Manju N., LIBRARIAN, R.S MUNDLE DHARAMPETH ARTS AND COMMERCE COLLEGE, NAGPUR, MAHARASHTRA, 440010, India ~72: DHOBLE, Sanjay J.;DUBEY, Manju N.~

2022/12120 ~ Complete ~54:A KATI BASTI INSTRUMENT FOR LOW BACK PAIN ~71:CHALAKH, Sonali, DEPARTMENT OF AGADTANTRA VYAVHAR AYURVED, MAHATMA GANDHI AYURVED COLLEGE, HOSPITAL AND RESEARCH CENTRE, DATTA MEGHE INSTITUTE OF MEDICAL SCIENCES, SAWANGI, WARDHA, MAHARASHTRA, 442001, India;DHOBLE, Sanjay J., DEPARTMENT OF PHYSICS, R.T.M. NAGPUR UNIVERSITY, NAGPUR, MAHARASHTRA, 440033, India ~72: CHALAKH, Sonali;DHOBLE, Sanjay J.~

2022/12124 ~ Complete ~54:COIL OF ELECTRICAL MACHINERY AND METHOD FOR FORMING THE SAME, STATOR OF ELECTRICAL MACHINERY AND METHOD FOR FORMING THE SAME, AND ELECTRICAL MACHINERY ~71:BEIJING GOLDWIND SCIENCE & CREATION WINDPOWER EQUIPMENT CO., LTD., No. 19, Kangding Road Beijing Economic & Technological Development Zone, People's Republic of China ~72: GAO, Yazhou;HE, Haitao;XIA, Jing~ 33:CN ~31:202010611208.2 ~32:30/06/2020

2022/12131 ~ Complete ~54:A HIGH UV PROTECTION CLEANSING COMPOSITION ~71:UNILEVER GLOBAL IP LIMITED, Port Sunlight, Wirral, Merseyside, CH62 4ZD, United Kingdom ~72: ASHISH ANANT VAIDYA;PRAFUL GULAB RAO LAHORKAR;RAJKUMAR PERUMAL~ 33:IN ~31:202021023192  
~32:02/06/2020;33:EP ~31:20185852.9 ~32:15/07/2020

2022/12132 ~ Complete ~54:COMPOSITIONS AND KITS OF PARTS COMPRISING N,N-DIMETHYLTRYPTAMINE AND HARMINE AND THEIR USE IN THERAPY ~71:UNIVERSITY OF Z&#220;RICH,

Prorektorat Forchung, Raemistrasse 71, 8006, Zurich, Switzerland ~72: DARIO DORNBIEERER;DAVOR KOSANIC;MILAN SCHEIDEGGER~ 33:EP ~31:20181489.4 ~32:22/06/2020

2022/12134 ~ Complete ~54:METHODS OF TREATING ALLERGY USING ANTI-BET V 1 ANTIBODIES ~71:REGENERON PHARMACEUTICALS, INC., 777 Old Saw Mill River Road, Tarrytown, United States of America ~72: ATANASIO, Amanda;HERMAN, Gary;O&#39;BRIEN, Meagan P;ORENGO, Jamie, M.;PERLEE, Lorah~ 33:US ~31:63/047,126 ~32:01/07/2020;33:US ~31:63/129,253 ~32:22/12/2020

2022/12138 ~ Complete ~54:TRICYCLIC HETEROCYCLES USEFUL AS TEAD BINDERS ~71:Cancer Research Technology Ltd., 2 Redman Place, LONDON E20 1JQ, UNITED KINGDOM, United Kingdom;Merck Patent GmbH, Frankfurter Strasse 250, DARMSTADT 64293 , GERMANY, Germany ~72: BLUM, Andreas;CARSWELL, Emma;GUNERA, Jakob;HEINRICH, Timo;KOETZNER, Lisa;SCHLESIGER, Sarah~ 33:EP ~31:20173755.8 ~32:08/05/2020;33:EP ~31:21156317.6 ~32:10/02/2021

2022/12153 ~ Complete ~54:ATMOSPHERIC WATER GENERATOR ~71:JUDDHOO, Rishen, 202 Spencer Road, Clare Estate, DURBAN 4091, SOUTH AFRICA, South Africa ~72: JUDDHOO, Rishen~ 33:ZA ~31:2020/02433 ~32:05/05/2020

2022/12101 ~ Provisional ~54:WIRE MODULAR TOY ~71:Lehlogonolo Kgabela Matsapola, 17 sable street, South Africa ~72: Lehlogonolo Kgabela Matsapola~

2022/12145 ~ Complete ~54:PHARMACEUTICAL FORMULATIONS OF ABIRATERONE ACETATE AND NIRAPARIB ~71:Janssen Pharmaceutica NV, Turnhoutseweg 30, BEERSE 2340, BELGIUM, Belgium ~72: BERTELS, Johny;DELAET, Urbain Alfons C.;HARTMAN KOK, Paul J. A.;HEYNS, Philip Erna H.;LOPEZ-GITLITZ, Angela;LUYTEN, Katrien;MARCOZZI, Tatiana;QUINTEN, Thomas Ronald A.;TAMBWEKAR, Kaustubh Ramesh~ 33:EP ~31:20173749.1 ~32:08/05/2020;33:US ~31:63/142,919 ~32:28/01/2021;33:US ~31:63/174,282 ~32:13/04/2021

2022/12154 ~ Provisional ~54:FOREX TRADING MODIFICATIONS AND MENTOR APPROVAL IN SA ~71:BOIKGANTSHO GINO MAJOLA, 1690 MANALA STREET, South Africa ~72: BOIKGANTSHO GINO MAJOLA~

2022/12155 ~ Provisional ~54:REFLECTIVE SAFETY AND BRANDING KITS ~71:Megan Fleur Smith, 55 Beaconsfield Road, South Africa;Tamsin Martin, 65a High Road, South Africa;Walton Thomas Martin, 65a High Road, South Africa ~72: Tamsin Martin~

- APPLIED ON 2022/11/08 -

2022/12156 ~ Provisional ~54:NEGATIVE PRESSURE WOUND THERAPY APPARATUS ~71:Graham Taschner, 31 Brickfield Road, South Africa ~72: Graham Taschner;Hugh Bryan Theunissen~

2022/12165 ~ Complete ~54:A DTP1 GENE SEQUENCE IN CONTROLLING RICE MALE REPRODUCTIVE DEVELOPMENT ~71:Jiangxi agriculture university, Zhimin Avenue, Economic and Technological Development Zone, Nanchang, Jiangxi, 330045, People's Republic of China ~72: Cai Yicong;Fu Haihui;He Haohua;Hu Lifang;Hu xiafei;Jiang Wenxiang;Li Weixing;Liu Shiqiang;Ouyang Linjuan;Xu jie;Zhou Dahu~

2022/12170 ~ Complete ~54:SAMPLING METHOD FOR SIMULATED LEACHING OF RARE EARTH MINERALS ~71:Guangdong Geological Survey Institute, No. 10, Yard 6, Donghuan Road, Yuexiu District, Guangzhou City, Guangdong Province, People's Republic of China;Guangdong University of Petrochemical Technology, No. 139, Guandu Second Road, Maonan District, Maoming City, Guangdong Province, People's Republic of China;Xianyou Xiandai Middle School of Fujian Province, No. 899, Jinshi Road, Chengnei Community, Licheng Street, Xianyou

County, Putian City, Fujian Province, People's Republic of China ~72: FAN Weiwen;GUO Min;LI Zitao;LIU Jianwei;TAN Junjie;WU Jiewen;XU Xinqi;YANG Ruiyi;YANG Yurong~

2022/12175 ~ Complete ~54:HEAT TREATED COLD ROLLED STEEL SHEET AND A METHOD OF MANUFACTURING THEREOF ~71:ARCELORMITTAL, 24-26, Boulevard d'Avranches, Luxembourg ~72: Matthieu SIEBENTRITT;ronique HEBERT;Vincent LHOIST~

2022/12180 ~ Complete ~54:IMMUNE BOOSTER SUPPLEMENT TREATMENT KIT AND METHODS OF USE ~71:ALTERED LABS LLC, 17774 SW 47th Street, Miramar, Florida, 33029, United States of America ~72: DARIO ECHEVERRY CAMPOS~ 33:US ~31:63/025,685 ~32:15/05/2020

2022/12184 ~ Complete ~54:MIXTURES AND COMPOSITIONS COMPRISING 5-FLUORO-4-IMINO-3-METHYL-1-TOSYL-3,4-DIHYDROPYRIMIDIN-2-ONE, AND METHODS OF USE THEREOF ~71:ADAMA MAKHTESHIM LTD., P.O. Box 60, Beer Sheva, 8410001, Israel ~72: JAMES SLOAN;JENNY YARDENI~ 33:US ~31:63/019,871 ~32:04/05/2020;33:US ~31:63/024,031 ~32:13/05/2020

2022/12186 ~ Complete ~54:COMPOUND COMBINATION WITH SUPERIOR HERBICIDAL ACTIVITY ~71:Bayer Aktiengesellschaft, Kaiser-Wilhelm-Allee 1, LEVERKUSEN 51373, GERMANY, Germany ~72: K&HOLD, Volker;LORENTZ, Lothar;REUTER, Georg;WEGENER, Martin~ 33:EP ~31:20169010.4 ~32:09/04/2020;33:EP ~31:20190529.6 ~32:11/08/2020

2022/12176 ~ Complete ~54:HEAT TREATED COLD ROLLED STEEL SHEET AND A METHOD OF MANUFACTURING THEREOF ~71:ARCELORMITTAL, 24-26, Boulevard d'Avranches, Luxembourg ~72: Dongwei FAN;Olga GIRINA~ 33:IB ~31:PCT/IB2020/056330 ~32:06/07/2020

2022/12177 ~ Complete ~54:ANNULATED 2-AMINO-3-CYANO THIOPHENES AND DERIVATIVES FOR THE TREATMENT OF CANCER ~71:BOEHRINGER INGELHEIM INTERNATIONAL GMBH, Binger Strasse 173, Germany;VANDERBILT UNIVERSITY, 305 Kirkland Hall, United States of America ~72: ABBOTT, Jason;BROEKER, Joachim;CUI, Jianwen;FESIK, Stephen W;GOLLNER, Andreas;HODGES, Tim;KAROLYI-OEZGUER, Jale;LITTLE, Andrew;MANTOULIDIS, Andreas;PHAN, Jason;SARKAR, Dhruva;SMETHURST, Christian Alan Paul;SUN, Qi;TREU, Matthias;WATERSON, Alex~ 33:US ~31:63/033,505 ~32:02/06/2020;33:EP ~31:20212067.1 ~32:05/12/2020

2022/12192 ~ Complete ~54:COMPOSITIONS OF POLYMERIC MICRODEVICES AND THEIR USE IN CANCER IMMUNOTHERAPY ~71:Massachusetts Institute of Technology, 77 Massachusetts Avenue, CAMBRIDGE 02139, MA, USA, United States of America ~72: JAKLENEC, Ana;LANGER, Robert S.;LU, Xueguang~ 33:US ~31:63/024,308 ~32:13/05/2020

2022/12191 ~ Complete ~54:METHODS OF MANUFACTURING A BIFUNCTIONAL COMPOUND, ULTRAPURE FORMS OF THE BIFUNCTIONAL COMPOUND, AND DOSAGE FORMS COMPRISING THE SAME ~71:Arvinas Operations, Inc., 5 Science Park, 395 Winchester Avenue, NEW HAVEN 06511, CT, USA, United States of America ~72: ALLAN, Laura E.N.;CHEN, Chungpin Herman;DONG, Hanqing;DUGUID, Robert J.;GROSSO, John A.;HASKELL III, Royal J.;JAGER, Casey Keith;KATTUBOINA, Venkata A.;KAUSHAL, Aditya Mohan;KENNEDY, Samuel Elliott;LLOYD, Rhys;NEESER, Miranda Anell;QIU, Yuping;REECE, Hayley;REEVE, Maxwell Marco;REO, Joseph P.;ROBERTSON, Jerod;ZAHEDI, Mohammad Mehdi~ 33:US ~31:63/022,475 ~32:09/05/2020;33:US ~31:63/149,143 ~32:12/02/2021;33:US ~31:63/177,378 ~32:20/04/2021

2022/12163 ~ Complete ~54:A RISK SCORING SYSTEM FOR PREDICTING INVASIVE CANDIDIASIS OF CRITICAL PATIENTS BY COMBINING CLINICAL RISK FACTORS AND LYMPHOCYTE SUBTYPES AND ITS ESTABLISHMENT METHOD ~71:Peking Union Medical College Hospital, Chinese Academy of Medical

Sciences, No.1 Shuaifuyuan, Wangfujing, Dongcheng District, Beijing, People's Republic of China ~72: Cheng Wei;Cui Na;Du Bin;Du Wei;He HuaiWu;Li ZunZhu;Long Yun;Zhang JiaHui~

2022/12185 ~ Complete ~54:SYSTEMS, DEVICES, AND METHODS FOR RAIL-BASED AND OTHER ELECTRIC VEHICLES WITH MODULAR CASCADED ENERGY SYSTEMS ~71:TAE TECHNOLOGIES, INC., 19631 Pauling, Foothill Ranch, California, 92610, United States of America ~72: MIKHAIL SLEPCHENKOV;MOHAMMAD MOUSAVI;ROOZBEH NADERI~ 33:US ~31:63/025,099 ~32:14/05/2020;33:US ~31:63/029,368 ~32:22/05/2020;33:US ~31:63/084,293 ~32:28/09/2020

2022/12187 ~ Complete ~54:COMPOUND COMBINATION WITH SUPERIOR HERBICIDAL ACTIVITY ~71:Bayer Aktiengesellschaft, Kaiser-Wilhelm-Allee 1, LEVERKUSEN 51373, GERMANY, Germany ~72: K&#220;HNHOLD, Volker;LORENTZ, Lothar;REUTER, Georg~ 33:EP ~31:20169003.9 ~32:09/04/2020

2022/12159 ~ Complete ~54:ZINC-ENRICHED LIQUID FERTILIZER FOR HIGHLAND BARLEY IN HIGH-ALTITUDE AREAS ~71:Shandong Agricultural University, No. 61, Daizong Street,, Tai&#39;an City, Shandong Province, 271018, People's Republic of China;Shandong Province Jinan City Licheng District Ganggou Street Agricultural Comprehensive Service Center, Yehe Village North, Gangxi Road, Licheng District, Jinan City, Shandong Province, 250102, People's Republic of China;Tibet Gangdise Black Highland Barley Planting Industry Development Co., Ltd., Kaiyang Village, Kadui Township, Jiangzi County, Xigaze City, Tibet Autonomous Region, 857400, People's Republic of China;Xigaze Agricultural and Animal Husbandry Science Research and Extension Center, No. 76, Heilongjiang South Road, Sangzhuzi District, Xigaze City, Tibet Autonomous Region, 857000, People's Republic of China ~72: Bianzhen;KONG, Fanmei;LI, Changjie;LI, Ping;LI, Shuang;Pubu Duoji;SHI, Xueshuang;ZHANG, Xiaocun~

2022/12161 ~ Complete ~54:METHOD FOR PREPARING TRANSITION METAL PHOSPHIDE OR SULFIDE ~71:Henan University of Urban Construction, Longxiang Avenue, Xincheng District, Pingdingshan City, Henan Province, 467041, People's Republic of China ~72: BAO, Yun;LU, Wenke;WANG, Jin;WANG, Jina;WU, Xuyang;XU, Kaidong~

2022/12168 ~ Complete ~54:MULTIPURPOSE TRAY WITH AN EXTENDABLE HOLDER ~71:VISHWAKARMA INSTITUTE OF INFORMATION TECHNOLOGY, SURVEY NO. 3/4, KONDHWA (BUDRUK), PUNE, MAHARASHTRA, 411048, India ~72: DESHMUKH, Sanket;KAMBLE, Dinesh N.;KORE, Sandeep S.;NALAWADE, Dattatraya B.;SAWARGAONKAR, Samyak;THAKARE, Vedangini~

2022/12190 ~ Complete ~54:COMPOSITIONS USEFUL IN TREATMENT OF KRABBE DISEASE ~71:The Trustees of the University of Pennsylvania, 3600 Civic Center Blvd., 9th Floor, PHILADELPHIA 19104, PA, USA, United States of America ~72: HORDEAUX, Juliette;KATZ, Nathan;WILSON, James M.~ 33:US ~31:63/023,459 ~32:12/05/2020;33:US ~31:63/070,653 ~32:26/08/2020;33:US ~31:63/073,756 ~32:02/09/2020

2022/12166 ~ Complete ~54:THE APPLICATION OF AP2 GENE IN REGULATING RICE MALE REPRODUCTION ~71:Jiangxi agriculture university, Zhimin Avenue, Economic and Technological Development Zone, Nanchang, Jiangxi, 330045, People's Republic of China ~72: Cai Yicong;Fu Haihui;He Haohua;Hu Lifang;Li Weixing;Liu Shiqiang;Ouyang Linjuan;Wang Xiaoqing;Xu Jie;Zhou Dahu~

2022/12169 ~ Complete ~54:COMBINED MINING METHOD FOR TRANSITION SUBLEVELS AND BARRIER PILLARS FROM CAVING TO FILLING ~71:UNIVERSITY OF SCIENCE AND TECHNOLOGY BEIJING, No. 30 Xueyuan Road, Haidian District, Beijing, 100083, People's Republic of China ~72: FU, Jianxin;SONG, Weidong;TAN, Yuye;ZHU, Fenghao~ 33:CN ~31:202210120191.X ~32:07/02/2022

2022/12179 ~ Complete ~54:APTAMERS FOR USE IN THE TREATMENT OF CORONAVIRIDAE INFECTIONS ~71:BERLIN CURES GMBH, Knesebeckstra&#223;e. 59-61, 10719, Berlin, Germany ~72: ANNEKATHRIN

HABERLAND;GERD WALLUKAT;JOHANNES M&#220;LLER;PETER G&#214;TTEL~ 33:EP ~31:20168929.6  
~32:09/04/2020;33:EP ~31:20176023.8 ~32:22/05/2020;33:EP ~31:20180781.5 ~32:18/06/2020;33:EP  
~31:20204036.6 ~32:27/10/2020

2022/12188 ~ Complete ~54:METHOD AND SYSTEM FOR ASSEMBLING AND INSTALLING ARRAYS OF  
PHOTOVOLTAIC SOLAR PANELS IN AN OUTDOOR FIELD ~71:Comau S.p.A., via Rivalta 30, GRUGLIASCO  
(TORINO) I-10095, ITALY, Italy ~72: BECCARISI, Francesco;DI STEFANO, Giovanni;POLLANO, Maurizio~ 33:IT  
~31:10202000010507 ~32:11/05/2020

2022/12194 ~ Complete ~54:IL-2 FUSION POLYPEPTIDE COMPOSITIONS AND METHODS OF MAKING AND  
USING THE SAME ~71:ALKERMES PHARMA IRELAND LIMITED, One Burlington Road, Connaught House,  
Ireland ~72: GBORMITTAH, Francisca O.;KALARIYA, Mayur;ZEIDAN, Tarek A.~ 33:US ~31:63/022,853  
~32:11/05/2020

2022/12174 ~ Complete ~54:MODULAR AND GENERALIZABLE BIOSENSOR PLATFORM BASED ON DE  
NOVO DESIGNED PROTEIN SWITCHES ~71:UNIVERSITY OF WASHINGTON, 4545 Roosevelt Way NE, Suite  
400, United States of America ~72: BAKER, David;CAO, Longxing;COVENTRY, Brian;GORESHNIK,  
Inna;KOZODOY, Lisa;PARK, Jooyoung;QUIJANO RUBIO, Alfredo;STEWART, Lance, Joseph;YEH, Hsien-Wei~  
33:US ~31:63/030,836 ~32:27/05/2020;33:US ~31:63/051,549 ~32:14/07/2020;33:US ~31:63/067,643  
~32:19/08/2020

2022/12178 ~ Complete ~54:METHOD FOR OBTAINING A FIBROUS PREPARATION FOR IMMERSION-  
RESISTANT OPAQUE PAPER ~71:CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, 3 rue Michel  
Ange, France;INSTITUT POLYTECHNIQUE DE BORDEAUX, 1 avenue du Docteur Albert Schweitzer,  
France;PAPETERIE ZUBER RIEDER, Rue Ernest Zuber, France;UNIVERSITE DE BORDEAUX, 35 Place Pey  
Berland, France ~72: COMA V&#233;ronique;GRELIER St&#233;phane;HAM-PICHAVANT  
Fr&#233;d&#233;rique;LE GOUE Erwan~ 33:FR ~31:FR2005654 ~32:28/05/2020

2022/12183 ~ Complete ~54:METHOD OF TREATMENT OF CANCER OR TUMOUR ~71:ADAPTIMMUNE  
LIMITED, 60 Jubilee Avenue Milton Park, Abingdon, Oxfordshire, OX14 4RX, United Kingdom ~72: MARK  
EDWARD DUDLEY~ 33:US ~31:63/024,104 ~32:13/05/2020

2022/12157 ~ Provisional ~54:IMPROVED ANCHOR SYSTEM WITH FLAT SURFACE TAPER PROFILE  
~71:Kevin O&#39;Neill, 4 Far Hills Estate, Ruitershoogte, Durbanville, South Africa ~72: Kevin O&#39;Neill~  
33:ZA ~31:1 ~32:07/11/2022

2022/12158 ~ Provisional ~54:A SECURITY AT A GO PLATFORM UTILIZING A CELL PHONE APPLICATION  
(WEWATCH) ~71:Alec Mashabane, 183 Canta Libre, Reniet Avenure, Terenure, South Africa ~72: Alec  
Mashabane;Norman Masiya~ 33:ZA ~31:ZA20221109 ~32:07/11/2022

2022/12160 ~ Complete ~54:SELENIUM-ENRICHED FOLIAR FERTILIZER FOR HIGHLAND BARLEY  
~71:Shandong Agricultural University, No. 61, Daizong Street, Tai&#39;an City, Shandong Province, 271018,  
People's Republic of China;Tibet Gangdise Black Highland Barley Planting Industry Development Co., Ltd.,  
Kaiyang Village, Kadui Township, Jiangzi County, Xigaze City, Tibet Autonomous Region, 857400, People's  
Republic of China;Xigaze Agricultural and Animal Husbandry Science Research and Extension Center, No. 76,  
Heilongjiang South Road, Sangzhuzi District, Xigaze City, Tibet Autonomous Region, 857000, People's Republic  
of China ~72: KONG, Fanmei;LI, Shuang;LI, Wenxing;Laba Qionгда;Pubu Duoji;SHI, Xueshuang;ZHANG,  
Baoyou;ZHANG, Xiaocun~

2022/12167 ~ Complete ~54:A DA1 GENE SEQUENCE IN CONTROLLING RICE MALE REPRODUCTIVE  
DEVELOPMENT ~71:Jiangxi agriculture university, Zhimin Avenue, Economic and Technological Development

Zone, Nanchang, Jiangxi, 330045, People's Republic of China ~72: Cai Yicong;Fu Haihui;He Haohua;Hu Lifang;Li Weixing;Liu Shiqiang;Ouyang Linjuan;Xu Jie;Zhang Zelin;Zhou Dahu~

2022/12172 ~ Complete ~54:PREPARATION METHOD OF HYPERBRANCHED PHOTO-CURED WATERBORNE POLYURETHANE FILM ~71:Shanxi-Zheda Institute of Advanced Materials and Chemical Engineering, No.79 Yingze West Street, Wanbailin District, Taiyuan, Shanxi, 030024, People's Republic of China;Taiyuan University of Technology, No.79 Yingze West Street, Wanbailin District, Taiyuan, Shanxi, 030024, People's Republic of China ~72: Heng Zhang;Lan Jia;Nan Yuan;Xiaohong Liang;Yanlong Ma~ 33:CN ~31:202210749627.1 ~32:28/06/2022

2022/12164 ~ Complete ~54:APPLICATION OF TNFSF15 PROTEIN IN PROMOTING DIFFERENTIATION AND PROLIFERATION OF BONE MARROW STEM CELLS INTO MACROPHAGES ~71:NANKAI UNIVERSITY, No. 38, Tongyan Road, Jinnan District, Tianjin, People's Republic of China ~72: LI Luyuan;ZHANG Qiangzhe~

2022/12171 ~ Complete ~54:PHASE-CHANGE HEAT-STORAGE HEAT EXCHANGER ~71:ZHEJIANG UNIVERSITY OF WATER RESOURCES AND ELECTRIC POWER, No.583, Xuelin Avenue, Hi-Education Park, Xiasha District, Zhejiang Province, People's Republic of China ~72: CUI, JIAMIN;CUI, YANG;HUANG, BIYI;LI, HUIYING;LUO, QUANQUAN;SHEN, LIFANG;YAN, SHUBIN;ZHANG, WEI;ZHU, CHUANHUI~ 33:CN ~31:CN202111326886.5 ~32:10/11/2021

2022/12193 ~ Complete ~54:CRYSTALLINE FORMS OF (9R, 135S)-13- {4-[5-CHLORO-2-(4-CHLORO-1H,2,3-TRIAZOL- 1-YL)PHENYL] -6-OXO- 1,6-DIHYDROPYRIMIDIN- 1-YL}-3-(DIFLUOROMETHYL)-9-METHYL-3,4,7,15- TETRAAZATRICYCLO [ 12.3.1.02:6] OCTADEC- 1(18), 2(6), 4, 14, 16-PENTAEN-8-ONE ~71:Bristol-Myers Squibb Company, Route 206 and Province Line Road, PRINCETON 08543, NJ, USA, United States of America;Janssen Pharmaceutica NV, Turnhoutseweg 30, BEERSE 2340, BELGIUM, Belgium ~72: AHUJA, Dipali;CLEEREN, Dirk Angelina J.;DILGER, Andrew K.;GALELLA, Michael A.;L&#220;DEKER, David;SMITH, Daniel;XIOURAS, Christos;ZIEMBA, Theresa M.~ 33:US ~31:63/008,161 ~32:10/04/2020

2022/12173 ~ Complete ~54:MEK-INHIBITORS FOR THE TREATMENT OR PREVENTION OF CORONAVIRUS INFECTIONS AND/OR COVID-19 CYTOKINE STORM ~71:ATRIVA THERAPEUTICS GMBH, Eisenbahnstr. 1, Germany ~72: HOFFMANN, Helen Elisa;KOCH-HEIER, Julia;LUDWIG, Stephan;PLANZ, Oliver;SCHINDLER, Michael~ 33:EP ~31:20175739.0 ~32:20/05/2020

2022/12181 ~ Complete ~54:ARTIFICIAL ANTIGEN PRESENTING CELL SYSTEM AND USES THEREOF ~71:CELTEC, INC., 15F-7, No. 99, Sec. 1, Xintai 5th Rd., Xizhi Dis., New Taipei City, Taiwan, 22175, People's Republic of China ~72: CHE-MING JACK HU;CHUNG-YAO HSU;JUNG-CHEN LIN~ 33:US ~31:63/022,289 ~32:08/05/2020

2022/12182 ~ Complete ~54:METHOD OF TREATMENT OF CANCER OR TUMOUR ~71:ADAPT IMMUNE LIMITED, 60 Jubilee Avenue Milton Park, Abingdon, Oxfordshire, OX14 4RX, United Kingdom ~72: DENNIS ROBERT WILLIAMS~ 33:US ~31:63/024,077 ~32:13/05/2020;33:US ~31:63/030,503 ~32:27/05/2020;33:US ~31:63/089,611 ~32:09/10/2020

2022/12189 ~ Complete ~54:COMPOSITIONS FOR DRG-SPECIFIC REDUCTION OF TRANSGENE EXPRESSION ~71:The Trustees of the University of Pennsylvania, 3600 Civic Center Blvd., 9th Floor, PHILADELPHIA 19104, PA, USA, United States of America ~72: HORDEAUX, Juliette;WILSON, James M.~ 33:US ~31:63/023,593 ~32:12/05/2020;33:US ~31:63/038,488 ~32:12/06/2020;33:US ~31:63/043,562 ~32:24/06/2020;33:US ~31:63/079,299 ~32:16/09/2020;33:US ~31:63/152,042 ~32:22/02/2021

2022/12162 ~ Complete ~54:A MULTIFUNCTIONAL CERAMIC POWDER COATING WITH INORGANIC MATERIAL AS THE MAIN BODY ~71:Langfang Xubo Tulide New Material Technology Co., Ltd., Caozhuang



Village, Yongqing County Development Zone, Langfang City, Hebei Province, 065600, People's Republic of China  
~72: BOWEI SUN;GUOXU LI~

- APPLIED ON 2022/11/09 -

2022/12195 ~ Provisional ~54:ELECTRICITY GENERATION ~71:Whybrow, John Sheldon, 18 Church Street, Swellendam 6740, Western Cape, SOUTH AFRICA, South Africa ~72: Whybrow, John Sheldon~

2022/12197 ~ Complete ~54:COMPOSITION AND METHOD FOR SUPPRESSING SUNBURN AND BROWNING IN PLANTS AND PLANT PARTS ~71:BOTHA, MARTIN, 18 Milkwood Crescent, Serengeti Golf and Wildlife Estate, South Africa ~72: BOTHA, MARTIN~ 33:ZA ~31:2021/09993 ~32:06/12/2021

2022/12204 ~ Complete ~54:METHOD FOR INFLUENCING QUALITY OF EUPATORIUM ODORATUM SILAGE BY ADDING DIFFERENT PROPORTIONS OF LACTIC ACID BACTERIA PREPARATION ~71:Guizhou University, West Campus of Guizhou University, Huaxi District, Guiyang City, Guizhou Province, 550025, People's Republic of China;Sichuan Academy of Grassland Sciences, No. 368, West Guoning Road, Hongguang Town, Pidu District, Chengdu City, Sichuan Province, People's Republic of China ~72: BAI, Shiqie;CHEN, Chao;CHEN, Liangyin;GOU, Wenlong;LI, Daxu;LI, Ping;YAN, Jiajun;YOU, Minghong~

2022/12208 ~ Complete ~54:A PATTERN RECOGNITION METHOD FOR IDENTIFICATION OF DEVNAGARI SCRIPT BASED ON FINGERTIPS AND PALM ~71:DESHMUKH, Chandrashekhar Nandkumar, 105, WING NO.4, RACHANA RESIDENCY, GANEDIWAL LAYOUT, CAMP, AMRAVATI, MAHARASHTRA, 444602, India;TANTARPALE, Sharvari Rita Shrikant, C/O ADV. SHRIKANT T. TANTARPALE, BLOCK NO.45, OLD BYPASS ROAD, NEAR YASHODA NAGAR, ADHANESHWAR DADAJI MANDIR LANDMARK, MAHARASHTRA, AMRAVATI, MAHARASHTRA, 444606, India ~72: DESHMUKH, Chandrashekhar Nandkumar;INGOLE, Vijay Tulsiram;PUND, Mahendra Abarao;TANTARPALE, Sharvari Rita Shrikant~

2022/12216 ~ Complete ~54:ALCOHOL SENSING ALERT SYSTEM WITH ENGINE LOCK AND ALARM ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: BHATELE, Priyanka;BHISE, Pratik;JALNEKAR, Rajesh M.;JHAMTANI, Prishita;KAMALAPURE, Prithiviraj;PUKALE, Priti;WAGH, Preeti;WAGHMARE, Pranav~

2022/12196 ~ Complete ~54:BLOOD SAMPLING DEVICE FOR RAT ABDOMINAL AORTA ~71:Shihezi University, 221 Beisi Road, Shihezi, Xinjiang, 832061, People's Republic of China ~72: CAI, Wenping;GUO, Na;JIN, Shan;PANG, Lijuan;ZHU, Dongyang~ 33:CN ~31:202122752783.7 ~32:10/11/2021

2022/12201 ~ Complete ~54:COMPOSITE PRESERVATIVE FOR INHIBITING MELANOSIS OF LITOPENAEUS VANNAMEI AND APPLICATION METHOD THEREOF ~71:Hainan Tropical Ocean University, Yucai Rd1#,Jiyang District, Sanya City, Hainan Province, People's Republic of China;Yazhou Bay Innovation Institute Hainan Tropical Ocean University, Hainan Ruize Office Building 6th floor, Yazhou Bay Science and Technology City, Yazhou District, Sanya City, Hainan Province, People's Republic of China ~72: CHIN Yaoxian;HANG Yuyu;HU Yaqin;PEI Zhisheng;XUE Changfeng~

2022/12211 ~ Complete ~54:A NOVEL SYSTEM FOR OBJECT COUNTING ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: BHATELE, Priyanka;MAHAJAN, Bhushan;MAHAJAN, Divesh;MAHAJAN, Divya;MAHAJAN, Nikhil;MAHAJAN, Prasad;SAWANT, Sachin S.~

2022/12213 ~ Complete ~54:DRIVER DROWSINESS DETECTION SYSTEM ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: BANSODE, Prasannata;BHATELE, Priyanka;DHORE,

Prathamesh;JADHAV, Pratik;JALNEKAR, Rajesh M.;KHINVSARA, Pratham;KORADE, Pratham;MASKE, Pranita~

2022/12219 ~ Complete ~54:A NOVEL CAR RACING SYSTEM FOR MENTAL EXERCISE ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: BHATELE, Priyanka;MAGAR, Akshay;MAGAR, Snehal;MAGDUM, Suyog;MAHAJAN, Abhinav;MAHAJAN, Arya;RAIKWAR, Rajesh G.~

2022/12224 ~ Complete ~54:METHODS FOR PRODUCTION OF BIO-CRUDE OIL ~71:KVASIR TECHNOLOGIES APS, C/O ALFA LAVAL, MASKINVEJ 5, 2860 S&#216;BORG, DENMARK, Denmark ~72: BACHMANN NIELSEN, Joachim~ 33:US ~31:63/010,079 ~32:15/04/2020;33:US ~31:63/122,475 ~32:08/12/2020

2022/12226 ~ Complete ~54:A MOUNTING BRACKET ~71:LOUVER-LITE LIMITED, ASHTON ROAD, HYDE CHESHIRE SK 14 4BG, GREAT BRITAIN, United Kingdom ~72: GREENING, Andrew~ 33:GB ~31:2005640.4 ~32:17/04/2020

2022/12229 ~ Complete ~54:WIND TURBINE GENERATOR SYSTEM, AND ROTATION SPEED AVOIDANCE CONTROL METHOD AND APPARATUS THEREFOR ~71:BEIJING GOLDWIND SCIENCE & CREATION WINDPOWER EQUIPMENT CO., LTD., No. 19, Kangding Road, Beijing Economic & Technological Development Zone, Daxing District, Beijing, 100176, People's Republic of China ~72: XINLI ZHANG~ 33:CN ~31:202010597078.1 ~32:28/06/2020

2022/12238 ~ Complete ~54:NUCLEIC ACID BASED COMBINATION VACCINES ~71:CUREVAC SE, Friedrich-Miescher-Str. 15, Germany ~72: OOSTVOGELS, Cornelia;PETSCH, Benjamin;RAUCH, Susanne;SCHWENDT, Kim Ellen~ 33:EP ~31:PCT/EP2020/065094 ~32:29/05/2020;33:DE ~31:PCT/EP2021/052458 ~32:03/02/2021

2022/12246 ~ Complete ~54:COMPOUNDS SPECIFIC TO CORONAVIRUS S PROTEIN AND USES THEREOF ~71:Invivyd, Inc., 1601 Trapelo Road, Suite 178, WALTHAM 02451, MA, USA, United States of America ~72: BELK, Jonathan;DEVEAU, Laura;RAPPAZZO, C. Garrett;WALKER, Laura;WEC, Anna~ 33:US ~31:63/008,545 ~32:10/04/2020;33:US ~31:63/021,589 ~32:07/05/2020;33:US ~31:63/046,313 ~32:30/06/2020;33:US ~31:63/112,122 ~32:10/11/2020;33:US ~31:63/138,886 ~32:19/01/2021;33:US ~31:63/143,456 ~32:29/01/2021;33:US ~31:63/147,495 ~32:09/02/2021;33:US ~31:63/148,754 ~32:12/02/2021;33:US ~31:63/150,413 ~32:17/02/2021;33:US ~31:63/152,054 ~32:22/02/2021;33:US ~31:63/163,400 ~32:19/03/2021

2022/12234 ~ Complete ~54:METHOD AND APPARATUS FOR CONTROLLING POWER OF WIND FARM ~71:XINJIANG GOLDWIND SCIENCE & TECHNOLOGY CO., LTD., No. 107 Shanghai Road, Economic & Technological Development Zone, Urumqi, Xinjiang, 830026, People's Republic of China ~72: CHI YU;SHUOWEN XIAO;ZELIN WANG~ 33:CN ~31:202010599002.2 ~32:28/06/2020

2022/12237 ~ Complete ~54:BARK-FREE, STABLE DISPERSION ~71:CAPSUM, 126 Boulevard Bara Heliopolis II, France ~72: BACON, Julie;GOUTAYER, Mathieu~ 33:FR ~31:2005408 ~32:21/05/2020

2022/12243 ~ Complete ~54:MODIFIED FILAMENTOUS FUNGI FOR PRODUCTION OF EXOGENOUS PROTEINS ~71:Dyadic International (USA), Inc., 140 Intracoastal Pointe Drive, Suite 404, JUPITER 33477, FL, USA, United States of America ~72: EMALFARB, Mark Aaron;HUUSKONEN, Anne;KOVALCHUK, Andriy;LANDOWSKI, Christopher;SALOHEIMO, Markku;TCHELET, Ronen;VITIKAINEN, Marika~ 33:US ~31:63/024,550 ~32:14/05/2020

2022/12247 ~ Complete ~54:SYSTEM AND PROCESS FOR STARTING UP AN ELECTROLYTIC CELL  
~71:ELYSIS LIMITED PARTNERSHIP, 1 Place Ville Marie, Suite 2323, Montreal, Canada ~72: BARDET,  
Benoit;BECASSE, Sebastien;D&#39;ASTOLFO, Leroy;FORS, John;NOIZET, Alain;PETITJEAN, Bruno~ 33:US  
~31:63/018,680 ~32:01/05/2020

2022/12233 ~ Complete ~54:WIND TURBINE GENERATOR, AND MINIMUM ROTATIONAL SPEED CONTROL  
METHOD AND DEVICE THEREFOR ~71:BEIJING GOLDWIND SCIENCE & CREATION WINDPOWER  
EQUIPMENT CO., LTD., No. 19, Kangding Road, Beijing Economic & Technological Development Zone,  
Daxing District, Beijing, 100176, People's Republic of China ~72: XINLI ZHANG~ 33:CN ~31:202010597821.3  
~32:28/06/2020

2022/12236 ~ Complete ~54:EFFICIENT CULTIVATION WAY OF MESEMBRYANTHEMUM CRYSTALLINUM  
LINN ~71:Shandong Institute of Sericulture, No. 21, Zhichu North Road, Zhifu District, Yantai, Shandong, 264001,  
People's Republic of China ~72: FU Rao;GU Yinyu;MA Lan;QIAO Peng;SONG Yanjing;TIAN Wei;WANG  
Xiangyu;ZHANG Hongxia~

2022/12241 ~ Complete ~54:SYSTEM AND METHOD FOR CONNECTING AND FIXING FRAMED SOLAR  
PANELS TO MAKE A WEATHERPROOF BUILDING-INTEGRATED MODULAR SURFACE ~71:Solarstone  
O&#220;, Tartu 16-8, VILJANDI 71004, ESTONIA, Estonia ~72: AEDNIK, Silver;J&#220;RIM&#196;E,  
Mattis;KRAAVI, Mati~ 33:EE ~31:P202000007 ~32:15/05/2020

2022/12245 ~ Complete ~54:VACCINES FOR RECURRENT RESPIRATORY PAPILLOMATOSIS AND  
METHODS OF USING THE SAME ~71:Inovio Pharmaceuticals, Inc., 660 W. Germantown Pike, Suite 110,  
PLYMOUTH MEETING 19462, PA, USA, United States of America ~72: BRODERICK, Kate;RAMOS,  
Stephanie;REED, Charles;SLAGER, Anna;WALTERS, Jewell;YAN, Jian~ 33:US ~31:63/024,912  
~32:14/05/2020

2022/12199 ~ Complete ~54:CHINESE COPYBOOK AUXILIARY BOARD ~71:CHENG, Yingyue, NO. 67  
BEIHUAN ROAD, People's Republic of China ~72: CHENG, Yingyue~

2022/12203 ~ Complete ~54:SELF-CLEANING DRUM-SHAPED MESH CONTINUOUS FILTER ~71:XINJIANG  
AGRICULTURAL UNIVERSITY, No. 311 Nongda East Road, Urumqi, Xinjiang Uygur Autonomous Region,  
People's Republic of China ~72: JIANG Youwei;LI Qiao;MAHEMUJIANG Aihemaiti;TAO Hongfei;WEI Jianqun~

2022/12209 ~ Complete ~54:AN ONLINE SYSTEM FOR LINKING NGOS WITH FAMILIES OF COVID VICTIMS  
~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR,  
BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: INGOLE, Tejas;IRAKATE, Swapnil;IRAMANI,  
Harsh;ITHAPE, Sankalpa;JALNEKAR, Rajesh M.;JANOKAR, Sagar;VENIKAR, Isha~

2022/12217 ~ Complete ~54:A SYSTEM FOR VIRTUAL GAME CONTROL USING HAND GESTURES  
~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR,  
BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: BHATELE, Priyanka;DALVI, Manas  
Manoj;KULKARNI, Manas Amrish;MALI, Tejas;MANAKSHE, Aman;MANALWAR, Manthan;RAIKWAR, Rajesh  
G.~

2022/12222 ~ Complete ~54:INTERACTIVE COMPUTING RESOURCE ~71:GRYPP CORP LIMITED, The Old  
Granary, Cotton End, United Kingdom ~72: JONES, Pete;LANCEY, Adam;PATEL, Jemal~ 33:GB  
~31:2005272.6 ~32:09/04/2020

2022/12227 ~ Complete ~54:OVERCOMING IMMUNE SUPPRESSION WITH TGF-BETA RESISTANT NK  
CELLS ~71:RESEARCH INSTITUTE AT NATIONWIDE CHILDREN&#39;S HOSPITAL, 700 Children&#39;s

Drive, W-148, Columbus, Ohio, 43205, United States of America ~72: AAROHI THAKKAR;DEAN ANTHONY LEE;JENA E MOSEMAN;JENNIFER FOLTZ;MEISAM N KARAROUDI;PRASHANT TRIKHA~ 33:US ~31:63/018,108 ~32:30/04/2020

2022/12231 ~ Complete ~54:WIND TURBINE GENERATOR SYSTEM, AND ROTATION SPEED AVOIDANCE CONTROL METHOD AND APPARATUS THEREFOR ~71:BEIJING GOLDWIND SCIENCE & CREATION WINDPOWER EQUIPMENT CO., LTD., No. 19, Kangding Road, Beijing Economic & Technological Development Zone, Daxing District, Beijing, 100176, People's Republic of China ~72: XINLI ZHANG;YE HU~ 33:CN ~31:202010597154.9 ~32:28/06/2020

2022/12240 ~ Complete ~54:SENSORY PERCEPTION SURGICAL SYSTEM FOR ROBOT-ASSISTED LAPAROSCOPIC SURGERY ~71:ROB SURGICAL SYSTEMS, SL, Autov&#237;a de Castelldefels C-31, km 190,5, 08820, Spain ~72: AMAT GIRBAU, Josep~ 33:EP ~31:20382338.0 ~32:27/04/2020

2022/12244 ~ Complete ~54:SINGLE-SERVE CAPSULE FOR PREPARING ALCOHOLIC BEER ~71:Heineken Supply Chain B.V., Burgemeester Smeetsweg 1, ZOETERWOUDE 2382 PH, THE NETHERLANDS, Netherlands ~72: BEKKERS, Augustinus Cornelius Aldegonde Petrus Albert;BROUWER, Eric Richard~ 33:EP ~31:20175082.5 ~32:15/05/2020

2022/12249 ~ Complete ~54:MITRAL VALVE REPAIR DEVICE AND CONTROL HANDLE THEREOF ~71:SHANGHAI NEWMED MEDICAL CO., LTD., Room 301, No. 23, Lane 908, Ziping Road, Zhoupu Town,, Pudong New District, Shanghai, 201321, People's Republic of China ~72: QIN, Tao;WANG, Haishan;YU, Qifeng~ 33:CN ~31:202010390972.1 ~32:11/05/2020;33:CN ~31:202010581915.1 ~32:23/06/2020

2022/12198 ~ Complete ~54:NOVEL METHOD FOR DC-SIDE VOLTAGE BALANCING CONTROL OF CASCADED SVG ~71:Anhui University of Technology, No. 59, Hudong Road, Ma&#39;anshan City, Anhui Province, 243000, People's Republic of China ~72: FANG, Si&#39;an;LANG, Jiahong;LIU, Hairui;XU, Lei;XU, Quanwei;ZHENG, Shicheng~

2022/12210 ~ Complete ~54:SOLAR OBSTACLE AVOIDING VEHICLE WITH SOLAR SPRINKLER ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: DESHPANDE, Rupali S.;PATWARDHAN, Milind M.;THAKUR, Arjun P.~

2022/12214 ~ Complete ~54:A SYSTEM FOR CREDIT CARD FRAUD ANALYSIS USING MACHINE LEARNING ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: BHATELE, Priyanka;DHAKE, Rajesh J.;KUMAR, Prachi;NANNWARE, Pranay;POWAR, Sneha;PRABHU, Parth;PRAJAPATI, Ritesh~

2022/12221 ~ Complete ~54:A THERAPEUTIC COMPOSITION ~71:Prabhakaran PANDURANGAN, Municipal No. 40/11-1, BDA no. 1269/B, 2nd Floor MRCR Layout, Agrahara Dasarahalli, India ~72: PANDURANGAN, Prabhakaran~ 33:IN ~31:202041015667 ~32:09/04/2020

2022/12202 ~ Complete ~54:SHOCK ABSORBING DEVICE FOR MAIN LINE BRIDGE OF STATION ~71:China Railway 10th Bureau Group Urban Construction Engineering Co., Ltd., 22nd Floor, Zhenghai Building, No.66 Zhujiang Road, Fushan District, Yantai City, Shandong Province, People's Republic of China;China Railway No.10 Engineering Group Co., Ltd., Building 7, Shuntai Plaza, High-tech Industrial Development Zone, 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: CHU Yanhai;LIANG Tianle;LIU Jingwang;LIU Wei;LUO Mingzu;WANG Peijun;WANG Peng;WANG Xiufei~

2022/12206 ~ Complete ~54:AN UNMANNED AERIAL VEHICLE AND ENERGY HARVESTING DEVICE  
~71:AFRICAN NEW ENERGIES LIMITED, Villa Florita, East Road, St George's Hill, United Kingdom ~72: KHAN, Saad Saleem;LARKIN, Stephen;OMAR, Muhammad;RAW, Brendon;TAHA, Muhammad;USMAN, Muhammad~

2022/12212 ~ Complete ~54:A SYSTEM FOR REAL TIME SPEECH RECOGNITION AND TEXT CONVERSION  
~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: BHATELE, Priyanka;MAHAJAN, Richa;MAHALE, Swayamprakash;MAHALE, Zelam;MAHANKALIWAR, Shrirang;MAHATME, Tanish;MAHESHWARI, Anay;SAWANT, Sachin S.~

2022/12218 ~ Complete ~54:INTELLIGENT SYSTEM FOR STRATEGIC FLEXIBLE MANAGEMENT OF FRAMEWORK OF SMALL- AND MEDIUM-SIZED ENTERPRISES BASED ON IOT & MACHINE LEARNING  
~71:Azam, Dr. Mohammed, Associate Professor, Department of Electronics and Communication Engineering, ISL ENGINEERING COLLEGE, Hyderabad, Telangana, India;Gautam, Dr. Shikha, Assistant Professor, Department of Computer Science and Engineering, University of Lucknow, Lucknow, Uttar Pradesh, India;Guntu, Ravi Kumar, Assistant Professor, Department of Physics, Sreenidhi Institute of Science and Technology, Hyderabad, Telangana, India;Jaiswal, Tarun, Research Scholar, Department of Computer Application, National Institute of Technology, Raipur, Chhattisgarh, India;Jha, Dr. Nishikant, Vice Principal (Commerce), HoD Accounting & Finance, Thakur College of Science & Commerce (Affiliated to University of Mumbai), Thakur Village, Kandivali (East), Mumbai, India;Joshi, Dr. Apoorva, Assistant Professor & HOD, Department of Computer Application, NIET, Greater Noida, India;Kakade, Prof. Revannath Babanrao, Lecturer, Department of Electrical Engineering, Government Residential Women's Polytechnic, Latur, Maharashtra, India;Mamodiya, Udit, Assistant Professor, HoD & Coordinator of PIET AICTE IDEA Lab, Department of Electrical Engineering, Poornima Institute of Engineering and Technology, Jaipur, Rajasthan, India;Rahi, Dr Pankaj, Associate Professor, Department of Artificial Intelligence & Data Science, Poornima Institute of Engineering and Technology, Jaipur, Rajasthan, India;Reddy, Dr. Algubelly Yashwanth, Vice Principal & HoD -CSE, Sree Dattha Group of Institutions, Hyderabad, Telangana, India;Sharma, Ambrish Kumar, Assistant Professor, Department of MCA, NIET, Greater Noida, India;Tiwari, Mohit, Assistant Professor, Department of Computer Science and Engineering, Bharati Vidyapeeth's College of Engineering, Delhi, India;Yadav, Dr. Kusum, Associate Professor, College of Computer Science and Engineering, University of Ha'il, Saudi Arabia ~72: Azam, Dr. Mohammed;Gautam, Dr. Shikha;Guntu, Ravi Kumar;Jaiswal, Tarun;Jha, Dr. Nishikant;Joshi, Dr. Apoorva;Kakade, Prof. Revannath Babanrao;Mamodiya, Udit;Rahi, Dr Pankaj;Reddy, Dr. Algubelly Yashwanth;Sharma, Ambrish Kumar;Tiwari, Mohit;Yadav, Dr. Kusum~

2022/12220 ~ Complete ~54:A KIND OF WELDING TOOL FOR LONGITUDINAL SEAM OF THIN-WALLED CYLINDER ~71:Yiwu Industrial and Commercial College, No. 2 Xueyuan Road, Yiwu City, Jinhua City, People's Republic of China ~72: GUANG MA;XUJIANG YU;YANG ZHAO~

2022/12223 ~ Complete ~54:LPA RECEPTOR ANTAGONISTS AND USES THEREOF ~71:GILEAD SCIENCES, INC., 333 Lakeside Drive, Foster City, United States of America ~72: BESTVATER, BRIAN P.;DU, ZHIMIN;FARAND, JULIE;KAPLAN, JOSHUA A.;PHILLIPS, BARTON W.;TANG, DORIS T;VENKATARAMANI, CHANDRASEKAR;WANG, PEIYUAN;YANG, KIN S;ZAGORSKA, ANNA~ 33:US ~31:63/034,220 ~32:03/06/2020;33:US ~31:63/130,242 ~32:23/12/2020

2022/12225 ~ Complete ~54:PARALLEL PATH PUNCTURE DEVICE GUIDE AND METHOD ~71:INNOVACELL AG, Mitterweg 24, Austria ~72: Craig Joseph CERMAK;Marco THURNER;Rainer MARKSTEINER~ 33:US ~31:63/039,515 ~32:16/06/2020

2022/12228 ~ Complete ~54:SUPPORT DEVICE AND WIND GENERATING SET ~71:BEIJING GOLDWIND SCIENCE & CREATION WINDPOWER EQUIPMENT CO., LTD., No. 19, Kangding Road, Beijing Economic

& Technological Development Zone, Daxing District, Beijing, 100176, People's Republic of China ~72: YUFEI CUI~ 33:CN ~31:202010342220.8 ~32:27/04/2020

2022/12230 ~ Complete ~54:LOAD REDUCTION CONTROL METHOD FOR WIND TURBINE GENERATOR AND DEVICE ~71:BEIJING GOLDWIND SCIENCE & CREATION WINDPOWER EQUIPMENT CO., LTD., No. 19 Kangding Road, Beijing Economic & Technological Development Zone, Daxing District, Beijing, 100176, People's Republic of China ~72: ZHONGPENG LIU~ 33:CN ~31:202010542560.5 ~32:15/06/2020

2022/12239 ~ Complete ~54:MULTI-TASK OBJECT DETECTION METHOD AND APPARATUS, ELECTRONIC DEVICE, AND STORAGE MEDIUM ~71:OBJECTEYE (BEIJING) TECHNOLOGY CO., LTD., Room A-6193, Building 3, No. 20 Yongan Road, Shilong Economic Development Zone, Mentougou District, Beijing, 100190, People's Republic of China ~72: Chaoyang ZHAO;Jinqiao WANG;Yousong ZHU~ 33:CN ~31:202010422038.3 ~32:18/05/2020

2022/12232 ~ Complete ~54:HYBRID DAMPING MODULE, VIBRATION SUPPRESSION DEVICE, VIBRATION SUPPRESSION METHOD, AND WIND TURBINE SET ~71:BEIJING GOLDWIND SCIENCE & CREATION WINDPOWER EQUIPMENT CO., LTD., No. 19, Kangding Road, Beijing Economic & Technological Development Zone, Daxing District, Beijing, 100176, People's Republic of China ~72: YANG GAO;ZHONG ZHANG;ZHILIANG XU~ 33:CN ~31:202010606894.4 ~32:29/06/2020

2022/12235 ~ Complete ~54:WIND TURBINE AND CONVERTER FILTER CAPACITOR SWITCHING CONTROL METHOD, DEVICE AND SYSTEM THEREFOR ~71:BEIJING GOLDWIND SCIENCE & CREATION WINDPOWER EQUIPMENT CO., LTD., No. 19, Kangding Road Beijing Economic & Technological Development Zone, People's Republic of China ~72: CHEN, Liquan;DUAN, Liaoran~ 33:CN ~31:202010602986.5 ~32:29/06/2020

2022/12242 ~ Complete ~54:ANTI-CD47 ANTIBODY AND USES THEREOF ~71:Hutchison MediPharma Limited, Building 4, 720 Cailun Road, Pilot Free Trade Zone, SHANGHAI 201203, CHINA (P.R.C.), People's Republic of China ~72: CAI, Yu;LI, Xiong;REN, Yongxin;SU, Wei-Guo;YANG, Xianwen;YANG, Yizhen~ 33:CN ~31:202010282924.0 ~32:10/04/2020

2022/12248 ~ Complete ~54:PHARMACEUTICAL COMPOSITIONS COMPRISING FLUBENDAZOLE ~71:ZEPHAPHARM LTD, The Harley Building, 77 New Cavendish Street, United Kingdom ~72: TAYLOR, John~

2022/12200 ~ Complete ~54:OCEAN ENVIRONMENT PARAMETER INTEGRATED ADJUSTABLE NAVIGATION MARK MONITORING DEVICE ~71:Ningbo Institute of Oceanography, No. 358, Qixing South Road, Beilun, Ningbo City, Zhejiang Province, 315800, People's Republic of China ~72: LI, Fan;MAO, Shuoqian;SHAO, Qianwen;WANG, Shiwei;XU, Yuankai;YANG, Qingchuan~

2022/12205 ~ Complete ~54:METHOD FOR PREPARING 2-METHYLTETRAHYDROFURAN BY USING WASTE BIOMASS ~71:ANHUI SENRISE TECHNOLOGY CO., LTD., No.88 Weisan Road, High-Tech Industrial Development Zone, People's Republic of China ~72: LI, Xiaoyan;LIU, Yinhui;SUN, Xiling~ 33:CN ~31:202210364329.0 ~32:08/04/2022

2022/12207 ~ Complete ~54:ALFALFA TYPE COMPLETE PELLET FEED CAPABLE OF ENHANCING INTESTINAL MICROECOLOGICAL BALANCE TO REDUCE DIARRHEA RATE OF PIGLETS ~71:Henan Agricultural University, No. 95, Wenhua Road, Jinshui District, Zhengzhou City, Henan Province, 450000, People's Republic of China ~72: CUI, Yalei;LA, Shaokai;LIU, Boshuai;LIU, Mengqi;NIU, Jiakuan;SHI, Yinghua;SUN, Hao;SUN, Yu;WANG, Zhichang;XU, Feng;ZHU, Xiaoyan~

2022/12215 ~ Complete ~54:SOIL MONITORING AND WATERING SYSTEM CONTROL BY AN APPLICATION  
~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR,  
BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: BHATELE, Priyanka;DESHPANDE,  
Vaishnavi;JALNEKAR, Rajesh M.;MAHURKAR, Vaishnavi;PATIL, Vaishnavi;VAISHNAV, Prathamesh;VANAGE,  
Varad~

- APPLIED ON 2022/11/10 -

2022/12315 ~ Provisional ~54:BEARD COMB KEYCHAIN ~71:Francois Meyer, 7 Clifton road, South Africa ~72:  
Francois Meyer~

2022/12282 ~ Complete ~54:A DEFOGGING DEVICE FOR AUTOMOBILE FRONT WINDSHIELD  
~71:CHENGDU VOCATIONAL AND TECHNICAL COLLEGE OF INDUSTRY, No. 818, Da'an Road, Zhengxing  
Street, Tianfu New District, Chengdu City, Sichuan Province, 610213, People's Republic of China ~72: YU, Dong~

2022/12286 ~ Complete ~54:BALLER TWINE AND METHOD FOR TWINING BALES ~71:TAMA GROUP,  
1923600 Kibbutz, Israel ~72: HUGI, Reuven;MALACHI, Adi Moked;RABINOVITCH, Maya~ 33:US  
~31:63/160,975 ~32:15/03/2021;33:US ~31:63/270,425 ~32:21/10/2021

2022/12298 ~ Complete ~54:LOW DIACETYL YEAST ~71:CARLSBERG A/S, J.C. Jacobsens Gade 1, 1799,  
Copenhagen V, Denmark ~72: ANNA CHAILYAN;CLAES GJERMENSEN;JOCHEN F&#214;RSTER;KLAUS  
LENGELER;MICHAEL KATZ;ROSS FENNESSY~ 33:EP ~31:20183134.4 ~32:30/06/2020

2022/12300 ~ Complete ~54:METHOD AND DEVICE FOR DETERMINING CHARACTERISTICS OF A  
PHOTOVOLTAIC POWER SOURCE ~71:STELLENBOSCH UNIVERSITY, Admin B, Victoria Street,  
Stellenbosch, South Africa ~72: STRAUSS, Johannes Matthias~ 33:ZA ~31:2020/03430 ~32:09/06/2020

2022/12305 ~ Complete ~54:CRYSTAL OF M RECEPTOR ANTAGONIST AS WELL AS PREPARATION  
METHOD THEREFOR AND APPLICATION THEREOF ~71:Beijing Showby Pharmaceutical Co., Ltd., 401, 4/F,  
Building 12, No.16, Huanke Middle Road, Jinqiao Science & Technology Industrial Base, Tongzhou Park,  
Zhongguan Village Science & Technology Park, Tongzhou District, BEIJING 101102, CHINA (P.R.C.),  
People's Republic of China ~72: CHEN, Xiaoping;GAO, Zejun~ 33:CN ~31:202010338830.0 ~32:26/04/2020

2022/12313 ~ Complete ~54:METHOD AND SYSTEM FOR CONTROLLING AN AGRICULTURAL TREATMENT  
~71:CARBON BEE, 11 Rue Olivier de Serres, Parc du 45&#232;me Paralle, France ~72: GERMAIN,  
G&#233;rald~ 33:FR ~31:2005355 ~32:20/05/2020

2022/12280 ~ Complete ~54:A SYSTEM FOR ONLINE GROCERY SHOPPING ~71:VISHWAKARMA  
INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE,  
MAHARASHTRA, 411037, India ~72: ANAND, Sanchit;DESHPANDE, Rupali;GUPTA, Sanchita;GURAKHE,  
Samiksha;PARANJAPE, Sanchit;SAMNERKAR, Archit;VYAWAHARE, Sameer~

2022/12283 ~ Complete ~54:CONCOMITANT ADMINISTRATION OF GLUCOCORTICOID RECEPTOR  
MODULATOR RELACORILANT AND PACLITAXEL, A DUAL SUBSTRATE OF CYP2C8 AND CYP3A4  
~71:CORCEPT THERAPEUTICS INCORPORATED, 149 Commonwealth Drive, United States of America ~72:  
CUSTODIO, Joseph;HUNT, Hazel~ 33:US ~31:63/030,800 ~32:27/05/2020

2022/12303 ~ Complete ~54:COMPOSITIONS AND METHODS FOR TREATING GJB2-ASSOCIATED  
HEARING LOSS ~71:Akouos, Inc., 645 Summer Street, Suite 200, BOSTON 02210, MA, USA, United States of  
America ~72: CHIANG, Hao;LENZ, Danielle R.;NG, Robert;SIMONS, Emmanuel John~ 33:US ~31:63/024,468  
~32:13/05/2020;33:US ~31:63/152,835 ~32:23/02/2021

2022/12310 ~ Complete ~54:MONITORING VIAL CONDITIONS DURING A LYOPHILIZATION PROCESS  
~71:Amgen Inc., One Amgen Center Drive, THOUSAND OAKS 91320-1799, CA, USA, United States of America  
~72: BAC, Deniz;BAMBURY, Colm;GARVIN, Christopher Jon;RUITBERG, Christian;SCALZO,  
Gioval;SCHLEGEL, Fabrice~ 33:US ~31:63/023,482 ~32:12/05/2020

2022/12311 ~ Complete ~54:SYSTEMS AND METHODS FOR MOUNTING A HELIOSTAT ~71:Solar Dynamics,  
LLC, 1105 W. 11th Court, BROOMFIELD 80020, CO, USA, United States of America ~72: KATTKE,  
Kyle;SOMMERS, Rick;STEGALL, Nathaniel~ 33:US ~31:63/023,648 ~32:12/05/2020

2022/12295 ~ Complete ~54:WEARABLE PHYSICAL HEALTH TESTING SYSTEMS AND ASSOCIATED  
DEVICES AND METHODS ~71:REPERIO HEALTH, INC., 4784 SE 17th Avenue, Suite 120, Portland, Oregon,  
97202, United States of America ~72: MATTHEW ROBERT WALLINGTON;TRAVIS BENJAMIN RUSH~ 33:US  
~31:63/019,154 ~32:01/05/2020

2022/12301 ~ Complete ~54:DETECTING A CHROMOSOME CONFORMATION AS MARKER FOR FIBROSIS,  
E.G. SCLERODERMA ~71:OXFORD BIODYNAMICS PLC, Building 3140,Oxford Business Park, United Kingdom  
~72: AKOULITCHEV, Alexandre;HUNTER, Ewan;RAMADASS, Aroul Selvam~ 33:GB ~31:2008269.9  
~32:02/06/2020

2022/12309 ~ Complete ~54:STABILIZED CORONAVIRUS SPIKE PROTEIN FUSION PROTEINS ~71:Janssen  
Pharmaceuticals, Inc., 1125 Trenton-Harbourton Road, TITUSVILLE 08560, NJ, USA, United States of America  
~72: JURASZEK, Jaroslaw;LANGEDIJK, Johannes Petrus Maria;RUTTEN, Lucy~ 33:US ~31:63/022,776  
~32:11/05/2020;33:US ~31:62/705,579 ~32:06/07/2020

2022/12287 ~ Complete ~54:INTEGRATED JOINING SYSTEM IN TUBULAR FLUID DISTRIBUTION  
ELEMENTS ~71:PIPES & FITTINGS EQOFLUIDS S.L., Poligono Industrial Palma de Gandia C/Garbi 2,  
Spain ~72: CERDA, Miguel;DI LIBERTO, Luca;GRANATA, Giacomo~ 33:IT ~31:10202000009817  
~32:05/05/2020

2022/12289 ~ Complete ~54:ANTIBODIES TO TIGIT ~71:ARCUS BIOSCIENCES, INC., 3928 Point Eden Way,  
United States of America ~72: GAUTHIER, KELSEY SIVICK;LIPPINCOTT, JOHN;WALKER, NIGEL PELHAM  
CLINTON;ZHAO, XIAONING~ 33:US ~31:63/033,609 ~32:02/06/2020

2022/12304 ~ Complete ~54:PRESSURE-SENSITIVE LABEL ~71:Multi-Color Corporation, 4053 Clough Woods  
Drive, BATAVIA 45103, OH, USA, United States of America ~72: CASSANI, Paul J.;KAINEC, Samantha  
L.;MCKILLIP, Barron G.~ 33:US ~31:16/871,694 ~32:11/05/2020

2022/12306 ~ Complete ~54:METHOD FOR THE PREPARATION OF ANDROGEN RECEPTOR ANTAGONISTS  
AND INTERMEDIATES THEREOF ~71:Orion Corporation, Orionintie 1, ESPOO FI-02200, FINLAND, Finland  
~72: GRUMANN, Arne;KARJALAINEN, Oskari~ 33:FI ~31:20207081 ~32:11/05/2020

2022/12264 ~ Complete ~54:AUTOMATIC MOUNTING DEVICE FOR CABIN COVER TARPAULIN OF WIND  
POWER GENERATOR ~71:Jiangsu Ocean University, No. 59, Cangwu Road, high tech Zone, Lianyungang City,  
People's Republic of China ~72: Chen Na;Liu Xiaoyan;Sun Zheng;Zhang Chi;Zi Keming~ 33:CN  
~31:202210988118.4 ~32:17/08/2022

2022/12273 ~ Complete ~54:A SYSTEM FOR ALCOHOL DETECTION WITH ENGINE LOCKING SYSTEM  
USING ARDUINO ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER  
INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: MAHAJAN,  
Chandrashekhar;MANDE, Smita S.;PATIL, Dijasmit J.;PATIL, Harsh D.;PATIL, Hitashri T.;PATIL, Hitesh  
M.;PATIL, Isha T.;PATIL, Komalesh D.~



2022/12258 ~ Complete ~54:DROWNING DETECTION METHOD AND SYSTEM BASED ON MOTION COMPONENT THRESHOLD AND MACHINE LEARNING ~71:Zhejiang University City College, No. 51, Huzhou Street, Gongshu District, Hangzhou City, Zhejiang Province, 310015, People's Republic of China ~72: CAI, Jianping;HUO, Meimei;WU, Jianzhong~

2022/12261 ~ Complete ~54:3D OBJECT DETECTION METHOD BASED ON CROSS-MODULE ATTENTION ~71:Army Academy of Armored forces of PLA, 21 Dujiakan, Fengtai District, Beijing, 100072, People's Republic of China ~72: CHENG, Jie;TIAN, Honggang;XU, Renjie;ZHAI, Xiaoning;ZHANG, Xiaoming;ZHANG, Yong;ZHAO, Zhanbiao~

2022/12284 ~ Complete ~54:OVERLOAD PROTECTION FOR A LOCK STRUCTURE ~71:ESSITY HYGIENE AND HEALTH AKTIEBOLAG, S-405 03, Sweden ~72: HENSON, Mark W.;M&#214;LLER, Per;WALHEIM, Karl~

2022/12290 ~ Complete ~54:TRANSFER DETECTION ROD FOR CONVERSION EQUIPMENT, AND REVERSING METHOD ~71:CRSC (XI&#39;AN) RAIL TRANSIT INDUSTRY GROUP CO., LTD., No. 396, South Aerospace Road, National Civil Aerospace Industrial Base, Xi&#39;an, Shaanxi, 710100, People's Republic of China;TIANJIN RAILWAY SIGNAL CO., LTD., No.1199, Xunhai Road, Dongli District, Tianjin 300300, People's Republic of China;XI&#39;AN RAILWAY SIGNAL CO., LTD., No. 396, South Aerospace Road, National Civil Aerospace Industrial Base, Xi&#39;an, Shaanxi, 710100, People's Republic of China ~72: CHAORONG ZOU;CHENXUAN QIAO;JIANFENG HE;LEI CHEN;PENGXIANG CAI;PURU WANG;XIAOWEI GAO;YIMING TANG;ZHEN ZHANG;ZONGXIA NING~ 33:CN ~31:202010525938.0 ~32:10/06/2020

2022/12291 ~ Complete ~54:ANTICOCCIDIAL AGENT AND METHOD FOR USING THE SAME ~71:NIHON NOHYAKU CO., LTD., 19-8, Kyobashi 1-chome Chuo-ku, Tokyo, 1048386, Japan ~72: HIROKAZU FUJIHARA;SHUNSUKE FUCHI;YUTAKA ABE~ 33:JP ~31:2020-115725 ~32:03/07/2020;33:JP ~31:2020-151716 ~32:10/09/2020

2022/12293 ~ Complete ~54:SYNTHETIC MODIFIED VACCINIA ANKARA (SMVA) BASED CORONAVIRUS VACCINES ~71:CITY OF HOPE, 1500 E. Duarte Road, Duarte, California, 91010-3000, United States of America ~72: DON J DIAMOND;FELIX WUSSOW;FLAVIA CHIUPPESI~ 33:US ~31:63/026,127 ~32:17/05/2020;33:US ~31:63/044,033 ~32:25/06/2020;33:US ~31:63/113,810 ~32:13/11/2020;33:US ~31:63/161,371 ~32:15/03/2021

2022/12299 ~ Complete ~54:SYSTEMS AND METHODS FOR MANAGING FEEDBACK FOR MULTICAST TRANSMISSIONS ~71:ZTE CORPORATION, ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, Nanshan, Shenzhen, Guangdong, 518057, People's Republic of China ~72: JING SHI;PENG HAO;XING LIU;XINGGUANG WEI~

2022/12270 ~ Complete ~54:A SYSTEM FOR TEXT TO SPEECH AND SPEECH TO TEXT CONVERTING ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: JANOKAR, Sagar;JOSHI, Anita S.;RATHI, Manas;RATHOD, Alkesh;RATHOD, Chaitanya;RATHOD, Payal;RATNAPARKHI, Soham~

2022/12272 ~ Complete ~54:GAS LEAKAGE DETECTION SYSTEM FOR DOMESTIC PURPOSES ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: DHUMAL, Om;DHUMAL, Shivani;DHUMAL, Siddhi;DHURVE, Durgesh;GOKHALE, Dhruwa;RAIKWAR, Rajesh~

2022/12275 ~ Complete ~54:DYEING OF GOAT SKIN LEATHER WITH MIXTURE OF NATURAL DYES-BUTEA MONOSPERMA AND CASSIA AURICULATA ~71:Dr. Shelley Oberoi, K.C. College of Engineering and Management Studies and Research, Mithbunder Road, Near Sadguru Gardens, Kopri, Thane East, Thane,

Maharashtra, 400603, India;K.C. College of Engineering and Management Studies and Research, Mithbunder Road, Near Sadguru Gardens, Kopri, Thane East, Thane, Maharashtra, 400603, India ~72: Dr. Shelley Oberoi~

2022/12281 ~ Complete ~54:A SYSTEM FOR PERSONALISED HEALTHCARE ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: RAI, Prakhar;RAIKAR, Tushar;RAJANDEKAR, Rugved;RAJPUROHIT, Subhash;RAKTE, Ishan;RANADE, Nishad;SAWANT, Sachin S.~

2022/12288 ~ Complete ~54:CYSTEINE PROTEASE ~71:HANSA BIOPHARMA AB, P.O. Box 785, Sweden ~72: BOCKERMANN, Robert;J&#196;RNUM, Sofia;KARHUMAA, Kaisa;KJELLMAN, Christian;NORDAHL, Emma Andersson;ROUP&#201;; Karl Markus~ 33:GB ~31:2007431.6 ~32:19/05/2020

2022/12297 ~ Complete ~54:LYSM RECEPTOR MOTIFS ~71:AARHUS UNIVERSITET, Nordre Ringgade 1, DK-8000, Aarhus C, Denmark ~72: CHRISTINA KR&#214;NAUER;DAMIANO LIRONI;JENS STOUGAARD;KASPER R&#216;JKJ&#198;R ANDERSEN;METTE LAURSEN;SIMONA RADUTOIU~ 33:US ~31:63/027,151 ~32:19/05/2020

2022/12302 ~ Complete ~54:SYSTEMS AND METHODS FOR NON-INVASIVE DETERMINATION OF PROPERTIES OF PRESSURE VESSELS ~71:Kenwave Solutions Inc., 7080 Derrycreech Drive, MISSISSAUGA L5W 0G5, ONTARIO, CANADA, Canada ~72: RICHARZ, Harrison F.;RICHARZ, Werner G.;VAELIMAA, Tuukka~ 33:US ~31:63/023,017 ~32:11/05/2020

2022/12307 ~ Complete ~54:MONO- AND COMBINATION THERAPIES ~71:Recurium IP Holdings, LLC, 10275 Science Center Drive, Suite 200, SAN DIEGO 92121, CA, USA, United States of America ~72: BOREN, Brant Clayton;BUNKER, Kevin Duane;DONATE, Fernando;HUANG, Peter Qinhua;LI, Jiali;SAMATAR, Ahmed Abdi~ 33:US ~31:63/025,490 ~32:15/05/2020;33:US ~31:63/040,832 ~32:18/06/2020;33:US ~31:63/089,419 ~32:08/10/2020;33:US ~31:63/160,325 ~32:12/03/2021;33:US ~31:63/161,828 ~32:16/03/2021

2022/12312 ~ Complete ~54:CHIMERIC ANTIGEN RECEPTOR SPACERS ~71:Lyell Immunopharma, Inc., 201 Haskins Way, SOUTH SAN FRANCISCO 94080, CA, USA, United States of America ~72: BOYKEN, Scott Edward;LAJOIE, Marc Joseph;PARK, Spencer;SONG, Yun;WEITZNER, Brian Douglas~ 33:US ~31:63/023,751 ~32:12/05/2020

2022/12254 ~ Complete ~54:ELECTROLYTIC REDUCTION DEVICE OF CARBON DIOXIDE AND REDUCTION METHOD THEREOF ~71:Kunming University of Science and Technology, No.68 Wenchang Road, No.121 Street, Kunming, Yunnan Province, 650031, People's Republic of China ~72: CHEN, Shiyi~

2022/12259 ~ Complete ~54:ADVANCED DETECTION APPARATUS FOR MINE TUNNEL ~71:Xi&#39;an Zhongdi Borui Detection Technology Co., Ltd., Room 1902, Block C, Huixin IBC Building, No. 1, Zhangbayi Road, High-tech Zone, Xi&#39;an, Shaanxi Province, 710065, People's Republic of China ~72: HE, Liang;ZHANG, Qiang~ 33:CN ~31:202210174230.4 ~32:25/02/2022

2022/12262 ~ Complete ~54:EFFICIENT VIBRATING SCREEN FOR FILTERING NORI WASTE WATER ~71:Jiangsu Ocean University, No. 59, Cangwu Road, high tech Zone, Lianyungang City, People's Republic of China ~72: Chen Na;Sun Zheng;Wang Feifan;Wang Huabing;Zhang Chi;Zi Keming~ 33:CN ~31:202211039794.3 ~32:29/08/2022

2022/12271 ~ Complete ~54:A WASTE DECAYING AND RECYCLING SYSTEM ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: BULCHUNDE, Mohit;DONGRE, Ganesh G.;MANDE, Smita;MORE, Aniket;MORE, Aniket. P.;OSWAL, Mokshit~

2022/12274 ~ Complete ~54:A SYSTEM FOR AGE AND GENDER PREDICTION USING PYTHON AND DEEP LEARNING ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: MAHAJAN, Chandrashekhar;MANDE, Smita S.;PATANGE, Pravin P.;PATANKAR, Akarsh A.;PATE, Samruddhi P.;PATEL, Aayushi R.;PATEL, Krishna M.~

2022/12279 ~ Complete ~54:MACHINE LEARNING BASED SYSTEM FOR PHYSICAL HEALTH IMPROVEMENT ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: CHOPKAR, Paras A.;CHORGHADE, Vaishnavi R.;CHOUDHARI, Gauri R.;CHOUDHARI, Mahesh N.;CHOUDHARI, Vedant A.;CHOUGULE, Ojas S.;MAHAJAN, Chandrashekhar;SAWANT, Sachin S.~

2022/12285 ~ Complete ~54:LONG ACTING GLP-1/GIP DUAL AGONISTS ~71:SUN PHARMACEUTICAL INDUSTRIES LIMITED, Sun House, Plot No. 201 B/1, Western Express Highway, Goregaon (E), India ~72: BURADE, Vinod Sampatrao;GANDHI, Manish Harendraprasad;JIVANI, Chandulal Thakarshibhai;JOSHI, Dhiren Rameshchandra;NATARAJAN, Muthukumar;SONI, Krunal Harishbhai;THENNATI, Rajamannar;TIWARI, Abhishek~ 33:IN ~31:202021026360 ~32:22/06/2020;33:IN ~31:202121002838 ~32:20/01/2021

2022/12292 ~ Complete ~54:ARYLTETRAHYDROPYRIDAZINE DERIVATIVE OR SALT THEREOF, INSECTICIDAL AGENT CONTAINING THE COMPOUND, AND METHOD OF USE THEREOF ~71:NIHON NOHYAKU CO., LTD., 19-8, Kyobashi 1-chome Chuo-ku, Tokyo, 1048386, Japan ~72: KOJI TANAKA;RYOSUKE TANAKA;SHUNSUKE MATSUI;TAKAYUKI YAMADA~ 33:JP ~31:2020-110400 ~32:26/06/2020

2022/12294 ~ Complete ~54:COMPETITIVE AND NONCOMPETITIVE INHIBITORS OF THE MUSCARINIC ACETYLCHOLINE RECEPTOR M5 ~71:VANDERBILT UNIVERSITY, 305 Kirkland Hall 2201 West End Avenue, Nashville, TN 37240, United States of America ~72: ANDREW S FELTS;CARRIE K JONES;CHANGHO HAN;CRAIG W LINDSLEY;DAVID L WHOMBLE;DOUGLAS L ORSI;JINMING LI;JULIE L ENGERS;KAYLA J TEMPLE;P. JEFFREY CONN;RORY A CAPSTICK~ 33:US ~31:63/029,286 ~32:22/05/2020;33:US ~31:63/129,098 ~32:22/12/2020

2022/12308 ~ Complete ~54:ANTIBODY DRUG CONJUGATE, PREPARATION METHOD THEREFOR AND USE THEREOF ~71:Sichuan Kelun-Biotech Biopharmaceutical Co., Ltd., No.666, Xinhua Avenue (Section 2), Hai Xia Industrial Park, Wenjiang District, CHENGDU 611138, SICHUAN, CHINA (P.R.C.), People's Republic of China ~72: LIU, Dengnian;SONG, Shuai;TIAN, Qiang;WANG, Cheng;WANG, Jingyi;XIAO, Liang;XUE, Tongtong~ 33:CN ~31:202010410633.5 ~32:15/05/2020

2022/12276 ~ Complete ~54:A SYSTEM FOR ACCIDENT LIFESAVER ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: DESHPANDE, Rupali S.;JAIN, Naman;MANDE, Smita;NAIK, Sayali;NAIKWADE, Mayuresh;NAKIL, Shivdas;NALAWADE, Shrawani;NANDRE, Hetan~

2022/12277 ~ Complete ~54:A MACHINE VISION BASED AERIAL STYLUS ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: BUVA, Paras;CHAFEKAR, Aditya;CHAHANDE, Krunjanvee;CHAKURKAR, Atharv;MAHAJAN, Chandrashekhar;SAWANT, Sachin S.;SHARMA, Chaitanya~

2022/12296 ~ Complete ~54:PIRFENIDONE FOR CORONAVIRUS TREATMENT ~71:EXCALIBUR PHARMACEUTICALS, INC., 9 Sniffen Court, New York, New York, 10016, United States of America ~72: ESTUARDO AGUILAR-CORDOVA;JOS~; AGUSTIN ROGELIO MAGA~;A CASTRO;LAURA AGUILAR~ 33:US ~31:63/010,009 ~32:14/04/2020

2022/12250 ~ Provisional ~54:A METHOD OF FRACTIONATING A LIPID CONTAINING MATERIAL OBTAINED FROM AN INSECT SOURCE ~71:UNIVERSITY OF THE WESTERN CAPE, Robert Sobukwe Road, Bellville, Cape Town, Western Cape, 7535, South Africa ~72: LESLIE FELICIA PETRIK;RAISSA OKWUOSA~

2022/12251 ~ Provisional ~54:TOILET INSTALLATION ~71:BETRAM (PROPRIETARY) LIMITED, 11 Steenbok Street, Koedoespoort, PRETORIA 0186, SOUTH AFRICA, South Africa ~72: FOURIE (Jnr), Lukas Pieter~

2022/12253 ~ Complete ~54:AUTOMATIC MEASURING AND REPORTING SYSTEM FOR WATER LEVEL OF RIVERS AND LAKES BASED ON BEIDOU SATELLITE ~71:China Institute of Water Resources and Hydropower Research, 20, Chegongzhuang West Road, Haidian District, Beijing, 100038, People's Republic of China ~72: CUI Shiai;JIA Jinsheng;JIANG Wei;JIANG Xiaoming;KONG Fanping;LI Hao;LV Juan;PANG Zhiguo;SONG Wenlong;WANG Chao;ZHANG Hongbin;ZHANG Pengjie;ZHAO Fei;ZHENG Shouzhu~

2022/12255 ~ Complete ~54:NON-ROAD MOVING SOURCE POLLUTANT CONTENT DETECTION DEVICE AND METHOD THEREOF ~71:Liaoning Institute of Science and Technology, No. 176, Xianghuai Road, High-tech Industrial Development Zone, Benxi City, Liaoning Province, 117004, People's Republic of China ~72: LIU, Tong~

2022/12256 ~ Complete ~54:CLEANING EQUIPMENT FOR BIOLOGICAL POLLUTANTS ~71:Liaoning Institute of Science and Technology, No. 176, Xianghuai Road, High-tech Industrial Development Zone, Benxi City, Liaoning Province, 117004, People's Republic of China ~72: ZHANG, Danfeng~

2022/12266 ~ Complete ~54:DIGITAL IMAGING PRODUCTION MANAGEMENT DEVICES AND PROCESSES ~71:GOGIGIT, LLC, 420 Wando Park Blvd., Mt. Pleasant, South Carolina 29464, United States of America ~72: MING XU~ 33:US ~31:17/528,458 ~32:17/11/2021

2022/12267 ~ Complete ~54:AUTOMATED PRODUCTION SYSTEM BY MIXING STRAW AND COW DUNG FOR FERMENTATION AND TRANSMISSION ~71:Branch of Animal Husbandry and Veterinary of Heilongjiang Academy of Agricultural Sciences, 2 Heyi Street, Longsha District, Qiqihar City, Heilongjiang Province, 161000, People's Republic of China ~72: Ding Deli;Ding Xinying;Fu Long;Gao Shengyue;Han Yongsheng;Jin Zhenhua;Li Qingqing;Li Qingying;Lin Xiuwei;Ma Shanshan;Song Yan;Wang Hao;Wang Jiahui;Wang Yanfei;Wang Zhen;Yao Meiling;Zhang Shufen;Zhu Yuanfang~

2022/12278 ~ Complete ~54:A SYSTEM FOR AUTOMATIC HEADLIGHT BEAM SWITCHING USING IOT ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: DESHPANDE, Rupali;JOSHI, Anita S.;SALUNKHE, Raj;SALUNKHE, Shivraj;SALVE, Sahil;SAMARTH, Amit;SAWANT, Sachin S.;UPARE, Samarth~

2022/12252 ~ Complete ~54:GRAZING FENCE SYSTEM AND GRAZING METHOD THEREOF ~71:Guizhou Extension Station of Grassland Technology, Zhulin 2055, Dashiugou, Huaxi District, Guiyang, Guizhou, People's Republic of China;Guizhou University, College of Forestry, Guizhou University, Huaxi District, Guiyang, Guizhou, People's Republic of China;Guizhou Vocational College of Agriculture, West of Vocational Education Town, Qingzhen City, Guiyang, Guizhou, People's Republic of China ~72: CHEN Xiuhua;DAI Xinghong;LI Li;LIU Jiming;LONG Jinmei;LUO Bin;WANG Puchang;WANG Shunying;WANG Zhiwei;YANG Xuedong~

2022/12257 ~ Complete ~54:A PHARMACEUTICAL HERBAL FORMULATION FOR THE TREATMENT AND MANAGEMENT OF DIABETES MELLITUS AND METHODS THEREOF ~71:Dr. A. R. Vijayakumar, Department of Pharmacology, Faculty of Pharmacy, Sree Balaji Medical College and Hospital, BIHER, Chromepet, Chennai, Tamil Nadu, 600044, India;Dr. Ajay Pal Singh, Department of Pharmacy, Integrated Academy of Management & Technology, Ghaziabad, Uttar Pradesh, 201009, India;Dr. Amit Chawla, Maa Saraswati Institute of Pharmaceutical Sciences, Sitto Road, Abohar, Punjab, 152116, India;Dr. N. Delhiraj, Department of

Pharmaceutical Analysis, School of Pharmacy, Sathyabama Institute of Science and Technology (Deemed to be University), Chennai, Tamil Nadu, 600119, India;Dr. Nitin Kumar, Sunder Deep Pharmacy College, NH-24, Delhi-Hapur Road, Dasna, Ghaziabad, Uttar Pradesh, 201015, India;Dr. Pankaj Gupta, Department of Pharmaceutical Sciences, School of Medical & Allied Sciences, K. R. Mangalam University, Sohna Road, Gurugram, HARYANA, 122103, India;Dr. Pugazhenthan Thangaraju, Department of Pharmacology, All India Institute of Medical Sciences, Raipur, Chhattisgarh, 492099, India;Dr. R. Sudhakar, Department of Pathology, NRI Academy of Sciences, Guntur, Andhra Pradesh, 522503, India;Dr. Sundararajan G, Department of Pharmaceutics, Faculty of Pharmacy, Sree Balaji Medical College and Hospital, BIHER, Chromepet, Chennai, Tamil Nadu, 600044, India ~72: Dr. A. R. Vijayakumar;Dr. Ajay Pal Singh;Dr. Amit Chawla;Dr. N. Delhiraj;Dr. Nitin Kumar;Dr. Pankaj Gupta;Dr. Pugazhenthan Thangaraju;Dr. R. Sudhakar;Dr. Sundararajan G~

2022/12260 ~ Complete ~54:PREDICTION MODEL OF DELIRIUM IN CRITICAL PATIENTS AFTER CARDIAC SURGERY AND ITS CONSTRUCTION METHOD ~71:Peking Union Medical College Hospital, Chinese Academy of Medical Sciences, No.1 Shuaifuyuan, Wangfujing, Dongcheng District, Beijing, People's Republic of China ~72: Cheng Wei;Cui Na;Du Bin;Li DongKai;Li Xiao;Long Yun;Luo HongBo;Zhang JiaHui~

2022/12263 ~ Complete ~54:ALL-AROUND MULTI-LAYER HIGH-EFFICIENCY CONICAL VIBRATING SCREEN FOR FILTERING NORI WASTE WATER ~71:Jiangsu Ocean University, No. 59, Cangwu Road, high tech Zone, Lianyungang City, People's Republic of China ~72: Chen Na;Li Hongwen;Sun Zheng;Wang Feifan;Zhang Chi;Zi Keming~ 33:CN ~31:202211183251.9 ~32:27/09/2022

2022/12265 ~ Complete ~54:CONTAINER SYSTEM FOR TRANSPORTING AND DISPENSING AGRICULTURAL PRODUCTS ~71:AMVAC HONG KONG LIMITED, 11/F., Unit B, Winbase Centre, 208 Queen's Road Central, Sheung Wan, Hong Kong ~72: BRIAN KALTNER;KEITH WOODRUFF;RICHARD L RICE~ 33:US ~31:62/724,001 ~32:28/08/2018

2022/12268 ~ Complete ~54:REACTION DEVICE FOR REAGENT TREATMENT ~71:Zhengzhou Preschool Education College, No. 9, North Street, Shimen Xincun, Jinshui District, Zhengzhou City, Henan Province, People's Republic of China ~72: Xiao Boan~

2022/12269 ~ Complete ~54:A CROWD FUNDING SYSTEM WITH ETHEREUM SOLIDITY ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: BOHARI, Mustansir;DONGRE, Ganesh G.;MANDE, Smita;MUNDHADA, Vinit;MUNDLIK, Omkar;MUNDPHANE, Jayesh;MURSAL, Asif~

- APPLIED ON 2022/11/11 -

2022/12359 ~ Complete ~54:MULTISPECIFIC ANTIBODY ~71:NUMAB THERAPEUTICS AG, Einsiedlerstrasse 34, Switzerland ~72: BROCK, Matthias;CHATTERJEE, Bithi;GUNDE, Tea;HESS, Christian;JOHANSSON, Maria;LICHTLEN, Peter;SIMONIN, Alexandre;SNELL, Daniel;URECH, David;WARMUTH, Stefan~ 33:EP ~31:20177337.1 ~32:29/05/2020

2022/12360 ~ Complete ~54:RIM BASED ON DH STRUCTURE AND DW STRUCTURE COMBINATION AND MANUFACTURING METHOD FOR RIM ~71:Jining Lianwei Wheel Manufacturing Co., Ltd., (west of National Highway 105)Kangyi Town Government Station, Wenshang County, Jining City, People's Republic of China ~72: GAO YONG;XU CHANGHONG;XU ENCHENG~ 33:CN ~31:202110956616.6 ~32:19/08/2021

2022/12362 ~ Complete ~54:BRANCHED PRODUCTS ~71:SCION HOLDINGS LLC, 3011 Scenic Elm Street, Houston, United States of America ~72: KILLEBREW, Kyle;LANE, Samuel Livingston~ 33:US ~31:63/035,073 ~32:05/06/2020;33:US ~31:63/035,280 ~32:05/06/2020;33:US ~31:63/035,479 ~32:05/06/2020;33:US ~31:63/126,780 ~32:17/12/2020;33:US ~31:17/246,580 ~32:30/04/2021;33:US ~31:PCT/US2021/030341

~32:30/04/2021;33:US ~31:17/331,371 ~32:26/05/2021;33:US ~31:PCT/US2021/034189  
~32:26/05/2021;33:US ~31:17/336,099 ~32:01/06/2021;33:US ~31:PCT/US2021/035169 ~32:01/06/2021

2022/12335 ~ Complete ~54:AN ANTI THEFT ALARM SYSTEM ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: JALNEKAR, Rajesh M.;KAKADE, Surabhi;SHINDE, Atharva P.;SHINDE, Jignesh B.;SHINDE, Mrunal S.;SHINDE, Neha J.;SHINDE, Nikhil S.~

2022/12338 ~ Complete ~54:A SYSTEM FOR VOICE INITIATED HANDLING ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: JALNEKAR, Rajesh M.;KAKADE, Surabhi;SHIMPI, Aditi;SHIMPI, Aditya;SHIMPI, Vaishnavi;SHINDE, Aditya;SHINDE, Akshit~

2022/12345 ~ Complete ~54:SERUM STABLE BINDING PROTEINS FOR HUMAN HER2 FOR THERANOSTIC APPLICATIONS ~71:NAVIGO PROTEINS GMBH, Heinrich Damerow Str. 1, 06120, Halle/Saale, Germany ~72: EVA BOSSE-DOENECKE;MANJA GLOSER-BR&#196;UNIG;ULRICH HAUPTS~ 33:EP ~31:20186113.5 ~32:16/07/2020;33:EP ~31:21155334.2 ~32:04/02/2021

2022/12346 ~ Complete ~54:COMPOSITE MATERIAL WITH A COMPONENT HARVESTED FROM THE SILVERSKIN OF COFFEE CHERRIES, AND PORTION CAPSULE COMPRISING SAID COMPOSITE MATERIAL ~71:TCHIBO GMBH, &#220;berseering 18, 22297, Hamburg, Germany ~72: HELENA VON STADEN~ 33:EP ~31:20173767.3 ~32:08/05/2020

2022/12351 ~ Complete ~54:SOLID COMPOSITION FOR PRODUCING ANTIBACTERIAL, ANTIVIRAL, ANTIFUNGAL AND DISINFECTANT SOLUTIONS ~71:QURES GROUP LTD, Bank Chambers, Brook Street, Bishops Waltham, SO32 1AX, United Kingdom ~72: RICHARD STEAD~ 33:GB ~31:2005432.6 ~32:14/04/2020

2022/12355 ~ Complete ~54:RECYCLE CONTENT POLYPROPYLENE ~71:Eastman Chemical Company, 200 South Wilcox Drive, KINGSPORT 37660, TN, USA, United States of America ~72: BITTING, Daryl;DEBRUIN, Bruce Roger;SLIVENSKY, David Eugene;TRAPP, William Lewis;WU, Xianchun~ 33:US ~31:63/008,922 ~32:13/04/2020

2022/12361 ~ Complete ~54:SYSTEM AND METHOD FOR GENERATING PATIENT-SPECIFIC VENTILATION SETTINGS BASED ON LUNG MODELING ~71:VYAIR MEDICAL, INC., 26125 N. Riverwoods Boulevard, United States of America ~72: VARGA, Christopher M.~ 33:US ~31:63/019,218 ~32:01/05/2020

2022/12364 ~ Provisional ~54:GREEN ENERGY (RENUWABLE) ~71:PRINCE THEMBINKOSI MASINGA, 26386 SIRITI STR EXT 8, PHASE 5, MAMELODI, GAUTENG, South Africa ~72: PRINCE THEMBINKOSI MASINGA~

2022/12316 ~ Provisional ~54:BOOK A SLOT ~71:Ebrahim, 17 Candella Road, South Africa ~72: Ebrahim~

2022/12318 ~ Provisional ~54:SUSTAINABLE TAMPER-PROOF HANDLED GOODS DELIVERY BAG ~71:Travis Nagesar, 2 St Audley Road, South Africa ~72: Travis Nagesar~

2022/12328 ~ Complete ~54:OXYMETAZOLINE COMPOSITIONS AND METHODS FOR TREATING OCULAR DISORDERS ~71:RVL PHARMACEUTICALS, INC., 400 Crossing Boulevard, Bridgewater, New Jersey, 08807, United States of America ~72: DAVID JACOBS;TINA DEVRIES~ 33:US ~31:62/843,819 ~32:06/05/2019;33:US ~31:62/844,069 ~32:06/05/2019;33:US ~31:16/715,998 ~32:16/12/2019;33:US ~31:16/716,014 ~32:16/12/2019

2022/12343 ~ Complete ~54:SYSTEM AND METHOD OF AUTOMATED KNOW-YOUR-TRANSACTION CHECKING IN DIGITAL ASSET TRANSACTIONS ~71:BLOCKQUAKE IP HOLDINGS, LLC, 110 Wall Street,

United States of America ~72: BRASSE, Antonio;BRASSE, Samuel;HYUN, Samuel;SHRIKISHUN, Randy~  
33:US ~31:63/001,646 ~32:30/03/2020

2022/12347 ~ Complete ~54:PORTION CAPSULE AND METHOD FOR PRODUCING A PORTION CAPSULE  
~71:TCHIBO GMBH, &#220;berseering 18, 22297, Hamburg, Germany ~72: JENS BR&#214;CKEL~ 33:EP  
~31:20173768.1 ~32:08/05/2020

2022/12348 ~ Complete ~54:METHOD FOR PRODUCING A SINGLE-SERVE CAPSULE, AND SINGLE-SERVE  
CAPSULE ~71:TCHIBO GMBH, &#220;berseering 18, 22297, Hamburg, Germany ~72: RALF M&#220;LLER~  
33:EP ~31:20173756.6 ~32:08/05/2020

2022/12349 ~ Complete ~54:SINGLE-SERVE CAPSULE ~71:TCHIBO GMBH, &#220;berseering 18, 22297,  
Hamburg, Germany ~72: DOROTHEA SCHACHT;HELENA VON STADEN;JENS BR&#214;CKEL~ 33:EP  
~31:20173758.2 ~32:08/05/2020

2022/12322 ~ Complete ~54:ANCHORING DEVICE FOR SHIPS ~71:Zhejiang International Maritime College,  
No. 268, Haitian Avenue, Lincheng, Dinghai District, Zhoushan City, Zhejiang Province, 316021, People's  
Republic of China ~72: YE, Mingjun~

2022/12325 ~ Complete ~54:FIBRIN-CHITOSAN ELECTROSPUN HEMOSTATIC PATCH AND PREPARATION  
METHOD THEREOF ~71:XU, JIN&#39;GUO, Heyuan New Village, Lianhu District, Xi&#39;an City, Shaanxi  
Province, ZIP Code 710086, People's Republic of China ~72: XU, JIN&#39;GUO~

2022/12326 ~ Complete ~54:PRODUCTS AND METHODS FOR PROMOTING ESTRUS IN FEMALE MAMMALS  
~71:Beijing Academy of Agriculture and Forestry Sciences, No.9 Shuguang Huayuan Middle Rd, Haidian District,  
BEIJING, CHINA (P.R.C.), People's Republic of China ~72: JIAHUA, Bai;JIANHUI, Tian;LINLI, Xiao;TAO,  
Feng;XIAOLING, Xu;YAN, Liu;YUQING, Song;YUSHENG, Qin~

2022/12339 ~ Complete ~54:OPTIMIZED DISPATCHING METHOD FOR ENERGY SUPPLY SYSTEM OF  
RIVER WATER SOURCE HEAT PUMP BASED ON A3C ALGORITHM ~71:Nanjing Power Supply Company, No.  
1 Aoti Avenue, Jianye District, Nanjing, Jiangsu, 210019, People's Republic of China ~72: CHEN, Chi;QIAN,  
Xin;SHI, Xuanxuan;WANG, Pu;XIAO, Jing;XU, Honghua;XU, Jingzhou;XU, Ruobing;XU, Ziqiang;ZHANG,  
Weiya;ZHU, Zhengyi~ 33:CN ~31:2022109390587 ~32:05/08/2022

2022/12319 ~ Provisional ~54:SYSTEM AND METHOD FOR VALIDATING ENERGY CONSUMPTION DATA  
~71:PARKIN, Norman Frederick, 12 Sycamore Street, South Africa ~72: PARKIN, Norman Frederick~

2022/12327 ~ Complete ~54:USE OF TELOMERASE INHIBITORS FOR THE TREATMENT OF  
MYELOPROLIFERATIVE DISORDERS AND MYELOPROLIFERATIVE NEOPLASMS ~71:GERON  
CORPORATION, 149 Commonwealth Drive, Menlo Park, California, 94025, United States of America ~72:  
MONIC J STUART;STEPHEN KELSEY~ 33:US ~31:61/734,941 ~32:07/12/2012;33:US ~31:13/841,711  
~32:15/03/2013;33:US ~31:61/799,069 ~32:15/03/2013;33:US ~31:61/900,347 ~32:05/11/2013

2022/12332 ~ Complete ~54:A SYSTEM FOR WATER MANAGEMENT ~71:VISHWAKARMA INSTITUTE OF  
TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA,  
411037, India ~72: DHAKE, Rajesh J.;FUNDE, Anurag;GADAD, Tejal;GADI, Tejas;GADRE, Aditi;GAHERWAR,  
Yash;Kakade, Surabhi~

2022/12334 ~ Complete ~54:AN ADVANCED LANE DETECTION SYSTEM FOR SELF-DRIVING CARS  
~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR,  
BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: JALNEKAR, Rajesh M.;KAKADE,

Surabhi;SHINDODE, Aryan;SHINGADE, Omkar;SHINGATE, Omkar;SHIRSATH, Aditya;SHISHUPAL, Raj;SHISODE, Aryan~

2022/12341 ~ Complete ~54:HEAT RESISTANT ADHESIVE, PREPARATION METHOD THEREFOR, AND BONDING METHOD FOR ALUMINUM ALLOY ~71:SICHUAN CHUANHUAN TECHNOLOGY CO., LTD., TECHNOLOGY ROAD 1, DONGLIU INDUSTRIAL DISTRICT, DAZHU COUNTY,, Dazhou, Sichuan, 635102, People's Republic of China ~72: FAINLEIB, Alexander;STAROSTENKO, Olga;WEN, Jie;WEN, Motong;WEN, Qichao;WEN, Yong~ 33:CN ~31:202010393281.7 ~32:11/05/2020;33:CN ~31:202010394159.1 ~32:11/05/2020

2022/12350 ~ Complete ~54:MULTISPECIFIC PROTEINS ~71:MOLECULAR PARTNERS AG, Wagistr. 14, 8952, Z&#252;rich-Schlieren, Switzerland ~72: CLARA DOMKE;NICOLO RIGAMONTI;NIINA ELISABET VEITONM&#196;KI;PAMELA ANNA TRAIL SMITH;VAL&#201;RIE PERRINE CALABRO;VICTOR LEVITSKY~ 33:EP ~31:20174847.2 ~32:14/05/2020;33:EP ~31:20181498.5 ~32:22/06/2020

2022/12353 ~ Complete ~54:RECYCLE CONTENT POLYETHYLENE ~71:Eastman Chemical Company, 200 South Wilcox Drive, KINGSPORT 37660, TN, USA, United States of America ~72: BITTING, Daryl;DEBRUIN, Bruce Roger;EDENS, Aaron Nathaniel;EKART, Michael Paul;LANGE, David Milton;SLIVENSKY, David Eugene;WU, Xianchun~ 33:US ~31:63/008,919 ~32:13/04/2020

2022/12358 ~ Complete ~54:REDIRECTION OF TROPISM OF AAV CAPSIDS ~71:Voyager Therapeutics, Inc., 64 Sidney Street, CAMBRIDGE 02139, MA, USA, United States of America ~72: CHILD, Matthew;HOU, Jinzhao;LI, Shaoyong;NONNENMACHER, Mathieu E.;WANG, Wei~ 33:US ~31:63/023,927 ~32:13/05/2020;33:US ~31:63/122,300 ~32:07/12/2020

2022/12363 ~ Complete ~54:PHARMACEUTICAL COMPOSITION COMPRISING POLYNUCLEOTIDES AND USE THEREOF FOR PREVENTION OR TREATMENT OF COVID-19 ~71:BEIJING YISHENG BIOTECHNOLOGY CO., LTD., Room 101, 1/F, Building 2, No. 38 Yongda Road, Daxing Biopharmaceutical Industrial Base, Zhongguancun Science Park, Daxing District, Beijing, 102600, People's Republic of China;LIAONING YISHENG BIOPHARMA CO., LTD., Daxin 2 Village, Cailuo Town, Xinchengzi District Shenyang, Liaoning, 110131, People's Republic of China ~72: LIU, Yuan;ZHANG, Nan;ZHANG, Yi~ 33:CN ~31:202010475388.6 ~32:29/05/2020

2022/12337 ~ Complete ~54:MULTIFUNCTIONAL LANDSLIDE PREDICTION DEVICE ~71:Henan University of Urban Construction, Longxiang Road, Xincheng District, Pingdingshan City, Henan Province, 467000, People's Republic of China;Shijiazhuang Information Engineering Vocational Collage, Tianxiang Street, Gaocheng District, Shijiazhuang City, Hebei Province, 052160, People's Republic of China ~72: Gao Caiyun;Gao Ning;Hou shaoyang;Wang Jingyan;Zhang zhimin~

2022/12331 ~ Complete ~54:A BLACK FUNGUS SEA SEDGE AND PROCESSING METHOD THEREOF ~71:JILIN AGRICULTURAL UNIVERSITY, Jilin Agricultural University, No. 2888 Xincheng Street, Changchun City, Jilin Province, 130118, People's Republic of China ~72: JIANG, Guochuan;TU, Huajie;WANG, Liyan~

2022/12344 ~ Complete ~54:POTENCY ASSAY ~71:LONGEVERON INC., 1951 NW 7th Avenue, Suite 520, Miami, Florida 33136, United States of America ~72: ANTHONY, A OLIVA;BEN HITCHINSON~ 33:US ~31:63/012,884 ~32:20/04/2020

2022/12352 ~ Complete ~54:PHARMACEUTICAL COMPOSITION FOR ORAL ADMINISTRATION COMPRISING AMINOPYRIMIDINE DERIVATIVE OR PHARMACEUTICALLY ACCEPTABLE SALT, HYDRATE, OR SOLVATE THEREOF ~71:Janssen Biotech, Inc., 800/850 Ridgeview Drive, HORSHAM 19044, PA, USA,



United States of America ~72: MAXIMILIEN, Jacqueline;RAJAN, Gopal~ 33:US ~31:63/009,623  
~32:14/04/2020;33:US ~31:63/014,277 ~32:23/04/2020

2022/12356 ~ Complete ~54:RECYCLE CONTENT AMORPHOUS POLYOLEFINS ~71:Eastman Chemical Company, 200 South Wilcox Drive, KINGSPORT 37660, TN, USA, United States of America ~72: BITTING, Daryl;DEBRUIN, Bruce Roger;SLIVENSKY, David Eugene;TRAPP, William Lewis;WU, Xianchun~ 33:US ~31:63/008,925 ~32:13/04/2020

2022/12317 ~ Provisional ~54:A GEOLOCATION VERIFICATION SYSTEM AND METHOD ~71:DISCOVERY LIMITED, 1 Discovery Place, corner of Rivonia Road and Katherine Street, Sandton, 2196, South Africa ~72: IVAN ROBERTS-YORK~

2022/12320 ~ Complete ~54:RUTIN-CISPLATIN SYNERGISTIC NANOEMULSION FOR TARGETING AND REGULATING P38/P65 PROTEINS ~71:Jilin University, No. 1266, Fujin Road, Changchun, Jilin, 130012, People's Republic of China ~72: CAI, Mingjun;CHENG, Zhihua;GAO, Haicheng;HUANG, Yuxin;LIU, Shenhe;WANG, Yue;WANG, Zhenxing~

2022/12321 ~ Complete ~54:DEVELOPMENT AND PREPARATION OF RUTIN-CISPLATIN SYNERGISTIC ANTI-LUNG CANCER NANOEMULSION INJECTION ~71:China-Japan Union Hospital Of Jilin University, No. 126, Xiantai Street, Erdao District, Changchun, Jilin, 130033, People's Republic of China ~72: GAO, Haicheng;HUANG, Yuxin;LIU, Shenhe;MAI, Shixiong;WANG, Yue;WANG, Zhenxing~

2022/12323 ~ Complete ~54:BUD INHIBITOR FOR INHIBITING GROWTH OF SIDE BUDS OF CUCUMBER GRAFTING STOCKS AND PREPARATION METHOD THEREOF ~71:Weifang Academy of Agricultural Sciences ( Weifang Branch of Shandong Academy of Agricultural Sciences ), No. 1921, Shengli East Street., Weifang City, Shandong Province, 261071, People's Republic of China ~72: SUN, Shasha;YANG, Xiaodong;ZHANG, Yuanguo~ 33:CN ~31:202111335774.6 ~32:12/11/2021

2022/12324 ~ Complete ~54:CORE-SHELL STRUCTURED NANOWIRE AND POLYMER-BASED HIGH THERMAL CONDUCTIVITY COMPOSITE MATERIAL AND ITS PREPARATION METHOD ~71:Shanghai Polytechnic University (SSPU), 2360 Jin Hai Road, Pudong District, Shanghai, People's Republic of China ~72: Gao Ying;Guo Lihe;Li Guan;Wang Jingrong;Xu Haiping~

2022/12329 ~ Complete ~54:METHOD FOR PREDICTING SHIPPING CAPACITY OF COMPETITORS, COMPUTER-READABLE MEDIUM ~71:COSCO SHIPPING TECHNOLOGY (BEIJING) CO., LTD., Room 15A, Block F, Fuhua Building, No. 8 Chaoyangmen North Street, Dongcheng District, Beijing, 100000, People's Republic of China ~72: ZHAN, Haolin~ 33:CN ~31:202211035116.X ~32:26/08/2022

2022/12330 ~ Complete ~54:A NOVEL METHOD FOR TESTING COVID - 19 INFECTION RATE ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: DASHETWAR, Isha;DATEROAO, Shoumik;DAVANGE, Pratik;DAVARI, Vaishnavi;DEOKAR, Om;DEORE, Yash;DHAKE, Rajesh J.;Kakade, Surabhi~

2022/12333 ~ Complete ~54:AN AUTOMATIC IRRIGATION SYSTEM ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: APTE, Gandharv;DHAKE, Rajesh J.;GAJBHIYE, Mihir;GANDHI, Shreyas;GANDHI, Tanush;GANDHI, Yash;GANGURDE, Ashish;Kakade, Surabhi~

2022/12336 ~ Complete ~54:BURIED DATA COLLECTION METHOD BASED ON SPARK AND FLUME ~71:COSCO SHIPPING TECHNOLOGY (BEIJING) CO., LTD., Room 15A, Block F, Fuhua Building, No. 8

Chaoyangmen North Street, Dongcheng District, Beijing, 100000, People's Republic of China ~72: YANG, Bin;YU, Yang;ZHANG, Libin;ZHUANG, Li~ 33:CN ~31:202211035102.8 ~32:26/08/2022

2022/12340 ~ Complete ~54:FORMULATIONS ~71:VIIV HEALTHCARE COMPANY, 251 Little Falls Drive, Wilmington, Delaware, United States of America ~72: CONN, Ian Paul;DAVIES, Mark Robert;FUEYO, Jose Maria;HEAFIELD, Joanne;SHREEVES, Trevor Martin~ 33:GB ~31:2009685.5 ~32:25/06/2020

2022/12342 ~ Complete ~54:CABLE CONVEYOR BELT JUNCTION DEVICE PROVIDED WITH CABLE LOCKING ELEMENTS ~71:FP BUSINESS INVEST, Rue Michel Rondet ZI du Clos Marquet, 42400, Saint-Chamond, France ~72: GUILLEMET, Fr&#233;d&#233;ric;TAVERNIER, Bernard~ 33:FR ~31:2005721 ~32:29/05/2020

2022/12354 ~ Complete ~54:RECYCLE CONTENT HYDROGEN ~71:Eastman Chemical Company, 200 South Wilcox Drive, KINGSPORT 37660, TN, USA, United States of America ~72: BITTING, Daryl;DEBRUIN, Bruce Roger;SLIVENSKY, David Eugene;WU, Xianchun~ 33:US ~31:63/008,912 ~32:13/04/2020

2022/12357 ~ Complete ~54:MULTI-STAGE ADJUSTING DAMPING VALVE, AS WELL AS SHOCK ABSORBER AND SUSPENSION SYSTEM USING DAMPING VALVE ~71:Hefei University of Technology, No.193, Tunxi Road, HEFEI 230009, ANHUI, CHINA (P.R.C.), People's Republic of China ~72: CHEN, Tong;LIU, Pengfei;LUO, Liang;WANG, Bin;ZHANG, Nong;ZHENG, Minyi;ZHONG, Weimin~ 33:CN ~31:202110640916.3 ~32:08/06/2021;33:CN ~31:202110953125.6 ~32:18/08/2021

- APPLIED ON 2022/11/14 -

2022/12395 ~ Complete ~54:RECOMBINANT RHABDOVIRUS ENCODING FOR A CD80 EXTRACELLULAR DOMAIN FC-FUSION PROTEIN ~71:BOEHRINGER INGELHEIM INTERNATIONAL GMBH, Binger Strasse 173, Germany ~72: ERB, Klaus;ERLMANN, Patrik;MUELLER, Philipp;WOLLMANN, Guido~ 33:EP ~31:20178032.7 ~32:03/06/2020

2022/12400 ~ Complete ~54:LIQUID FORMULATION FOR HYDROGEN STORAGE ~71:ARKEMA FRANCE, 420, rue d&#39;Estienne d&#39;Orves, 92700, Colombes, France ~72: J&#201;R&#212;ME BLANC~ 33:FR ~31:FR2012922 ~32:09/12/2020

2022/12405 ~ Complete ~54:COLD-ROLLED ENAMEL STEEL FOR DEEP DRAWING INNER CONTAINER AND MANUFACTURING METHOD THEREFOR ~71:Baoshan Iron & Steel Co., Ltd., No.885, Fujin Road, Baoshan District, SHANGHAI 201900, CHINA (P.R.C.), People's Republic of China ~72: DAI, Xuecheng;LIN, Changqing;SUN, Quanshe;TAO, Xiaoyong;WANG, Jintao;WANG, Junkai;WANG, Mu;WANG, Shuangcheng;WEI, Jiao~ 33:CN ~31:202010418537.5 ~32:18/05/2020

2022/12407 ~ Complete ~54:TREATMENT OF ADJUSTMENT DISORDERS ~71:VistaGen Therapeutics, Inc., 343 Allerton Avenue, SOUTH SAN FRANCISCO 94080, CA, USA, United States of America ~72: SINGH, Shawn K.;SMITH, Mark A.~ 33:US ~31:63/026,441 ~32:18/05/2020

2022/12409 ~ Complete ~54:DEVICE FOR PREPARING AND DISPENSING RECONSTITUTED BEER ~71:Heineken Supply Chain B.V., Burgemeester Smeetsweg 1, ZOETERWOUDE 2382 PH, THE NETHERLANDS, Netherlands ~72: BEKKERS, Augustinus Cornelius Aldegonde Petrus Albert;BROUWER, Eric Richard~ 33:EP ~31:20175078.3 ~32:15/05/2020

2022/12384 ~ Complete ~54:EFFICIENT EXTRACTION METHOD OF AMYGDALIN FROM SEMEN PERSICAE AND APPLICATION THEREOF ~71:Zhejiang Academy of Agricultural Sciences, No. 298, Desheng Middle Road,

Hangzhou City, Zhejiang, 310000, People's Republic of China ~72: Chen Hangjun;Fang Xiangjun;Gao Haiyan;Han Yanchao;Mu Honglei;Niu Ben;Wu Weijie~

2022/12390 ~ Complete ~54:CAN BODYMAKER AND A METHOD OF OPERATING A CAN BODYMAKER TO MITIGATE THE EFFECTS OF TOOL WEAR, DAMAGE AND/OR MISALIGNMENT ~71:CROWN PACKAGING TECHNOLOGY, INC., 11535 South Central Avenue, United States of America ~72: BAILEY, Damien Andrew;EGERTON, Daniel;HALSTEAD, Michael~ 33:GB ~31:2007230.2 ~32:15/05/2020

2022/12401 ~ Complete ~54:PROCESS FOR RECOVERING TITANIUM DIOXIDE ~71:COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION, Clunies Ross St, Acton, Australian Capital Territory, 2601, Australia ~72: GOUTAM KUMAR DAS~ 33:AU ~31:2020901698 ~32:26/05/2020

2022/12406 ~ Complete ~54:SINGLE-SERVE CAPSULE FOR PREPARING A BEER-LIKE BEVERAGE ~71:Heineken Supply Chain B.V., Burgemeester Smeetsweg 1, ZOETERWOUDE 2382 PH, THE NETHERLANDS, Netherlands ~72: BEKKERS, Augustinus Cornelius Aldegonde Petrus Albert;BROUWER, Eric Richard;TESSLOT, Sabine Charlette Jacqueline~ 33:EP ~31:20175077.5 ~32:15/05/2020;33:EP ~31:20175078.3 ~32:15/05/2020;33:EP ~31:20175079.1 ~32:15/05/2020;33:EP ~31:20175081.7 ~32:15/05/2020;33:EP ~31:20175082.5 ~32:15/05/2020;33:EP ~31:20203689.3 ~32:23/10/2020;33:EP ~31:20203700.8 ~32:23/10/2020;33:EP ~31:20204148.9 ~32:27/10/2020

2022/12410 ~ Complete ~54:INJECTION-MOLDABLE AERATOR MIXING ROD AND METHOD OF MANUFACTURING THEREOF ~71:Rich Products Corporation, One Robert Rich Way, BUFFALO 14213, NY, USA, United States of America ~72: CAMPBELL, Shawn;DODDANAARI SHAMAKUMAR, Rakshitha;KAISER, Alexander;REISER, Ralf~ 33:US ~31:63/025,283 ~32:15/05/2020

2022/12372 ~ Complete ~54:A METHOD FOR MANUFACTURING FLY-ASH PELLETS WITH PROVISION OF FIBERS ~71:Dr. AMBIKA KUIITY, Assistant Professor, Department of Civil Engineering, National Institute of Technology Silchar, Assam-788010, India;MOHAMMED JAVEED, Former M.Tech. Student of National Institute of Technology Silchar, India ~72: Dr. AMBIKA KUIITY;MOHAMMED JAVEED~

2022/12385 ~ Complete ~54:A METHOD FOR JOINT RETRIEVAL OF ARCTIC SEA ICE SNOW DEPTH BY FIELD OBSERVATION AND SATELLITE REMOTE SENSING ~71:SHANGHAI OCEAN UNIVERSITY, 999 Hucheng Ring Road, Pudong New Area, Shanghai, 201306, People's Republic of China ~72: Zhang, Yu;Zhou, Yi~

2022/12383 ~ Complete ~54:ANTI-BLOCKING CONCEALED DRAINAGE STRUCTURE OF ROAD SUBGRADE ~71:CHONGQING JIAOTONG UNIVERSITY, No. 66, Xuefu Avenue, Nan'an District, Chongqing, 400074, People's Republic of China;ZUNYI HIGHWAY ADMINISTRATION BUREAU OF GUIZHOU PROVINCE, No. 359, Dalian Avenue, Huichuan District, Zunyi, Guizhou Province, 563000, People's Republic of China ~72: CHEN, Kang;GONG, Weiyong;LI, Shibao;LIANG, Xuzhi;LIU, Bin;MENG, Yunwei;WANG, Yunjin;ZHENG, Shilun~

2022/12367 ~ Complete ~54:A SYSTEM FOR AUTOMATIC KITCHEN EXHAUST ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: BHOSALE, Tejaswini;GUJARATHI, Ishan;GUNDAWAR, Ayush;GUNJAL, Manas;GUPTA, Shubhankar;GUPTA, Vedant;SHILASKAR, Swati N.~

2022/12374 ~ Complete ~54:WATER STORAGE AND UTILIZATION METHOD FOR LOESS LAYER COVERED MINING AREA ~71:China University of Mining and Technology, No. 1, Daxue Road, Tongshan District, Xuzhou City, Jiangsu Province, 221116, People's Republic of China;Liupanshui Normal University, No. 288, Minghu Road, Zhongshan District, Liupanshui City, Guizhou Province, 553004, People's Republic of China;Shenmu Ningtiaota Mining Co., Ltd, Shaanxi Coal and Chemical Industry Group Co., Ltd., Ningtiaota Village, Sunjiacha Town,

Shenmu City, Yulin City, Shaanxi Province, 719314, People's Republic of China ~72: FAN, Limin;GAO, Lijun;LI, Tao;SUN, Qiang;WANG, Shubin;WU, Qunying;YAN, Jingwang~ 33:CN ~31:202211312290.4 ~32:25/10/2022

2022/12377 ~ Complete ~54:AUTOMATIC DEMOULDING ADDITIVE MANUFACTURING PRINTING APPARATUS ~71:ShanDong JiaoTong University, No. 5 Jiaoxiao Road, Tianqiao District, Jinan City, Shandong Province, 250023, People's Republic of China ~72: CUI, Wenchao~

2022/12379 ~ Complete ~54:DOUBLE-SIDED FLAT GRINDING AND POLISHING MACHINE ~71:JIANGXI HUAPAI OPTOELECTRONICS TECHNOLOGY CO., LTD., SECOND DISTRICT, QUANNAN COUNTY INDUSTRIAL PARK, People's Republic of China ~72: TANG, Zhangxiang;TIAN, Jun~

2022/12380 ~ Complete ~54:PREPARATION METHOD AND APPLICATION OF 5-AMINOSALICYLIC ACID DENDRITIC CRYSTAL-SYNERGISTIC BLETILLA STRIATA GEL COMPOUND LINE AGENT ~71:CHONGQING HOSPITAL OF TRADITIONAL CHINESE MEDICINE, NO. 6, PANXI QIZHI ROAD, People's Republic of China ~72: LENG, Jing;ZHANG, Ling~

2022/12381 ~ Complete ~54:HYBRID SEED SELECTION AND SEED PORTFOLIO OPTIMIZATION BY FIELD ~71:Climate LLC, 201 Third Street, Suite 1050, SAN FRANCISCO 94103, CA, USA, United States of America ~72: BULL, Jason Kendrick;EHLMANN, Tonya S.;JIANG, Dongming;REICH, Timothy;WIMBUSH, Samuel Alexander;XIE, Yao;YANG, Xiao~ 33:US ~31:15/807,872 ~32:09/11/2017

2022/12382 ~ Complete ~54:CRYSTALLINE PYRIMIDINYL-3,8-DIAZABICYCLO[3.2.1]OCTANYLMETHANONE COMPOUND AND USE THEREOF ~71:Pfizer Inc., 235 East 42nd Street, NEW YORK 10017, NY, USA, United States of America ~72: SAMUEL, Amanda Patrice Surajhie;YANG, Xiaojing~ 33:US ~31:62/806,180 ~32:15/02/2019

2022/12393 ~ Complete ~54:BELT ADJUSTING CARRIER ROLLER FOR SMALL ANGLE FINE ADJUSTMENT ~71:ANHUI SHENGFANG MACHINERY MANUFACTURING CO.,LTD., Xincai Project Area, Lieshan Industrial Park, Huaibei, Anhui, 235000, People's Republic of China ~72: HUA, Shuo;HUA, Wenkang;LI, Li;LI, Yong;ZHANG, Bin;ZONG, Jianshe~ 33:CN ~31:202210403186.X ~32:18/04/2022

2022/12397 ~ Complete ~54:HYDROGEN PRODUCTION AND CONVEYANCE SYSTEM ~71:LONE GULL HOLDINGS, LTD., Suite 258-332, 5331 SW Macadam Avenue, Portland, Oregon, 97239, United States of America ~72: BRIAN LEE MOFFAT;DANIEL WILLIAM PLACE;GARTH ALEXANDER SHELDON-COULSON;IVAR LEE THORSON~ 33:US ~31:63/026,670 ~32:18/05/2020;33:US ~31:63/060,145 ~32:03/08/2020;33:US ~31:63/186,709 ~32:10/05/2021;33:US ~31:17/320,541 ~32:14/05/2021

2022/12398 ~ Complete ~54:PROCESS FOR IMPROVING THE QUALITY OF HYDROGEN-BEARING ORGANIC LIQUIDS ~71:ARKEMA FRANCE, 420, rue d'Estienne d'Orves, 92700, Colombes, France ~72: BERNARD MONGUILLON;J&R;ME BLANC~ 33:FR ~31:FR2007313 ~32:10/07/2020

2022/12403 ~ Complete ~54:VIRTUAL VENUE ~71:BENO&T FREDETTE, 1906-2 avenue des Citronniers 98000 Monaco, Monaco;VENKATA GANESAN, 353 3rd Street, Apt. 4B, Brooklyn, New York 11215, United States of America ~72: BENO&T FREDETTE;VENKATA GANESAN~ 33:US ~31:63/011,520 ~32:17/04/2020

2022/12404 ~ Complete ~54:TIBIAL OSTEOTOMY SYSTEM, INSTRUMENTS, AND RELATED METHODS ~71:Paragon 28, Inc., 14445 Grasslands Drive, ENGLEWOOD 80112, CO, USA, United States of America ~72: BERNHARDT, Dirk C.;BRINKER, Laura Zagrocki;DACOSTA, Albert;FAJARDO CORTES, Kareen A.;HUNT, Richard David;MCLEAN, Joshua A.;OKONYA, Andrew A.;REQUIST, Melissa R.~ 33:US ~31:63/011,737 ~32:17/04/2020

2022/12415 ~ Complete ~54:A PACKAGING COMPOSITE AND THE PROCESS FOR PREPARING SUCH COMPOSITE ~71:PAWAR, Jayant Rajaram, Krishna Institute of Medical Sciences, Near Dhebewadi Road, Malkapur,, Karad, Maharashtra, 415110, India ~72: GHUGARE, Rohit;PAWAR, Jayant Rajaram;SINGH, E.A.~33:IN ~31:202021016991 ~32:20/04/2020

2022/12368 ~ Complete ~54:A VIRTUAL ASSISTANT FOR SMART HOME AND AUTOMATION APPLICATIONS ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: JAGTAP, Simran;JAIN, Eshaan;JAIN, Ketan;JAIN, Manas;JAIN, Vishwas;MARATHE, Ashutosh S.;RAJPUT, Vaishali~

2022/12366 ~ Complete ~54:METHOD OF PREPARING A WINE BLENDED WITH HONEY ~71:GM GLOBAL (CHINA) LIMITED, Unit 604, 6/F, Block A, Wing Kut Industrial Building 608 Castle Peak Road, Lai Chi Kok, People's Republic of China ~72: FRITH, Colin~ 33:ZA ~31:2021/08969 ~32:12/11/2021

2022/12369 ~ Complete ~54:ZEBRA CROSSING SAFETY DEVICE ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: CHOURASIYA, Sunny M.;CHULE, Bhumika V.;DABADE, Mayur B.;DABERAO, Shon D.;DADMAL, Jidnyasa A.;KAKADE, Surabhi;SHILASKAR, Swati N.~

2022/12386 ~ Complete ~54:SPLICED CONCEALED DRAINAGE PIPELINE FOR SUBGRADE ~71:CHONGQING JIAOTONG UNIVERSITY, No. 66, Xuefu Avenue, Nan'an District, Chongqing, 400074, People's Republic of China;ZUNYI HIGHWAY ADMINISTRATION BUREAU OF GUIZHOU PROVINCE, No. 359, Dalian Avenue, Huichuan District, Zunyi, Guizhou Province, 563000, People's Republic of China ~72: CHEN, Kang;GONG, Weiyong;LI, Shibao;LIANG, Xuzhi;LIU, Bin;MENG, Yunwei;WANG, Yunjin;ZHENG, Shilun~

2022/12396 ~ Complete ~54:METHOD OF PREPARATION OF ELECTRODE FOR ELECTROCATALYSIS ~71:FUNDACI&#211; INSTITUT CATAL&#192; D&#39;INVESTIGACI&#211; QU&#205;MICA (ICIQ), Avinguda dels Pa&#239;sos Catalans, 16, 43007, Tarragona, Spain;INSTITUCI&#211; CATALANA DE RECERCA I ESTUDIS AVAN&#199;ATS (ICREA), Passeig Llu&#237;s Company, 23, 08010, Barcelona, Spain ~72: ALBERTO BUCCI;JULIO LLORET-FILLOL~ 33:EP ~31:20382294.5 ~32:15/04/2020

2022/12414 ~ Complete ~54:PROCESS TO PREPARE FISCHER-TROPSCH DERIVED MIDDLE DISTILLATES AND BASE OILS ~71:SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V., Carel van Bylandtlaan 30, HR The Hague, Netherlands ~72: CREYGHTON, Edward Julius;JANSSEN, Andries Hendrik;RIGUTTO, Marcello Stefano;SAMMELIUS, Olav~ 33:EP ~31:20180628.8 ~32:17/06/2020

2022/12370 ~ Complete ~54:A BLOCKCHAIN ENABLED DECENTRALIZED VOTING SYSTEM ~71:VISHWAKARMA INSTITUTE OF TECHNOLOGY, 666, UPPER MARKET RD, UPPER INDIRA NAGAR, BIBWEWADI, PUNE, MAHARASHTRA, 411037, India ~72: CHAUDHARI, Jayesh;JAYAPPA, Atharva;JAYBHAYE, Ankit;JAYBHAYE, Shweta;JAYBHAYE, Vishwadhhar;MARATHE, Ashutosh S.;RAJPUT, Vaishali~

2022/12373 ~ Complete ~54:EPOXY CASTING SELF-SEALING METHOD FOR SMALL STERN TUBE ~71:Zhejiang International Maritime College, No. 268, Haitian Avenue, Lincheng, Zhoushan, Zhejiang, 316021, People's Republic of China ~72: Chuanjiang Li;Jianhua He;Jiazheng Wang;Rui Zhang;Zailiang Liu;Zhaohui Gan~

2022/12378 ~ Complete ~54:SAP FLOW GAUGE ~71:Plant Pulse (Pty) Ltd, 8 Lea Road Rondebosch, South Africa ~72: Plant Pulse (Pty) Ltd~

2022/12412 ~ Complete ~54:METHOD, DEVICE AND COMPUTER PROGRAM FOR DETERMINING THE PERFORMANCE OF A WELDING METHOD VIA DIGITAL PROCESSING OF AN IMAGE OF THE WELDED

WORKPIECE ~71:L&#39;Air Liquide, Societe Anonyme pour l&#39;Etude et l&#39;Exploitation des Procedes Georges Claude, 75 Quai d&#39;Orsay, PARIS 75007, FRANCE, France ~72: CARISTAN, Charles L.;PLANCKAERT, Jean-Pierre~ 33:FR ~31:2003950 ~32:20/04/2020

2022/12413 ~ Complete ~54:CUSTOM DATA FILES FOR PERSONALIZED MEDICINE ~71:ILLUMINA, INC., 5200 Illumina Way, United States of America ~72: BAKER, Dwight Thomas;EDLUND, Christopher Karl;LOHMAN, Egan Jackson;WARD, Jeremy Joseph~ 33:US ~31:63/078,215 ~32:14/09/2020

2022/12371 ~ Complete ~54:A METHOD FOR SYNTHESIZING NOVEL SUBSTITUTED DERIVATIVES OF OXADIAZOLE AS POTENT ANTICONVULSANT AND ANTIMICROBIAL AGENT ~71:Dr. Keshamma Entoori, Associate Professor, Dept Of Biochemistry, Maharani Cluster University, Palace Road, Bangalore-560001, Karnataka, India;Dr. Achal Mishra, Professor, Faculty of Pharmaceutical Sciences, Shri Shankaracharya Technical Campus, Junwani, Bhilai, (Chhattisgarh), 490020, India;Dr. Kuntal Das, Professor Department of Pharmacognosy and Phytochemistry Krupanidhi College of Pharmacy #12/1, Chikkabelandur, Carmelaram, post. Varthur Hobli. Bangalore, 560035, India;Dr. Rakesh Kadalipura Puttaswamy, Post Doctoral K P Rakesh, Department of Radiology, Biomedical Research Imaging Center, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, 27599, United States of America;Dr. Rameshwari Verma, Associate Professor School of Chemistry and Chemical Engineering, Yulin University, Yulin 719000, Shaanxi, People's Republic of China;Dr. Santosh Kumar Verma, Associate Professor School of Chemistry and Chemical Engineering, Yulin University, Yulin 719000, Shaanxi, People's Republic of China;Dr. Yogesh Vaishnav, Professor, Faculty of Pharmaceutical Sciences, Shri Shankaracharya Technical Campus, Junwani, Bhilai, (Chhattisgarh), 490020, India;Soumitra Tiwari, Assistant Professor Department of Food Processing and Technology, Atal Bihari Vajpayee University, Koni, Bilaspur (C.G.), India;Sudha Muthusamy, Assistant Professor, The Erode College of Pharmacy, Veppampalayam, Erode- 638112 Tamilnadu, India;Vinay Sagar Verma, Associate Professor, Faculty of Pharmaceutical Sciences, Shri Shankaracharya Technical Campus, Junwani, Bhilai, (Chhattisgarh), 490020, India ~72: Dr. Keshamma Entoori;Dr. Achal Mishra;Dr. Kuntal Das;Dr. Rakesh Kadalipura Puttaswamy;Dr. Rameshwari Verma;Dr. Santosh Kumar Verma;Dr. Yogesh Vaishnav;Soumitra Tiwari;Sudha Muthusamy;Vinay Sagar Verma~

2022/12375 ~ Complete ~54:FAR AND NEAR FIELD ADAPTIVE PICKUP ~71:North China University of Technology, No. 5 Jinyuanzhuang Road, Shijingshan District, Beijing, 100144, People's Republic of China ~72: CAI, Xichang;GAN, Yanggang;LI, Jiawei;QIAO, Ziling;WANG, Mingrui~ 33:CN ~31:202111401801.5 ~32:19/11/2021

2022/12376 ~ Complete ~54:HANDHELD LASER CLADDING HEAD DEVICE ~71:Shenghong (Taizhou) Laser Technology Co., Ltd., Building C, Building 11, Dream Park, No. 818, Kaifa Avenue East, Haihong Street, Taizhou Bay New District, Taizhou City, Zhejiang Province, 380014, People's Republic of China ~72: LIN, Peichen;LIN, Xuechun;LIU, Jiangchuan;NONG, Guangyi~ 33:CN ~31:202210585343.3 ~32:27/05/2022

2022/12365 ~ Provisional ~54:SPECIALIZED DATA NETWORK FOR FINANCIAL SERVICES UTILISING THE OTT MOBILE CONCEPT ~71:Win Htoo Aung, 135 Somerset Gardens , Mulbarton Road , Beverley A/H, South Africa ~72: Win Htoo Aung~

2022/12387 ~ Complete ~54:CASSAVA TRANSCRIPTION FACTORS MEBHLH72, MEBHLH114 AND THEIR APPLICATION IN LINAMARIN SYNTHESIS ~71:TROPICAL CROPS GENETIC RESOURCES INSTITUTE, CHINESE ACADEMY OF TROPICAL AGRICULTURAL SCIENCES, No. 4 Xueyuan Road, Longhua District, Haikou, Hainan, 571101, People's Republic of China ~72: AN, Feifei;CAI, Jie;CHEN, Songbi;LUO, Xiuqin;WEI, Zhuowen;XIAO, Xinhui;XUE, Jingjing~ 33:CN ~31:202210541272.7 ~32:17/05/2022

2022/12389 ~ Complete ~54:A MAGNETIC INDUCTION CAPACITIVE FLUID LEVEL OIL-WATER INTERFACE SENSOR ~71:Southwest Petroleum University, No. 8 Xindu Avenue, Xindu District, Chengdu City, Sichuan Province, 610500, People's Republic of China ~72: Hongjiang Chen;Zhen Song~

2022/12391 ~ Complete ~54:METHODS FOR RECOVERING A PRECIOUS METAL FROM REFRACTORY ORES BY NEAR-AMBIENT ALKALINE PRE-OXIDATION AND COMPLEXATION ~71:COREM, 1180 rue de la Min#233;ralogie, Canada ~72: ASSIMA, Gnouyaro Palla;DROLET, Danielle;LEVASSEUR, Benoit;OLSEN, Caroline~ 33:US ~31:63/018,882 ~32:01/05/2020

2022/12392 ~ Complete ~54:METHODS AND SYSTEM FOR VALIDATING FLOW CYTOMETRY MEASUREMENTS ~71:KIADIS PHARMA INTELLECTUAL PROPERTY B.V., Paasheuvelweg 25A, Amsterdam, Netherlands ~72: LING, Kam-Wing~ 33:US ~31:63/013,098 ~32:21/04/2020

2022/12399 ~ Complete ~54:PURIFICATION OF AROMATIC LIQUIDS ~71:ARKEMA FRANCE, 420, rue d#39;Estienne d#39;Orves, 92700, Colombes, France ~72: BERNARD MONGUILLON;J#201;R#212;ME BLANC;LUDIVINE BOUVIER;UGO RAVON~ 33:FR ~31:FR2007312 ~32:10/07/2020

2022/12402 ~ Complete ~54:HAIR CONDITIONING COMPOSITION FOR IMPROVED DEPOSITION ~71:UNILEVER GLOBAL IP LIMITED, Port Sunlight, Wirral, Merseyside, CH62 4ZD, United Kingdom ~72: CESAR ERNESTO MENDOZA FERNANDEZ;MICHAEL JAMES COOKE;PAUL DAMIEN PRICE;RICHARD JONATHAN BARFOOT~ 33:EP ~31:20181260.9 ~32:19/06/2020

2022/12411 ~ Complete ~54:CROSS-LINKABLE ZWITTERIONIC POLYMERS AND THEIR USE IN MEMBRANE FILTERS ~71:Trustees of Tufts College, Ballou Hall, 4th Floor, MEDFORD 02155, MA, USA, United States of America ~72: ALEXIOU, Ayse Asatekin;LOUNDER, Samuel J.~ 33:US ~31:63/025,559 ~32:15/05/2020

2022/12388 ~ Complete ~54:CABLE KNEE BRACE SYSTEM ~71:MOBIUS TECHNOLOGIES, LLC, 251 Northwood Way, Suite B, United States of America ~72: FLEMING, Darren~ 33:US ~31:16/436,716 ~32:10/06/2019

2022/12394 ~ Complete ~54:VIDEO ENCODER, VIDEO DECODER, METHODS FOR ENCODING AND DECODING AND VIDEO DATA STREAM FOR REALIZING ADVANCED VIDEO CODING CONCEPTS ~71:GE VIDEO COMPRESSION, LLC, 1 RESEARCH CIRCLE, NISKAYUNA, NY 12309, USA, United States of America ~72: HELLGE, Cornelius;S#193;NCHEZ DE LA FUENTE, Yago;S#220;HRING, Karsten;SCHIERL, Thomas;SKUPIN, Robert;WIEGAND, Thomas~ 33:EP ~31:20176178.0 ~32:22/05/2020;33:EP ~31:20176206.9 ~32:22/05/2020

2022/12408 ~ Complete ~54:EXTENDED TIME ACTION ACYLATED INSULIN COMPOUNDS ~71:Eli Lilly and Company, Lilly Corporate Center, INDIANAPOLIS 46206-6288, IN, USA, United States of America ~72: BRENNAN, Seamus Patrick;FLORA, David Benjamin;KISSELEV, Valdislav;LIU, Wen;VALENZUELA, Francisco Alcides~ 33:US ~31:63/025,463 ~32:15/05/2020

- APPLIED ON 2022/11/15 -

2022/12419 ~ Provisional ~54:A NEW BUSINESS METHOD/ PROCESS TO INCREASE USER ENGAGEMENT INTO THE METAVERSE PLATFORM USING THE REWARD POINT SYSTEM (LOYALTY PROGRAM), INCREASING AFFINITY PARTNER NETWORKS TO BENEFIT THE CUSTOMER AND INCREASE BRAND AWARENESS FOR OUR PARTNERS, WHILE INCREASING VALUE FOR THE METAVERSE PLATFORM AND ITS CURRENCY TOKEN ~71:Njabulo Nzimande, 153 Walton Avenue Carlswald Midrand 1686, Unit 1 Umthunzi Views, South Africa ~72: Njabulo Nzimande~

2022/12420 ~ Complete ~54:REAL-TIME DYNAMIC MONITORING METHOD FOR PRODUCTION OF DESERT CYANOBACTERIA CULTIVATED IN LARGE SCALE ~71:Northwest Institute of Eco-Environment and Resources, Chinese Academy of Sciences, No. 320, Donggang West Road, Chengguan District, Lanzhou City, Gansu Province, 730000, People's Republic of China ~72: LI, Xinrong;ZHANG, Zhishan;ZHAO, Yang~

2022/12423 ~ Complete ~54:SITE INTELLIGENT MANAGEMENT SYSTEM BASED ON TERMINAL APP PLATFORM OF OILFIELD STATION LIBRARY ~71:Daqing City Huayu Petroleum Machinery Manufacturing Co., Ltd., No. 23-2, Guangming South Street, Guangming Industrial Park, Longfeng District, Daqing City, Heilongjiang Province, 163000, People's Republic of China ~72: XI, Xiaoping;XU, Haiying~ 33:CN ~31:202211093364.X ~32:08/09/2022

2022/12434 ~ Complete ~54:COMPOUNDS TARGETING PROTEINS AND PHARMACEUTICAL COMPOSITIONS THEREOF, AND THEIR THERAPEUTIC APPLICATIONS ~71:BIOTHERYX, INC., 20 Cabin Ridge Road, Chappaqua, New York, 10514, United States of America ~72: APARAJITA HOSKOTE CHOURASIA;DAVID AARON HECHT;EDUARDO TORRES;FRANK MERCURIO;IMELDA LAM;KYLE W.H. CHAN;LEAH FUNG;PAUL E ERDMAN;ROBERT SULLIVAN~ 33:US ~31:62/852,844 ~32:24/05/2019

2022/12437 ~ Complete ~54:PREPARATION OF BISMUTH FILM AND TWO-DIMENSIONAL GRAPHDIYNE MODIFIED ELECTRODE AND ITS APPLICATION IN DETECTING MULTICOMPONENT HEAVY METAL IONS ~71:Hainan Normal University, No. 99 Longkun South Road, Haikou City, Hainan Province, 571158, People's Republic of China ~72: Baoli Wang;Fan Shi;Wei Sun;Yijing Ai;Yucen Yao;Zejun Zhang~

2022/12439 ~ Complete ~54:PNEUMATIC PRESSURE CONTROLLER ~71:Ettienne Antonius GOUTIER, 77 Sea Hare Circle, South Africa ~72: GOUTIER, Ettienne Antonius~ 33:ZA ~31:2020/03337 ~32:04/06/2020;33:ZA ~31:2020/07332 ~32:25/11/2020

2022/12444 ~ 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

2022/12448 ~ Complete ~54:SYSTEM HAVING A LIQUID AIR ENERGY STORAGE AND POWER PLANT APPARATUS ~71:SCHWARZ, Anton, Anrichterstrasse 77, Germany;SCHWARZ, Helmut, Lohstrasse 1, Germany ~72: SCHWARZ, Anton~ 33:DE ~31:10 2020 110 854.0 ~32:21/04/2020

2022/12450 ~ Complete ~54:ACTIVE COMPOUND COMBINATIONS AND FUNGICIDE COMPOSITIONS COMPRISING THOSE ~71:Bayer Aktiengesellschaft, Kaiser-Wilhelm-Allee 1, LEVERKUSEN 51373, GERMANY, Germany ~72: G&#214;HLICH, Frank;G&#214;RTZ, Andreas;KL&#220;KEN, Agostinos Michael~ 33:EP ~31:20169947.7 ~32:16/04/2020

2022/12417 ~ Provisional ~54:ONLINE TOKEN LOADER ~71:Kwatshana Buhle, MZNZANA A/A, P.O BOX 34, South Africa ~72: Kwatshana Buhle~ 33:ZA ~31:1 ~32:01/11/2022

2022/12421 ~ Complete ~54:NOVEL SATELLITE SELECTION METHOD FOR MULTI-GNSS BASELINE NETWORK ~71:Anhui Chaoxing Zhike Geographic Information Service Co., Ltd, 701, Building A, Shuangchuang Center, Taining Street, Shannan New District, Huainan, 232000, People's Republic of China;CNBM Guizhou Surveying and Design Co.,Ltd., 3rd floor, Building 3, Qilong Business Port, No. 211, Yangguan Avenue, Guanshanhu District, Guiyang, 550000, People's Republic of China ~72: Chao LIU;Gui FU;Hao TAN;Mingfei ZHU;Ya FAN~



2022/12427 ~ Complete ~54:GROUTING SUPPORT STRUCTURE FOR COAL MINING IN THE FRACTURED ZONE ~71:Liaoning Technical University, Xueyuan Street, Xihe District, Fuxin City, Liaoning Province, People's Republic of China ~72: Li Jianxin;Sun Teng;Xiao Huizan~

2022/12446 ~ Complete ~54:SNP MOLECULAR MARKER AFFECTING DUCK FATTY ACID COMPOSITION-RELATED GENE ELOVL3, AND DETECTION METHOD THEREFOR AND USE THEREOF ~71:CHINA AGRICULTURAL UNIVERSITY, No.2 Yuanmingyuan West Road, Haidian District, Beijing, 100193, People's Republic of China ~72: HOU, Zhuocheng;LI, Xiaoqin~ 33:CN ~31:202210336713.X ~32:01/04/2022

2022/12454 ~ Complete ~54:ACTIVE COMPOUND COMBINATIONS AND FUNGICIDE COMPOSITIONS COMPRISING THOSE ~71:Bayer Aktiengesellschaft, Kaiser-Wilhelm-Allee 1, LEVERKUSEN 51373, GERMANY, Germany ~72: G&#214;HLICH, Frank;G&#214;RTZ, Andreas;KL&#220;KEN, Agostinos Michael~ 33:EP ~31:20169944.4 ~32:16/04/2020

2022/12458 ~ Complete ~54:ACTRII PROTEINS AND USE IN TREATING POST-CAPILLARY PULMONARY HYPERTENSION ~71:Acceleron Pharma Inc., 128 Sidney Street, CAMBRIDGE 02139, MA, USA, United States of America ~72: ANDRE, Patrick;JOSHI, Sachindra;KUMAR, Ravindra;LI, Gang;LU, Jonathan Toshi~ 33:US ~31:63/016,942 ~32:28/04/2020;33:US ~31:63/159,253 ~32:10/03/2021

2022/12462 ~ Complete ~54:COLD-RESISTANT DATA TRANSMISSION CABLE ~71:JIANGSU HENGTONG WIRE & CABLE TECHNOLOGY CO., LTD., No.88, Hengtong Avenue, Qidu Town, Wujiang District, Suzhou, Jiangsu 215200, People's Republic of China ~72: BO ZHANG;GUOQUAN WANG;HONGJIE ZHANG;JIAONA XI;LIANGLIANG GENG;QIUHUI HE;WEIGUO LU;YONGZHAO PENG~ 33:CN ~31:202010421103.0 ~32:18/05/2020

2022/12428 ~ Complete ~54:REVERSING COLLISION-AVOIDANCE SYSTEM BASED ON INTERNET OF THINGS FOR VEHICLE ~71:Anhui Science and Technology University, No. 9, Donghua Road, Fucheng Town, Fengyang County, Chuzhou, Anhui Province, 233100, People's Republic of China ~72: LI, Jin;LIU, Chunhui;ZHANG, Wei~ 33:CN ~31:202210255242.X ~32:15/03/2022

2022/12438 ~ Complete ~54:VOCS COMBUSTION CATALYST PREPARED BY RECYCLING TERNARY LITHIUM-ION BATTERIES AND PREPARATION METHOD THEREOF ~71:UNIVERSITY OF CHINESE ACADEMY OF SCIENCES, No. 19 (A) Yuquan Road, Shijingshan District, Beijing, 100049, People's Republic of China ~72: Ganggang LI;Jie CHENG;Zeyu ZHAO;Zhengping HAO;Zhongshen ZHANG~ 33:CN ~31:202111086649.6 ~32:16/09/2021

2022/12442 ~ Complete ~54:ENGINEERED CORONAVIRUS SPIKE (S) PROTEIN AND METHODS OF USE THEREOF ~71:BOARD OF REGENTS, THE UNIVERSITY OF TEXAS SYSTEM, 210 West 7th Street, United States of America;THE TRUSTEES OF DARTMOUTH COLLEGE, 11 Rope Ferry Road, United States of America ~72: BYRNE, Patrick;CHASSE, Andrea;CHOU, Chia-Wei;FINDELSTEIN, Ilya;GOLDSMITH, Jory;HJORTH, Christy;HSIEH, Ching-Lin;JAVANMARDI, Mohammad;JOHNSON, Nicole;KUO, Hung-Che;MAYNARD, Jennifer;MCLELLAN, Jason;SCHAUB, Jeffrey;WANG, Nianshuang;WRAPP, Daniel~ 33:US ~31:63/032,502 ~32:29/05/2020

2022/12452 ~ Complete ~54:ACTIVE COMPOUND COMBINATIONS AND FUNGICIDE COMPOSITIONS COMPRISING THOSE ~71:Bayer Aktiengesellschaft, Kaiser-Wilhelm-Allee 1, LEVERKUSEN 51373, GERMANY, Germany ~72: G&#214;HLICH, Frank;G&#214;RTZ, Andreas;KL&#220;KEN, Agostinos Michael~ 33:EP ~31:20169954.3 ~32:16/04/2020

2022/12460 ~ Complete ~54:GLUCOAMYLASE AND METHODS OF USE THEREOF ~71:DANISCO US INC., 925 Page Mill Road, Palo Alto, California, 94304, United States of America ~72: CHAO HUANG;HELONG

HAO;JING GE;LILIA BABE;XINGXIANG XI;ZHENGHONG ZHANG;ZHONGMEI TANG~ 33:CN  
~31:PCT/CN2020/085393 ~32:17/04/2020

2022/12431 ~ Complete ~54:A READING THERAPY-BASED AUXILIARY READER FOR PATIENTS WITH DEPRESSION ~71:North China University of Science and Technology, No.21, Bohai Avenue, Caofeidian New City, Tangshan, Hebei Province, People's Republic of China ~72: Guo Xiangfei;Pang Nan;Peng Yan~ 33:CN  
~31:202211201861.7 ~32:29/09/2022

2022/12433 ~ Complete ~54:ENERGY STORAGE DEVICE, SYSTEM AND METHOD ~71:STELLENBOSCH UNIVERSITY, Admin B, Victoria Street, Stellenbosch, South Africa ~72: BASSON, Anton Herman~ 33:ZA  
~31:2021/09750 ~32:30/11/2021

2022/12441 ~ Complete ~54:REAR LOWER CONTROL ARM FOR MOTOR VEHICLE ~71:ARCELORMITTAL, 24-26, Boulevard d'Avranches, Luxembourg ~72: Zakariae ABDEDDINE~

2022/12447 ~ Complete ~54:NEW PROCESS OF TREATMENT OF FRUIT AND VEGETABLES ~71:XEDA INTERNATIONAL, Zone Artisanale la Crau, Route Nationale 7, France ~72: SARDO, Alberto~ 33:FR  
~31:2005027 ~32:19/05/2020

2022/12463 ~ Complete ~54:CONSTRUCTION METHOD OF FINE FRACTURE IMAGE RECOGNITION NETWORK BASED ON CROSS-ATTENTION MECHANISM ~71:Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, Union Hospital, Huazhong University of Science and Technology, Jiefang Avenue 1277, Jiangnan Road, Wuhan, Hubei, 430022, People's Republic of China ~72: Fei Gao;Jiyao Zhang;Lin Lu;Mao Xie;Pengran Liu;Songxiang Liu;Tongtong Huo;Yi Xie;Zhe Dong;Zhewei Ye~ 33:CN  
~31:202210126442.5 ~32:10/02/2022

2022/12464 ~ Complete ~54:IMMUNE CELLS WITH ENHANCED FUNCTION ~71:THE COUNCIL OF THE QUEENSLAND INSTITUTE OF MEDICAL RESEARCH, 300 Herston Road, Herston, Australia ~72: KHANNA, Rajiv;LINEBURG, Katie;PANIKKAR, Archana;SMITH, Corey~ 33:AU ~31:2020901217 ~32:17/04/2020

2022/12425 ~ Complete ~54:IN-SITU OBSERVATION METHOD OF WAVE CHARACTERISTICS AND BEACH PROFILE IN COASTAL ENGINEERING FLUME EXPERIMENT ~71:Dalian Maritime University, No.1 Linghai Road,Ganjingzi District, Dalian City, Liaoning Province, People's Republic of China ~72: LIANG Bingchen;WANG Jun;WANG Zhaowei;YANG Bo;YOU Zaijin~

2022/12432 ~ Complete ~54:GOODS AND SERVICE FACILITATION ~71:MARAIS, David, John, UNIT 11, WELGEVONDEN ESTATE, PINE STREET, PAARL, 7646, South Africa ~72: MARAIS, David, John~ 33:ZA  
~31:2021/09751 ~32:30/11/2021

2022/12455 ~ Complete ~54:SYSTEMS AND METHODS FOR CONTROLLING A DISCHARGE RATE OF A HAULING MACHINE ~71:Caterpillar Inc., 100 NE Adams Street, PEORIA 61629-9510, IL, USA, United States of America ~72: GRAMBIHLER, Kenneth F.;LANDES, James W.;NEWTON, Harry P.;TABOR, Joseph E.;VAN DE VEER, Brad R.;WULF, Stefan~ 33:US ~31:16/854,723 ~32:21/04/2020

2022/12416 ~ Provisional ~54:ENERGETIC DISEQUILIBRIUM ~71:ALVARO BERNARDO TAFUR CASTILLO, unit 1, kingsley place, 55 Oxford road, South Africa ~72: ALVARO BERNARDO TAFUR CASTILLO~

2022/12466 ~ Provisional ~54:COFFEE ~71:Stephen L Makhene, 39 Reeders Street, South Africa ~72: Stephen L Makhene~

2022/12418 ~ Provisional ~54:A PROCESS FOR RECOVERING UNCONTAMINATED OIL FROM EMULSIONS ~71:UNIVERSITY OF THE WESTERN CAPE, Robert Sobukwe Road, Bellville, Cape Town, Western Cape, 7535, South Africa ~72: BERNARD JAN BLADERGROEN;BRADLEY ROBERT CERFF;PIETER JANSEN~

2022/12424 ~ Complete ~54:METHOD FOR PREPARING VEIN DETAINED NEEDLE PATCH ~71:Gansu Analysis and Research Center, No. 225, Dingxi South Road, Chengguan District, Lanzhou City, Gansu Province, 730030, People's Republic of China ~72: LIU, Yu;YANG, Jing;ZHANG, Rui~

2022/12426 ~ Complete ~54:WEIGHT DETERMINING METHOD BASED ON MEASURED DISTANCE AND MEASURED ANGLES OF SCANNING POINT CLOUD ~71:Anhui Chaoxing Zhike Geographic Information Service Co., Ltd, 701, Building A, Shuangchuang Center, Taining Street, Shannan New District, Huainan, 232000, People's Republic of China;CNBM Guizhou Surveying and Design Co.,Ltd., 3rd floor, Building 3, Qilong Business Port, No. 211, Yangguan Avenue, Guanshanhu District, Guiyang, 550000, People's Republic of China ~72: Chao LIU;Gui FU;Hao TAN;Mingfei ZHU;Ya FAN~

2022/12445 ~ Complete ~54:PEKING DUCK SEBUM CLN8 GENE UPSTREAM KEY SNP AND BREEDING USE THEREOF ~71:CHINA AGRICULTURAL UNIVERSITY, No.2 Yuanmingyuan West Road, Haidian District, Beijing, 100193, People's Republic of China ~72: HOU, Zhuocheng;YANG, Fangxi;ZHANG, Fan;ZHU, Feng~ 33:CN ~31:202210005141.7 ~32:04/01/2022

2022/12422 ~ Complete ~54:WATERBORNE EPOXY SELF-LEVELING FLOOR COATING AND APPLICATION METHOD THEREOF ~71:Lanzhou City University, No. 11, Jiefang Road, Anning District, Lanzhou City, Gansu Province, 730070, People's Republic of China ~72: MA, Xiaofang;ZHANG, Huifang~

2022/12430 ~ Complete ~54:A DISPLAY DEVICE FOR PUBLICIZING THE READING THERAPY OF PATIENTS WITH DEPRESSION ~71:North China University of Science and Technology, No.21, Bohai Avenue, Caofeidian New City, Tangshan, Hebei Province, People's Republic of China ~72: Guo Xiangfei;Pang Nan;Peng Yan~ 33:CN ~31:202211210008.1 ~32:30/09/2022

2022/12435 ~ Complete ~54:PREVENTION OF INFECTION BY HIGHLY PATHOGENIC VIRUSES USING TOPICAL APPLICATION OF POVIDONE-IODINE ON MUCOUS MEMBRANES ~71:FIREBRICK PHARMA LIMITED, Level 10, 440 Collins Street, Melbourne, Victoria, 3000, Australia ~72: PETER MOLLOY;STEPHEN GOODALL~ 33:AU ~31:2019902006 ~32:10/06/2019;33:AU ~31:2020900489 ~32:20/02/2020

2022/12440 ~ Complete ~54:CONDUCTOR FOR USE WITH A DETONATOR AND DETONATOR ASSEMBLY ~71:BEUKES, Christo Andre, 47 Koomhof Road, Meadowdale, South Africa ~72: BEUKES, Christo Andre~ 33:ZA ~31:2020/04514 ~32:22/07/2020

2022/12443 ~ Complete ~54:SELECTIVE HERBICIDES BASED ON SUBSTITUTED ISOXAZOLIN CARBOXAMIDES AND METCAMIFEN ~71:BAYER AKTIENGESELLSCHAFT, Kaiser-Wilhelm-Allee 1, Leverkusen, Germany ~72: DITTGEN, Jan;GATZWEILER, Elmar;HAAF, Klaus, Bernhard;LORENTZ, Lothar;MENNE, Hubert;PEREZ CATALAN, Julio;ROSINGER, Christopher, Hugh;TRABOLD, Klaus~ 33:EP ~31:20177909.7 ~32:02/06/2020

2022/12453 ~ Complete ~54:ACTIVE COMPOUND COMBINATIONS AND FUNGICIDE COMPOSITIONS COMPRISING THOSE ~71:Bayer Aktiengesellschaft, Kaiser-Wilhelm-Allee 1, LEVERKUSEN 51373, GERMANY, Germany ~72: G&#214;HLICH, Frank;G&#214;RTZ, Andreas;KL&#220;KEN, Agostinos Michael~ 33:EP ~31:20169949.3 ~32:16/04/2020

2022/12457 ~ Complete ~54:INJECTABLE PHARMACEUTICAL COMPOSITIONS AND USES THEREOF ~71:Intervet International B.V., Wim De Koerverstraat 35, BOXMEER 5831 AN, THE NETHERLANDS,

Netherlands ~72: FREEHAUF, Keith;GUERINO, Frank;KULCZAR, Christopher D.;VALLE COLON, Brenda L.~  
33:EP ~31:20175597.2 ~32:20/05/2020

2022/12461 ~ Complete ~54:HEAP LEACHING ~71:ANGLO AMERICAN TECHNICAL & SUSTAINABILITY  
SERVICES LTD, 17 Charterhouse Street, London, EC1N 6RA, United Kingdom;ANGLO CORPORATE  
SERVICES SOUTH AFRICA (PTY) LTD., 44 Main Street, Johannesburg, 2001, South Africa ~72: ANTHONY  
OWEN FILMER;CHRISTOPHER ALAN BILEY;DANIEL JOHN ALEXANDER~ 33:US ~31:63/028,616  
~32:22/05/2020

2022/12451 ~ Complete ~54:HERBICIDAL COMBINATION AND METHOD OF CONTROLLING HERBICIDE  
RESISTANT WEEDS ~71:UPL Corporation Limited, 5th Floor, Newport Building, Louis Pasteur Street, PORT  
LOUIS, MAURITIUS, Mauritius;UPL Europe Ltd., The Centre, 1st Floor, Birchwood Park, WARRINGTON WA3  
6YN, CHESHIRE, UNITED KINGDOM, United Kingdom ~72: SILVA, Ferdinando Marcos Lima~ 33:IN  
~31:202011020608 ~32:15/05/2020

2022/12456 ~ Complete ~54:METHODS FOR CULTURING CELLS ~71:Lyell Immunopharma, Inc., 201 Haskins  
Way, SOUTH SAN FRANCISCO 94080 , CA, USA, United States of America ~72: EIL, Robert  
Langland;RESTIFO, Nicholas P.;VODNALA, Suman Kumar~ 33:US ~31:63/016,907 ~32:28/04/2020

2022/12465 ~ Provisional ~54:CINEMA AND VOD-VIDEO ON DEMAND STREAMING AREA INSIDE  
RESTAURANT ~71:DUMISANI BRIAN MBULI, 98 Kerk Street, South Africa ~72: DUMISANI BRIAN MBULI~

2022/12429 ~ Complete ~54:NOSTOC COMMUNE POLYSACCHARIDE FERMENTED BY LACTOBACILLUS IN  
PROTECTING KIDNEY FROM CADMIUM OXIDATIVE DAMAGE, PREPARATION METHOD AND  
APPLICATION THEREOF ~71:Jilin Agricultural University, No. 2888, Xincheng Street, Nangan District,  
Changchun City, Jilin Province, People's Republic of China ~72: GUAN Lili;HAN Peng;JIN Zhouyu;LI Hailong;LI  
Yuting;LIU Huijing;MA Hongxia;REN Ping;WANG Wanting~

2022/12436 ~ Complete ~54:BODY HEATING EQUIPMENT ~71:BUDRICKS, Francois Johannes, 310 Aristia  
Drive, MOSSELBAY 6506, Western Cape Province, SOUTH AFRICA, South Africa ~72: BUDRICKS, Francois  
Johannes~ 33:ZA ~31:2021/06823 ~32:17/09/2021

2022/12449 ~ Complete ~54:INJECTION TRAINING DEVICE AND METHOD FOR USING SAME ~71:Janssen  
Biotech, Inc., 800/850 Ridgeview Drive, HORSHAM 19044, PA, USA, United States of America ~72: BROWN,  
Keith;MACH, Hung;VESOLE, Steven~ 33:US ~31:63/011,154 ~32:16/04/2020

2022/12459 ~ Complete ~54:FUSED TRICYCLIC KRAS INHIBITORS ~71:Incyte Corporation, 1801 Augustine  
Cut-Off, WILMINGTON 19803, DE, USA, United States of America ~72: POLICARPO, Rocco;QI,  
Chao;SHVARTSBART, Artem;WANG, Xiaozhao;YAO, Wenqing;ZHU, Wenyu~ 33:US ~31:63/011,089  
~32:16/04/2020;33:US ~31:63/146,899 ~32:08/02/2021

- APPLIED ON 2022/11/16 -

2022/12510 ~ Complete ~54:PERITONEAL DIALYSIS SOLUTION ~71:COREQUEST SAGL, Corso Elvezia, 37  
6900 Lugano, Switzerland ~72: ARDUINO ARDUINI;GIOVANNI GAMBARO;MARIO BONOMINI;VALENTINA  
MASOLA~ 33:EP ~31:20175357.1 ~32:19/05/2020;33:US ~31:63/026,936 ~32:19/05/2020

2022/12517 ~ Complete ~54:FIREPROOF POLYMER ADDITIVE, METHOD OF ITS PRODUCTION AND  
APPLICATION ~71:MOVYCHEM, S.R.O., Šv&#225;bska 1433/2, Slovakia ~72: Jiř&#237;  
VYLIMEC;Lubom&#237;r NĚMEČEK;Roman MAGDINA~ 33:SK ~31:SK PP 50023-2020 ~32:05/05/2020;33:SK  
~31:SK PP 50024-2020 ~32:05/05/2020

2022/12520 ~ Complete ~54:FUNGICIDAL COMPOSITIONS ~71:Syngenta Crop Protection AG, Rosentalstrasse 67, BASEL 4058, SWITZERLAND, Switzerland ~72: BLUM, Mathias;BURNS, David;EDMUNDS, Andrew;LAMBERTH, Clemens;MONACO, Mattia Riccardo;RENDINE, Stefano~ 33:EP ~31:20178040.0 ~32:03/06/2020

2022/12527 ~ Complete ~54:COMPACT PASSIVE DECAY HEAT REMOVAL SYSTEM FOR TRANSPORTABLE MICRO-REACTOR APPLICATIONS ~71:Westinghouse Electric Company LLC, 1000 Westinghouse Drive, Suite 141, CRANBERRY TOWNSHIP 16066, PA, USA, United States of America ~72: SWARTZ, Matthew M.;TRUPIANO, Anthony G.;VAN WYK, Jurie J.~ 33:US ~31:63/018,539 ~32:01/05/2020

2022/12530 ~ Complete ~54:DEEP ULTRAVIOLET LIGHT-EMITTING DIODE ~71:SEOUL VIOSYS CO.,LTD., 65-16,Sandan-ro 163 beon-gil, Danwon-gu, Aasan-Si, Gyeonggi-do,, Republic of Korea ~72: KIM, Tae Gun;LEE, Kyu Ho~ 33:KR ~31:10-2019-0004547 ~32:14/01/2019

2022/12470 ~ Complete ~54:COAL-WATER SLURRY ADDITIVE PRODUCTION SYSTEM AND PROCESS ~71:Inner Mongolia University, No.235 West College Road, Hohhot, Inner Mongolia Autonomous Region, 010020, People's Republic of China;Inner Mongolia Zhongtai Intelligent Chemical Technology Co., Ltd., Room 9027, Building A, Tianhe Apartment, Ordos East Street, Saihan District, Hohhot, Inner Mongolia Autonomous Region, 010013, People's Republic of China ~72: CAO, Cheng;HAO, Haigang;JIA, Min;LU, Wenhui;WANG, Zhenyu~

2022/12473 ~ Complete ~54:C-TYPE LECTIN DERIVED FROM EXOSKELETON OF MACROBRACHIUM NIPPONENSE, AND ENCODING GENE AND USE THEREOF ~71:Xinxiang Medical University, No. 601, Jinsui Avenue, Hongqi District,, Xinxiang City,, Henan Province, 453003, People's Republic of China ~72: DU, Juan;GUAN, Liping;HU, Lixia;JIN, Yan;TANG, Yuanyuan~ 33:CN ~31:202211208726.5 ~32:30/09/2022

2022/12476 ~ Complete ~54:PRICE PREDICTION METHOD OF DOWN MATERIALS BASED ON LSTM DEEP LEARNING MODEL ~71:Anhui Polytechnic University, Beijing Middle Road, Wuhu City, Anhui Province, People's Republic of China;Anhui Suli Technology Co., Ltd, No. 16, Yongzhen Road, Wuhu District, China (Anhui) Pilot Free Trade Zone, Jiujiang District, Wuhu City, Anhui Province, People's Republic of China ~72: CAO Xuejiao;LING Xue;PAN Wei;RAN Shuge;SU Zhaowei;WAN Zihao;WANG Peng;WANG Zongqian;WEI Yuhui;WU Kaiming;XIE Wei;YUAN Huifen;ZHANG Zhenlin~

2022/12478 ~ Complete ~54:ENERGY-SAVING UNIT BASED ON FLYWHEEL AND ACCUMULATOR AND ENERGY-SAVING ELECTRO-HYDRAULIC SYSTEM ~71:XUZHOU COLLEGE OF INDUSTRIAL TECHNOLOGY, No.1, Xiangwang Road, Gulou District, Xuzhou, Jiangsu, 221140, People's Republic of China ~72: LI Haiyan;LI Jiansong;MENG Baoxing;SUN Jinhai~

2022/12482 ~ Complete ~54:DRUG-LOADED DNA ORIGAMI RAFT AND PREPARATION METHOD AND USE THEREOF ~71:West China Hospital of Sichuan University, No. 37 Guoxue Lane, Wuhou District, Chengdu City, Sichuan Province, 610041, People's Republic of China ~72: LI, Wei;TONG, Nanwei;ZHENG, Xiaofeng~

2022/12483 ~ Complete ~54:HINGE MODULE AND FOLDABLE ELECTRONIC DEVICE INCLUDING THE SAME ~71:SAMSUNG ELECTRONICS CO., LTD., 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Republic of Korea ~72: CHUNGKEUN YOO;JONGMIN KANG;JONGYOON KIM;JUNGJIN KIM;SUMAN LEE;SUNGKYU HWANG~ 33:KR ~31:10-2019-0019576 ~32:19/02/2019

2022/12488 ~ Complete ~54:PREPARATION METHOD FOR GRANULAR BLACK TEA OF ALBINO-INDUCED YELLOW TEA CULTIVARS ~71:NORTHWEST A&F UNIVERSITY, NO. 3 TAICHENG ROAD, People's Republic of China ~72: LI, Wengang;XIAO, Yao;YAN, Manzhao;YU, Youben;ZHOU, Jie~

2022/12490 ~ Complete ~54:INHIBITION OF UNINTENDED MUTATIONS IN GENE EDITING  
~71:SHANGHAITECH UNIVERSITY, ROOM 207, ADMINISTRATION CENTER, NO. 393 MIDDLE HUAXIA  
ROAD, PUDONG NEW AREA, People's Republic of China ~72: CHEN, JIA;HUANG, XINGXU;WANG,  
LIJIE;YANG, BEI;YANG, LI~ 33:CN ~31:PCT/CN2019/074577 ~32:02/02/2019

2022/12467 ~ Provisional ~54:COMPOUNDS, COMPOSITIONS AND METHODS FOR TREATING, INHIBITING  
OR PREVENTING MALARIA ~71:VIRO-GEN PTY LTD, 313 CLIFF AVENUE, WATERKLOOF RIDGE x2, South  
Africa ~72: SMIT, MICHELLE OLGA PATRICIA GIESTEIRA DA SILVA~

2022/12468 ~ Provisional ~54:COMPOUNDS, COMPOSITIONS AND METHODS FOR TREATING OR  
DELAYING AGING ~71:VIRO-GEN PTY LTD, 313 CLIFF AVENUE, WATERKLOOF RIDGE x2, South Africa ~72:  
SMIT, MICHELLE OLGA PATRICIA GIESTEIRA DA SILVA~

2022/12472 ~ Complete ~54:METHOD FOR MAKING ANTIQUE STUB BONSAI BY DRILLING GRAFTING OF  
THICK BRANCH OF GINKGO BILOBA ~71:Taishan University, No. 525, Dongyue Street,, Tai'an City,,  
Shandong Province, 271000, People's Republic of China ~72: LI, Kai;LI, Shan;LIU, Xia;SHI, Weidong;YAO,  
Qi;YUE, Junsheng;ZHANG, Ting~

2022/12477 ~ Complete ~54:TRUE THREE-DIMENSIONAL GEOMECHANICAL MODEL TEST ANCHOR ROD  
PRE-EMBEDDING DEVICE AND OPERATION METHOD ~71:Henan University of Urban Construction,  
Longxiang Avenue, Xincheng District, Pingdingshan City, Henan Province, 467041, People's Republic of China  
~72: CHU, Yapei;LIU, Heng;LIU, Jiahui;MA, Yabing;REN, Mingyang;SHEN, Tong;WANG, Qingguo;WU,  
Xuyang;ZHAI, Panpan~

2022/12519 ~ Complete ~54:BIOSYNTHETIC GLYCOPROTEIN POPULATIONS ~71:Janssen Biotech, Inc.,  
800/850 Ridgeview Drive, HORSHAM 19044, PA, USA, United States of America ~72: DIEM, Michael;GANESAN,  
Rajkumar;HO, Jason;MCDEVITT, Theresa;OBERMAJER, Natasa;SHEN, Fei;SINGH,  
Sanjaya;VENKATARAMANI, Sathyadevi;ZWOLAK, Adam~ 33:US ~31:63/011,959 ~32:17/04/2020;33:US  
~31:63/011,974 ~32:17/04/2020;33:US ~31:63/011,985 ~32:17/04/2020;33:US ~31:63/011,991  
~32:17/04/2020;33:US ~31:63/011,993 ~32:17/04/2020;33:US ~31:63/030,765 ~32:27/05/2020;33:US  
~31:63/030,787 ~32:27/05/2020;33:US ~31:63/030,808 ~32:27/05/2020;33:US ~31:63/030,823  
~32:27/05/2020;33:US ~31:63/030,829 ~32:27/05/2020;33:US ~31:63/058,332 ~32:29/07/2020;33:US  
~31:63/058,345 ~32:29/07/2020;33:US ~31:63/058,351 ~32:29/07/2020;33:US ~31:63/058,354  
~32:29/07/2020;33:US ~31:63/058,369 ~32:29/07/2020;33:US ~31:63/142,981 ~32:28/01/2021;33:US  
~31:63/142,982 ~32:28/01/2021;33:US ~31:63/142,983 ~32:28/01/2021;33:US ~31:63/142,985  
~32:28/01/2021;33:US ~31:63/142,987 ~32:28/01/2021

2022/12522 ~ Complete ~54:ANTI-OX40 ANTIBODY AND USES THEREOF ~71:Hutchison MediPharma Limited,  
Building 4, 720 Cailun Road, Pilot Free Trade Zone, SHANGHAI 201203, CHINA (P.R.C.), People's Republic of  
China ~72: CAI, Yu;LI, Xiong;QING, Weiguo;SU, Wei-Guo;YANG, Yizhen;ZHOU, Lei~ 33:CN  
~31:202010304381.8 ~32:17/04/2020

2022/12526 ~ Complete ~54:TRIAZINE DERIVATIVE HAVING VIRUS PROPAGATION INHIBITORY EFFECT,  
AND PHARMACEUTICAL COMPOSITION CONTAINING SAME ~71:National University Corporation Hokkaido  
University, Kita 8-jyo Nishi 5-chome, Kita-ku, SAPPORO-SHI 060-0808, HOKKAIDO, JAPAN, Japan;Shionogi  
& Co., Ltd., 1-8, Doshomachi 3-chome, Chuo-ku, OSAKA-SHI 541-0045, OSAKA, JAPAN, Japan ~72:  
ANDO, Shigeru;NAKAHARA, Kenji;SASAKI, Michihito;TACHIBANA, Yuki;TAODA, Yoshiyuki;UEHARA,  
Shota;UNOH, Yuto;YAMATSU, Yukiko~ 33:JP ~31:2021-068672 ~32:14/04/2021;33:JP ~31:2021-105802  
~32:25/06/2021;33:JP ~31:2021-153819 ~32:22/09/2021

2022/12469 ~ Provisional ~54:SYSTEM AND METHOD FOR PHYTOHORMONE EXTRACTION ~71:AFRIKELP (PTY) LTD, 3 ENGINE AVENUE, MONTAGUE GARDENS, CAPE TOWN, 7441, SOUTH AFRICA, South Africa ~72: HART, Nicole;MAJEKE, Bongo;NAICKER, Dunesha~

2022/12474 ~ Complete ~54:PLANT ROOT EXUDATES COLLECTION DEVICE ~71:Henan University, No. 85, Minglun Street, Kaifeng City, Henan Province, 475001, People's Republic of China ~72: JIANG, Li;LI, Xiaowei;TANG, Shengqi;WANG, Chuang;WANG, Yubang;ZHANG, Beibei;ZHANG, Chenlu~ 33:CN ~31:202210996199.2 ~32:19/08/2022

2022/12479 ~ Complete ~54:METHOD FOR PREPARING ACTIVE TOXIN FROM FERMENTATION BROTH OF BACILLUS THURINGIENSIS ~71:SHANXI NORMAL UNIVERSITY, No. 339, Taiyu Road, Xiaodian District, Taiyuan, Shanxi, People's Republic of China ~72: HU Qingping;MAIMAITINIYAZI Rehanguili;YU Xin;ZHANG Lihong;ZHOU Xueyong~

2022/12484 ~ Complete ~54:METHOD FOR EXTRACTING AND COMPLETING MULTI-DAY TRAVEL CHAIN ~71:Shanghai Maritime University, No.1550 Haigang Avenue, Pudong New Area, Shanghai City, People's Republic of China ~72: CHEN Liu;LU Qiongwen;OU Yuanshuai;WANG Tian;XIAO Guangnian;XIAO Yu~ 33:CN ~31:202211196760.5 ~32:29/09/2022

2022/12489 ~ Complete ~54:SLAG-REMAINING GASIFICATION DEPHOSPHORIZATION METHOD AND RECYCLING SMELTING METHOD FOR CONVERTER SLAG ~71:NORTH CHINA UNIVERSITY OF SCIENCE AND TECHNOLOGY, NO. 21 BOHAI AVENUE, People's Republic of China ~72: AI, Liqun;CHEN, Jianjun;HAO, Huaqiang;LI, Chenxiao;WANG, Shuhuan;XUE, Yuekai;ZHAO, Dingguo;ZHOU, Chaogang~

2022/12491 ~ Complete ~54:PREPARATION METHOD OF TRANSITION METAL CARBONITRIDE ~71:Henan University of Urban Construction, Longxiang Avenue, Xincheng District, Pingdingshan City, Henan Province, 467041, People's Republic of China ~72: BAO, Yun;WANG, Jina;WANG, Yuan;WU, Xuyang;XIE, Zhenyu;XU, Kaidong~

2022/12495 ~ Complete ~54:A METHOD FOR CALOTROPIS PROCERA FIBRE REINFORCEMENT FOR FLEXURAL STRENGTH ENHANCEMENT OF CONCRETE BEAMS ~71:RAO, Vedula Venkata Naga Prabhakara, PROFESSOR, CIVIL ENGINEERING DEPARTMENT, VELGAPUDI RAMAKRISHNA SIDDHARTHA ENGINEERING, COLLEGE, KANURU, VIJAYAWADA, ANDHRA PRADESH, 520010, India ~72: RAO, Vedula Venkata Naga Prabhakara~

2022/12498 ~ Complete ~54:A PREPARATION METHOD OF FRUIT-FLAVORED GRAPE-MULBERRY HEALTHCARE WINE ~71:SHANDONG ACADEMY OF GRAPE, No. 1-27 Da'nán Road, Jinan City, Shandong Province, 250014, People's Republic of China ~72: GAO, Deyan;GUO, Yayun;HE, Yi;LIANG, Hongmin;SHI, Hongmei;WANG, Zhe~

2022/12506 ~ Complete ~54:PREPARATION METHOD FOR AROMATIC ETHER COMPOUND ~71:ASIERIS PHARMACEUTICALS (SHANGHAI) CO., LTD., 12F, Building 56, No.1000 Jinhai Road, City Of Elite, Pudong, Shanghai 201203, People's Republic of China;JIANGSU YAHONG MEDITECH CO., LTD., D-1009, New Drug Innovation Base, No. 1, Yaocheng Avenue, CMC Taizhou, Jiangsu, 225316, People's Republic of China ~72: CHEN ZHOU;LIANG WU;YIJUN DENG~ 33:CN ~31:202010573569.2 ~32:22/06/2020

2022/12516 ~ Complete ~54:ENERGY SOURCE ~71:WITKOWITZ ATOMICA A.S., Vaclavske namesti 772/2, 11000 Praha 1, Czech Republic ~72: Bronislav KULIKOV;David CHROBOK;Frantisek CERMAK;Martin GROCH;Martin ULCAK~ 33:CZ ~31:2020-253 ~32:07/05/2020

2022/12528 ~ Complete ~54:SELECTION BY ESSENTIAL-GENE KNOCK-IN ~71:BlueRock Therapeutics LP, One Broadway, Floor 15, CAMBRIDGE 02142, MA, USA, United States of America;Editas Medicine, Inc., 11 Hurley Street, CAMBRIDGE 02141, MA, USA, United States of America ~72: MARGULIES, Carrie Marie;MCAULIFFE, Conor Brian;MONETTI, Claudio;SOH, Chew-Li;TOMISHIMA, Mark James;TONGE, Peter;ZURIS, John Anthony~ 33:US ~31:63/019,950 ~32:04/05/2020

2022/12492 ~ Complete ~54:INFORMATION MANAGEMENT SYSTEM FOR COLLEGE STUDENTS' INNOVATION AND ENTREPRENEURSHIP ~71:TANGSHAN UNIVERSITY, No. 11 University West Road,hi-tech Zone, Tangshan, Hebei Province, People's Republic of China ~72: MENG Qingying;SUN Liyan;ZHAO Nan~

2022/12494 ~ Complete ~54:A THREE-DIMENSIONAL CULTIVATION METHOD OF CAPSICUM ANNUUM INTERPLANTING HIGH-STALK CROPS ~71:Dezhou Academy of Agricultural Sciences, No. 926, Dexing Middle Avenue, Decheng District, Dezhou City, Shandong Province, People's Republic of China ~72: Chang Peipei;Duan Qingqing;Han Meimei;Li Hua;Li Tengfei;Wang Jingjing;Zhang Luqi;Zhang Shaoli;Zhang Zikun~ 33:CN ~31:202210325657.X ~32:30/03/2022

2022/12499 ~ Complete ~54:A METHOD FOR ANALYZING FACTORS THAT AFFECT EMPLOYEES' FOR TURNOVER INTENTION ~71:Dr Aditi Sharma, Associate Professor (Chairperson) Department of Commerce Indira Gandhi University, Meerpur, Rewari, Haryana, 122502, India;Dr. Danish Iqbal Raina, Assistant Professor, School of Management Studies, Baba Ghulam Shah Badshah University, Rajouri, Jammu and Kashmir, 185234, India;Dr. Savita, Assistant Professor, Bhagini Nivedita College, Delhi University, New Delhi, Delhi, 110043, India;Dr. Seema Mahlawat, Associate Professor (Chairperson) Department of Commerce, Gurugram university, Gurugram, Haryana, 122003, India;Mr. Manjeet Sharma, Research Scholar, Department of Commerce Indira Gandhi University, Meerpur, Rewari, Haryana, 122502, India;Ms. Gopali Dayal, Research Scholar, School of Business Management and Liberal Arts Shoolini University, Solan, Himachal Pradesh, 173229, India;Ms. Kiran Chawla, Research Scholar, Department of Business Management and Commerce, IEC University, Baddi, Solan, Himachal Pradesh, 174103, India;Prof.(Dr.) Divya J Thakur, Professor, Department of Business Management and Commerce IEC University, Baddi, Solan, Himachal Pradesh, 174103, India ~72: Dr Aditi Sharma;Dr. Danish Iqbal Raina;Dr. Savita;Dr. Seema Mahlawat;Mr. Manjeet Sharma;Ms. Gopali Dayal;Ms. Kiran Chawla;Prof.(Dr.) Divya J Thakur~

2022/12501 ~ Complete ~54:ANTI-VIRAL THERAPY ~71:NOVABIOTICS LIMITED, Silverburn Crescent, United Kingdom ~72: FRASER-PITT, Douglas;O&#39;NEIL, Deborah~ 33:GB ~31:2007768.1 ~32:25/05/2020;33:GB ~31:2012298.2 ~32:07/08/2020;33:GB ~31:2102106.8 ~32:15/02/2021

2022/12503 ~ Complete ~54:SUPRASTRUCTURE COMPRISING MODIFIED INFLUENZA HEMAGGLUTININ WITH REDUCED INTERACTION WITH SIALIC ACID ~71:HENDIN, Hilary, E., MCGILL UNIVERSITY, 845 SHERBROOKE STREET WEST, JAMES BUILDING, MONTREAL, QUEBEC H3A 0G4, CANADA, Canada;MEDICAGO INC., 600 - 1020, ROUTE DE L&#39;EGLISE, QUEBEC, QU&#201;BEC, G1V 3V9, CANADA, Canada;WARD, Brian, J, MCGILL UNIVERSITY, 845 SHERBROOKE STREET WEST, JAMES BUILDING, MONTREAL, QUEBEC H3A 0G4, CANADA, Canada ~72: BEDARD, Mikael;D&#39;AOUST, Marc-Andre;HENDIN, Hilary, E.;LANDRY, Nathalie;LAVOIE, Pierre-Olivier;SAXENA, Pooja;WARD, Brian, J~ 33:US ~31:63/014,008 ~32:22/04/2020

2022/12505 ~ Complete ~54:ANTIMICROBIAL MATERIAL ~71:PARAVIR LIMITED, Simpsons Farm, Pentlow, United Kingdom ~72: PATCHETT, Andrew;PATCHETT, Kim~ 33:GB ~31:2007392.0 ~32:19/05/2020

2022/12508 ~ Complete ~54:SLIDE GATE ON THE SPOUT OF A METALLURGICAL VESSEL ~71:REFRACTORY INTELLECTUAL PROPERTY GMBH & CO. KG, Wienerbergstrasse 11, 1100, Wien, Austria ~72: BEAT HEINRICH;JEAN-DANIEL COUSIN~ 33:EP ~31:20186977.3 ~32:21/07/2020



2022/12515 ~ Complete ~54:AQUEOUS PHARMACEUTICAL COMPOSITION OF LEVILIMAB ~71:JOINT STOCK COMPANY "BIOCAD", Liter A, bld. 34, Svyazi Street, Russian Federation ~72: IAKOVLEV, Aleksandr Olegovich;LINKOVA, Iuliia Nikolaevna;LOMKOVA, Ekaterina Aleksandrovna;LUTCKII, Anton Aleksandrovich;MOROZOV, Dmitry Valentinovich;TOLSTYKH, Dmitrii Aleksandrovich;TSUKUR, Alina Aleksandrovna;ZINKINA-ORIKHAN, Arina Valerevna~ 33:RU ~31:2020118737 ~32:05/06/2020

2022/12521 ~ Complete ~54:ANTI-OX40 ANTIBODY AND USES THEREOF ~71:Hutchison MediPharma Limited, Building 4, 720 Cailun Road, Pilot Free Trade Zone, SHANGHAI 201203, CHINA (P.R.C.), People's Republic of China ~72: CAI, Yu;LI, Xiong;QING, Weiguo;SU, Wei-Guo;YANG, Yizhen;ZHOU, Lei~ 33:CN ~31:202010304381.8 ~32:17/04/2020

2022/12523 ~ Complete ~54:SYSTEM AND METHOD FOR MULTI-PHASE OPTIMIZATION OF HAUL TRUCK DISPATCH ~71:Caterpillar Inc., 100 NE Adams Street, PEORIA 61629-9510, IL, USA, United States of America ~72: BROCKHURST, Russell A.;GATES, Kevin E.~ 33:US ~31:16/855,220 ~32:22/04/2020

2022/12481 ~ Complete ~54:ABNORMAL DETECTION METHOD OF SWIMMING POOL DROWNING BEHAVIOR BASED ON IMPROVED GAN ~71:SOUTHWEST PETROLEUM UNIVERSITY, No.8,Xindu Avenue, Xindu District, Chengdu City, Sichuan Province, People's Republic of China ~72: GU Yaxiong;LEI Jin;ZHONG Wen~

2022/12485 ~ Complete ~54:A DOUBLE-LAYER HOLLOW CAPSULE AND A MULTILAYER ENTERIC HOLLOW CAPSULE ~71:Anhui Huangshan capsule co., ltd, Bai Di Hong Chuan, Jingde County, Xuancheng City, Anhui Province, People's Republic of China ~72: Liu Guopan;Liu Songlin;Wei Yaoling;Zhang Zhiqiang~

2022/12486 ~ Complete ~54:A SYSTEM AND METHOD TO IMPLEMENT DATA HIDING FOR QUALITY ACCESS CONTROL OF GRAYSCALE IMAGE ~71:BRAINWARE UNIVERSITY, 398, Ramkrishnapur Road, Barasat, Kolkata-700125, India;Calcutta Institute of Technology, Banitabla, Uluberia, Howrah-711316, India;Dr. Amit Phadikar, Dept. of Information Technology, MCKV Institute of Engineering, 243 G.T. Road (North), Liluah, Howrah – 711204, India;Dr. Angshuman Majumdar, Department of Electronics and Communication Engineering, Brainware University, Barasat, Kolkata-700125, West Bengal, India;Dr. Himadri Mandal, Calcutta Institute of Technology, Banitabla, Uluberia, Howrah, Pin:711316, West Bengal, India;Dr. Tien-Lung Chiu, R70725, Bd.7, No.135, Yuan-Tung Rd., Chungli Dist., Taoyuang City, Taiwan, Province of China;Dr.Subhalaxmi Chakraborty, ANNAPURNA NILOYA, 1st Floor, Flat No.: 7, 17, Dr. S.K.Deb Street, Konnagar, Hooghly, Pin: 712235, WB, India;MCKV Institute of Engineering, MCKV Institute of Engineering, 243 G. T. Road (North), Liluah, Howrah – 711204, India;Mr. Aniruddha Ghosh, ANNAPURNA NILOYA, 1st Floor, Flat No.: 7, 17, Dr. S.K.Deb Street, Konnagar, Hooghly, Pin: 712235, WB, India;Priyanath Mahanti, Dept. of Information Technology, MCKV Institute of Engineering, 243 G. T. Road (North), Liluah, Howrah – 711204, India;Ramkrishna Rakshit, Department of Electronics and Communication Engineering, Dr.B.C.Roy Engineering College, Durgapur, Jemua road, Fuljhore, Durgapur. Pin.713206, India ~72: Dr. Amit Phadikar;Dr. Himadri Mandal;Dr. Tien-Lung Chiu~

2022/12487 ~ Complete ~54:UNDERGROUND MUSHROOM PLANTING GREENHOUSE ~71:SUN, Zihua, BUILDING 35, NO. 31 COMMUNITY, XIANGYANG STREET, People's Republic of China;XINJIANG TAIYUAN WATER TECHNOLOGY CO., LTD., NANBA ROAD, People's Republic of China ~72: ARKEN, Yasen;BAI, Haili;GUO, Yan;HE, Jun;MA, Jun;MA, Yanping;SUN, Zihua;WUMEIER, Yusin;YAN, Xixin~ 33:CN ~31:202111326797.0 ~32:10/11/2021

2022/12496 ~ Complete ~54:A SYSTEM TO FIND OPTIMUM MODULATION SCHEME IN WIRELESS RECHARGEABLE SENSOR NETWORKS AND A METHOD THEREOF ~71:Anupriya Kaushal, Department of Computer Science and Engineering, I.K. Gujral Punjab Technical University, Main Campus, Kapurthala, India;Dr. Harmeet Singh, Department of Computer Science and Applications, Sant Baba Bhag Singh University, Jalandhar,

Punjab, India;Dr. Manju Bala, Department of Computer Science and Engineering, Khalsa college of engineering and technology, Amritsar, India;Dr. Mohit Angurala, Department of Computer Science and Engineering, Khalsa college of engineering and technology, Amritsar, India;Dr. Nipun Chhabra, Department of Computer Science and Applications, Sant Baba Bhag Singh University, Jalandhar, Punjab, India;Khalsa College of Engineering and Technology, Ranjit Avenue, C-Block, Amritsar, Punjab, 143001, India ~72: Anupriya Kaushal;Dr. Harmeet Singh;Dr. Manju Bala;Dr. Mohit Angurala;Dr. Nipun Chhabra~

2022/12511 ~ Complete ~54:ELECTRODE FOR ELECTROCHEMICAL EVOLUTION OF HYDROGEN  
~71:INDUSTRIE DE NORA S.P.A., Via Bistolfi 35, 20134, Milan, Italy ~72: ALICE CALDERARA;STEFANIA MORA~ 33:IT ~31:10202000015250 ~32:25/06/2020

2022/12514 ~ Complete ~54:LOCK AND SWITCH CONTROLLER SYSTEM, LOCK AND SWITCH DEVICE WITH OFFLINE RESPONSIVENESS, LOCK AND SWITCH CONTROLLER SYSTEM WITH FLEXIBLE COMMANDS ~71:KUSHNIR, Marat, 1136 Centre street, Unit 3, Suite 126, Canada ~72: KUSHNIR, Marat~ 33:US ~31:17/321,942 ~32:17/05/2021;33:US ~31:17/673,069 ~32:16/02/2022

2022/12518 ~ Complete ~54:CRYSTALLINE FORMS OF 4-[(7-CHLORO-2-METHOXYBENZO[B][1,5]NAPHTHYRIDIN-10-YL)AMINO]-2,6-BIS(PYRROLIDIN-1-YLMETHYL)PHENOL AND SALTS THEREOF ~71:Merck Patent GmbH, Frankfurter Strasse 250, DARMSTADT 64293, GERMANY, Germany ~72: BECKER, Axel;GRUIA, Delia-Maria~ 33:EP ~31:20170197.6 ~32:17/04/2020

2022/12524 ~ Complete ~54:REDUCED GLYCOL FATTY ALCOHOL ETHOXYLATES AND REDUCED GLYCOL SULFATE ETHOXYLATED|SURFACTANTS ~71:The Procter & Gamble Company, One Procter & Gamble Plaza, CINCINNATI 45202, OH, USA, United States of America ~72: SMITH III, Edward Dewey~ 33:US ~31:63/042,326 ~32:22/06/2020;33:US ~31:63/042,337 ~32:22/06/2020;33:US ~31:63/042,347 ~32:22/06/2020

2022/12529 ~ Complete ~54:REINFORCED ANTI-SEISMIC STRUCTURE SUITABLE FOR URBAN UNDERGROUND COMPREHENSIVE PIPE GALLERY ~71:HEBEI GEO UNIVERSITY, 136 Huaian East Road, Yuhua District, Shijiazhuang, Hebei, 050031, People's Republic of China ~72: CAO, Xiuling;CHEN, Song;GAO, Yunsheng;LI, Qingyao;NIU, Jianguang;WANG, Junfeng;WANG, Xingkuo;XU, Haiyan;XU, Hongrui;YUAN, Ying;YUE, Muci;ZHANG, Siru~ 33:CN ~31:202111465951.2 ~32:03/12/2021

2022/12493 ~ Complete ~54:EVALUATION SYSTEM OF MENTAL HEALTH FOR COLLEGE STUDENTS ~71:TANGSHAN UNIVERSITY, No. 11 University West Road,hi-tech Zone, Tangshan, Hebei Province, People's Republic of China ~72: MENG Qingying;SUN Liyan;ZHAO Nan~

2022/12497 ~ Complete ~54:A SEED GERMINATION PROMOTER SUITABLE FOR VEGETATION RESTORATION IN RARE EARTH TAILINGS, A PREPARATION METHOD AND A USE METHOD ~71:NANCHANG INSTITUTE OF TECHNOLOGY, No. 289 Tianxiang Avenue, High-tech District, Nanchang City, Jiangxi Province, 330099, People's Republic of China ~72: CHEN, Zhiqi;GONG, Rongxin;LU, Xianghui;YANG, Baocheng;ZHANG, Haina~

2022/12500 ~ Complete ~54:METHOD OF USING A GIP/GLP1 CO-AGONIST FOR DIABETES ~71:Eli Lilly and Company, Lilly Corporate Center, INDIANAPOLIS 46285, IN, USA, United States of America ~72: ALSINA-FERNANDEZ, Jorge;CABRERA, Over;COSKUN, Tamer~ 33:US ~31:62/702,180 ~32:23/07/2018;33:US ~31:62/730,562 ~32:13/09/2018;33:US ~31:62/740,640 ~32:03/10/2018

2022/12502 ~ Complete ~54:PHARMACEUTICAL COMPOSITION COMPRISING L-TRIIODOTHYRONINE (T3) FOR USE IN THE TREATMENT OF TISSUE HYPOXIA AND SEPSIS ~71:TSETI, Ioulia, 13 PAVLOU MELA STREET, 145 61 KIFISSIA ATTICA, GREECE, Greece;UNI-PHARMA KLEON TSETIS PHARMACEUTICAL

LABORATORIES S.A., 14TH KLM, NATIONAL ROAD 1, GR-145 64 KIFISSIA, ATTICA, GREECE, Greece ~72: MOUROUZIS, Iordanis; PANTOS, Constantinos~ 33:GR ~31:20200100200 ~32:21/04/2020;33:GR ~31:20200100695 ~32:23/11/2020;33:GR ~31:20210100216 ~32:29/03/2021

2022/12504 ~ Complete ~54: MULTI-EPI TOPE VACCINE FOR THE TREATMENT OF ALZHEIMER'S DISEASE ~71: OTHAIR PROTHENA LIMITED, 77 Sir John Rogerson's Quay Block C, Grand Canal Docklands, Ireland ~72: BARBOUR, Robin; KINNEY, Gene; NIJJAR, Tarlochan S.; ZAGO, Wagner~ 33:US ~31:63/027,150 ~32:19/05/2020;33:US ~31:63/062,903 ~32:07/08/2020;33:US ~31:63/140,917 ~32:24/01/2021

2022/12507 ~ Complete ~54: WIND TURBINE GENERATOR SYSTEM, AND CONTROL METHOD, CONTROLLER AND CONTROL SYSTEM THEREFOR ~71: XINJIANG GOLDWIND SCIENCE & TECHNOLOGY CO., LTD., No. 107 Shanghai Road, Economic & Technological Development Zone, Urumqi, Xinjiang, 830026, People's Republic of China ~72: JIE ZHOU; WAQAR ALI; WEIDONG HAO; XUEMING CAO~ 33:CN ~31:202010606858.8 ~32:29/06/2020

2022/12471 ~ Complete ~54: RAPID SURVIVAL METHOD FOR GRAFTING OF THICK BRANCH OF ACER TRUNCATUM FOR LANDSCAPE ENGINEERING ~71: TaiShan University, No. 525, Dongyue Street, Tai'an, Shandong, 271000, People's Republic of China ~72: JIN, Jie; LI, Lei; LIU, Changyou; LIU, Min; YAO, Qi; ZHANG, Dameng; ZHANG, Ting~

2022/12475 ~ Complete ~54: MULTIFORM ARTIFICIAL INTELLIGENCE FLEXIBLE EXOSKELETON CAPABLE OF EMPOWERING DURING PREGNANCY ~71: Pufengsuo Industry (Shanghai) Co., Ltd., No. 10, Lane 658, Jinzhong Road, Changning District, Shanghai, People's Republic of China ~72: FU Yuli; SHI Hao; Virginia Trigo; WANG Xiyuan; ZHAO Enmeng; ZHOU Shuoni~

2022/12480 ~ Complete ~54: MOBILE INTELLIGENT HANDLING AND PALLETIZING ROBOT DEVICE AND APPLICATION METHOD THEREOF ~71: TANGSHAN UNIVERSITY, No. 11 University West Road, hi-tech Zone, Tangshan, Hebei Province, People's Republic of China ~72: DAI Yan; TIAN Lixin; YUAN Na~

2022/12509 ~ Complete ~54: MAIZE EVENT DP-915635-4 AND METHODS FOR DETECTION THEREOF ~71: PIONEER HI-BRED INTERNATIONAL, INC., 7100 N W 62nd Avenue, P.O. Box 1014, Johnston, Iowa, 50131-1014, United States of America ~72: ALBERT L LU; BIN CONG; HEATHER MARIE CHRISTENSEN; JEFFREY KLEVER; KRISTEN DENISE RINEHART KREBS; LUCIANO M JAUREGUY; MARGIT C ROSS; MATTHEW CURTIS HARMON; VIRGINIA CRANE~ 33:US ~31:63/033,994 ~32:03/06/2020;33:US ~31:63/116,192 ~32:20/11/2020

2022/12512 ~ Complete ~54: HAIR CONDITIONING COMPOSITION FOR IMPROVED DEPOSITION ~71: UNILEVER GLOBAL IP LIMITED, Port Sunlight, Wirral, Merseyside, CH62 4ZD, United Kingdom ~72: CESAR ERNESTO MENDOZA FERNANDEZ; MICHAEL JAMES COOKE; PAUL DAMIEN PRICE; RICHARD JONATHAN BARFOOT~ 33:EP ~31:20181255.9 ~32:19/06/2020

2022/12513 ~ Complete ~54: WROUGHTABLE, CHROMIUM-BEARING, COBALT-BASED ALLOYS WITH IMPROVED RESISTANCE TO GALLING AND CHLORIDE-INDUCED CREVICE ATTACK ~71: HAYNES INTERNATIONAL, INC., 1020 West Park Avenue, Post Office Box 9013, Kokomo, Indiana, 46904-9013, United States of America ~72: PAUL CROOK; RAMANATHAN KRISHNAMURTHY~ 33:US ~31:63/022,892 ~32:11/05/2020

2022/12525 ~ Complete ~54: DEVICES, SYSTEMS, AND METHODS FOR DELIVERING FLUID TO THE INNER EAR ~71: Akouos, Inc., 645 Summer Street, Suite 200, BOSTON 02210, MA, USA, United States of America ~72: CONNELLY, John; MCKENNA, Michael~ 33:US ~31:63/030,519 ~32:27/05/2020;33:US ~31:63/126,270 ~32:16/12/2020;33:US ~31:63/151,610 ~32:19/02/2021

- APPLIED ON 2022/11/17 -

2022/12555 ~ Complete ~54:ADJUVANT FOR AGROCHEMICALS ~71:SZEWCZYK, Roman, SZEWCZYK, Roman, Roman Szewczyk Zaklad Produkcyjno-handlowy, "AGROMIX", ul. Mokra 7, 32-005 Niepolomice, Poland ~72: SZEWCZYK, Roman;WOS, Kazimierz;WOZNICA, Zenon~ 33:PL ~31:P.433649 ~32:23/04/2020

2022/12563 ~ Complete ~54:PRALSETINIB PHARMACEUTICAL COMPOSITIONS ~71:BLUEPRINT MEDICINES CORPORATION, 45 Sidney Street, Cambridge, Massachusetts, 02139, United States of America ~72: AIMEE J SPENCELEY;CSANAD M VARGA;DEBRA L MAZAIK;DIPAK GORDHAN;GORDON D WILKIE;IAN A BARKER;JOSHUA WAETZIG;KIMBERLY JEAN MILLER;LAUREN MACEACHERN;LIA ROGAL;ROBERT J HARRIS;SHELLIE RIGBY-SINGLETON~ 33:US ~31:63/032,030 ~32:29/05/2020

2022/12565 ~ Complete ~54:BLASTING SYSTEM ~71:DETNET SOUTH AFRICA (PTY) LTD, AECI Place, The Woodlands, Woodlands Drive, Woodmead, South Africa ~72: SCHLENTER, Craig;YATES, Marinus~ 33:NA ~31:NA/P/2020/0014 ~32:15/05/2020

2022/12573 ~ Complete ~54:AEROSOL PROVISION DEVICE ~71:eSmoking Institute sp. z o.o., ul. Rubiez 46, POZNAK 61-612, POLAND, Poland ~72: JAK&#211;BCZYK, Adrian;KOS, Marcin;KOZLOWSKI, Marcin;MACIAGOWSKI, Maciej;MILEWSKI, Lukasz;SZEINIG, Krzysztof;SZYKOWNY, Andrzej;ZIELAZEK, Pawel~ 33:PL ~31:P.434276 ~32:10/06/2020

2022/12541 ~ Complete ~54:MONITORING AN OPERATING CYCLE OF HEAVY EQUIPMENT ~71:Motion Metrics International Corp., 202-2389 Health Sciences Mall, VANCOUVER V6T 1Z3, BRITISH COLUMBIA, CANADA, Canada ~72: AGRAWAL, Vibudh;DEZAKI, Fatemeh Taheri;NOURANIAN, Saman;PESTEHEI, Seyed Mehran;SAMADI ARAKHSH BAHAR, Samareh;TAFAZOLI BILANDI, Shahram;TANG, Muzhi;TURNER, Glen Richard Floyd~ 33:US ~31:17/986,891 ~32:15/11/2022

2022/12545 ~ Complete ~54:MEDICAL CONNECTORS WITH FLUID-RESISTANT MATING INTERFACES ~71:ICU MEDICAL, INC., 951 Calle Amanecer, San Clemente, United States of America ~72: FANGROW, Thomas F.~ 33:US ~31:61/533,138 ~32:09/09/2011;33:US ~31:61/557,793 ~32:09/11/2011;33:US ~31:61/579,582 ~32:22/12/2011;33:US ~31:61/607,429 ~32:06/03/2012;33:US ~31:61/692,516 ~32:23/08/2012

2022/12554 ~ Complete ~54:DYNAMIC FIN ALIGNMENT SYSTEM ~71:MENDEZ, Zarate Yuri, P.O. Box 74087, R.P.O. Beechwood, Ottawa, Canada ~72: MENDEZ, Zarate Yuri~ 33:WO ~31:PCT / CA2020 / 051751 ~32:18/12/2020

2022/12556 ~ Complete ~54:ACCUMULATOR ~71:UGT GROUP PTY LTD, 407 MORRISON ROAD, SWAN VIEW, WESTERN AUSTRALIA 6056, AUSTRALIA, Australia ~72: SCOTT, Max~ 33:AU ~31:2020900155 ~32:21/01/2020

2022/12562 ~ Complete ~54:IMPLANTABLE PROSTHESIS ~71:DAVOL INC., 100 Crossings Boulevard Warwick, Rhode Island, 02886, United States of America ~72: AUGUSTUS FELIX;CUIXIANG QU SPINNEY;KOREL CUDMORE;TALIA D&#39;AMBRUOSO~ 33:US ~31:16/907,100 ~32:19/06/2020

2022/12566 ~ Complete ~54:A SAFETY ARRANGEMENT FOR A WIRELESS BLASTING SYSTEM ~71:DETNET SOUTH AFRICA (PTY) LTD, AECI Place, The Woodlands, Woodlands Drive, Woodmead, South Africa ~72: LIEBENBERG, Abraham Johannes;MEYER, Tielman Christiaan;MULLER, Elmar Lennox~ 33:NA ~31:NA/P/2020/0011 ~32:29/04/2020

2022/12571 ~ Complete ~54:IRON-BEARING ELECTRODES FOR ELECTROCHEMICAL CELLS ~71:Form Energy, Inc., 30 Dane Street, SOMERVILLE 02143, MA, USA, United States of America ~72: CHIANG, Yet-Ming;GIBSON, Michael Andrew;WOODFORD, William Henry~ 33:US ~31:63/021,610 ~32:07/05/2020

2022/12576 ~ Complete ~54:A COMPOSITION COMPRISING HP-HMG FOR USE IN TREATING INFERTILITY ~71:Ferring B.V., Polaris Avenue 144, HOOFFDORP 2132 JX, THE NETHERLANDS, Netherlands ~72: FOSTER, Eric;HEISER, Patrick~ 33:US ~31:63/032,430 ~32:29/05/2020;33:EP ~31:20182800.1 ~32:29/06/2020

2022/12532 ~ Provisional ~54:FENCE POST ~71:COCHRANE STEEL PRODUCTS (PTY) LTD, 125 Fitter Road, South Africa ~72: COCHRANE, Richard Bruce~

2022/12537 ~ Complete ~54:LAYERED RICE BREEDING RACK ~71:Jilin Agricultural Science and Technology University, 77 Hanlin Road, Jilin Economic and Technological Development Zone, Jilin City, Jilin Province, People's Republic of China ~72: LIU Guangna;YANG Xiangbo~

2022/12539 ~ Complete ~54:A COSMETOLOGY METHOD FOR FACIAL ANTI-AGING AND CONTOURING ~71:Baofeng Xu, No. 29, Puchang Road, Shenbei New District, Liaobei Hospital of Traditional Chinese Medicine, Shenyang, Liaoning, People's Republic of China ~72: Baofeng Xu~

2022/12542 ~ Complete ~54:ANTHROPOMETRIC GROWTH APPARATUS ~71:STELLENBOSCH UNIVERSITY, Admin B, Victoria Street, South Africa ~72: McCLUNAN, Klara;VAN NIEKERK, Evette~ 33:ZA ~31:2021/09135 ~32:17/11/2021

2022/12547 ~ Complete ~54:APPLICATION OF CIRCULAR RNA AS MOLECULAR MARKER FOR POOR PROGNOSIS OF GASTRIC CANCER, AND ASSAY KIT AND PRIMER ~71:ZHENJIANG FIRST PEOPLE'S HOSPITAL, No. 8, Dianli Road, Zhenjiang City, Jiangsu Province, 212002, People's Republic of China ~72: Baoping ZHU;Pei WANG;Wei XU;Xiaoyan WANG;Xu GAO;Yakun LANG;Yimeng SUN;Yu FAN;Yu JIE~

2022/12551 ~ Complete ~54:REACTOR AND METHOD FOR CARRYING OUT A CHEMICAL REACTION ~71:BASF SE, Carl-Bosch-Str. 38, Germany;LINDE GMBH, Dr.-Carl-von-Linde-Strasse 6-14, Germany ~72: AENGENHEISTER, Jens;DELHOMME-NEUDECKER, Clara;FEIGL, J~;HOFST~;TTER, Martin;JACOB, Reiner;JENNE, Eric;K~;HN, Heinz-J~;KIESE, Georg;KOCHEND~;RFER, Kiara Aenne;LAIB, Heinrich;REISER, Peter;SHUSTOV, Andrey;STEGEMANN, Robert;WELLENHOFER, Anton;ZELLHUBER, Mathieu;ZIEGLER, Christian~ 33:EP ~31:20171182.7 ~32:23/04/2020

2022/12559 ~ Complete ~54:GPER PROTEOLYTIC TARGETING CHIMERAS ~71:UNIVERSITY OF IOWA RESEARCH FOUNDATION, 112 N Capitol Street, 6 Gilmore Hall, Iowa City, Iowa, 52242-5500, United States of America ~72: ALIASGER K SALEM;ANH S LU;EDWARD J FILARDO;MILAD ROUHIMOGHADAM~ 33:US ~31:63/014,410 ~32:23/04/2020;33:US ~31:63/144,783 ~32:02/02/2021

2022/12567 ~ Complete ~54:GUARD ASSEMBLY ~71:Caterpillar Inc., 100 NE Adams Street, PEORIA 61629-9510, IL, USA, United States of America ~72: ARUL, Samuel J. W.~ 33:US ~31:16/856,516 ~32:23/04/2020

2022/12533 ~ Provisional ~54:LIS-TRP SACUBITRIL CRYSTALLIZATION ~71:ANGIODESIGN (UK) LIMITED, Manor Stables, Corsley, Warminster, Wiltshire, BA12 7QE, United Kingdom ~72: EDWARD DAVID STURROCK;MINO RODOLFO CAIRA;TERENCE JAMES NOONAN~

2022/12534 ~ Provisional ~54:SYSTEM FOR FIBRE INTERNET ACCESS ROLLOUT ~71:ACORN HOLDINGS (PTY) LTD, 8 BIRD STREET, STELLENBOSCH, 7600, SOUTH AFRICA, South Africa ~72: KNOTT-CRAIG, Alan, Thomas~

2022/12536 ~ Complete ~54:DEVICE AND METHOD FOR ATOMIC EMISSION SPECTRUM AND MASS SPECTRUM ANALYSIS OF SHARED INDUCTIVELY COUPLED PLASMA LIGHT SOURCE ~71:Guangzhou Institute of Geochemistry, Chinese Academy of Sciences, 511 Kehua Street, Tianhe District, Guangzhou, Guangdong, People's Republic of China ~72: GONG Gelian~

2022/12544 ~ Complete ~54:SYSTEMS AND METHODS FOR SECURE PAYMENTS VIA AN ALTERNATIVE COMMUNICATION PROTOCOL ~71:GOOGLE, LLC, 1600 Amphitheatre Parkway, Mountain View, California, 94043, United States of America ~72: CRISTEN ANDERSON HO;DILLON AMADEO;KIAT CHUAN TAN;XINAN LIU;YOHAN LAUNAY~

2022/12548 ~ Complete ~54:A METHOD FOR ANALYZING TECHNOLOGY ADOPTION IN SMALL-MEDIUM ENTERPRISES BASED ON A TECHNOLOGY ACCEPTANCE MODEL ~71:Dr. Prasanta Kumar Parida, KIIT University, Campus 17, Patia, Bhubaneswar, Odisha, 751024, India ~72: Dr. Prasanta Kumar Parida~

2022/12552 ~ Complete ~54:REACTOR AND METHOD FOR CARRYING OUT A CHEMICAL REACTION ~71:BASF SE, Carl-Bosch-Str. 38, Germany;LINDE GMBH, Dr.-Carl-von-Linde-Strasse 6-14, Germany ~72: AENGENHEISTER, Jens;DELHOMME-NEUDECKER, Clara;FEIGL, J&#252;rgen;HOFST&#196;TTER, Martin;JACOB, Reiner;JENNE, Eric;K&#220;HN, Heinz-J&#252;rgen;KIESE, Georg;KOCHEND&#214;RFER, Kiara Aenne;LAIB, Heinrich;REISER, Peter;SHUSTOV, Andrey;STEGEMANN, Robert;WELLENHOFER, Anton;ZELLHUBER, Mathieu;ZIEGLER, Christian~ 33:EP ~31:20171196.7 ~32:23/04/2020

2022/12557 ~ Complete ~54:METHOD AND APPARATUS FOR UPGRADING RANDOM ACCESS NETWORK IN A COMMUNICATION SYSTEM ~71:SAMSUNG ELECTRONICS CO., LTD., 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Republic of Korea ~72: DEEPANSHU GAUTAM;KARTHIKEYAN NARAYANAN;KARTHIKEYAN SUBRAMANIAM;NAVEEN KUMAR~ 33:IN ~31:202041020288 ~32:14/05/2020;33:IN ~31:202041020288 ~32:12/03/2021

2022/12561 ~ Complete ~54:PROSTHETIC REPAIR FABRIC ~71:DAVOL INC., 100 Crossings Boulevard Warwick, Rhode Island, 02886, United States of America ~72: AUGUSTUS FELIX;MICHAEL LIGEIKIS~ 33:US ~31:16/907,104 ~32:19/06/2020

2022/12568 ~ Complete ~54:PISTON GUIDING ELEMENT, ROCK DRILLING MACHINE AND METHOD ~71:Sandvik Mining and Construction Oy, Pihtisulunkatu 9, TAMPERE 33330, FINLAND, Finland ~72: H&#196;M&#196;L&#196;INEN, Mr. Mikko;KANDELIN, Mr. Lars;KELA, Mr. Timo;KOSKIM&#196;KI, Mr. Antti;L&#196;K&#196;KK&#214;L&#196;, Mr. Esa;VIINIKKA, Mr. Matti~ 33:EP ~31:20177658.0 ~32:01/06/2020

2022/12574 ~ Complete ~54:THREAD CLEARANCE ~71:Sandvik Mining and Construction Tools AB, SANDVIKEN 81181, SWEDEN, Sweden ~72: HAMMARGREN, John~ 33:EP ~31:20183128.6 ~32:30/06/2020

2022/12577 ~ Complete ~54:AMPK ACTIVATORS ~71:KALLYOPE, INC., 430 East 29th Street, 10th Floor, New York, United States of America ~72: HE, Shuwen;KRUG, Lisa;LAURING, Brett;RICHARDS, Paul;SEBHAT, Iyassu;THORNBERRY, Nancy;WEBER, Ann~ 33:US ~31:63/027,231 ~32:19/05/2020;33:US ~31:63/111,837 ~32:10/11/2020;33:US ~31:63/141,169 ~32:25/01/2021

2022/12531 ~ Provisional ~54:RESIDENTIAL RENEWABLE ENERGY SYSTEM ~71:REDGARD, Armand, 39 JB Marks Rd (Old Chelmsford Rd), Unit 14, Glenwood, South Africa ~72: REDGARD, Armand~

2022/12535 ~ Complete ~54:METHOD FOR EXTRACTING PECTIN FROM TOBACCO STEMS BY MEANS OF ULTRASONIC WAVES AND MIXED ACID ~71:Kunming University of Science and Technology, No. 68, Wenchang Road, 121 Street, Kunming City, Yunnan Province, 650504, People's Republic of China;Yunnan Tobacco Company, Yuxi Branch, No. 102, Fenghuang Road, Hongta District, Yuxi City, Yunnan Province,

653100, People's Republic of China ~72: GU, Lili;HUANG, Zhihua;LI, Jiangzhou;LI, Zengliang;PENG, Jian;TANG, Xuyu;YANG, Hailin;ZHANG, Limeng~

2022/12538 ~ Complete ~54:A DISPOSABLE MULTIFUNCTIONAL RECTAL HEMOSTATIC EXHAUST TUBE  
~71:Gang Zhao, No. 85, Yingbin Road, Chengguan Town, Baokang County, Xiangyang, Hubei, People's Republic of China ~72: Chengcheng Zhao;Gang Zhao;Niansheng Jiang;Yi Liu;Yinglin Dai~

2022/12540 ~ Complete ~54:PESTICIDE SYNERGIST AND ITS PREPARATION METHOD ~71:Dezhou University, No. 566 university Rd. West, Decheng District, Dezhou City, Shandong Province, 253023, People's Republic of China ~72: E MENG;Fangsheng GAO;Haihui JIA;Lei WANG;Mingyou WANG;Naiqin ZHANG;Shiping LI~

2022/12543 ~ Complete ~54:ELECTRONIC SMOKING ARTICLE WITH ALTERNATIVE AIR FLOW PATHS  
~71:ALTRIA CLIENT SERVICES LLC, 6601 West Broad Street, Richmond, Virginia, 23230, United States of America ~72: ERIC HAWES;SRINIVASAN JANARDHAN;YEZDI B PITHAWALLA~ 33:US ~31:61/857,931  
~32:24/07/2013

2022/12546 ~ Complete ~54:A NOVEL HARDWARE PROTOTYPE FOR CROWD MONITORING SYSTEM AND A METHOD THEREOF ~71:Arun Khannur, Dayananda Sagar University-School of Engineering, Hosur Rd, Kudlu Gate, Srinivasa Nagar, Hal Layout, Singasandra, Bengaluru, Karnataka, 560068, India;Dr Basavaraj N Hiremath, Dayananda Sagar University-School of Engineering, Hosur Rd, Kudlu Gate, Srinivasa Nagar, Hal Layout, Singasandra, Bengaluru, Karnataka, 560068, India;Dr Pramod Kumar Naik, Dayananda Sagar University-School of Engineering, Hosur Rd, Kudlu Gate, Srinivasa Nagar, Hal Layout, Singasandra, Bengaluru, Karnataka, 560068, India;Dr Ravinder Singh Kuntal, Dayananda Sagar University-School of Engineering, Hosur Rd, Kudlu Gate, Srinivasa Nagar, Hal Layout, Singasandra, Bengaluru, Karnataka, 560068, India;Dr. Kiran B. Malagi, Dayananda Sagar University-School of Engineering, Hosur Rd, Kudlu Gate, Srinivasa Nagar, Hal Layout, Singasandra, Bengaluru, Karnataka, 560068, India;Dr. Sindhu. P. Menon, Dayananda Sagar University-School of Engineering, Hosur Rd, Kudlu Gate, Srinivasa Nagar, Hal Layout, Singasandra, Bengaluru, Karnataka, 560068, India;Mr Gangesh Gunjan, Dayananda Sagar University-School of Engineering, Hosur Rd, Kudlu Gate, Srinivasa Nagar, Hal Layout, Singasandra, Bengaluru, Karnataka, 560068, India;Mr Naveen Kulkarni, Dayananda Sagar University-School of Engineering, Hosur Rd, Kudlu Gate, Srinivasa Nagar, Hal Layout, Singasandra, Bengaluru, Karnataka, 560068, India;Mr Pratham V Kamat, Dayananda Sagar University-School of Engineering, Hosur Rd, Kudlu Gate, Srinivasa Nagar, Hal Layout, Singasandra, Bengaluru, Karnataka, 560068, India;Mr Yogesh Sirvi, Dayananda Sagar University-School of Engineering, Hosur Rd, Kudlu Gate, Srinivasa Nagar, Hal Layout, Singasandra, Bengaluru, Karnataka, 560068, India;Nachiketh U Ujjainimath, Dayananda Sagar University-School of Engineering, Hosur Rd, Kudlu Gate, Srinivasa Nagar, Hal Layout, Singasandra, Bengaluru, Karnataka, 560068, India;Prof Baskar Venugopalan, Dayananda Sagar University-School of Engineering, Hosur Rd, Kudlu Gate, Srinivasa Nagar, Hal Layout, Singasandra, Bengaluru, Karnataka, 560068, India ~72: Arun Khannur;Dr Basavaraj N Hiremath;Dr Pramod Kumar Naik;Dr Ravinder Singh Kuntal;Dr. Kiran B. Malagi;Dr. Sindhu. P. Menon;Mr Gangesh Gunjan;Mr Naveen Kulkarni;Mr Pratham V Kamat;Mr Yogesh Sirvi;Nachiketh U Ujjainimath;Prof Baskar Venugopalan~

2022/12549 ~ Complete ~54:POWDER AND METHOD FOR MANUFACTURING POWDER ~71:GLENICAL TECHNOLOGY CO., LTD., 24-1, Nishikamata 8-chome, Ota-ku, Japan ~72: NAKAISHI Masahito~ 33:JP  
~31:2020-106283 ~32:19/06/2020

2022/12550 ~ Complete ~54:A BUCKET ~71:AUSTIN ENGINEERING LIMITED, 100 Chisholm Crescent, Australia ~72: HALL, Jamie Vincent Clarke~ 33:AU ~31:2020203766 ~32:08/06/2020

2022/12553 ~ Complete ~54:DETONATOR POSITION DETERMINATION ~71:DETNET SOUTH AFRICA (PTY) LTD, AECI Place, The Woodlands, Woodlands Drive, Woodmead, South Africa ~72: SCHLENTER, Craig;YATES, Marinus~ 33:NA ~31:NA/P/2020/0012 ~32:29/04/2020

2022/12558 ~ Complete ~54:HIGH FLOW TAP FOR DISPENSING FLUIDS FROM A CONTAINER ~71:LIQUI-BOX CORPORATION, 901 East Byrd Street, Suite 1105, Riverfront Plaza, Richmond, Virginia, 23219, United States of America ~72: LOREN L BRELJE;MATTHEW RUSCHMEIER;RONALD E KIERAS~ 33:US ~31:63/020,722 ~32:06/05/2020;33:US ~31:63/020,727 ~32:06/05/2020;33:US ~31:17/308,357 ~32:05/05/2021

2022/12560 ~ Complete ~54:IMPLANTABLE PROSTHESIS ~71:DAVOL INC., 100 Crossings Boulevard Warwick, Rhode Island, 02886, United States of America ~72: AUGUSTUS FELIX;MICHAEL LIGEIKIS~ 33:US ~31:16/907,091 ~32:19/06/2020

2022/12564 ~ Complete ~54:POTENT NEUTRALIZING ANTIBODIES AGAINST SARS-COV-2, GENERATION AND USES THEREOF ~71:THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK, 412 Low Memorial Library 535 W 116th Street New York, New York, 10027, United States of America ~72: DAVID D HO;JIAN YU;LIHONG LIU;MANOJ S NAIR;PENGFEI WANG;YANG LUO;YAOXING HUANG~ 33:US ~31:63/027,935 ~32:20/05/2020;33:US ~31:63/032,518 ~32:29/05/2020;33:US ~31:63/039,977 ~32:16/06/2020;33:US ~31:63/060,116 ~32:02/08/2020;33:US ~31:63/063,106 ~32:07/08/2020;33:US ~31:63/117,908 ~32:24/11/2020;33:US ~31:63/123,767 ~32:10/12/2020;33:US ~31:63/165,729 ~32:24/03/2021

2022/12569 ~ Complete ~54:TRIPLE COMBINATION THERAPY FOR ENHANCING CANCER CELL KILLING IN CANCERS WITH LOW IMMUNOGENICITY ~71:BeyondSpring Pharmaceuticals, Inc., 28 Liberty Street, 39th Floor, NEW YORK 10005, NY, USA, United States of America ~72: HUANG, Lan;MOHANLAL, Ramon~ 33:US ~31:63/019,703 ~32:04/05/2020

2022/12570 ~ Complete ~54:CLOSURE ASSEMBLY FOR A BEVERAGE CONTAINER AND METHOD FOR REPEATABLY CLOSING A BEVERAGE CONTAINER BY MEANS OF A CLOSURE ASSEMBLY ~71:Ardagh Metal Beverage Holdings Germany GmbH, Georg-von-Boeselager-Strasse 25, BONN 53117, GERMANY, Germany ~72: GONNERT, Peter;J&#214;BGES, Udo;RIECK, Hajo~ 33:DE ~31:10 2020 114 863.1 ~32:04/06/2020

2022/12572 ~ Complete ~54:ANTIBODIES AGAINST SARS-COV-2 ~71:Vir Biotechnology, Inc., 499 Illinois Street, Suite 500, SAN FRANCISCO 94158, CA, USA, United States of America ~72: BELTRAMELLO, Martina;CAMERONI, Elisabetta;CORTI, Davide;CZUDNOCHOWSKI, Nadine;DE MARCO, Anna;HAVENAR-DAUGHTON, Colin;LEMPP, Florian A.;PINTO, Dora;PIZZUTO, Matteo Samuele;SNELL, Gyorgy;TELENTI, Amalio;ZATTA, Fabrizia~ 33:US ~31:63/022,392 ~32:08/05/2020;33:US ~31:63/024,372 ~32:13/05/2020;33:US ~31:63/027,814 ~32:20/05/2020;33:US ~31:63/029,338 ~32:22/05/2020;33:US ~31:63/031,286 ~32:28/05/2020;33:US ~31:63/033,045 ~32:01/06/2020;33:US ~31:63/036,683 ~32:09/06/2020;33:US ~31:63/039,939 ~32:16/06/2020;33:US ~31:63/046,465 ~32:30/06/2020;33:US ~31:63/057,767 ~32:28/07/2020;33:US ~31:63/090,667 ~32:12/10/2020;33:US ~31:63/113,450 ~32:13/11/2020;33:US ~31:63/153,784 ~32:25/02/2021;33:US ~31:63/170,368 ~32:02/04/2021

2022/12575 ~ Complete ~54:ANTI-VIRAL COMPOUNDS FOR TREATING CORONAVIRUS, PICORNAVIRUS, AND NOROVIRUS INFECTIONS ~71:Aligos Therapeutics, Inc., 1 Corporate Drive, 2nd Floor, SOUTH SAN FRANCISCO 94080, CA, USA, United States of America;Katholieke Universiteit Leuven, KU Leuven Research & Development, Waaistraat 6, bus 5105, LEUVEN B-3000, BELGIUM, Belgium ~72: BARDIOT, Dorothea Alice Marie-Eve;BEIGELMAN, Leonid;BOLAND, Sandro;MARCHAND, Arnaud Didier



Marie;RABOISSON, Pierre Jean-Marie Bernard;SEREBRYANY, Vladimir;STOYCHEVA, Antitsa  
Dimitrova;VANDYCK, Koen~ 33:US ~31:63/037,200 ~32:10/06/2020;33:US ~31:63/055,679  
~32:23/07/2020;33:US ~31:63/085,871 ~32:30/09/2020;33:US ~31:63/086,787 ~32:02/10/2020;33:US  
~31:63/125,562 ~32:15/12/2020;33:US ~31:63/155,113 ~32:01/03/2021

- APPLIED ON 2022/11/21 -

2022/12615 ~ Complete ~54:ADDITIVE FEED OF MAOTAI DISTILLER'S GRAINS AND ITS APPLICATION IN  
ANIMAL HUSBANDRY ~71:Guizhou University, West Campus of Guizhou University, Huaxi District, Guiyang  
City, Guizhou Province, 550025, People's Republic of China ~72: CHEN, Chao;CHEN, Yulian;CHENG,  
Qiming;FAN, Xueying;LEI, Yao;LI, Maoya;LI, Ping;LIANG, Chenchen;SUN, Hong;WANG, Chunmei;WU,  
Xinyu;XIE, Yixiao;XU, Duhan;ZHENG, Yulong;ZHU, Mingming~

2022/12616 ~ Complete ~54:METHOD FOR IMPROVING SILAGE BY ADDING MAOTAI DISTILLER'S GRAINS  
~71:Guizhou University, West Campus of Guizhou University, Huaxi District, Guiyang City, Guizhou Province,  
550025, People's Republic of China ~72: CHEN, Chao;CHEN, Yulian;CHENG, Qiming;FAN, Xueying;LEI, Yao;LI,  
Maoya;LI, Ping;LIANG, Chenchen;SUN, Hong;WANG, Chunmei;WU, Xinyu;XIE, Yixiao;XU, Duhan;ZHENG,  
Yulong;ZHU, Mingming~

2022/12624 ~ Complete ~54:VIDEO ENCODER, VIDEO DECODER, METHODS FOR ENCODING AND  
DECODING AND VIDEO DATA STREAM FOR REALIZING ADVANCED VIDEO CODING CONCEPTS ~71:GE  
VIDEO COMPRESSION, LLC, 1 RESEARCH CIRCLE, NISKAYUNA, NY 12309, USA, United States of America  
~72: HELLGE, Cornelius;S&#193;NCHEZ DE LA FUENTE, Yago;S&#220;HRING, Karsten;SCHIERL,  
Thomas;SKUPIN, Robert;WIEGAND, Thomas~ 33:EP ~31:20176178.0 ~32:22/05/2020;33:EP ~31:20176206.9  
~32:22/05/2020

2022/12589 ~ Complete ~54:AN IOT-POWERED SCHEDULING SYSTEM FOR DRONE TRANSPORT  
SERVICES ~71:Dr.Akula Suneetha, Associate Professor, Department of Computer Science and Engineering,  
KKR & KSR Institute of Technology and Sciences (A), Vinjanampadu, Guntur, Andhra Pradesh, 522017,  
India;Dr.P.G.K.Sirisha, Associate Professor, Department of Computer Science and Engineering, KKR & KSR  
Institute of Technology and Sciences (A), Vinjanampadu, Guntur, Andhra Pradesh, 522017, India;Dr.Venkata  
Kishore Kumar Rejeti, Associate Professor, Department of Computer Science and Engineering, KKR & KSR  
Institute of Technology and Sciences (A), Vinjanampadu, Guntur, Andhra Pradesh, 522017, India;Mr.Anil Kumar  
Prathipati, Assistant Professor, Department of Computer Science and Engineering, Raghu Engineering College  
(A), Dakamarri, Visakhapatnam, Andhra Pradesh, 531162, India;Mr.Bhanu Pratap Reddy Bhavanam, Full Time  
Research Scholar, School of Computer Science and Engineering, VIT-AP University, Amaravathi, Beside AP  
Secretariat, Andhra Pradesh, 522237, India;Mrs.P.Neela Sundari, Assistant Professor, Department of Computer  
Science and Engineering, KKR & KSR Institute of Technology and Sciences (A), Vinjanampadu, Guntur,  
Andhra Pradesh, 522017, India ~72: Dr.Akula Suneetha;Dr.P.G.K.Sirisha;Dr.Venkata Kishore Kumar  
Rejeti;Mr.Anil Kumar Prathipati;Mr.Bhanu Pratap Reddy Bhavanam;Mrs.P.Neela Sundari~

2022/12591 ~ Complete ~54:TESTING APPARATUS AND METHOD FOR FIRE BEHAVIOR OF URBAN  
UNDERGROUND INTEGRATED PIPE GALLERY STRUCTURE ~71:Jilin Jianzhu University, No.5088 Xincheng  
Street, Changchun City, Jilin Province, 130118, People's Republic of China ~72: Li Jiayi;Li Yongqing;Yang  
Yanmin;Zhang Binlin~

2022/12617 ~ Complete ~54:METHOD FOR PREPARING ULTRAFINE TUNGSTEN CARBIDE ~71:CENTRAL  
SOUTH UNIVERSITY, No. 932 South Lushan Road, Changsha, Hunan, 410083, People's Republic of China ~72:  
CHEN, Xingyu;CUI, Muye;HE, Lihua;LI, Jiangtao;LI, Zhichao;LIU, Xuheng;LUO, Yongjin;SUN, Fenglong;ZHAO,  
Zhongwei~ 33:CN ~31:202111413525.4 ~32:25/11/2021

2022/12622 ~ Complete ~54:AN ON-DEMAND ELECTRICITY BILLING SYSTEM AND METHOD ~71:NEURA TECHNOLOGIES (PTY) LTD., Third Floor, Building 13,, The Woodlands, 20 Woodlands Drive, JOHANNESBURG 2191, Gauteng, SOUTH AFRICA, South Africa ~72: DU TOIT, Ignatius Johannes;NEILSON, Peter John~ 33:ZA ~31:2021/10175 ~32:09/12/2021

2022/12625 ~ Complete ~54:BOW STAND ~71:JOHANNES RONALD BEZUIDENHOUT, 118 SANDHAM ROAD, GLEN NORTON ROAD, South Africa ~72: JOHANNES RONALD BEZUIDENHOUT~

2022/12626 ~ Complete ~54:NAVIGATION MODULE AND SYSTEM ~71:SHEER VERSATILITY GROUP (PTY) LTD., 2015 N.U 17 Mdantsane, East London, 5219, South Africa ~72: SIVUYILE NGCANGA~ 33:ZA ~31:2021/05983 ~32:20/08/2021

2022/12634 ~ Complete ~54:USE OF (Z)-3-HEXENYL ESTERS AND METHOD FOR PROTECTING PLANTS AGAINST PESTS ~71:Consejo Superior de Investigaciones Científicas (CSIC), C/ Serrano 117, MADRID 28006, SPAIN, Spain;Instituto Valenciano De Investigaciones Agrarias (IVIA), Ctra. Moncada-Naquera Km.4,5, MONCADA 46113 , (VALENCIA), SPAIN, Spain;Universitat Politècnica De València, Servicio de Promoción y Apoyo a Investigaciones, Innovación y Transferencia - i2T Cam de Vera, s/n - Edificio 8G - Acceso A Planta 3, VALENCIA 46022, SPAIN, Spain ~72: ALONSO VALIENTE, Miquel;GRANELL RICHART, Antonio;NAVARRO LLOPIS, Vicente;PÉREZ HEDO, Meritxel;RAMBLA NEBOT, José;Luis;URBANEJA GARCÍA, Alberto;VACAS GONZÁLEZ, Sandra~ 33:ES ~31:P202030330 ~32:21/04/2020

2022/12642 ~ Complete ~54:BLOCK PROPAGATION WITH POISONED TRANSACTIONS IN A BLOCKCHAIN NETWORK ~71:nChain Licensing AG, Grafenauweg 6, ZUG 6300, SWITZERLAND, Switzerland ~72: COUGHLAN, Steven Patrick~ 33:GB ~31:2005822.8 ~32:21/04/2020

2022/12646 ~ Complete ~54:GUIDE DEVICE AND MECHANICAL SYSTEM COMPRISING SUCH A DEVICE ~71:HYDROMECANIQUE ET FROTTEMENT, 69 Avenue Benoît Fourneyron, France ~72: PAVALLIER, Pierrick;PROST, Fabrice~ 33:FR ~31:2006879 ~32:30/06/2020

2022/12599 ~ Complete ~54:GROUP OF BIOMARKERS FOR DIAGNOSING ASTHENOSPERMIA AND THEIR APPLICATION ~71:STATE KEY LABORATORY OF REPRODUCTIVE MEDICINE OF NANJING MEDICAL UNIVERSITY, Nanjing Medical University (Jiangning Campus), People's Republic of China;THE AFFILIATED WUXI MATERNITY AND CHILD HEALTH CARE HOSPITAL OF NANJING MEDICAL UNIVERSITY, The Affiliated Wuxi Maternity and Child Health Care Hospital of Nanjing Medical University, People's Republic of China ~72: CHEN, Daozhen;CHEN, Yu;LI, Su;LING, Pengyun;LU, Mudan;LU, Xinyi;YANG, Rui;ZHANG, Linshen;ZHANG, Yun~

2022/12603 ~ Complete ~54:SAFE AND SIMPLE LABORATORY FLOOR ASPHALT CLEANING DEVICE ~71:Changsha University of Science and Technology, 960, 2nd Section, Wanjiali RD (S), Tianxin District, Changsha, Hunan, 410114, People's Republic of China ~72: JU, Haolong;LI, Ping;PENG, Zhuyi;WEI, Jianguo;YUE, Hao;ZHOU, Yuming~

2022/12636 ~ Complete ~54:BICYCLIC PEPTIDE LIGANDS SPECIFIC FOR NECTIN-4 AND USES THEREOF ~71:BicycleTX Limited, Building 900, Babraham Research Campus, CAMBRIDGE CB22 3AT, UNITED KINGDOM, United Kingdom ~72: DICKSON, Amy Katherine;LIMB, Darren;MAHNKE, Lisa;RIGBY, Michael;WEST, Terrence Allen;WITTY, David~ 33:US ~31:63/027,536 ~32:20/05/2020

2022/12643 ~ Complete ~54:ATTACHMENT ASSEMBLY FOR ATTACHING A WEAR MEMBER TO A WORK IMPLEMENT AND LUG MEMBER FOR USE WITH AN ATTACHMENT SYSTEM FOR ATTACHING WEAR MEMBERS TO A WORK IMPLEMENT USING A SPACER ~71:Caterpillar Inc., 100 NE Adams Street, PEORIA

61629-9510, IL, USA, United States of America ~72: CAMPOMANES, Patrick S.;KUNZ, Phillip J.~ 33:US  
~31:16/857,511 ~32:24/04/2020

2022/12648 ~ Complete ~54:COMPOSITION FOR IMPROVING QPCR TEST PERFORMANCE, REACTION LIQUID, USE, AND METHOD ~71:SANSURE BIOTECH INC., No. 680, Lusong Road, Hi-Tech Development Zone, Changsha, Hunan, 41020, People's Republic of China ~72: DAI, Lizhong;DENG, Zhongping;JI, Bozhi;LIU, Jia;MIAO, Weimin;WU, Kang~ 33:CN ~31:202010326989.0 ~32:23/04/2020

2022/12653 ~ Complete ~54:METHOD AND INDUSTRIAL PLANT FOR SEPARATING A WASTE MATERIAL ~71:BERNEGGER GMBH, Gradau 15 4591 Molln, Austria;K&#220;TTNER HOLDING GMBH & CO. KG, Alfredstra&#223;e 28 45130 Essen, Germany ~72: BERNHARD HANUSCH;DIRK BEHRMANN;FARZAD SALEHI;KURT BERNEGGER;THOMAS BREUER~ 33:DE ~31:10 2020 206 095.9 ~32:14/05/2020

2022/12657 ~ Complete ~54:CONTROL CIRCUITRY FOR DYNAMIC SHADE WITH ELECTROSTATIC HOLDING, AND ASSOCIATED METHODS ~71:GUARDIAN GLASS, LLC, 2300 Harmon Road , Auburn Hills, Michigan, 48326, United States of America ~72: JEFFREY KOSKULICS;SYED UZAIR AHMED~ 33:US  
~31:16/947,014 ~32:15/07/2020

2022/12663 ~ Complete ~54:PHARMACEUTICAL FORMULATIONS ~71:AstraZeneca AB, S&#214;DERT&#196;LJE 151 85, SWEDEN, Sweden ~72: AL HUSBAN, Farhan Abdel Karim Mohammad~ 33:US ~31:63/014,923 ~32:24/04/2020

2022/12581 ~ Provisional ~54:MATTRESS COIL SPRING ARRANGEMENT ~71:BURAAQ BEDS CC, 76 Gibbs Road, Devland, Johannesburg, South Africa ~72: EBRAHIM SAHIB~

2022/12594 ~ Complete ~54:SUPPORTING CULTIVATION METHOD FOR INTEGRATING OF AGRICULTURAL MACHINERY AND AGRONOMY OF POTATO IN DRY LAND ~71:SHANXI AGRICULTURAL UNIVERSITY/SHANXI ACADEMY OF AGRICULTURAL SCIENCES,HIGH LATITUDE CROPS INSTITUTE TO SHANXI ACADEMY, No. 18, Yingbin East Road, Datong, Shanxi, 037000, People's Republic of China ~72: Bai Xiaodong;Chen Yun;Du Peibing;Fan Xiangbin;Lu Yao;Mao Xianghong;Qi Haiying;Shen Rimin;Yang Chun;Zhu Zhihui~

2022/12600 ~ Complete ~54:SAMPLING DEVICE FOR PATHOGEN NUCLEIC ACID TESTING SAMPLES OF RESPIRATORY DISEASES IN LIVE PIGS ~71:Institute of Biological Resources, Jiangxi Academy of Sciences, No. 7777, Changdong Avenue, Nanchang City, Jiangxi Province, 330012, People's Republic of China ~72: SHENG, Ping;SUN, Jie;WANG, Hongxiu;WANG, Ruxia;YANG, Chunhua;ZHANG, Qiang;ZHENG, Qiuyue~

2022/12604 ~ Complete ~54:CALCULATION METHOD AND SYSTEM FOR TWO-DIMENSIONAL ELECTROMAGNETIC FIELD ~71:Shanghai Material Industry Development Co., Ltd., Room J2643, 2nd Floor, Building 1, No. 399, Zhongren Road, Jiading District, Shanghai, 201802, People's Republic of China ~72: GU, Yuan;ZHANG, Biqing;ZHOU, Yi~

2022/12627 ~ Complete ~54:DETECTING AND CORRECTING KNOWLEDGE BASE ERRORS ~71:International Business Machines Corporation, New Orchard Road, ARMONK 10504, NY, USA, United States of America ~72: AKHALWAYA, Ismail Yunus;KHAN, Naweed Aghmad;LEBESE, Thabang Doreen;LUUS, Francois Pierre;MAKONDO, Ndivhuwo;MOLOKO, Oarabile Hope;RIEGEL, Ryan Nelson~ 33:US ~31:17/807,909  
~32:21/06/2022

2022/12630 ~ Complete ~54:NETWORK BASED HYBRID STORAGE SYSTEM FOR LAYERED IOT FRAMEWORK ~71:DONGRE, Nilima Manoj, CABIN 1, ROOM NO 602, 6TH FLOOR, RAMRAO ADIK INSTITUTE OF TECHNOLOGY, DR. D Y PATIL DEEMED TO BE UNIVERSITY, D Y PATIL VIDHYANAGAR,

SECTOR 7, NERUL, NAVI MUMBAI, MAHARASHTRA, 400706, India ~72: ATIQUE, Mohammad;DONGRE, Manoj M.;DONGRE, Nilima Manoj;RAUT, Atul D.;SHAIKH, Zeba Atique~

2022/12633 ~ Complete ~54:COMPOSITIONS AND METHODS OF MODULATING SHORT-CHAIN DEHYDROGENASE ACTIVITY ~71:Board of Regents of the University of Texas System, 210 West 7th Street, AUSTIN 78701, TX, USA, United States of America;Case Western Reserve University, 10900 Euclid Avenue, CLEVELAND 44106, OH, USA, United States of America;Rodeo Therapeutics Corporation, 2815 Eastlake Ave E, Ste 300, SEATTLE 98102, WA, USA, United States of America ~72: ANTCZAK, Monika;DESAI, Amar;GERSON, Stanton;GWALTNEY, Stephen L.;MARKOWITZ, Sanford D.;READY, Joseph~ 33:US ~31:63/027,557 ~32:20/05/2020

2022/12655 ~ Complete ~54:ELECTRICAL CONNECTIONS FOR SUPPLYING POWER TO INSULATING GLASS UNIT INTERIORS, AND/OR ASSOCIATED METHODS ~71:GUARDIAN GLASS, LLC, 2300 Harmon Road , Auburn Hills, Michigan, 48326, United States of America ~72: JOHN MATUSZEWSKI;LANCE ALTIZER~ 33:US ~31:16/947,006 ~32:15/07/2020

2022/12670 ~ Complete ~54:ACTIVATABLE IL-12 POLYPEPTIDES AND METHODS OF USE THEREOF ~71:Werewolf Therapeutics, Inc., 1030 Massachusetts Avenue, CAMBRIDGE 02138, MA, USA, United States of America ~72: BRODKIN, Heather;HICKLIN, Daniel;SALMERON-GARCIA, Jose Andres;SEIDEL-DUGAN, Cynthia;STEINER, Philipp;WINSTON, William~ 33:US ~31:63/027,276 ~32:19/05/2020

2022/12671 ~ Complete ~54:WIRELESS CHARGING ADAPTER, SYSTEM AND METHOD ~71:OPENCHARGE WIRELESS POWER TECHNOLOGIES (PTY) LTD, 21 Stepney Crescent, South Africa ~72: VERA, Denys;VERA, Phebeon~ 33:GB ~31:2005818.6 ~32:21/04/2020

2022/12578 ~ Provisional ~54:ANTI HIT AND RUN SYSTEM ~71:KGOTLAETSILE SYLVESTER MOLELE, 1503/4145 24TH AVENUE TLHABANE WES, South Africa;OMPHILE MORATWE MOLATLHWA, 1503/4145 24TH AVENUE TLHABANE WES, South Africa ~72: KGOTLAETSILE SYLVESTER MOLELE;OMPHILE MORATWE MOLATLHWA~

2022/12605 ~ Complete ~54:IMMUNOPOTENTIATOR FOR SINIPERCA CHUATSI AND APPLICATION THEREOF ~71:FUJIAN TIANMA SCIENCE AND TECHNOLOGY GROUP CO., LTD., Industrial Zone, Shangjing Town, Fuqing City, Fujian Province, 350308, People's Republic of China ~72: CHEN, Jiacheng;CHEN, Qingtang;DING, Liyun;HU, Bing;XIAO, Jun;ZHANG, Jiaonan;ZHANG, Kun~

2022/12607 ~ Complete ~54:RAPID PROPAGATION METHOD FOR SWEET POTATOES ~71:Xuzhou Institute of Agricultural Sciences in Jiangsu Xuhuai District, North Kunpeng North Road, Xuhai Road High-speed Railway Station, Xuzhou City, Jiangsu Province, 221131, People's Republic of China ~72: GAO, Runfei;KOU, Meng;LI, Chen;LI, Qiang;ZHANG, Yungang~

2022/12608 ~ Complete ~54:PRODUCTION METHOD OF FUNCTIONAL RABBIT MEAT PRODUCTS ~71:Institute of Animal Science and Veterinary Medicine, Shandong Academy of Agricultural Sciences, 23788 Gongye Bei Lu, Jinan City, Shandong Province, 250100, People's Republic of China ~72: BAI Liya;GAO Shuxia;LIU Ce;LIU Gongyan;SUN Haitao;WANG Peng;YANG Liping~

2022/12613 ~ Complete ~54:BREATHING THERMAL MANIKIN FOR DEMONSTRATION OF METABOLISM SYNDROME ~71:Lingbo (Changzhou) HVAC Engineering Co., Ltd., No. 106, Youyi North Road, Bu Yi, Zouqu Town, Zhonglou District, Changzhou City, Jiangsu Province, 213000, People's Republic of China;Nanjing University Of Chinese Medicine, No. 282, Hanzhong Road, Nanjing City, Jiangsu Province, 210000, People's Republic of China ~72: SHANG, Wenbin;WANG, Jinliang;WEI, Yaping~

2022/12614 ~ Complete ~54:INDUCTION CULTURE METHOD AND INDUCTION CULTURE MEDIUM FOR EMBRYOGENIC CALLUS OF PINUS ELLIOTTII ENGELM ~71:JIANGXI AGRICULTURAL UNIVERSITY, Jiangxi Agricultural University, No. 1101, Zhimin Avenue, Economic Development Zone, Nanchang City, Jiangxi Province, People's Republic of China ~72: CHEN Tingxuan;CHENG Zishan;HU Rong;LAI Meng;LUO Xin;WEN Jing;YI Min;ZHANG Lu~

2022/12618 ~ Complete ~54:TRADITIONAL CHINESE MEDICINE OINTMENT FOR EXTERNAL USE FOR TREATING ACUTE GOUTY ARTHRITIS AND PREPARATION METHOD THEREOF ~71:Chuzhou Integrated Traditional Chinese and Western Medicine Hospital, No. 788, Huifeng East Road, Langya District, Chuzhou, Anhui, 239099, People's Republic of China ~72: Caicai ZHOU;Chenggui MIAO;Guiping JIANG;Guoping ZHANG;Huibo CAO;Jie WU;Lei HUANG;Li DING;Limin GUO;Shengping LI;Ting XU;Yu ZHANG~

2022/12623 ~ Complete ~54:VIDEO ENCODER, VIDEO DECODER, METHODS FOR ENCODING AND DECODING AND VIDEO DATA STREAM FOR REALIZING ADVANCED VIDEO CODING CONCEPTS ~71:GE VIDEO COMPRESSION, LLC, 1 RESEARCH CIRCLE, NISKAYUNA, NY 12309, USA, United States of America ~72: HELLGE, Cornelius;S&#193;NCHEZ DE LA FUENTE, Yago;S&#220;HRING, Karsten;SCHIERL, Thomas;SKUPIN, Robert;WIEGAND, Thomas~ 33:EP ~31:20176178.0 ~32:22/05/2020;33:EP ~31:20176206.9 ~32:22/05/2020

2022/12650 ~ Complete ~54:HISTONE DEACETYLASE INHIBITORS FOR IMMUNOMODULATION IN TUMOR MICROENVIRONMENT ~71:GREAT NOVEL THERAPEUTICS BIOTECH & MEDICALS CORPORATION, 17F., No.3, Park St., Nangang Dist., Taipei City 115, Taiwan, Province of China ~72: CHENG-HAN CHOU;CHIA-NAN CHEN;JIA-SHIONG CHEN;MU-HSUAN YANG;SZ-HAO CHU;YE-SU CHAO;YI-HONG WU~ 33:US ~31:63/018,427 ~32:30/04/2020

2022/12628 ~ Complete ~54:REACTOR AND REACTION METHOD ~71:Siemens Process Systems Engineering Limited, Pinehurst 2, Pinehurst Road, FARNBOROUGH GU14 7BF, UNITED KINGDOM, United Kingdom ~72: URBAN, Zbigniew Boguslaw~ 33:GB ~31:2216567.4 ~32:07/11/2022

2022/12629 ~ Complete ~54:AN AUXILIARY DEVICE FOR EXCISING A URETHRAL SCAR ~71:Hangzhou Lin&#39;an District First People&#39;s Hospital, Room 602, Building 9, Guihua New Village, Jincheng Street, People's Republic of China ~72: Lejun Wu;Shuo Wu;Yi Jiang;Zhichao Min~ 33:CN ~31:202220392995.0 ~32:25/02/2022

2022/12631 ~ Complete ~54:HALOGENATED-HETEROARYL AND OTHER HETEROCYCLIC KINASE INHIBITORS, AND USES THEREOF ~71:iOmx Therapeutics AG, Fraunhoferstrasse 13, MARTINSRIED 82152, GERMANY, Germany ~72: BANCROFT, David;BISSINGER, Stefan;KHANDELWAL, Nisit;LOFERER, Hannes;MICHELS, Tillmann;SENNHENN, Peter~ 33:EP ~31:20170641.3 ~32:21/04/2020

2022/12644 ~ Complete ~54:USE OF POLYAMINES, TYRAMINE AND/OR A PLANT EXTRACT CONTAINING SAME TO STABILISE MICROORGANISMS ~71:Agro Innovation International, 18 avenue Franklin Roosevelt, SAINT-MALO 35400, CEDEX, FRANCE, France ~72: BEZIAT, Matthieu C.;BRIAND, Xavier;COMBY, Morgane;HOUDUSSE, Fabrice~ 33:FR ~31:2005016 ~32:19/05/2020

2022/12649 ~ Complete ~54:TREATMENT OF RESPIRATORY DISEASES WITH AMINO ACID COMPOUNDS ~71:PLIANT THERAPEUTICS, INC., 260 Littlefield Avenue, South San Francisco, California, 94080, United States of America ~72: CHENGGUO DONG;DAVID J MORGANS JR.;ERIC LEFEBVRE;HUI LI;JACOB CHA;KATERINA LEFOTHERIS;KRAIG ANDERSON;LAN JIANG;MANUEL MUNOZ;MAUREEN REILLY;SCOTT TURNER;TIMOTHY HOM;YAJUN ZHENG~ 33:US ~31:63/021,674 ~32:07/05/2020

2022/12652 ~ Complete ~54:ANTI-TISSUE FACTOR ANTIBODY-DRUG CONJUGATES AND THEIR USE IN THE TREATMENT OF CANCER ~71:GENMAB A/S, Kalvebod Brygge 43, 1560, Copenhagen V, Denmark ~72: RESHMA A RANGWALA~ 33:US ~31:63/045,448 ~32:29/06/2020;33:US ~31:63/094,571 ~32:21/10/2020

2022/12660 ~ Complete ~54:EDIBLE FOOD CASING ~71:ALZARRO D&#214;NERWORLD GMBH, Wiesenring 5, 07554, Korbu&#223;en, Germany ~72: MUSTAFA DEMIRK&#220;REK~ 33:DE ~31:20 2020 102 778.6 ~32:15/05/2020

2022/12664 ~ Complete ~54:CORNER SEGMENT AND CORNER SHROUD FOR A WORK IMPLEMENT ~71:Caterpillar Inc., 100 NE Adams Street, PEORIA 61629-9510, IL, USA, United States of America ~72: BJERKE, Nathan R.;CONGDON, Thomas M.~ 33:US ~31:63/015,928 ~32:27/04/2020;33:US ~31:17/212,015 ~32:25/03/2021

2022/12669 ~ Complete ~54:ANTI-VSIG4 COMPOSITIONS AND METHODS FOR MODULATING MYELOID CELL INFLAMMATORY PHENOTYPES AND USES THEREOF ~71:Verseau Therapeutics, Inc., 47 Wiggins Avenue, BEDFORD 01730, MA, USA, United States of America ~72: CULYBA, Elizabeth;FELDMAN, Igor;NGUYEN, Phuong Anh;NOVOBRANTSEVA, Tatiana I.;RAZLOG, Maja;SAZINSKY, Stephen L.~ 33:US ~31:63/032,337 ~32:29/05/2020

2022/12640 ~ Complete ~54:METHOD FOR PRODUCING MILK LIKE PRODUCTS ~71:Soci&#233;t&#233; des Produits Nestl&#233; S.A., Avenue Nestl&#233; 55, VEVEY 1800, SWITZERLAND, Switzerland ~72: BOSCO, Mohamed Nabil;COLOMBO MOTTAZ, Sara;DESTAILLATS, Frederic;KRAUS, Marine~ 33:EP ~31:20171518.2 ~32:27/04/2020

2022/12645 ~ Complete ~54:GUIDE DEVICE AND MECHANICAL SYSTEM COMPRISING SUCH A DEVICE ~71:HYDROMECHANIQUE ET FROTTEMENT, 69 Avenue Beno&#238;t Fourneyron, France ~72: PAVALLIER, Pierrick;PROST, Fabrice~ 33:FR ~31:2006880 ~32:30/06/2020

2022/12647 ~ Complete ~54:VALVE FOR A BEVERAGE CONTAINER ~71:HEINEKEN SUPPLY CHAIN B.V., Tweede Weteringplantsoen 21, Netherlands ~72: DE VRIND, Johannes Rogier;LUTH, Henderikus Hilvert;ONNEKINK, Johan;PAAUWE, Arie Maarten;PATJE, Alexander;ROZEBOOM, Frans Wiebe~ 33:NL ~31:2025622 ~32:19/05/2020

2022/12656 ~ Complete ~54:FORMULATION TO DELIVER LIPOPHILIC ACTIVE INGREDIENTS ~71:PERFORMS S.R.L., Via Giuseppe Campi, 103, I-41125, Modena, Italy ~72: ELEONORA MARETTI;ELIANA GRAZIA LEO;VIRGINIA BRIGHENTI~ 33:IT ~31:10202000016411 ~32:07/07/2020

2022/12658 ~ Complete ~54:MOTORIZED DYNAMIC SHADE WITH ELECTROSTATIC HOLDING, AND ASSOCIATED METHODS ~71:GUARDIAN GLASS, LLC, 2300 Harmon Road , Auburn Hills, Michigan, 48326, United States of America ~72: JASON THEIOS;JOHN MATUSZEWSKI;LINDSAY HORN~ 33:US ~31:16/947,007 ~32:15/07/2020

2022/12661 ~ Complete ~54:DISPERSIBLE TABLET FORMULATIONS COMPRISING DOLUTEGRAVIR ~71:VIV HEALTHCARE COMPANY, 251 Little Falls Drive, Wilmington, Delaware, United States of America ~72: CONN, Ian Paul;DAVIES, Mark Robert;HEAFIELD, Joanne;HOLTON, Michael;MORTIMER, Neil~ 33:GB ~31:2009684.8 ~32:25/06/2020

2022/12665 ~ Complete ~54:FILTER ELEMENT INTEGRATED SEAL PROFILE ~71:Caterpillar Inc., 100 NE Adams Street, PEORIA 61629-9510, IL, USA, United States of America ~72: CLINE, Jay H.;EVERY, Joseph J.;IMMEL, Jon T.;MOREHOUSE III, Darrell L.;OEDEWALDT, Stephen E.;POTTS, Gregory O.;RIES, Jeffrey R.~ 33:US ~31:16/859,137 ~32:27/04/2020

2022/12667 ~ Complete ~54:IMINO SULFANONE INHIBITORS OF ENPP1 ~71:Volastra Therapeutics, Inc., 1361 Amsterdam Avenue, Suite 520, NEW YORK 10027, NY, USA, United States of America ~72: BETTIGOLE, Sarah;COGAN, Derek A.;FOLMER, Rutger;NIECZYPOR, Piotr;SU, Michael;VAN BERKOM, Leon~ 33:US ~31:63/019,853 ~32:04/05/2020;33:US ~31:63/093,709 ~32:19/10/2020

2022/12587 ~ Complete ~54:INTELLIGENT AUXILIARY DIAGNOSIS SYSTEM FOR DIABETIC RETINOPATHY ~71:Shenzhen Eye Hospital, No. 18 Zetian Road, Futian District, Shenzhen, 518040, 518040, People's Republic of China ~72: Hong Xiangqian;Wang Jiantao;Yang Weihua;Zhang Guoming;Zhang Shaochong~

2022/12595 ~ Complete ~54:PREPARATION METHOD OF FLOURLESS GOLDEN POMFRET NOODLES IN DEEP SEAWATER ~71:HAINAN TROPICAL OCEAN UNIVERSITY, No.1 Yucai road, People's Republic of China;SANYA YAZHOU BAY SOUTH CHINA SEA DEEP WATER RESEARCH INSTITUTE CO., LTD., Room 201-202, Floor 2, Building 2, People's Republic of China ~72: HU, Yaqin;HU, Zhiheng;SONG, Yu;XU, Yuanzhe~

2022/12637 ~ Complete ~54:METHOD OF ROASTING ~71:Soci&#233;t&#233; des Produits Nestl&#233; S.A., Avenue Nestl&#233; 55, VEVEY 1800, SWITZERLAND, Switzerland ~72: BIGLER, Nicolas;DUBIEF, Flavien Florent~ 33:EP ~31:20171659.4 ~32:27/04/2020

2022/12638 ~ Complete ~54:PROCESS OF CALIBRATION OF A ROASTING APPARATUS ~71:Soci&#233;t&#233; des Produits Nestl&#233; S.A., Avenue Nestl&#233; 55, VEVEY 1800, SWITZERLAND, Switzerland ~72: BIGLER, Nicolas;DUBIEF, Flavien Florent;MARTIN, Vincent;PINDJUROV, Riste~ 33:EP ~31:20171665.1 ~32:27/04/2020

2022/12651 ~ Complete ~54:PREDICTIVE MAINTENANCE SYSTEMS AND METHODS TO DETERMINE END GUN HEALTH ~71:HEARTLAND AG TECH, INC., 907 3rd Avenue Hancock, Wisconsin, 54943, United States of America ~72: JEREMIE PAVELSKI;RUSSELL SANDERS~ 33:US ~31:63/024,721 ~32:14/05/2020

2022/12654 ~ Complete ~54:PROCESS FOR PRODUCING BRIQUETTES FROM A WASTE MATERIAL AND BRIQUETTE MADE OF A WASTE MATERIAL ~71:BERNEGGER GMBH, Gradau 15 4591 Molln, Austria;K&#220;TTNER HOLDING GMBH & CO. KG, Alfredstra&#223;e 28 45130 Essen, Germany ~72: BERNHARD HANUSCH;DIRK BEHRMANN;FARZAD SALEHI;KURT BERNEGGER;THOMAS BREUER~ 33:DE ~31:10 2020 206 095.9 ~32:14/05/2020

2022/12659 ~ Complete ~54:DYNAMIC SHADE WITH REACTIVE GAS COMPATIBLE DESICCANT, AND/OR ASSOCIATED METHODS ~71:GUARDIAN GLASS, LLC, 2300 Harmon Road , Auburn Hills, Michigan, 48326, United States of America ~72: DAVID COOPER;DUANE RECKER;JOHN MATUSZEWSKI~ 33:US ~31:62/705,776 ~32:15/07/2020

2022/12662 ~ Complete ~54:USE OF COMPOUNDS FOR TREATING VIRAL INFECTIONS ~71:GODAVARI BIOREFINERIES LTD., Somaiya Bhavan, 45/47, Mahatma Gandhi Road, India ~72: ATHAVALE, Maithili;GAVADE, Sandip;KHARKAR, Prashant;SRIVASTAVA, Sangeeta~ 33:IN ~31:202021019866 ~32:11/05/2020

2022/12666 ~ Complete ~54:ANALYTE SENSOR AND ITS MANUFACTURING ~71:F. Hoffmann-La Roche AG, Grenzacherstrasse 124, BASEL 4070, SWITZERLAND, Switzerland ~72: SLIOZBERG, Kirill;STECK, Alexander~ 33:EP ~31:20184466.9 ~32:07/07/2020

2022/12693 ~ Complete ~54:VENTILATOR AND METHOD OF VENTILATION ~71:KERSTEN, Erich, 12 Cosmic Street, Linbro Business Park, Sandton, South Africa ~72: KERSTEN, Erich~ 33:ZA ~31:2020/02555 ~32:08/05/2020

2022/12583 ~ Complete ~54:LOCKING ARRANGEMENT ~71:Trellidor Innovations (Pty) Ltd, t/a Taylor Blinds and Shutters, 10 Hoist Ave, South Africa ~72: Patrick BOOTH-JONES~ 33:ZA ~31:2021/09385 ~32:23/11/2021

2022/12585 ~ Complete ~54:CHROMANE, ISOCHROMANE AND DIHYDROISOBENZOFURAN DERIVATIVES AS MGLUR2-NEGATIVE ALLOSTERIC MODULATORS, COMPOSITIONS, AND THEIR USE ~71:Merck Sharp & Dohme LLC, 126 East Lincoln Avenue, RAHWAY 07065, NJ, USA, United States of America ~72: ARASAPPAN, Ashok;DEMONG, Duane;HOYT, Scott B.;SEBHAT, Iyassu K.;WILKENING, Robert R.~ 33:US ~31:62/400,150 ~32:27/09/2016

2022/12588 ~ Complete ~54:MANAGEMENT SYSTEM AND MANAGEMENT METHOD FOR SHALLOW POLLUTED GROUNDWATER ~71:Institute of Hydrogeology and Environmental Geology, Chinese Academy of Geological Sciences, No.268 Zhonghua North Street, Shijiazhuang City, Hebei Province, 050000, People's Republic of China ~72: Li Haigang;Liang Hongcheng;Liu Linjing;Wang Lijun;Yang Congcong;Zhai Tianlun;Zheng Dechao~

2022/12593 ~ Complete ~54:A STRUCTURE AND COOLING METHOD OF A LOW-ABLATION ROCKET ENGINE NOZZLE WITH ACTIVE-COOLING THROAT-INSERT ~71:Nanjing University Of Aeronautics And Astronautics, No. 29, Yudao Street, Qinhuai District, Nanjing City, Jiangsu Province, 210016, People's Republic of China ~72: Yao Zhaohui~ 33:CN ~31:202210378851.4 ~32:12/04/2022

2022/12596 ~ Complete ~54:CITRAL SUSTAINED-RELEASE PREPARATION METHOD, APPLICATION IN THE PREVENTION AND TREATMENT OF MILDEW OF CHINESE MEDICINAL MATERIALS ~71:JIANGXI ACADEMY OF FORESTRY, No.1629 Fenglin West Street, People's Republic of China;JIANGXI AGRICULTURAL UNIVERSITY, Zhimin Avenue, People's Republic of China ~72: CHEN, Shangxing;DENG, Shaoyong;FAN, Guorong;LIAO, Shengliang;LUO, Hai;WANG, Zongde;XIA, Shiqi;ZHU, Peilin~

2022/12597 ~ Complete ~54:BROAD-SPECTRUM METHOD FOR DETECTING ORGANOPHOSPHORUS PESTICIDES AND APPLICATION THEREOF ~71:BOZHOU UNIVERSITY, 2266 Tangwang Avenue, People's Republic of China ~72: GAO, Qianni;LU, Ning;PU, Shunchang;WANG, Xiaolu;ZHANG, Huimin;ZHANG, Yu~

2022/12601 ~ Complete ~54:ELONGATED AND FLAKY AGGREGATE SCREENING DEVICE ~71:Changsha University of Science and Technology, 960, 2nd Section, Wanjiali RD (S), Tianxin District, Changsha, Hunan, 410114, People's Republic of China ~72: DUAN, Xurui;HUANG, Meiyang;LI, Ping;WEI, Jianguo;XIAO, Miaolin;YU, Fan;ZHOU, Yuming~

2022/12606 ~ Complete ~54:COMPOUND FEED FOR SINIPERCA CHUATSI ~71:FUJIAN TIANMA SCIENCE AND TECHNOLOGY GROUP CO., LTD., Industrial Zone, Shangjing Town, Fuqing City, Fujian Province, 350308, People's Republic of China ~72: CHEN, Jiacheng;CHEN, Qingtang;DING, Liyun;HU, Bing;XIAO, Jun;ZHANG, Jiaonan;ZHANG, Kun~

2022/12610 ~ Complete ~54:RAPID DETECTION METHOD OF SIBUTRAMINE AND ITS APPLICATION ~71:Bozhou University, 2266 Tangwang Avenue, Economic Development Zone, Bozhou City, Anhui Province, People's Republic of China ~72: GAO Qianni;LU Ning;PU Shunchang;WANG Xiaolu;ZHANG Huimin;ZHANG Yu~

2022/12612 ~ Complete ~54:GEOPHYSICAL LOGGING CABLE CLEANING DEVICE ~71:Nanchang Institute of Technology, No. 289, Tianxiang Avenue, High tech Development Zone, Nanchang City, Jiangxi Province, People's Republic of China ~72: LIU Xiao;ZHENG Fangwen~

2022/12579 ~ Provisional ~54:A DISPENSER ~71:BRIAN ALBERT DUBE, 200 GURNEY STREET, WEAVIND PARK, South Africa ~72: BRIAN ALBERT DUBE~



- 2022/12580 ~ Provisional ~54:ANIMAL FEED PRODUCTS ~71:MEIRING, Cornelius Jacobus, 14 Oranjesingel, Kirkwood 6120, Eastern Cape, SOUTH AFRICA, South Africa ~72: MEIRING, Cornelius Jacobus~
- 2022/12582 ~ Complete ~54:TILTING ARRANGEMENT ~71:Trellidor Innovations (Pty) Ltd, t/a Taylor Blinds and Shutters, 10 Hoist Ave, South Africa ~72: Patrick BOOTH-JONES~ 33:ZA ~31:2021/09383 ~32:23/11/2021
- 2022/12584 ~ Complete ~54:FRICITION ARRANGEMENT ~71:Trellidor Innovations (Pty) Ltd, t/a Taylor Blinds and Shutters, 10 Hoist Ave, South Africa ~72: Patrick BOOTH-JONES~ 33:ZA ~31:2021/09386 ~32:23/11/2021
- 2022/12586 ~ Complete ~54:MEAT CUTTING AND GRINDING DEVICE FOR MEAT PROCESSING ~71:HAINAN TROPICAL OCEAN UNIVERSITY, No.1 Yucai road, People's Republic of China ~72: GE, Yingliang;LI, Mingcui;LU, Lin;WANG, Hefei;XUE, Changfeng;ZHANG, Wei~
- 2022/12592 ~ Complete ~54:QUASI-STATIC LOADING TEST APPARATUS AND TEST METHOD FOR ASSEMBLY-SUPERPOSITION PIPE GALLERY ~71:Jilin Jianzhu University, No.5088 Xincheng Street, Changchun City, Jilin Province, 130118, People's Republic of China ~72: Li Jiayi;Li Yongqing;Yang Yanmin;Zhang Binlin~
- 2022/12602 ~ Complete ~54:DEVICE FOR SEPARATING AND PURIFYING MICRO-PLASTICS FROM MARINE SEDIMENTS AND USING METHOD ~71:SOUTH CHINA UNIVERSITY OF TECHNOLOGY, No. 382, Waihuan East Road, University Town, Panyu District, Guangzhou, Guangdong Province, 510006, People's Republic of China ~72: CHEN, Xueli;HE, Haijun;LI, Feng;LU, Guining~
- 2022/12609 ~ Complete ~54:POTTING METHOD OF OLEA EUROPAEA L. ~71:Research Institute of Forestry Chinese Academy of Forestry, No. 1, Dongxiaofu, Haidian District, Beijing, 100091, People's Republic of China;Sichuan Hua&#39;ou Olive Development Center, No. 1, Dezheng Street, Songya Town, Youxian District, Mianyang City, Sichuan Province, 621023, People's Republic of China;Sichuan Hua&#39;ou Olive Development Co., Ltd., No. 1, Dezheng Street, Songya Town, Youxian District, Mianyang City, Sichuan Province, 621023, People's Republic of China;Sichuan Olive Development Promotion Association, No. 1, Dezheng Street, Songya Town, Youxian District, Mianyang City, Sichuan Province, 621023, People's Republic of China ~72: WANG, Zhaoshan;XIAO, Jian;XIAO, Xing;YANG, Xizhen;ZHANG, Jianguo;ZHANG, Zihan~
- 2022/12590 ~ Complete ~54:CLIMBING FRAME-OPEN FLOOR COMBINED UPRIGHT POST ~71:CHINA CONSTRUCTION SECOND ENGINEERING BUREAU LTD, No.251 Beiyangwa, Liyuan Town, Tongzhou District, Beijing,101100, People's Republic of China ~72: Gong Zhi;Huang Weizhen;Xiao Xingxing;Yang Huapeng;Ye Puan~
- 2022/12598 ~ Complete ~54:METHOD FOR INSPECTING GROUTING QUALITY OF SURROUNDING ROCK ~71:ANHUI CHEN&#39;AN MINE SUPPORT TECHNOLOGY CO., LTD., 701, 7F, building A, entrepreneurship and innovation center, Taining Street, Shannan New District, People's Republic of China;ANHUI UNIVERSITY OF SCIENCE AND TECHNOLOGY, 168 Taifeng Street, Tianjiaan District, People's Republic of China;ANHUI WEIPEI MINING TECHNOLOGY CO., LTD, 701, 7F, building A, entrepreneurship and innovation center, Taining Street, Shannan New District, People's Republic of China;HETAOYU COAL MINE OF HUANENG QINGYANG COAL POWER CO., LTD, Qiaopo Administrative Village, ZhouJia Township, Zhengning County, People's Republic of China ~72: DOU, Jiangang;JIAO, Jianjun;JING, Laiwang;JING, Wei;LI, Xiujun;LIANG, Gelong;XUE, Weipei;YANG, Xiaoquan;ZHANG, Haicheng~
- 2022/12611 ~ Complete ~54:A COMPLEX NETWORK LINK PREDICTION METHOD BASED ON GRAPH CONVOLUTIONAL NEURAL NETWORK ~71:Suzhou University, Education Park in Yongqiao District, Suzhou City, Anhui Province, People's Republic of China ~72: Zhiwei Zhang~

2022/12619 ~ Complete ~54:SOFTENING DEVICE FOR PROCESSING MONGOLIAN MEDICINE DECOCTION PIECES ~71:Inner Mongolia;Minzu University, No.536 Huolinhe Street, Horqin District, Tongliao City, Inner Mongolia, 028000, People's Republic of China ~72: E Erdunduleng;LI Huifang;LI Xin;WU Lan~

2022/12620 ~ Complete ~54:A METHOD FOR ACCURATELY OBTAINING THE INFLUENCE RADIUS OF FOUNDATION PIT DEWATERING WELL ~71:Yantai University, No.30 Qingquan Road, Laishan District, Yantai City, Shandong Province, 264005, People's Republic of China ~72: Haixing ZHANG;Jinhao WU;Kehe GONG;Quanfeng WANG;Wenjing XU;Xingmin HOU~

2022/12621 ~ Complete ~54:MOBILE SEPTAGE TREATMENT SYSTEM ("THE ANNAM") ~71:Water, Sanitation and Hygiene Institute (WASH Institute), 1/20, Academic Course Centre, Kathirampatti Pirivu, Palani Main Road, Reddiar Chatram,, Dindigul, Tamil Nadu, 624622, India ~72: Arumugam Pillai Kalimuthu~ 33:IN ~31:202241051497 ~32:09/09/2022

2022/12632 ~ Complete ~54:MEDICAL USE OF DARIDOREXANT ~71:Idorsia Pharmaceuticals Ltd, Hegenheimmattweg 91, ALLSCHWIL 4123, SWITZERLAND, Switzerland ~72: BRAUNSTEIN, Guy;PAIN, Scott;SEBOEK-KINTER, Dalma;VAILLANT, Cedric~ 33:IB ~31:2020/060940 ~32:19/04/2020

2022/12635 ~ Complete ~54:SYSTEM, METHOD, AND DEVICE UTILIZING REVERSIBLE CONNECTOR ~71:KPR U.S., LLC, 777 West Street, MANSFIELD 02048, MA, USA, United States of America ~72: CHIGA, Bradley;PATEL, Vinit;SHALTIS, Philip~ 33:US ~31:63/028,819 ~32:22/05/2020

2022/12639 ~ Complete ~54:SYSTEM FOR CALIBRATION OF ROASTING APPARATUSES ~71:Société des Produits Nestlé S.A., Avenue Nestlé 55, VEVEY 1800, SWITZERLAND, Switzerland ~72: BIGLER, Nicolas;DUBIEF, Flavien Florent;MARTIN, Vincent;PINDJUROV, Riste~ 33:EP ~31:20171668.5 ~32:27/04/2020

2022/12641 ~ Complete ~54:METHOD FOR PRODUCING MILK LIKE PRODUCTS ~71:Société des Produits Nestlé S.A., Avenue Nestlé 55, VEVEY 1800, SWITZERLAND, Switzerland ~72: BOSCO, Mohamed Nabil;COLOMBO MOTTAZ, Sara;DESTAILLATS, Frederic;HALLER, Corinne;KRAUS, Marine;MASHINCHIAN, Omid~ 33:EP ~31:20171524.0 ~32:27/04/2020;33:EP ~31:21156950.4 ~32:12/02/2021

2022/12668 ~ Complete ~54:COMPOUNDS USEFUL FOR INHIBITING CDK7 ~71:Eli Lilly and Company, Lilly Corporate Center, INDIANAPOLIS 46206-6288, IN, USA, United States of America ~72: FERNANDEZ FIGUEROA, Maria Carmen;LUMERAS AMADOR, Wenceslao;SANCHEZ-MARTINEZ, Concepcion~ 33:EP ~31:20382446.1 ~32:27/05/2020

2022/12672 ~ Complete ~54:PENILE IMPLANT DEVICE AND METHOD ~71:MENOVA INTERNATIONAL, INC., 8500 Wilshire Blvd., Suite 707, Beverly Hills, CA, 90211, United States of America ~72: James J ELIST~ 33:US ~31:16/882,167 ~32:22/05/2020

- APPLIED ON 2022/11/22 -

2022/12673 ~ Provisional ~54:MOBILE AGRICULTURAL SOIL IMPROVEMENT MACHINE AND METHOD ~71:TURNERLAND MANUFACTURING (PTY) LTD, Old Vredenburg Road, South Africa ~72: TURNER, Francois~

2022/12678 ~ Complete ~54:PREPARATION AND APPLICATION OF HIGH-PURITY INSOLUBLE FIBER FROM SOYBEAN DREGS (OKARA) ~71:Jilin Agricultural University, 2888 Xincheng Street, Changchun City, Jilin

Province, People's Republic of China ~72: DAI Weichang;FU Hongling;GAO Junpeng;JING Wendan;LIU Junmei;LYU Bo;WANG Sainan;WANG Yuhua;YANG Huanhuan;YU Hansong~

2022/12688 ~ Complete ~54:SUN-TRACKING SOLAR POWER GENERATING APPARATUS AND THE SOLAR PANEL THEREOF ~71:Season Energy Technology Co., Ltd., 4F-6, No. 160, Sec. 1, Guiren 13th Rd, TAINAN CITY 711010, GUIREN DISTRICT, TAIWAN (R.O.C.), Taiwan, Province of China ~72: CHANG, Lin-Hung~

2022/12691 ~ Complete ~54:A MODIFIED STRAW FIBER AND A PREPARATION METHOD THEREOF AND AN ASPHALT MORTAR PREPARED BY THE MODIFIED STRAW FIBER AND A PREPARATION METHOD OF THE ASPHALT MORTAR ~71:SHANDONG JIAOTONG UNIVERSITY, No. 5001, Haitang Road, University Science Park, Changqing District, Jinan City, Shandong Province, 250037, People's Republic of China ~72: FAN, Liran;HU, Peng;LI, Xiongao;LIN, Yuquan;QU, Lu;WANG, Kun;WU, Mingjun;WU, Qiong;XU, Hao;ZHU, Yuzhu~

2022/12698 ~ Complete ~54:COMPOSITIONS AND METHODS FOR TREATMENT OF INHERITED MACULAR DEGENERATION ~71:SALIOGEN THERAPEUTICS, INC., 245 FIRST STREET, 18TH FLOOR, CAMBRIDGE, MA 02142, USA, United States of America ~72: HIGGINS, Joseph, J.;MCMILLAN, Scott;TABIBIAZAR, Ray~ 33:US ~31:63/017,442 ~32:29/04/2020

2022/12704 ~ Complete ~54:SCALABLE NESTED SEI MESSAGE HANDLING IN VIDEO SUB-BITSTREAM EXTRACTION PROCESS ~71:BYTEDANCE INC., 12655 West Jefferson Boulevard, Sixth Floor, Suite No. 137, Los Angeles, California, 90066, United States of America ~72: YE-KUI WANG~ 33:US ~31:63/029,308 ~32:22/05/2020

2022/12716 ~ Complete ~54:METHOD AND SYSTEM FOR TENSIONING A HYPERSTATIC SYSTEM ~71:Saipem S.A., 1/7 avenue San Fernando, MONTIGNY LE BRETONNEUX 78180, FRANCE, France ~72: AUPERIN, Mathieu~ 33:FR ~31:2005466 ~32:25/05/2020

2022/12722 ~ Complete ~54:ANTI-TGFB ANTIBODIES AND THERAPEUTIC USES THEREOF ~71:Zoetis Services LLC, 10 Sylvan Way, PARSIPPANY 07054, NJ, USA, United States of America ~72: BAMMERT, Gary F.;BERGERON, Lisa Marie;CAMPOS, Henry Luis;LIGHTLE, Sandra Ann Marie;STRIETZEL, Catherine J.~ 33:US ~31:63/036,092 ~32:08/06/2020

2022/12685 ~ Complete ~54:AUGMENTED INJECTION FLUID AS WELL AS PREPARATION METHOD AND APPLICATION THEREOF ~71:China Oilfield Services Limited, No. 1581, Haichuan Road, Tanggu Marine Science Park, Binhai High-tech Zone, Tianjin, 300000, People's Republic of China ~72: FENG, Qing;LI, Dan;LI, Shengsheng;LI, Xiaonan;SHE, Yuehui;ZHANG, Fan~

2022/12692 ~ Complete ~54:COLORED PERVIOUS CONCRETE AND PREPARATION METHOD THEREOF ~71:SHANDONG HI-SPEED GROUP CO., LTD., No. 8 Long'ao North Road, Lixia District, Jinan City, Shandong Province, 250101, People's Republic of China;SHANDONG JIAOTONG UNIVERSITY, No. 5001, Haitang Road, University Science Park, Changqing District, Jinan City, Shandong Province, 250037, People's Republic of China ~72: CHANG, Chunzhen;HU, Peng;MAN, Xinjie;SHI, Tao;WANG, Kun;WU, Mingjun~

2022/12707 ~ Complete ~54:INTELLIGENT GENETIC BREEDING AND SEED PRODUCTION SYSTEM FOR CROP CROSS BREEDING AND HYBRID SEED PRODUCTION, AND APPLICATION THEREOF ~71:HAINAN BOLIAN TECHNOLOGY CO., LTD., 9F, 36 Securities Building Nanbao Road, Meilan District Haikou, Hainan, 570125, People's Republic of China ~72: BAOGUANG AN;PEIJIN HUANG;TUAN LONG;XIANG ZENG;XINPENG LI;YONGZHONG WU~ 33:CN ~31:202010379287.9 ~32:07/05/2020

2022/12710 ~ Complete ~54:COMBINATION TREATMENT OF LIVER DISORDERS ~71:TERNS PHARMACEUTICALS, INC., 1065 E. Hillsdale Blvd., Suite 100, Foster City, California 94404, United States of

America ~72: CHRISTOPHER T JONES;KEVIN KLUCHER;MARTIJN FENAUX~ 33:US ~31:63/024,359  
~32:13/05/2020

2022/12719 ~ Complete ~54:NEGATIVELY CHARGED PARTICLES FOR THE TREATMENT OF CYTOKINE STORM SYNDROME (CSS) AND ACUTE RESPIRATORY DISTRESS SYNDROME (ARDS) ~71:ONCOUR Pharma, Inc., 2215 Sanders Rd., Suite 428, NORTHBROOK 60062, IL, USA, United States of America ~72: HERRMANN, Jim;PUISSIS, John~ 33:US ~31:63/018,210 ~32:30/04/2020;33:US ~31:63/018,214 ~32:30/04/2020;33:US ~31:63/128,386 ~32:21/12/2020

2022/12690 ~ Complete ~54:A UNIVERSAL SEPARATING X- AND Y-BEARING SPERM SEPARATION LIQUID FOR MAMMALS AND A USE METHOD THEREOF ~71:BEIJING REKE ZHONGYI TECHNOLOGY CO., LTD, Room 2080, Floor 2, Building 2, No. 50, Jianmucheng West Road, Haidian District, Beijing, 100089, People's Republic of China;BEIJING UNIVERSITY OF AGRICULTURE, 7 Beining Road, Huilongguan Town, Changping District, Beijing, 102206, People's Republic of China ~72: Longfei XIAO;Xiangguo WANG;Xiaojie WANG~

2022/12694 ~ Complete ~54:SYSTEM AND METHOD OF CAPTURING AND LINEARIZING OCEANIC WAVE MOTION USING A BUOY FLOTATION DEVICE AND AN ALTERNATING-TO-DIRECT MOTION CONVERTER ~71:IYER, Narayan R., 3500 Edgewood Rd NE, Apt 306 Cedar Rapids, Iowa, 52402, United States of America ~72: IYER, Narayan R.~ 33:US ~31:63/065,779 ~32:14/08/2020;33:US ~31:63/136,284 ~32:12/01/2021;33:US ~31:63/200,015 ~32:09/02/2021;33:US ~31:63/201,173 ~32:15/04/2021;33:US ~31:17/388,599 ~32:29/07/2021

2022/12709 ~ Complete ~54:ENGINEERED WOOD STRUCTURAL SYSTEM ~71:PHYLEM STRUCTURES S.L., C/ Espronceda 19. 00 A IZ 28003 Madrid, Spain ~72: JAIME TARAZONA LIZARRAGA;MANUEL P&#201;REZ ROMERO~ 33:EP ~31:20382489.1 ~32:05/06/2020

2022/12712 ~ Complete ~54:CRASH CUSHION ~71:VALTIR, LLC, 15601 Dallas Parkway Suite 525 Addison, Texas 75001, United States of America ~72: PATRICK LEONHARDT;SEAN THOMPSON~ 33:US ~31:63/035,414 ~32:05/06/2020

2022/12675 ~ Provisional ~54:COMET BRIQUETTES ~71:charl myburgh, 888 sovereign road; odangwa; 51, South Africa ~72: charl myburgh~

2022/12679 ~ Complete ~54:HIGH-STRENGTH AL-CU-MG-CE WROUGHT ALUMINIUM ALLOY AND PREPARATION METHOD THEREOF ~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: CHE, Xin;CHEN, Lijia;HE, Zhenghua;LIN, Li;WANG, Xin;ZHANG, Haoyu;ZHANG, Siqian;ZHANG, Zhipeng;ZHOU, Ge~

2022/12682 ~ Complete ~54:PREPARATION METHOD AND APPLICATIONS OF TEA POLYPHENOL MICRO-NANO COMPLEX BASED ON PROTEIN CARRIER ~71:HANGZHOU TEA RESEARCH INSTITUTE, CHINA COOP, NO. 41, CAIHE ROAD, People's Republic of China ~72: DIAO, Chunhua;KONG, Junhao;SU, Xiaoqin;YANG, Xiufang;ZUO, Xiaobo~

2022/12687 ~ Complete ~54:SOLAR POWER GENERATING SYSTEM ~71:Season Energy Technology Co., Ltd., 4F-6, No. 160, Sec. 1, Guiren 13th Rd, TAINAN CITY 711010, GUIREN DISTRICT, TAIWAN (R.O.C.), Taiwan, Province of China ~72: CHANG, Lin-Hung~

2022/12695 ~ Complete ~54:WATER PURIFIER SYSTEM ~71:Anhui Beichi Biotech Co.,Ltd, Northwest Side Of The Intersection Of Tongjiang Avenue And Jingsan Road, Wuwei Economic Development Zone, Wuhu, Anhui, 241000, People's Republic of China ~72: WANG,Yaqing~ 33:CN ~31:202210467953.3 ~32:29/04/2022

2022/12705 ~ Complete ~54:IMMUNOMODULATORY COMPLEX AND USES THEREOF FOR THERAPY  
~71:COMMISSARIAT A L&#39;ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES, 25 rue Leblanc  
B&#226;timent "Le Ponant D", 75015 Paris, France ~72: ALEXANDRA SAVATIER;C&#201;LINE  
COUSIN;CULINA SLOBODAN;MICHEL LEONETTI~ 33:FR ~31:FR20 05663 ~32:28/05/2020

2022/12713 ~ Complete ~54:LIQUID FORMULATION FOR HYDROGEN STORAGE ~71:ARKEMA FRANCE,  
420, rue d&#39;Estienne d&#39;Orves, 92700, Colombes, France ~72: J&#201;R&#212;ME BLANC~ 33:FR  
~31:FR2012920 ~32:09/12/2020

2022/12715 ~ Complete ~54:PROCESS FOR PRODUCING DICHROIC SECURITY FEATURES FOR  
SECURING VALUE DOCUMENTS ~71:SICPA HOLDING SA, Avenue de Florissant 41, PRILLY 1008,  
SWITZERLAND, Switzerland ~72: DEMARTIN MAEDER, Marlyse;GRIGORENKO, Nikolay;OSWALD,  
Andre;PITTET, Herv&#233;;RICHERT, Michelle;VEYA, Patrick~ 33:EP ~31:20171031.6 ~32:23/04/2020

2022/12723 ~ Complete ~54:SPUNBOND RECYCLED POLYPROPYLENE NONWOVEN AND METHOD OF  
MAKING THE SAME ~71:PFNONWOVENS LLC, 101 Green Mountain Road, United States of America ~72:  
Anna, Elizabeth MACURA;David, John PUNG;Eric, Bryan BOND;John, C. PARSONS;Karthik RAMARATNAM~  
33:US ~31:63/037,122 ~32:10/06/2020

2022/12696 ~ Complete ~54:SELECTIVE HERBICIDES BASED ON SUBSTITUTED ISOXAZOLIN  
CARBOXAMIDES AND CYPROSULFAMIDE ~71:BAYER AKTIENGESELLSCHAFT, Kaiser-Wilhelm-Allee 1,  
Leverkusen, Germany ~72: DITTGEN, Jan;GATZWEILER, Elmar;HAAF, Klaus, Bernhard;LORENTZ,  
Lothar;MENNE, Hubert;PEREZ CATALAN, Julio;ROSINGER, Christopher, Hugh;TRABOLD, Klaus~ 33:EP  
~31:20177906.3 ~32:02/06/2020

2022/12676 ~ Provisional ~54:NOZZLE DEVICE FOR PUMP DISPENSERS ~71:Andro van Antwerp, 5 Mopanie  
St, Heiderand, South Africa ~72: Andro van Antwerp~

2022/12680 ~ Complete ~54:FOAMED NICKEL-BASED ERBIUM-DOPED NICKEL-COBALT BIMETALLIC  
PHOSPHIDE NANO ARRAY AS WELL AS PREPARATION METHOD AND APPLICATION THEREOF  
~71:Yunnan University, No. 2, Cuihu North Road,, Kunming City, Yunnan Province, 650091, People's Republic of  
China ~72: CHEN, Anran;HU, Guangzhi;JIA, Xiuxiu;ZHANG, Hua~

2022/12686 ~ Complete ~54:A RISK WARNING SYSTEM OF MINE CONSTRUCTION BASED ON MINE  
VENTILATION DETECTION ~71:Anhui University of Science and Technology, 168 Taifeng Avenue, Huainan  
City, Anhui Province, 232001, People's Republic of China;CCTEG CHONGQING RESEARCH INSTITUTE,  
No.6,Kecheng Road,Jiulongpo District, Chongqing, 400039, People's Republic of China ~72: Fei LIU;Haomin  
DONG;Kequan WANG;Qinghua ZHANG;Qingming LONG;Ruofei ZHANG;Sheng XUE;Xijun ZHANG;Xuezhan  
XU;Yahu YAO~

2022/12700 ~ Complete ~54:IL-17A MODULATORS ~71:SANOVI, 46 Avenue de la Grande, France ~72: AL  
MASRI, Mounir;HOLMES, Arthur, Jonathan;HUXLEY, Anthony;KERN, Oliver, Thomas;KICZUN,  
Michael;MARTIN, Barrie, Phillip;MORRISON, Angus;SMITH, Alasdair;WESTERMANN, Jan-Christoph~ 33:GB  
~31:2007925.7 ~32:27/05/2020;33:GB ~31:2016931.4 ~32:26/10/2020;33:GB ~31:2101574.8  
~32:04/02/2021;33:GB ~31:2103640.5 ~32:16/03/2021

2022/12706 ~ Complete ~54:A HIGH-THROUGHPUT AND MASS-SPECTROMETRY-BASED METHOD FOR  
QUANTITATING ANTIBODIES ~71:REGENERON PHARMACEUTICALS, INC., 777 Old Saw Mill River Road,  
Tarrytown, New York, 10591-6707, United States of America ~72: SHUNHAI WANG;YUETIAN YAN~ 33:US  
~31:63/036,679 ~32:09/06/2020

2022/12683 ~ Complete ~54:BOARDGAME APPARATUS ~71:NGCONGO MBUSO, 6 RAYLEIGH HOUSE, South Africa ~72: NGCONGO, Khanyiswa;NGCONGO, Mbuso~ 33:ZA ~31:2019/04711 ~32:24/11/2021

2022/12708 ~ Complete ~54:A PERSONAL CARE COMPOSITION BASED ON TITANIUM OXIDE AND A CROSSPOLYMER OF ADIPIC ACID AND NEOPENTYL GLYCOL ~71:UNILEVER GLOBAL IP LIMITED, Port Sunlight, Wirral, Merseyside, CH62 4ZD, United Kingdom ~72: BO XU;LIN WANG;SHANGCHUN YI~ 33:CN ~31:PCT/CN2020/097189 ~32:19/06/2020;33:EP ~31:20189734.5 ~32:06/08/2020

2022/12699 ~ Complete ~54:COMPOSITIONS AND METHODS FOR TREATMENT OF FAMILIAL HYPERCHOLESTEROLEMIA AND ELEVATED LOW-DENSITY LIPOPROTEIN CHOLESTEROL ~71:SALIOGEN THERAPEUTICS, INC., 245 FIRST STREET, 18TH FLOOR, CAMBRIDGE, MA 02142, USA, United States of America ~72: HIGGINS, Joseph, J.;MCMILLAN, Scott;TABIBIAZAR, Ray~ 33:US ~31:63/017,424 ~32:29/04/2020

2022/12702 ~ Complete ~54:PHARMACEUTICAL FORMULATIONS AND THEIR PREPARATIONS FOR TREATMENT OF CANCER ~71:CELLIX BIO PRIVATE LIMITED, PLOT NO. 1177 B, ROAD NO. 56, JUBILEE HILLS, South Africa ~72: KANDULA, Mahesh~ 33:IN ~31:202041020998 ~32:19/05/2020

2022/12714 ~ Complete ~54:TREATMENT STATION, TREATMENT UNIT AND METHOD FOR TREATING WORKPIECES ~71:D&#220;RR SYSTEMS AG, Carl-Benz-Strasse 34, 74321, Bietigheim-Bissingen, Germany ~72: KLAUS HEINSOHN;MAREK DOWNAR;MICHAEL LAUER;OLIVER SEYBOTH;TOBIAS J&#196;GER~ 33:DE ~31:10 2020 208 248.0 ~32:01/07/2020

2022/12720 ~ Complete ~54:ANTIBODIES TARGETING A COMPLEX COMPRISING NON-CLASSICAL HLA-I AND NEOANTIGEN AND THEIR METHODS OF USE ~71:Boehringer Ingelheim Pharmaceuticals, Inc., 900 Ridgebury Road, RIDGEFIELD US 06877, CT, USA, United States of America ~72: UPCHURCH-ANGE, Katherine;WEIDANZ, Jon~ 33:US ~31:63/032,747 ~32:01/06/2020;33:US ~31:17/199,205 ~32:11/03/2021

2022/12725 ~ Complete ~54:VOLTAGE MEASUREMENT APPARATUS, VOLTAGE MEASUREMENT METHOD AND STORAGE MEDIUM ~71:DIGITAL GRID RESEARCH INSTITUTE, CHINA SOUTHERN POWER GRID., No. 86 Of Room 406, No. 1 Yichuang Street, China-Singapore Guangzhou Knowledge City, People's Republic of China;ELECTRIC POWER RESEARCH INSTITUTE OF GUANGXI POWER GRID CO., LTD, No. 6-2, Minzhu Road, Xingning District Nanning, People's Republic of China ~72: CHEN, Renze;LI, Licheng;LI, Peng;LIU, Zhong;LUO, Bofeng;LV, Qiancheng;SUN, Hongdi;TIAN, Bing;WANG, Xiaoming;WANG, Zhiming;YIN, Xu;ZHANG, Jiaming;ZHOU, Ke~ 33:CN ~31:202110656386.1 ~32:11/06/2021

2022/12701 ~ Complete ~54:METHODS FOR TREATING OR PREVENTING SARS-COV-2 INFECTIONS AND COVID-19 WITH ANTI-SARS-COV-2 SPIKE GLYCOPROTEIN ANTIBODIES ~71:REGENERON PHARMACEUTICALS, INC., 777 Old Saw Mill River Road, Tarrytown, United States of America ~72: FORLEO NETO, Eduardo;GANGULY, Samit;HAMILTON, Jennifer;HERMAN, Gary;HOOPER, Andrea;ISA, Flonza;O&#39;BRIEN, Meagan;SIVAPALASINGAM, Sumathi;TURNER, Kenneth~ 33:US ~31:63/034,348 ~32:03/06/2020;33:US ~31:63/036,956 ~32:09/06/2020;33:US ~31:63/038,274 ~32:12/06/2020;33:US ~31:63/043,336 ~32:24/06/2020;33:US ~31:63/060,592 ~32:03/08/2020;33:US ~31:63/062,961 ~32:07/08/2020

2022/12717 ~ Complete ~54:2-(HET)ARYL-SUBSTITUTED CONDENSED HETEROCYCLIC DERIVATIVES AS PEST CONTROL AGENTS ~71:Bayer Aktiengesellschaft, Kaiser-Wilhelm-Allee 1, LEVERKUSEN 51373, GERMANY, Germany ~72: FISCHER, Ruediger;HOFFMEISTER, Laura;ILG, Kerstin;LINKA, Marc;LOESEL, Peter;MUELLER, Steffen;WILLOT, Matthieu~ 33:EP ~31:20170542.3 ~32:21/04/2020

2022/12724 ~ Complete ~54:IMPROVEMENT OF GLASS STRENGTH AND FRACTURE TOUGHNESS BY A NON-BRITTLE ABRASION RESISTANT COATING ~71:EXXERGY GMBH, Am Wasserbogen 28, Germany ~72: BROWN, John;SAUER, Thomas C.;YOLDAS, Bulent~ 33:DE ~31:10 2020 112 268.3 ~32:06/05/2020

2022/12674 ~ Provisional ~54:A DISPENSER ~71:DE VILLIERS, Albertus, Johannes, 29A BURGER STREET, POTCHEFSTROOM, 2526, South Africa ~72: DE VILLIERS, Albertus, Johannes~

2022/12677 ~ Complete ~54:DIETARY FIBER GRANULE FOR LOWERING BLOOD SUGAR AND PREPARATION METHOD THEREOF ~71:Jilin Agricultural University, 2888 Xincheng Street, Changchun City, Jilin Province, People's Republic of China ~72: CHEN Xue;FU Hongling;JING Wendan;LYU Bo;WANG Sainan;YANG Huanhuan;YU Hansong;ZHANG Tian~

2022/12681 ~ Complete ~54:METHOD FOR PREPARING HYDROTHERMAL CARBON-BASED FUNCTIONAL NUTRIENT SUBSTRATE BY STEAM EXPLOSION COMBINED WITH HYDROTHERMAL CARBONIZATION AND AEROBIC FERMENTATION AND ITS APPLICATION ~71:Xi'an Jiaotong University, No. 28 West Xianning Road, Xi'an, shaanxi, People's Republic of China ~72: Duan Peigao;Hou Xiaoke;Lian Dongjin;Wang Yibo;Wang Zhicong~

2022/12689 ~ Complete ~54:A RESOURCE ALLOCATION METHOD OF VIRTUAL MACHINE BASED ON DOUBLE CURSOR CONTROL MECHANISM ~71:Hunan Women's University, Zhongyi 1st Road, Tianxin District, Changsha City, Hunan Province, China, 410004, People's Republic of China ~72: Liu Shukun;Pan Xianmin~

2022/12711 ~ Complete ~54:COMBINATION TREATMENT OF LIVER DISORDERS ~71:TERNS PHARMACEUTICALS, INC., 1065 E. Hillsdale Blvd., Suite 100, Foster City, California 94404, United States of America ~72: CHRISTOPHER T JONES;KEVIN KLUCHER;MARTIJN FENAUX;THORSTEN A KIRSCHBERG~ 33:US ~31:63/024,360 ~32:13/05/2020

2022/12684 ~ Complete ~54:CULTURE MEDIUM FOR PRODUCING PROTEIN KINASE C INHIBITOR BALANOL AND METHOD THEREOF ~71:Zhejiang University, No. 866, Yuhangtang Road, Xihu District, Hangzhou City, Zhejiang Province, 310058, People's Republic of China ~72: CHEN, Xin-ai;LI, Yongquan;ZHANG, Min~ 33:CN ~31:202111412818.0 ~32:25/11/2021

2022/12697 ~ Complete ~54:PROCESS FOR THE PREPARATION SALTS OF TRIAZOLE COMPOUNDS ~71:CELLIX BIO PRIVATE LIMITED, PLOT NO. 1177 B, ROAD NO. 56, JUBILEE HILLS, South Africa ~72: KANDULA, Mahesh~ 33:IN ~31:202041019951 ~32:12/05/2020

2022/12703 ~ Complete ~54:PHARMACEUTICAL FORMULATIONS OF PILOCARPINE R-(+)-LIPOATE ~71:CELLIX BIO PRIVATE LIMITED, PLOT NO. 1177 B, ROAD NO. 56, JUBILEE HILLS, South Africa ~72: KANDULA, Mahesh~ 33:IN ~31:202041021891 ~32:26/05/2020;33:IN ~31:202041027318 ~32:27/06/2020

2022/12718 ~ Complete ~54:CANINE PD-1-BINDING POLYPEPTIDES AND USES THEREOF ~71:Inhibrx, Inc., 11025 N. Torrey Pines Road, Suite 200, LA JOLLA 92037, CA, USA, United States of America ~72: DEVERAUX, Quinn;ECKELMAN, Brendan P.;PANDIT, Rajay;TIMMER, John C.~ 33:US ~31:63/019,817 ~32:04/05/2020

2022/12721 ~ Complete ~54:CELL LINE FOR PRODUCTION OF MAREK'S DISEASE VIRUS VACCINE AND METHODS OF MAKING AND USING THE SAME ~71:Zoetis Services LLC, 10 Sylvan Way, PARSIPPANY 07054, NJ, USA, United States of America ~72: AMEISS, Keith Allen;ROSEY, Everett Lee~ 33:US ~31:63/039,021 ~32:15/06/2020

- APPLIED ON 2022/11/23 -

2022/12736 ~ Complete ~54:VERTICAL SHAFT FULL HYDRAULIC ROCK LOADER ~71:China Coal 71st Engineering Division Co., Ltd, No. 8, Jianshe North Road, Suzhou, Anhui, People's Republic of China;China Coal No.3 Construction (Group) Co., Ltd, No. 215, Bianhe West Road, Suzhou, Anhui, People's Republic of China ~72: Cao Chuanguo;Liu Linlin;Liu Ning;Lu Pengju;Man Donghui;Wang Zhen;Ye Jinghui;Zhang Huachun;Zhang Li;Zhang Peng;Zheng Changda;Zheng Yujian~

2022/12738 ~ Complete ~54:FEEDING SYSTEM AND METHOD ~71:INTELLIFARM (PTY) LTD., First Floor, Wrigley Field, The Campus, C/o Sloane & Main Street, Bryanston, 2021, South Africa ~72: PIETER JACOBUS DE WET~ 33:ZA ~31:2021/08789 ~32:09/11/2021

2022/12740 ~ Complete ~54:BINARY METAL CATALYST BASED ON GASIFICATION ASH AND SLAG, PREPARATION METHOD AND APPLICATION THEREOF ~71:North China University of Science and Technology, No. 21, Bohai Avenue, Xincheng, Caofeidian District, Tangshan City, Hebei Province, 063210, People's Republic of China ~72: CHEN, Liansheng;LI, Haiying;LIU, Yun;TIAN, Yaqiang;ZHANG, Yuan~ 33:CN ~31:202211326374.3 ~32:27/10/2022

2022/12751 ~ Complete ~54:MODIFIED IPSCS ~71:ADAPTIMMUNE LIMITED, 60 Jubilee Avenue Milton Park, Abingdon, Oxfordshire, OX14 4RX, United Kingdom ~72: CHRISTINE SEIDL;GARTH HAMILTON~ 33:GB ~31:2006903.5 ~32:11/05/2020

2022/12754 ~ Complete ~54:RING DEUTERATED GABOXADOL AND ITS USE FOR THE TREATMENT OF PSYCHIATRIC DISORDERS ~71:CERTEGO THERAPEUTICS INC., 3 Bioscience Park, Dr. Farmingdale, New York, 11735, United States of America ~72: JEFFREY ALBERT;KRISTIN BALDWIN;PAVEL OSTEN;ROBERT DEVITA;SAMUEL DESJARDINS~ 33:US ~31:63/027,923 ~32:20/05/2020;33:US ~31:63/027,953 ~32:20/05/2020;33:US ~31:63/028,457 ~32:21/05/2020;33:US ~31:63/028,472 ~32:21/05/2020

2022/12763 ~ Complete ~54:DEVICE AND METHOD FOR NEEDLE/CATHETER LOCATION UTILIZING CORRELATION ANALYSIS ~71:Milestone Scientific Inc., 425 Eagle Rock Ave, ROSELAND 07068, NJ, USA, United States of America ~72: BUCK, Richard K.;HOCHMAN, Mark N.~

2022/12766 ~ Complete ~54:STABLE ANTI-CLEVER-1 ANTIBODY FORMULATION ~71:Faron Pharmaceuticals Oy, Joukahaisenkatu 6, TURKU 20520, FINLAND, Finland ~72: MANDELIN, Jami;VAINIO, Marita~ 33:FI ~31:20205624 ~32:15/06/2020

2022/12771 ~ Complete ~54:DEVICE AND METHOD FOR THE PYROLYSIS OF ORGANIC STARTING MATERIALS ~71:KLEAN INDUSTRIES INC., #2500 - 700 West Georgia St, Canada ~72: Eckard PELZ;Martin L&#214;FFLER~ 33:DE ~31:10 2020 115 348.1 ~32:09/06/2020

2022/12726 ~ Provisional ~54:GREEN ENERGY AND GRID NETWORK MANAGEMENT ~71:UNIVERSITY OF SOUTH AFRICA, PRELLERSTREET, MUCKLENEUK, PRETORIA 0002, South Africa ~72: SNYMAN, Lukas, Willem~

2022/12737 ~ Complete ~54:TISSUE CULTURE AND RAPID PROPAGATION METHOD FOR THAMNOCHARIS ESQUIROLII ~71:GUIZHOU BOTANICAL GARDEN (GUIZHOU INSTITUTE OF HORTICULTURAL SCIENCE, GUIZHOU INSTITUTE OF BOTANY), NO. 86 LUCHONGGUAN ROAD, People's Republic of China ~72: CHEN, Yunfei;LIU, Fang;MA, Jinghua;OU, Mingzhu;REN, Qifei;TANG, Shenghu;ZUO, Zulun~ 33:CN ~31:202211228225.3 ~32:08/10/2022

2022/12730 ~ Provisional ~54:A GRID ANTENNA ~71:BICK, Anthony Aaron, 41b 4th Avenue, Illovo, Sandton, South Africa;FANAROFF, Stanley, c/o Stan Fanaroff & Associates, 107 Oxford Road, Rosebank, South Africa ~72: BICK, Anthony Aaron;CONFAIT, Jean-Pierre Julius~



2022/12733 ~ Complete ~54:FULL HYDRAULIC INTELLIGENT VERTICAL SHAFT UMBRELLA DRILL ~71:China Coal 71st Engineering Division Co., Ltd, No. 8, Jianshe North Road, Suzhou, Anhui, People's Republic of China;China Coal No.3 Construction (Group) Co., Ltd, No. 215, Bianhe West Road, Suzhou, Anhui, People's Republic of China ~72: Cao Chuanguo;Liu Linlin;Liu Ning;Lu Pengju;Man Donghui;Wang Zhen;Ye Jinghui;Zhang Huachun;Zhang Li;Zhang Peng;Zheng Changda;Zheng Yujian~

2022/12745 ~ Complete ~54:GROUND SURFACE DEFORMATION MONITORING METHOD AND SYSTEM BASED ON MULTI-SOURCE MONITORING DATA FUSION ~71:Shandong Jiaotong University, Civil Engineering College, Shandong Jiaotong University, No. 5001 Haitang Road,, Changqing University Science Park,, Jinan, Shandong, 250357, People's Republic of China ~72: Binchen Zhao~

2022/12753 ~ Complete ~54:HAIRDRYER HOLDER ~71:ELENA IGOREVNA KAZANCEVA, ul. Lenina, d. 62, korp. 9, kv. 37 Sverdlovskaya obl., g. Ekaterinburg, 620062, Russian Federation ~72: ELENA IGOREVNA KAZANCEVA~

2022/12761 ~ Complete ~54:RABBIT ANTIBODIES TO HUMAN IMMUNOGLOBULINS G ~71:GENZYME CORPORATION, 50 Binney Street, Cambridge, MA, United States of America ~72: CHU, Ruiyin~ 33:US ~31:63/033,073 ~32:01/06/2020

2022/12765 ~ Complete ~54:CORNER SEGMENT HAVING PROTRUSIONS ON WEAR ZONES ~71:Caterpillar Inc., 100 NE Adams Street, PEORIA 61629-9510, IL, USA, United States of America ~72: BJERKE, Nathan;CONGDON, Thomas M.~ 33:US ~31:16/861,664 ~32:29/04/2020

2022/12773 ~ Complete ~54:PEPTIDES AND METHODS FOR THE TREATMENT OF MULTIPLE SCLEROSIS ~71:IMCYSE SA, Avenue Pr#233;-Aily 14, Belgium ~72: CARLIER, Vincent;ERAK, Milos;GLOIRE, Geoffrey;SAINT-REMY, Jean-Marie;VAN MECHELEN, Marcelle;VAN RAMPPELBERGH, Jean;VANDER ELST, Luc;WALGRAFFE, David~ 33:EP ~31:20173201.3 ~32:06/05/2020

2022/12728 ~ Provisional ~54:A CONNECTING MEMBER FOR A LATTICE GIRDER ~71:SPECIALISED PRECAST ELEMENTS CC, 11 BLESBOK STREET, KOEDOESPOORT INDUSTRIAL SITES, PRETORIA, 0186, South Africa ~72: VAN ROOYEN, Paul, M#246;ller~

2022/12732 ~ Complete ~54:CADMIUM SULFIDE QUANTUM DOTS AND PREPARATION METHOD THEREOF ~71:Shantou Polytechnic, Shantou Polytechnic, Haojiang District, Shantou City, Guangdong Province, People's Republic of China ~72: Qi CHEN;Shen WANG~

2022/12741 ~ Complete ~54:MULTIFUNCTION VISOR AND A VISOR GLARE SCENE SIMULATOR DEVICE TOGETHER ALSO DEFINING A VISOR CUM SIMULATOR TESTING AND ADJUSTMENT SYSTEM ~71:Denis Krassas, 2 Smyrna Court 195 Nigel Road Selclourt, South Africa ~72: Denis KRASSAS~ 33:ZA ~31:2021/04304 ~32:23/08/2021;33:ZA ~31:2022/11189 ~32:13/10/2022

2022/12742 ~ Complete ~54:ARTIFICIAL INTELLIGENCE-BASED HEALTHCARE SYSTEM FOR CONTINUOUS HEALTH MONITORING AND PREDICTING DISEASES IN ITS EARLY PHASE ~71:Dr. Jency Rubia Jebaraj, Assistant professor, Department of Electronics and Communication Engineering, K. Ramakrishnan College of Engineering, Trichy, Tamil nadu, 621112, India;Dr. Jeyalakshmi Kaniyappan Sathiyavan, Assistant Professor, Department of Computer Applications, V.V. Vanniaperumal College for Women, Virudhunagar, Tamilnadu, 626001, India;Dr. Lilly Raamesh, Professor, Department of Information Technology, St. Joseph's College of Engineering, Chennai, Tamilnadu, 600119, India;Dr. Rajesh Thipparaju, Assistant Professor, Department of Electrical & Electronics Engineering, JB Institute of Engineering and Technology, Hyderabad, 500075, India;Dr. Subashini Balakrishnan, Assistant Professor, Department of Computer Applications, V.V.Vanniaperumal College for Women, Virudhunagar, Tamilnadu, 626001, India;Dr. Sumagna Patnaik, Professor, Department of

Information Technology, JB Institute of Engineering and Technology, Hyderabad, 500075, India;Dr. Yallanti Sowjanya Kumari, Associate Professor Department of CSE, St. Ann's College of Engineering and Technology, Chirala, Andhra Pradesh, 523187, India;Nancy Beaulah Rathinam, Assistant Professor, Department of Computer Applications, V.V. Vanniaperumal College for Women, Virudhunagar, Tamilnadu, 626001, India;Sakthivel Venkatesan, Lecturer, Department of Mechanical Engineering, Ramakrishna Mission Polytechnic College, Chennai, Tamilnadu, 600004, India;Tarun Jaiswal, Research Scholar, Department of Computer Application, National Institute of Technology(NIT, Raipur), Chhattisgarh, 492010, India ~72: Dr. Jency Rubia Jebaraj;Dr. Jeyalakshmi Kaniyappan Sathiyavan;Dr. Lilly Raamesh;Dr. Rajesh Thipparaju;Dr. Subashini Balakrishnan;Dr. Sumagna Patnaik;Dr. Yallanti Sowjanya Kumari;Nancy Beaulah Rathinam;Sakthivel Venkatesan;Tarun Jaiswal~

2022/12744 ~ Complete ~54:A NOVEL WEEDING TECHNOLOGY FOR HONEYSUCKLE ~71:GANSU BENCAOYUAN CHINESE HERBAL MEDICINE CO., LTD, Dongjie She, Caipu Village, Longchuan Town, Tongwei County, Dingxi City, Gansu Province, 743319, People's Republic of China ~72: GUO, Xinxin;HE, Junqing;JI, Lijun;WEI, Juntuan;ZHANG, Hongwei~

2022/12748 ~ Complete ~54:ALDOSE REDUCTASE INHIBITORS FOR TREATING SORBITOL DEHYDROGENASE DEFICIENCY ~71:APPLIED THERAPEUTICS, INC., 545 FIFTH AVENUE, SUITE 1400, NEW YORK, NEW YORK 10017, USA, United States of America ~72: SHENDELMAN, Shoshana~ 33:US ~31:63/019,186 ~32:01/05/2020;33:US ~31:63/019,738 ~32:04/05/2020

2022/12756 ~ Complete ~54:PYRAZOLO[1,5-A]PYRIMIDINE DERIVATIVES HAVING MULTIMODAL ACTIVITY AGAINST PAIN ~71:ESTEVE PHARMACEUTICALS, S.A., Passeig de la Zona Franca, 109, 4&#170; Planta , 08038, Barcelona, Spain ~72: ARIADNA FERNANDEZ-DONIS;CARMEN ALMANSA-ROSALES;JOAN-CARLES FERNANDEZ-COLLADO;JORDI GONZALEZ-GARCIA;JOS&#201;-LU&#205;S D&#205;AZ-FERN&#193;NDEZ;M&#211;NICA GARCIA-LOPEZ;MARIA GARRIDO-MARTINEZ~ 33:EP ~31:20382447.9 ~32:27/05/2020

2022/12760 ~ Complete ~54:IL-17A MODULATORS ~71:SANOFI, 46 Avenue de la Grande, France ~72: AL MASRI, Mounir;HOLMES, Arthur, Jonathan;HUXLEY, Anthony;KERN, Oliver, Thomas;KICZUN, Michael;MARTIN, Barrie, Phillip;MORRISON, Angus;SMITH, Alasdair;WASZKOWYCZ, Bohdan;WESTERMANN, Jan-Christoph~ 33:GB ~31:2007931.5 ~32:27/05/2020;33:GB ~31:2016934.8 ~32:26/10/2020;33:GB ~31:2101577.1 ~32:04/02/2021;33:GB ~31:2103642.1 ~32:16/03/2021

2022/12770 ~ Complete ~54:BIOCEMENTATION MIXTURE FOR DUST CONTROL AND RELATED APPLICATIONS ~71:BIND-X GMBH, Am Klopferspitz 19, Germany ~72: Florian HORNUNG;Jan-Philip MERKL;Luitpold FRIED;Martin SPITZNAGEL;Saskia PAZUR~ 33:EP ~31:20176894.2 ~32:27/05/2020

2022/12743 ~ Complete ~54:A PREPARATION METHOD OF EDIBLE COMPOSITE FILM BASED ON TEA POWDER ~71:XINYANG NORMAL UNIVERSITY, No. 237 Nanhu Road, Xinyang City, Henan Province, 464000, People's Republic of China ~72: JIA, Yin;JIA, Yongxian;LI, Cuiping;NING, Yuli;XU, Wei~

2022/12747 ~ Complete ~54:ELAFIBRANOR FOR THE TREATMENT OF PRIMARY SCLEROSING CHOLANGITIS ~71:GENFIT, 885 AVENUE EUG&#200;NE AVIN&#201;E, 59120 LOOS, FRANCE, France ~72: ROUDOT, Alice~ 33:EP ~31:20305513.2 ~32:18/05/2020

2022/12750 ~ Complete ~54:ISOXAZOLIDINES AS RIPK1 INHIBITORS AND USE THEREOF ~71:SANOFI, 46 Avenue de la Grande, France ~72: DEFOSSA, Elisabeth;GLOMBIK, Heiner;HEINELT, Uwe;MATTER, Hans;MENDEZ-PEREZ, Maria;RACKELMANN, Nils;RITTER, Kurt;SCHWINK, Lothar;SZILLAT, Hauke;ZECH, Gernot~ 33:EP ~31:20315292.1 ~32:02/06/2020

2022/12757 ~ Complete ~54:A CONTAINER ~71:UNILEVER GLOBAL IP LIMITED, Port Sunlight, Wirral, Merseyside, CH62 4ZD, United Kingdom ~72: GAURAV PATHAK;GIRISH MURALIDHARAN;RAJEESH KUMAR RAMACHANDRAN~ 33:EP ~31:20182876.1 ~32:29/06/2020

2022/12759 ~ Complete ~54:NOVEL FORMULATION ~71:RECKITT BENCKISER HEALTH LIMITED, 103-105 Bath Road, Slough, United Kingdom ~72: DAS, Anupam A K;MCGIRR, Matthew Edward Anthony~ 33:GB ~31:2007619.6 ~32:21/05/2020

2022/12769 ~ Complete ~54:TREATMENT FOR AMYLOIDOSIS ~71:Recurium IP Holdings, LLC, 10275 Science Center Drive, Suite 200, SAN DIEGO 92121, CA, USA, United States of America ~72: BUNKER, Kevin Duane;HUANG, Peter Qinhua;PINCHMAN, Joseph Robert;SAMATAR, Ahmed Abdi~ 33:US ~31:63/027,194 ~32:19/05/2020

2022/12746 ~ Complete ~54:SUPPORTED TRANSITION METAL NANOPARTICLE CATALYST AND USE THEREOF AS A HYDROGENATION CATALYST ~71:BASF CORPORATION, 100 PARK AVENUE, FLORHAM PARK, 07932, USA, United States of America ~72: WITTE, Peter~ 33:EP ~31:20172917.5 ~32:05/05/2020

2022/12749 ~ Complete ~54:AN ASSEMBLY AND A SYSTEM SUITABLE FOR DISPENSING A LIQUID FROM A COMPRESSIBLE BAG ~71:OSAA INNOVATION APS, KONGENS V&#198;NGE 49, 3400 HILLER&#216;D, DENMARK, Denmark ~72: HESSAM, Ahmed, Abdullah~ 33:DK ~31:PA 2020 70274 ~32:30/04/2020

2022/12758 ~ Complete ~54:MATERIALS AND METHODS FOR INHIBITING A VIRAL INFECTION, INCLUDING A CORONAVIRUS INFECTION ~71:QUORUM INNOVATIONS, LLC, 2088 Hawthorne Street, Sarasota, United States of America ~72: BERKES, Eva, A.;BOEHM, Frederick T.;LIAO, Yu-Hsien;MONSUL, Nicholas, T.~ 33:US ~31:63/035,733 ~32:06/06/2020

2022/12764 ~ Complete ~54:SUBSTITUTED AMINOTHIAZOLES AS DGKZETA INHIBITORS FOR IMMUNE ACTIVATION ~71:Bayer Aktiengesellschaft, Kaiser-Wilhelm-Allee 1, LEVERKUSEN 51373, GERMANY, Germany ~72: BADER, Benjamin;BOEMER, Ulf;GREES, Mareike;KIRCHHOFF, Dennis;KOSEMUND, Dirk;LINK, Corinna;NGUYEN, Thi Thanh Uyen;NOWAK-REPPEL, Katrin;OFFRINGA, Rienk;PETERSEN, Kirstin;ROEHN, Ulrike;SCHMEES, Norbert;STOECKIGT, Detlef;WERBECK, Nicolas~ 33:EP ~31:20171280.9 ~32:24/04/2020

2022/12768 ~ Complete ~54:CONJUGATES OF A CELL-BINDING MOLECULE WITH CAMPTOTHECIN ANALOGS ~71:Hangzhou DAC Biotech Co., Ltd., Building 12, Zhongzi Technology Park, No. 260 Sixth Street, HEDA, HANGZHOU 310018, ZHEJIANG, CHINA (P.R.C.), People's Republic of China ~72: BAI, Lu;CAI, Xiang;CHEN, Diancheng;CHEN, Miaomiao;CHEN, Xiaoxiao;DU, Yong;GUO, Huihui;GUO, Zhixiang;HUANG, Shangma;HUANG, Yuanyuan;JIA, Junxiang;JIANG, Xinyan;KONG, Xiangfei;LI, Wenjun;LI, Yanhua;LIN, Chen;WANG, Xiaoxu;XU, Yifang;YANG, Qingliang;YE, Hangbo;YE, Riping;ZHANG, Lingli;ZHANG, Xiuzhen;ZHAO, Gengxiang;ZHAO, Robert;ZHENG, Jun;ZHENG, Wei;ZHENG, Yunxia~

2022/12772 ~ Complete ~54:CONTAINER CLOSURE ~71:ALPLA WERKE ALWIN LEHNER GMBH & CO. KG, Allmendstrasse 81, Austria ~72: Andreas KAINZ;Franz-Michael L&#196;SSER~ 33:CH ~31:00672/20 ~32:05/06/2020

2022/12731 ~ Provisional ~54:ENERGY CONVERSION ARRANGEMENT ~71:DU TOIT, Ronald Michael, 13 Carney Street, South Africa ~72: DU TOIT, Ronald Michael~

2022/12735 ~ Complete ~54:GRINDING WHEEL FOR GRINDING RECLAIMED WAFER ~71:PINGLIANG VETERAN TECHNOLOGY RESEARCH AND DEVELOPMENT CO. LTD, No. 8, Nanbei Road, Industrial Park, Pingliang City, Gansu Province, 744000, People's Republic of China ~72: CAO, Liping;WEN, Kang;ZHANG, Puji;ZHANG, Wancai~

2022/12774 ~ Provisional ~54:LAYKHAYA ONLINE APP ~71:BATHULISILE MANDA, 5744 FOX STREET, VLAKFONTIEN PROPER, LENESIA SOUTH, GAUTENG, South Africa ~72: BATHULISILE MANDA~

2022/12727 ~ Provisional ~54:FOLLOW ME @ SCHOOL APP ~71:Siyavuya Nicholas Xolo, 377 Orion Avenue Waterkloof Ridge, South Africa ~72: Onikayo Avuya Xolo~

2022/12729 ~ Provisional ~54:A GRID ANTENNA ~71:BICK, Anthony Aaron, 41b 4th Avenue, Illovo, Sandton, South Africa;FANAROFF, Stanley, c/o Stan Fanaroff & Associates, 107 Oxford Road, Rosebank, South Africa ~72: BICK, Anthony Aaron;CONFAIT, Jean-Pierre Julius~

2022/12752 ~ Complete ~54:SYSTEMIC FORMULATION OF A PYRIDINONE DERIVATE FOR TG2-RELATED DISEASES ~71:DR. FALK PHARMA GMBH, Leinenweberstr. 5 79108 Freiburg, Germany;ZEDIRA GMBH, Roesslerstrasse 83, 64293, Darmstadt, Germany ~72: BERNHARD TEWES;MARTIN HILS;RALF PASTERNAK;ROLAND GREINWALD;RUDOLF WILHELM;WOLFGANG MOHR~ 33:EP ~31:20171441.7 ~32:24/04/2020;33:EP ~31:20211697.6 ~32:03/12/2020

2022/12755 ~ Complete ~54:METHOD FOR PROVIDING AN UNDERGROUND BARRIER FOR A WATER RESERVOIR ~71:ROYAL EIJKELKAMP B.V., Nijverheidsstraat 9, 6987 EN Giesbeek, Netherlands ~72: HUGO JAAP EIJKELKAMP~

2022/12762 ~ Complete ~54:ALLOY TOOL BIT TWIST DRILL ~71:SHANDONG OLD ROUGHNECK MACHINERY TECHNOLOGY CO. LTD, Room 1201, Zhongnanyue Business Building, West Dongyue Street, Taishan District, Tai'an, Shandong, 271099, People's Republic of China;SHANDONG XINGONG CUTTING TOOLS CO. LTD, Zhangzhuang Cinema, Xinwen Xintai, XinWen Xintai, Shandong, 271219, People's Republic of China ~72: LI, Shiqing~ 33:CN ~31:202010428077.4 ~32:17/05/2020;33:CN ~31:202010428078.9 ~32:17/05/2020;33:CN ~31:202010428080.6 ~32:17/05/2020;33:CN ~31:202010428122.6 ~32:17/05/2020;33:CN ~31:202010428124.5 ~32:17/05/2020;33:CN ~31:202010428157.X ~32:17/05/2020;33:CN ~31:202010428158.4 ~32:17/05/2020;33:CN ~31:202010428191.7 ~32:17/05/2020

2022/12767 ~ Complete ~54:A MIXTURE OF PYRETHROIDS AND MECTINS AND USES THEREOF ~71:Valent BioSciences LLC, 1910 Innovation Way, Suite 100, LIBERTYVILLE 60048, IL, USA, United States of America ~72: BELKIND, Benjamin A.;CLARK, Jason;DECHANT, Peter;KESAVARAJU, Banugopan~ 33:US ~31:63/037,285 ~32:10/06/2020

2022/12734 ~ Complete ~54:SEED DRESSING AGENT FOR PROMOTING EARLY AND FAST GROWTH OF PEANUTS AND PREPARATION METHOD THEREOF ~71:HENAN INSTITUTE OF SCIENCE AND TECHNOLOGY, East Section of Hualan Avenue, Xinxiang City, Henan Province, 453003, People's Republic of China ~72: JIA, Peipei;LI, Lijie;LIU, Runqiang;WANG, Sufang;WU, Zhibin;ZHANG, Weixing;ZHANG, Zhiyong~

2022/12739 ~ Complete ~54:TOOLBOX FOR SOIL ENVIRONMENTAL DAMAGE ASSESSMENT ~71:GANSU ACADEMY OF ECO-ENVIRONMENTAL SCIENCES, Gansu Environmental Science and Technology Building, No. 225, Yanerwan Road, People's Republic of China ~72: LIU, Peng;MA, Xiaozhou;YANG, Bin~

- APPLIED ON 2022/11/24 -

2022/12777 ~ Provisional ~54:SPARE WHEEL HOLDER ~71:KERSTEN, Jan Franz, Plot 199, South Africa;VORSTER, Barend Johannes Martunis, Plot 199, South Africa ~72: KERSTEN, Jan Franz;VORSTER, Barend Johannes Martunis~

2022/12788 ~ Complete ~54:A CELLAR FOR ENSILAGE ~71:Shandan Sanyang Agriculture and Animal Husbandry Development Co., Ltd., Shuangquantan Breeding Community, Damaying Township, Shandan County,

Zhangye City, Gansu Province, 734100, People's Republic of China ~72: Gao zicheng;Tang tianyuan;Wu chunxian~

2022/12795 ~ Complete ~54:PAPER PASTING MECHANISM OF PAPER PASTING MACHINE OF INFUSION APPARATUS ~71:Anqing Tianrun Paper Plastic Packaging Co., Ltd, East of Jingshi Road and south of Weiliu Road, Daqiao Development Zone, Anqing City, Anhui Province, 246001, People's Republic of China ~72: CHENG, Jiusong;LONG, Daoqin~ 33:CN ~31:202111106766.4 ~32:22/09/2021

2022/12800 ~ Complete ~54:METHODS FOR THE PREPARATION OF SPHINGOSINE 1-PHOSPHATE RECEPTOR MODULATORS AND SOLID FORMS THEREOF ~71:CIPLA LIMITED, Cipla House, Peninsula Business Park, Ganpatrao Kadam Marg, Lower Parel, Mumbai, Maharashtra, 400 013, India ~72: DURGA SURYA NARAYANA YARRA;LAKKIREDDY PULLAREDDY;PUPPALA RAVI KUMAR;RAJU BARLA;RAMANAI AH CHENNURU;SIVA KRISHNA NANGEDDA;SRINIVAS LAXMINARAYAN PATHI;YELLANKI JAGANNADHAM~ 33:IN ~31:202021022647 ~32:29/05/2020;33:IN ~31:202021038947 ~32:09/09/2020;33:IN ~31:202021050037 ~32:17/11/2020

2022/12805 ~ Complete ~54:PYRROLO[2,3-D]PYRIMIDINE DERIVATIVES ~71:Pfizer Inc., 235 East 42nd Street, NEW YORK 10017, NY, USA, United States of America ~72: DOWTY, Martin Eugene;MALHOTRA, Bimal Kumar;SAMARDJIEV, Ivan Jordan;SAMAS, Brian Matthew;STROHBACH, Joseph Walter~ 33:US ~31:62/704,796 ~32:28/05/2020;33:US ~31:63/037,366 ~32:10/06/2020

2022/12775 ~ Provisional ~54:NDLOVU OPTOMETRIST I CARE AND OPTICAL LAB OUTREACH PROGRAMME ~71:Dr Sibonelo Freedom Ndlovu, 112 AALYWYN ROAD, South Africa ~72: Dr Sibonelo Freedom Ndlovu~

2022/12780 ~ Provisional ~54:HYDROGEN FUEL CELL PASSENGER DRONE WITH BUILT-IN GPS MAP INFORMATION ~71:AHMED WASEEF SAIB, 24 Park Avenue Desainagar, South Africa ~72: AHMED WASEEF SAIB~

2022/12784 ~ Complete ~54:A KIND OF MULBERRY WINE AND ITS PRODUCTION METHOD ~71:Gansu Shangji Health Products Co., Ltd., Yingbin West Road, Shandan County, Zhangye City, Gansu Province, 734100, People's Republic of China ~72: Ding shuying;Gao yuhan;Ji hang~

2022/12787 ~ Complete ~54:A LABOR-SAVING CABLE TIGHTENER ~71:Anhui Lutai Electric Technology Co., Ltd, No.12401, Haixinsha Building, Pihe Road, Jin'an District, Lu'an City, Anhui Province, 237001, People's Republic of China;West Anhui University, Moon Island, Yu'an District, Lu'an City, Anhui Province, 237012, People's Republic of China ~72: Lu Chengling;Zhang Lei;Zhang Yanxue~

2022/12794 ~ Complete ~54:HOT-FORGING DIE STEEL AND MANUFACTURING METHOD THEREOF AS WELL AS PISTON FORGING MOLDING DIE AND MANUFACTURING METHOD THEREOF ~71:Anhui Anhuang Machinery Co., Ltd, 3.9 square kilometers Industrial Park, Anqing Development Zone, Anhui Province, 246001, People's Republic of China ~72: HUANG, Changwen;SONG, Jiabing;XUE, Yongjie;ZHAO, Zhongli~ 33:CN ~31:202110894658.1 ~32:05/08/2021

2022/12798 ~ Complete ~54:XANTHINE DEHYDROGENASE (XDH) RNA COMPOSITIONS AND METHODS OF USE THEREOF ~71:ALNYLAM PHARMACEUTICALS, INC., 675 West Kendall Street, Henri A. Termeer Square, Cambridge, Massachusetts, 02142, United States of America ~72: ADAM CASTORENO;ANNA BORODOVSKY;JAMES D MCININCH;JINGXUAN LIU;MARK K SCHLEGEL~ 33:US ~31:63/040,587 ~32:18/06/2020;33:US ~31:63/153,983 ~32:26/02/2021

2022/12802 ~ Complete ~54:GLASS MANUFACTURING ~71:OWENS-BROCKWAY GLASS CONTAINER INC., One Michael Owens Way, Perrysburg, Ohio, 43551, United States of America ~72: PHILLIP J RAUSCH;RANDY ERNSTHAUSEN;ROGER P SMITH;SCOTT WEIL;SHANE T RASHLEY;THOMAS G GREEN;ZHONGMING WANG~ 33:US ~31:17/061,302 ~32:01/10/2020

2022/12806 ~ Complete ~54:FUNGICIDAL COMPOSITIONS ~71:Syngenta Crop Protection AG, Rosentalstrasse 67, BASEL 4058, SWITZERLAND, Switzerland ~72: BLUM, Mathias;BURNS, David;LAMBERTH, Clemens;MONACO, Mattia Riccardo;RENDINE, Stefano~ 33:EP ~31:20178042.6 ~32:03/06/2020

2022/12810 ~ Complete ~54:CONTAINMENT DEVICE ~71:STELLENBOSCH UNIVERSITY, Admin B, Victoria Street, Stellenbosch, South Africa ~72: FUZY, Edward Joseph~ 33:GB ~31:2008435.6 ~32:04/06/2020

2022/12776 ~ Provisional ~54:NDLOVU OPTOMETRIST I CARE AND OPTICAL LAB OUTREACH PROGRAMME ~71:Dr Sibonelo Freedom Ndlovu, 112 AALYWYN ROAD, South Africa ~72: Dr Sibonelo Freedom Ndlovu~

2022/12779 ~ Provisional ~54:HYDRAULIC DRILLING MACHINE ~71:SULZER (SOUTH AFRICA) HOLDINGS (PTY) LTD, 9 GERHARDUS ROAD, ELANDSFONTEIN, South Africa ~72: MARIUS IMANIEL ACKERMANN~

2022/12782 ~ Complete ~54:PROTECTIVE COVER FOR ELEVATOR PULLEYS ~71:Anhui Technical College of Mechanical and Electrical Engineering, No. 16, Wenjin West Road, Higher Education Park, Yijiang District, Wuhu City, Anhui Province, 241002, People's Republic of China ~72: JIANG, Nenghui;NI, Jinting~

2022/12785 ~ Complete ~54:A MIXING AND STIRRING DEVICE FOR WATERPROOF COATINGS FOR BUILDING CONSTRUCTION ~71:Zhangye Zhicheng Architectural Decoration Engineering Co., Ltd., Zhengheyuan Complex Building, Huanzhuang Village, Shandan County, Zhangye City, Gansu Province, 734100, People's Republic of China ~72: Guo yugui;Huang haifeng;Qiao xingde~

2022/12789 ~ Complete ~54:A CLOUD DATABASE BASED IP MANAGEMENT SYSTEM ~71:Gansu Aoyu Technology Service Co., Ltd., Room 605, Building 2, Phase I Project of Zhangye Vision International Trade City, Ganzhou District, Zhangye City, Gansu Province, 734000, People's Republic of China ~72: Feng zhiping;Hemia;Qiao xingde~

2022/12792 ~ Complete ~54:ANTI-PD-1 ANTIBODIES AND FUSION PROTEINS ~71:KADMON CORPORATION, LLC, 450 East 29th Street New York, United States of America ~72: CHANG, Tzu-Pei;LU, Dan;MARTOMO, Stella, A;MIYARA, Faical;PATEL, Jeegar;POLONSKAYA, Zhanna~ 33:US ~31:63/043,114 ~32:23/06/2020;33:US ~31:63/111,459 ~32:09/11/2020

2022/12801 ~ Complete ~54:CATALYTIC OXIDATION OF CARBON BLACK EXHAUST GAS ~71:TOPSOE A/S, Haldor Tops&#248;es All&#233; 1, 2800, Kgs. Lyngby, Denmark ~72: GORDON R REYNOLDS JR;MADS LYKKE~ 33:US ~31:63/037,991 ~32:11/06/2020

2022/12807 ~ Complete ~54:MICROBIOCIDAL DERIVATIVES ~71:Syngenta Crop Protection AG, Rosentalstrasse 67, BASEL 4058, SWITZERLAND, Switzerland ~72: EDMUNDS, Andrew~ 33:EP ~31:20178038.4 ~32:03/06/2020

2022/12786 ~ Complete ~54:A QUINOA WINE AND ITS PREPARATION METHOD ~71:Gansu Shangji Health Products Co., Ltd., Yingbin West Road, Shandan County, Zhangye City, Gansu Province, 734100, People's Republic of China ~72: Kong li;Liang shunan;Liang xinran~

2022/12791 ~ Complete ~54:A GRAVIMETER ZERO-DRIFT CORRECTION METHOD, APPARATUS AND ELECTRONIC DEVICE ~71:Beihai Offshore Engineering Survey Institute, SOA, #27 Yun-ling-lu, laoshan,

Qingdao, Shandong, 266100, People's Republic of China;Zhang Wang, #27 Yun-ling-lu, laoshan, Qingdao, Shandong, 266100, People's Republic of China ~72: Bu Ruyuan;Cao Kai xiang;Liu Yaming;Shi Xiaowei;Wang Hongchao;Zhang Wang~ 33:CN ~31:202211305944.0 ~32:24/10/2022

2022/12796 ~ Complete ~54:IMPROVING ANTIBODY TOLERABILITY ASSOCIATED WITH INTRAVENOUS ADMINISTRATION ~71:BIOINVENT INTERNATIONAL AB, Ideongatan 1, SE-223 70, Lund, Sweden ~72: BJ&#214;RN FREN&#201;US;INGRID KARLSSON;INGRID TEIGE;LINDA M&#197;RTENSSON~ 33:EP ~31:20178287.7 ~32:04/06/2020;33:EP ~31:21163703.8 ~32:19/03/2021

2022/12781 ~ Complete ~54:MODEL AND METHOD FOR IDENTIFYING LARGE-SCALE BURSTY NETWORK TRAFFIC, AND TRAINING METHOD FOR MODEL ~71:Zhejiang University of Science and Technology, No. 318 Liuhe Road, Xihu District,, Hangzhou City,, Zhejiang Province, 310023, People's Republic of China ~72: FANG, Kebin;GAN, Xiaoya;GUO, Yuhan;QIAN, Yaguan;SUN, Yulu;WU, Shuhui;YUN, Bensheng~

2022/12790 ~ Complete ~54:CIRCUIT FOR TESTE TEMPERATURES ~71:Lu&#39;an Jianghuai Motor Co., Ltd, No. 1 Shouchun Road, Jin&#39;an District, Lu&#39;an City, Anhui Province, People's Republic of China;West Anhui University, Moon Island, Yu&#39;an District, Lu&#39;an City, Anhui Province, People's Republic of China ~72: Liu Ziqing;Lu Chengling;Xu Yubao;Zhang Gang~

2022/12797 ~ Complete ~54:MACROCYCLIC COMPOUNDS AND METHODS OF USE THEREOF ~71:GENENTECH, INC., 1 DNA Way, South San Francisco, California, 94080-4990, United States of America ~72: HAO WU;JAKOB FUHRMANN;JEREMY MURRAY;WAYNE FAIRBROTHER~ 33:US ~31:63/043,071 ~32:23/06/2020

2022/12803 ~ Complete ~54:METHOD FOR THE MACHINE-BASED DETERMINATION OF THE FUNCTIONAL STATE OF SUPPORT ROLLERS OF A BELT CONVEYOR SYSTEM, COMPUTER PROGRAM AND MACHINE-READABLE DATA CARRIER ~71:thyssenkrupp AG, ThyssenKrupp Allee 1, ESSEN 45143 , GERMANY, Germany;thyssenkrupp Industrial Solutions AG, ThyssenKrupp Allee 1, ESSEN 45143, GERMANY, Germany ~72: ESSER, Philipp;HANDL, David;KREX, Martin;WEI, Sophie Ruoshan~ 33:DE ~31:10 2020 206 497.0 ~32:25/05/2020

2022/12808 ~ Complete ~54:POLYNUCLEOTIDES COMPRISING AN ANTIGENIC PAYLOAD ~71:Nutcracker Therapeutics, Inc., 5858 Horton Street, Suite 540, EMERYVILLE 94608, CA, USA, United States of America ~72: FRIMANSSON, Daniel Omar;HAABETH, Ole~ 33:US ~31:63/024,604 ~32:14/05/2020

2022/12778 ~ Provisional ~54:PHOSPHORUS RECOVERY AND SYNGAS GENERATION FROM BIOWASTE ~71:MINTEK, 200 Malibongwe Drive, South Africa ~72: BANDA, Wesley Kondwani;GELDENHUYS, Isabella Johanna;KEKANA, Thokozile Penelope;MATINDE, Elias;REYNOLDS, Quinn Gareth;XAKALASHE, Buhle Sinaye~

2022/12783 ~ Complete ~54:DUAL CHANNEL-INTERMEDIATE HEAT INSULATION TYPE SOLAR PHASE CHANGE HEAT STORAGE WALL SYSTEM ~71:Institute of Energy Research, Jiangxi Academy of Sciences, No. 7777, Changdong Avenue, Nanchang 330096, Jiangxi, CHINA (P.R.C.), People's Republic of China;Nanjing University of Science and Technology, No. 200, Xiaolingwei Street, Nanjing 210094, Jiangsu, CHINA (P.R.C.), People's Republic of China ~72: LUO, Chenglong;TU, Mengzi;XI, Xiping~

2022/12793 ~ Complete ~54:ANTHELMINTIC HETEROCYCLIC COMPOUNDS ~71:BOEHRINGER INGELHEIM ANIMAL HEALTH USA INC., 3239 Satellite Blvd., Duluth, Georgia, United States of America;BOEHRINGER INGELHEIM PHARMA GMBH & CO. KG, Bingerstrasse 173, Germany ~72: HERLE, Bart;KOOLMAN, Hannes, Fiepko;LONG, Alan~ 33:US ~31:63/031,656 ~32:29/05/2020

2022/12799 ~ Complete ~54:BIODEGRADABLE ADHESIVE COMPOSITION ~71:UNILEVER GLOBAL IP LIMITED, Port Sunlight, Wirral, Merseyside, CH62 4ZD, United Kingdom ~72: GEOFFREY ROBERT VICTOR HAWKINS;JOANNA FLYNN~ 33:EP ~31:20181327.6 ~32:22/06/2020

2022/12804 ~ Complete ~54:MODULAR LOCK ~71:CISA S.p.A., Via Guglielmo Oberdan, 42, FAENZA 48018, ITALY, Italy ~72: FABBRI, Matteo;FERRI, Giovanni;TALAMONTI, Enzo~

2022/12809 ~ Complete ~54:COMBINATION OF RUXOLITINIB WITH INCB057643 FOR TREATMENT OF MYELOPROLIFERATIVE NEOPLASMS ~71:Incyte Corporation, 1801 Augustine Cut-Off, WILMINGTON 19803, DE, USA, United States of America ~72: LIU, Phillip C.;STUBBS, Matthew~ 33:US ~31:63/034,214 ~32:03/06/2020

- APPLIED ON 2022/11/25 -

2022/12821 ~ Complete ~54:SECURITY BARRIERS ~71:GROENEWALD, Martin, 23 Constantia Road, Langeberg Village, South Africa ~72: GROENEWALD, Martin~ 33:ZA ~31:202106172 ~32:26/08/2021

2022/12826 ~ Complete ~54:A RESIDUAL FEED INTAKE LNCRNA ASSOCIATED WITH SOCIAL AGGRESSION IN PIGS AND ITS APPLICATION ~71:Sichuan Agricultural University, Sichuan Agricultural University, No. 211, Huimin Road, Wenjiang District, Chengdu, Sichuan, People's Republic of China ~72: Chen Dong;Ji Xiang;Shen Qi;Tang Guoqing;Wang Shujie;Yu Yang;Zhao Zhenjian~

2022/12832 ~ Complete ~54:UNDERGROWTH PLANTING METHOD OF DICTYOPHORA RUBROVALVATA M.ZANG ~71:Guizhou Zhengcheng Agricultural Technology Development Co., Ltd, Guiyang National High tech Industrial Development Zone, Guiyang City, Guizhou Province, 550000, People's Republic of China;Institute of Crop Germplasm Resources/Institute of Modern Chinese Herbal Medicines, Guizhou Academy of Agricultural Sciences, 13th floor, agricultural science and technology innovation building, Provincial Academy of Agricultural Sciences, Jinxin community, Huaxi District, Guiyang City, Guizhou Province, 550000, People's Republic of China ~72: Cheng Peng;Cheng Zheng;Gong GuangLu;Luo TingQing~

2022/12834 ~ Complete ~54:HIELD REPAIR METHOD OF HUMAN FACE MASK FOR EPIDEMIC PREVENTION AND CONTROL ~71:HuaiNan Normal University, West Dongshan Road,Huainan City,Anhui Province,China,Zip232038, People's Republic of China ~72: Chen Lei;Li Xiaoyan;Liu Lei;Liu Qingyu;Meng Xuetao;Xiao Qiang~

2022/12814 ~ Complete ~54:WATER-BASED FAST-DRY ANTICORROSIVE COATING AND PROCESSING METHOD THEREFOR ~71:Xinxing Hebei Metallurgy Resource Co., Ltd., North of Shangluoyang Village, Cishan, Wu#39;an City, Handan City, Hebei Province, 056300, People's Republic of China ~72: BAI, Haiqiang;GAO, Xihong;LI, Futang;LI, Guoguang;LIU, Yanqiang;WEI, Zebin;XIAO, Wenkao;ZHAO, Xinjie~

2022/12818 ~ Complete ~54:FRESH-KEEPING METHOD FOR INHIBITING CHESTNUT GERMINATION BY UTILIZING ACTIVE CHLORINE ~71:Research Institute of Forestry Chinese Academy of Forestry, Research Institute of Forestry Chinese Academy of Forestry, No.1 Dongxiaofu, Qinglongqiao,, Haidian District,, Beijing,, 100091, People's Republic of China ~72: LIANG, Lisong;MA, Qinghua;RONG, Yan;SHI, Chenshan;YANG, Zhen;ZHAO, Tiantian~

2022/12823 ~ Complete ~54:MOISTURIZING DEVICE FOR PLANT DISEASE SAMPLES AND APPLICATION THEREOF ~71:Institute of Vegetables, Hainan Academy of Agricultural Sciences, No. 14, Xingdan Road, Qiongsan District, Haikou City, Hainan Province, 571199, People's Republic of China;Tropical Crops Genetic Resources Institute, Chinese Academy of Tropical Agricultural Sciences, No. 4, Xueyuan Road, Longhua District,



Haikou City, Hainan Province, 571101, People's Republic of China ~72: CAO, Zhenmu;LIU, Weixia;LIU, Ziji;QIN, Yuling;ZHU, Baibi;ZHU, Dan~

2022/12836 ~ Complete ~54:A SET OF ROADSIDE MOBILE INTELLIGENT ANTI-ICE AND SNOW-MELT EQUIPMENT ~71:Shandong Jiaotong University, #5001 Hai-tang-lu, Changqing District, Jinan, Shandong, 250357, People's Republic of China ~72: Chen Renshan;Hou Changlin;Shangguan Haonan;Zhang Wei~ 33:CN ~31:202111543263.3 ~32:16/12/2021

2022/12837 ~ Complete ~54:A COMPOUND AND ITS APPLICATIONS ~71:Beijing Technology and Business University, 11 Fucheng Road, Haidian District, Beijing, People's Republic of China ~72: Ai Nasi;Fu yan;Li Honghua;Song Fuhang;Yang Na~

2022/12839 ~ Complete ~54:SUSTAINED-RELEASE PHEROMONE PREPARATION ~71:Shin-Etsu Chemical Co., Ltd., 4-1, Marunouchi 1-chome, Chiyoda-ku, TOKYO 1000005, JAPAN, Japan ~72: SAGUCHI, Ryuichi~ 33:JP ~31:2021-192044 ~32:26/11/2021

2022/12867 ~ Complete ~54:ENGINEERED INTERLEUKIN-10 POLYPEPTIDES AND USES THEREOF ~71:The Board of Trustees of the Leland Stanford Junior University, Office of The General Counsel, Building 170, Third Floor, Main Quad, P.O. Box 203, STANFORD 94305-2038, CA, USA, United States of America ~72: GARCIA, Kenan Christopher;SAXTON, Robert Andrew~ 33:US ~31:63/031,186 ~32:28/05/2020

2022/12871 ~ Complete ~54:FEMORAL HEAD RESTORATION ~71:DePuy Ireland Unlimited Company, Loughbeg Industrial Estate, RINGASKIDDY, COUNTY CORK, IRELAND, Ireland ~72: NAYLOR, Jason;WITHER, Caroline~ 33:GB ~31:2006158.6 ~32:27/04/2020

2022/12849 ~ Complete ~54:ADAMTS13 PROTEIN VARIANTS AND USES THEREOF ~71:SANQUIN IP B.V., Plesmanlaan 125, Netherlands ~72: ER#199;IĀ, Boġa#231;;GOMES GRA#199;A, Nuno Alexandre;VOORBERG, Johannes Jacobus~ 33:EP ~31:20176333.1 ~32:25/05/2020

2022/12853 ~ Complete ~54:COMPOSITE ULTRAFILTRATION MEMBRANE MATERIAL AND PREPARATION METHOD THEREFOR ~71:JI NING LV YUAN RESEARCH INSTITUTE OF SPECIAL SEPARATION TECHNOLOGY AND APPLICATION, Building A4, Energy Conservation And Environmental Protection Industrial Park,, Jiaxin Road, Tuanli Town,, Jining Economic And Technological Development Zone,, Shandong, 273200, People's Republic of China;SHANDONG GRAND KEVAN ECO-TECH CO., LTD., Building A4, Energy Conservation And Environmental Protection Industrial Park,, Jiaxin Road, Tuanli Town,, Jining Economic And Technological Development Zone,, Shandong, 273200, People's Republic of China ~72: DENG, Hongbo;GU, Feng;YUAN, Tao;ZHU, Mingyue~ 33:CN ~31:202110304044.3 ~32:22/03/2021

2022/12856 ~ Complete ~54:CANCER TREATMENT STRATEGIES USING ARENAVIRUS VECTORS ~71:HOOKIPA BIOTECH GMBH, Helmut-Qualtinger-Gasse 2, 1030 Vienna, Austria ~72: ANDY HWANG;CORINNE IACOBUCCI;DONNA EDWARDS;HENNING LAUTERBACH;IGOR MATUSHANSKY;KATIA SCHLIENGER;KIANOOSH KATCHAR;KLAUS ORLINGER;MICHAEL SCHWENDINGER;SARAH SCHMIDT;URSULA BERKA~ 33:US ~31:63/032,362 ~32:29/05/2020;33:US ~31:63/173,155 ~32:09/04/2021;33:US ~31:63/175,842 ~32:16/04/2021

2022/12820 ~ Complete ~54:SCRAPER TYPE TOBACCO TOPPING DEVICE ~71:NORTHWEST A&F UNIVERSITY, NO. 22 XINONG ROAD, People's Republic of China;SHAANXI BRANCH OF CHINA NATIONAL TOBACCO CORPORATION, NO. 19 YANNAN 4TH ROAD, People's Republic of China ~72: DU, Xinghua;HE, Xin;JIAO, Taowei;LI, Longfei;LI, Wei;XIAO, Yumeng~

2022/12827 ~ Complete ~54:A NOVEL WINDOW FRAME SYSTEM FOR LIGHTING IN A BUILDING  
~71:LOVELY PROFESSIONAL UNIVERSITY, JALANDHAR-DELHI G.T. ROAD, PHAGWARA, India ~72: Arvind  
Kumar Singh;Davinderpal Singh;Dharam Buddhi;Mahendra Joshi;Nagendra Narayan;Rajesh Singh~

2022/12811 ~ Provisional ~54:A PUBLIC SECTOR SYSTEMS INNOVATION: THE ROYAL BLUEPRINT  
SYSTEM ~71:InventDesign 24/7 (Pty). Ltd, 13 Robinson, South Africa;Sizo Ngubane, Sizo, 13 Robinson street,  
South Africa ~72: Sizo Ngubane~

2022/12813 ~ Provisional ~54:ARTIFICIAL INTELLIGENCE LANGUAGE ~71:Maurice Vernon Marinus, 17 Skua  
Crescent, South Africa ~72: Maurice Vernon Marinus~ 33:ZA ~31:1 ~32:24/11/2022

2022/12822 ~ Complete ~54:AIRING DEVICE FOR VEGETABLE SEEDS AND USAGE THEREOF ~71:Institute  
of Vegetables, Hainan Academy of Agricultural Sciences, No. 14, Xingdan Road, Qiongsan District, Haikou City,  
Hainan Province, 571199, People's Republic of China;Tropical Crops Genetic Resources Institute, Chinese  
Academy of Tropical Agricultural Sciences, No. 4, Xueyuan Road, Longhua District, Haikou City, Hainan  
Province, 571101, People's Republic of China ~72: CAO, Zhenmu;CHEN, Yisong;LIU, Weixia;LIU, Ziji;QIN,  
Yuling;ZHU, Baibi;ZHU, Dan~

2022/12828 ~ Complete ~54:A NOVEL COMPOSITION FOR RECLAMATION OF DESERTED LAND AND  
PROCESS THEREOF ~71:LOVELY PROFESSIONAL UNIVERSITY, JALANDHAR-DELHI G.T. ROAD,  
PHAGWARA, India ~72: Ankita Thakur;Anu Bansal;Dr. Neeta Raj Sharma;Dr. Runjhun Tandon~

2022/12835 ~ Complete ~54:PREPARATION METHODS OF LIQUID CULTURE MEDIUM AND LIQUID STRAIN  
OF DICTYOPHORA RUBROVALVATA M.ZANG ~71:Guizhou Zhengcheng Agricultural Technology Development  
Co., Ltd, Guiyang National High tech Industrial Development Zone, Guiyang City, Guizhou Province, 550000,  
People's Republic of China;Institute of Crop Germplasm Resources/Institute of Modern Chinese Herbal  
Medicines, Guizhou Academy of Agricultural Sciences, 13th floor, agricultural science and technology innovation  
building, Provincial Academy of Agricultural Sciences, Jinxin community, Huaxi District, Guiyang City, Guizhou  
Province, 550000, People's Republic of China ~72: Cheng Peng;Cheng Zheng;Gong GuangLu;Luo TingQing~

2022/12843 ~ Complete ~54:SELECTIVE HERBICIDES BASED ON SUBSTITUTED ISOXAZOLIN  
CARBOXAMIDES AND CLOQUINTOCET-MEXYL ~71:BAYER AKTIENGESELLSCHAFT, Kaiser-Wilhelm-Allee  
1, Leverkusen, Germany ~72: DITTGEN, Jan;GATZWEILER, Elmar;HAAF, Klaus, Bernhard;LORENTZ,  
Lothar;MENNE, Hubert;PEREZ CATALAN, Julio;ROSINGER, Christopher, Hugh;TRABOLD, Klaus~ 33:EP  
~31:20177908.9 ~32:02/06/2020

2022/12846 ~ Complete ~54:CUTTING APPARATUS FOR DOUGH PRODUCTS ~71:FRITO-LAY NORTH  
AMERICA, INC., 7701 Legacy Drive, United States of America ~72: PONGPAIROTE, Chumpol~ 33:US  
~31:16/890,260 ~32:02/06/2020

2022/12848 ~ Complete ~54:AN ADAPTOR ASSEMBLY FOR A FLUID DISPENSING SYSTEM ~71:ESSITY  
HYGIENE AND HEALTH AKTIEBOLAG, 405 03, Sweden ~72: CRISMANN, Sebastiano;HODOSSY,  
Sofia;OLSSON, Joel;WALHEIM, Karl~ 33:EP ~31:PCT/EP2020/064199 ~32:20/05/2020

2022/12852 ~ Complete ~54:IMPROVED TOUCHLESS PRODUCT DISPENSING ~71:SESTRA SYSTEMS,  
INC., 45180 BUSINESS COURT, SUITE 100, STERLING, VA 20166, USA, United States of America ~72:  
KUSHNIR, Alex;MAPHIS, Ben;VOLFTSUN, Lev~ 33:US ~31:63/016,311 ~32:28/04/2020;33:US  
~31:63/016,315 ~32:28/04/2020;33:US ~31:63/016,339 ~32:28/04/2020

2022/12855 ~ Complete ~54:IMPROVED VIRUCIDAL FORMULATIONS ~71:FIREBRICK PHARMA LIMITED, Level 10, 440 Collins Street, Melbourne, Victoria, 3000, Australia ~72: PETER MOLLOY;SIMON TUCKER;STEPHEN GOODALL~ 33:AU ~31:2020901910 ~32:10/06/2020

2022/12858 ~ Complete ~54:ADDITIVE-COATED SHEAVE, METHOD OF MANUFACTURING THE SAME, AND METHODS OF REDUCING SOUND PRODUCED BY EQUIPMENT ~71:SHERMAN + REILLY, INC., 400 West 33rd Street, Chattanooga, Tennessee, 37410, United States of America ~72: DOUGLAS BRUCE MACDONALD;HARBY CARTER HOLLIS;JOHN JEREMIAH MORTON~ 33:US ~31:63/028,410 ~32:21/05/2020

2022/12862 ~ Complete ~54:METHOD FOR THE CONTINUOUS SYNTHESIS OF PARACETAMOL ~71:IPSOMEDIC, 1, Place F&#233;lix Baret 13006, Marseille, France ~72: EDITH LECOMTE-NORRANT;ROMAIN MEMBRAT~ 33:FR ~31:FR2004184 ~32:27/04/2020;33:FR ~31:FR2012032 ~32:23/11/2020

2022/12868 ~ Complete ~54:SYSTEM AND METHOD FOR FUMIGATING A VESSEL WITH CREW PROTECTION ~71:Fintran Australia Pty Ltd, 1/5 Phillip Court, PORT MELBOURNE 3207, VICTORIA, AUSTRALIA, Australia ~72: JANA, Aric;SLAVIN, Matthew Brian~ 33:AU ~31:2020901707 ~32:26/05/2020;33:AU ~31:2020901708 ~32:26/05/2020

2022/12830 ~ Complete ~54:A METHOD OF ECOLOGICAL SOIL REMEDIATION ~71:Hunan Economic Geography Technology Development Co., Ltd., No. 139 Fenglin 2nd Road, Yuelu District, Changsha, 410205, People's Republic of China ~72: OUYANG Ningxiang;WEI Xiao;ZHAN qiang;ZHANG Pengbo~

2022/12840 ~ Complete ~54:SUSTAINED-RELEASE PHEROMONE PREPARATION ~71:Shin-Etsu Chemical Co., Ltd., 4-1, Marunouchi 1-chome, Chiyoda-ku, TOKYO 1000005, JAPAN, Japan ~72: SAGUCHI, Ryuichi~ 33:JP ~31:2021-192048 ~32:26/11/2021

2022/12841 ~ Complete ~54:ACOUSTIC CABLE ALARM DEVICE, SYSTEM AND METHOD ~71:ESKOM HOLDINGS SOC LIMITED, Legal and Compliance Department, Megawatt Park, Maxwell Drive, South Africa ~72: DE KLERK, Nicolaas;KLEYNHANS, Theo;VAN LOGGERENBERG, Conrad~

2022/12864 ~ Complete ~54:MODIFIED NUCLEIC ACIDS ENCODING ASPARTOACYLASE (ASPA) AND VECTOR FOR GENE THERAPY ~71:Pfizer Inc., 235 East 42nd Street, NEW YORK 10017, NY, USA, United States of America ~72: ASANO, Shoh;ASSAF, Basel Tariq;BERG, Allison P.;FRANCIS, Jeremy;HALES, Katherine;LEONE, Paola~ 33:US ~31:63/016,507 ~32:28/04/2020;33:US ~31:63/077,144 ~32:11/09/2020

2022/12872 ~ Complete ~54:DEVICES AND METHODS FOR LAPAROSCOPIC ACCESS AND WOUND CLOSURE ~71:CHANG, Kuowei, 32 Buckman Drive, LEXINGTON 02421, MA, USA, United States of America;RAY, Subir, 211 Cherry Avenue, OAKLEY 67748, KS, USA, United States of America ~72: CHANG, Kuowei;RAY, Subir~ 33:US ~31:63/101,958 ~32:26/05/2020

2022/12876 ~ Complete ~54:4-OXO-3,4-DIHYDROQUINAZOLINON COMPOUNDS FOR THE TREATMENT OF BRAF-ASSOCIATED DISEASES AND DISORDERS ~71:Array BioPharma Inc., 3200 Walnut Street, BOULDER 80301, CO, USA, United States of America ~72: BETTENDORF, Tanna Marie;DOERNER BARBOUR, Patrick Michael;KAHN, Dean Russell;KELLUM, Alex Andrew;LAIRD, Ellen Ruth;MORENO, David Austin;REN, Li~ 33:US ~31:63/036,522 ~32:09/06/2020;33:US ~31:63/116,204 ~32:20/11/2020;33:US ~31:63/175,655 ~32:16/04/2021

2022/12860 ~ Complete ~54:OBJECT DETECTION AND TRACKING FOR AUTOMATED OPERATION OF VEHICLES AND MACHINERY ~71:RAVEN INDUSTRIES, INC, P.O. Box 5107, Sioux Falls, South Dakota,

57117-5107, United States of America ~72: AZIZ ALIBASIC;RAHUL RAMAKRISHNAN;THOMAS ANTONY;VENKATA RAMA KARTHIK PAGA~ 33:US ~31:63/016,738 ~32:28/04/2020

2022/12844 ~ Complete ~54:SELECTIVE HERBICIDES BASED ON SUBSTITUTED ISOXAZOLIN CARBOXAMIDES AND BENOXACOR ~71:BAYER AKTIENGESELLSCHAFT, Kaiser-Wilhelm-Allee 1, Leverkusen, Germany ~72: DITTGEN, Jan;GATZWEILER, Elmar;HAAF, Klaus, Bernhard;LORENTZ, Lothar;MENNE, Hubert;PEREZ CATALAN, Julio;ROSINGER, Christopher, Hugh;TRABOLD, Klaus~ 33:EP ~31:20177911.3 ~32:02/06/2020

2022/12869 ~ Complete ~54:SYSTEM AND METHOD FOR FUMIGATING A VESSEL WITH EXHAUST ~71:Fintran Australia Pty Ltd, 1/5 Phillip Court, PORT MELBOURNE 3207, VICTORIA, AUSTRALIA, Australia ~72: JANA, Aric;SLAVIN, Matthew Brian~ 33:AU ~31:2020901707 ~32:26/05/2020;33:AU ~31:2020901708 ~32:26/05/2020

2022/12874 ~ Complete ~54:ENPP1 MODULATORS AND USES THEREOF ~71:Vir Biotechnology, Inc., 499 Illinois Street, Suite 500, SAN FRANCISCO 94158, CA, USA, United States of America ~72: SAITO, Roland D.;TSE, Winston C.~ 33:US ~31:63/024,937 ~32:14/05/2020

2022/12877 ~ Complete ~54:STABLE SHAPED ALUMINA AND METHOD FOR PRODUCING SAME ~71:Sasol Germany GmbH, Anckelmannsplatz 1, HAMBURG 20537, GERMANY, Germany ~72: BRASCH, Andrea;HOLZMANN, Yanick;HOWE, Stefan;SIEGEL, Angela~ 33:EP ~31:20176653.2 ~32:26/05/2020

2022/12879 ~ Provisional ~54:TRAFFIC CONTROLLER ~71:MFANA FANIE RUBERU, 3789 SECTION M, BAHULA STR, MAMELODI WEST, South Africa ~72: MFANA FANIE RUBERU~

2022/12824 ~ Complete ~54:FERMENTED GRAINS TURNING MACHINE FOR FERMENTING FERMENTED GRAINS ~71:Zhenjiang Hengwei Koji Making Machine Co., Ltd., Zhenjiang Hengwei Koji Making Machine Co., Ltd., Zhenjiang City, Jiangsu Province, 212000, People's Republic of China ~72: SUN, Qiliang;SUN, Yi~

2022/12831 ~ Complete ~54:PREPARATION METHOD OF DICTYOPHORA RUBROVALVATA M.ZANG MUSHROOM STICK ~71:Guizhou Zhengcheng Agricultural Technology Development Co., Ltd, Guiyang National High tech Industrial Development Zone, Guiyang City, Guizhou Province, 550000, People's Republic of China;Institute of Crop Germplasm Resources/Institute of Modern Chinese Herbal Medicines, Guizhou Academy of Agricultural Sciences, 13th floor, agricultural science and technology innovation building, Provincial Academy of Agricultural Sciences, Jinxin community, Huaxi District, Guiyang City, Guizhou Province, 550000, People's Republic of China ~72: Cheng Peng;Cheng Zheng;Gong GuangLu;Luo TingQing~

2022/12854 ~ Complete ~54:SYSTEMS AND METHODS FOR COLLECTING RETINAL SIGNAL DATA AND REMOVING ARTIFACTS ~71:DIAMENTIS INC., 2875 boulevard Laurier, Suite D1-11, Tour 1, Qu&#233;bec, Qu&#233;bec, G1V 0B9, Canada ~72: CLAUDE HARITON~ 33:US ~31:63/038,257 ~32:12/06/2020;33:US ~31:63/149,508 ~32:15/02/2021;33:CA ~31:PCT/CA2021/050390 ~32:25/03/2021;33:US ~31:17/212,410 ~32:25/03/2021

2022/12857 ~ Complete ~54:DOMAIN-SPECIFIC LANGUAGE INTERPRETER AND INTERACTIVE VISUAL INTERFACE FOR RAPID SCREENING ~71:QUIXOTIC LABS INC., 819 Virginia Street #2210, Seattle, Washington, 98101-4428, United States of America ~72: SARA ITANI~ 33:US ~31:63/029,556 ~32:24/05/2020

2022/12866 ~ Complete ~54:ADENO-ASSOCIATED VIRUS COMPOSITIONS FOR RESTORING PAH GENE FUNCTION AND METHODS OF USE THEREOF ~71:Homology Medicines, Inc., 1 Patriots Park, BEDFORD 01730, MA, USA, United States of America ~72: FRANCONI, Omar;SEYMOUR, Albert Barnes;SOOKIASIAN,

Danielle Lauren;ST. MARTIN, Thia Baboval;WRIGHT, Jason Boke~ 33:US ~31:63/030,341  
~32:27/05/2020;33:US ~31:63/117,252 ~32:23/11/2020

2022/12870 ~ Complete ~54:COMPOSITION COMPRISING PEPSTATIN AND ALGINIC ACID OR A SALT THEREOF, AND USE THEREOF ~71:Drugs Minerals and Generics Italia S.r.l. in forma abbreviata D.M.G. Italia S.r.l., Via Laurentina Km. 26700, POMEZIA (RM) 00071, ITALY, Italy ~72: MERCURI, Luigi;TIBERI, Licia~ 33:IT ~31:10202000012370 ~32:26/05/2020

2022/12845 ~ Complete ~54:SELECTIVE HERBICIDES BASED ON SUBSTITUTED ISOXAZOLIN CARBOXAMIDES AND ISOXADIFEN-ETHYL ~71:BAYER AKTIENGESELLSCHAFT, Kaiser-Wilhelm-Allee 1, Leverkusen, Germany ~72: DITTGEN, Jan;GATZWEILER, Elmar;HAAF, Klaus, Bernhard;LORENTZ, Lothar;MENNE, Hubert;PEREZ CATALAN, Julio;ROSINGER, Christopher, Hugh;TRABOLD, Klaus~ 33:EP ~31:20177907.1 ~32:02/06/2020

2022/12847 ~ Complete ~54:HEAVY PEPTIDE APPROACH TO ACCURATELY MEASURE UNPROCESSED C-TERMINAL LYSINE ~71:REGENERON PHARMACEUTICALS, INC., 777 Old Saw Mill River Road, Tarrytown, United States of America ~72: CEJKOV, Milos;GREER, Tyler;LI, Ning;O'BRIEN JOHNSON, Reid;ZHENG, Xiaojing~ 33:US ~31:63/041,015 ~32:18/06/2020

2022/12863 ~ Complete ~54:PROBIOTIC BACILLUS SANITISER ~71:Dylan John SETTER, 52a Compensation Beach Road, South Africa;Quinten Colin DICKERSON, 40 Glades Drive, South Africa ~72: DICKERSON, Quinten Colin;SETTER, Dylan John~ 33:ZA ~31:2020/03127 ~32:27/05/2020

2022/12865 ~ Complete ~54:METHODS FOR TREATING MYELIN ASSOCIATED DISEASES AND MITOCHONDRIA ASSOCIATED DISEASES ~71:Larimar Therapeutics, Inc., Three Bala Plaza East, Suite 506, BALA CYNWYD 19004, PA, USA, United States of America ~72: BETTOUN, Joan David~ 33:US ~31:63/018,451 ~32:30/04/2020

2022/12873 ~ Complete ~54:DIHYDROXAZOLE AND THIOUREA DERIVATIVES MODULATING THE NLRP3 INFLAMMASOME PATHWAY ~71:AC Immune SA, EPFL Innovation Park, Building B, LAUSANNE 1015, SWITZERLAND, Switzerland ~72: DEHLINGER, Veronique;GABELLIERI, Emanuele;MOLETTE, Jean-Marie~ 33:EP ~31:20 18 1221.1 ~32:19/06/2020;33:EP ~31:21 16 4097.4 ~32:22/03/2021

2022/12875 ~ Complete ~54:PROCESSES OF PREPARING A JAK1 INHIBITOR ~71:Incyte Corporation, 1801 Augustine Cut-Off, WILMINGTON 19803, DE, USA, United States of America ~72: DAI, Yingrui;JIA, Zhongjiang;PAN, Yongchun;PARKS, James M.;TOMAINÉ, Anthony J.;WANG, Jianji;ZHANG, Aibin;ZHOU, Jiacheng~ 33:US ~31:63/033,618 ~32:02/06/2020

2022/12878 ~ Complete ~54:MARKERS AND CELLULAR ANTECEDENTS OF RHEUMATOID ARTHRITIS FLARES ~71:THE ROCKEFELLER UNIVERSITY, 1230 York Avenue, New York, United States of America;THE TRUSTEES OF PRINCETON UNIVERSITY, One Nassau Hall, Princeton, United States of America ~72: DARNELL, Robert B.;ORANGE, Dana;TROYANSHAYA, Olga G.;YAO, Vicky~ 33:US ~31:63/031,861 ~32:29/05/2020

2022/12850 ~ Complete ~54:ROOFTOP TENT ~71:iKAMPER CO., LTD., 541-44 BANGCHON-RO, TANHYEON-MYEON, PAJU-SI, GYEONGGI-DO 10858, REPUBLIC OF KOREA, Republic of Korea ~72: HA, Seung, Suk;PARK, Soon, Gyu;SHIN, Wan, Cheol~ 33:KR ~31:10-2021-0141468 ~32:22/10/2021

2022/12859 ~ Complete ~54:COMPOSITIONS AND METHODS FOR GENE EDITING ~71:THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, 1111 Franklin Street, Twelfth Floor, Oakland, California, 94607-5200, United States of America ~72: JAMES NUNEZ;JIN CHEN;JONATHAN WEISSMAN;LUKE GILBERT~ 33:US

~31:63/033,397 ~32:02/06/2020;33:US ~31:63/114,850 ~32:17/11/2020;33:US ~31:63/171,698  
~32:07/04/2021

2022/12861 ~ Complete ~54:COMPOSITIONS AND METHODS FOR EPIGENOME EDITING ~71:THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, 1111 Franklin Street, Twelfth Floor, Oakland, California, 94607-5200, United States of America ~72: GREG POMMIER;JAMES NUNEZ;JONATHAN WEISSMAN;LUKE GILBERT~ 33:US ~31:63/035,431 ~32:05/06/2020;33:US ~31:63/118,832 ~32:27/11/2020

2022/12817 ~ Complete ~54:FRESH-KEEPING METHOD FOR INHIBITING CHESTNUT GERMINATION BY UTILIZING CARBON DIOXIDE ~71:Research Institute of Forestry Chinese Academy of Forestry, Research Institute of Forestry Chinese Academy of Forestry, No.1 Dongxiaofu, Qinglongqiao, Haidian District, Beijing, 100091, People's Republic of China ~72: LIANG, Lisong;MA, Qinghua;RONG, Yan;SHI, Chenshan;YANG, Zhen;ZHAO, Tiantian~

2022/12816 ~ Complete ~54:METHOD FOR BREEDING SORGHUM BICOLOR (L) MOENCH AND APPLICATION THEREOF ~71:Sichuan University of Science and Engineering, No. 519, Xueyuan Street, Huixing Road, Zigong City, Sichuan Province, 643002, People's Republic of China;Wuliangye Group Co., Ltd., No. 150, Minjiang West Road, Yibin City, Sichuan Province, 644000, People's Republic of China ~72: DENG, Linglong;DUAN, Yujuan;KANG, Zhenhui;KONG, Meiqi;LI, Dong;SUN, Kangjun~

2022/12819 ~ Complete ~54:SEWAGE TREATMENT DEVICE APPLIED TO WATER ENVIRONMENT TREATMENT ~71:Beibu Gulf University, 12 Binhai Avenue, Binhai New City, Qinzhou City, Guangxi, People's Republic of China ~72: DENG Shaoyun;QIU Qinghua~

2022/12812 ~ Provisional ~54:ELECTROMECHANICAL BRAKE PEDAL ~71:TSHWANE UNIVERSITY OF TECHNOLOGY, STAATSARTILLERIE STREET PRETORIA WEST, South Africa ~72: LAUNSPACH, Waldo Stefan;OOSTHUIZEN, Christiaan Coenrad~

2022/12851 ~ Complete ~54:AWNING FOR VEHICLE ~71:IKAMPER CO., LTD., 541-44 BANGCHON-RO, TANHYEON-MYEON, PAJU-SI, GYEONGGI-DO 10858, REPUBLIC OF KOREA, Republic of Korea ~72: PARK, Soon, Gyu~ 33:KR ~31:10-2021-0054833 ~32:28/04/2021;33:KR ~31:10-2021-0152926 ~32:28/04/2021;33:KR ~31:10-2021-0152925 ~32:09/11/2021

2022/12815 ~ Complete ~54:INTELLIGENT PHYSICAL TRAINING DEVICE ~71:TaiShan University, No. 525, Dongyue Street, Tai'an City, Shandong Province, 271000, People's Republic of China ~72: MA, Lin~

2022/12842 ~ Complete ~54:A TYPE OF RECIPROCATING ELECTROMAGNETIC SLUDGE DRYER ~71:Jianjun Chen, Room 502, No. 66, West Wenxuan Road,, Pujiang County,, Jinhua City, Zhejiang Province, 322200, People's Republic of China ~72: Zhen Chen~

2022/12825 ~ Complete ~54:DEVICE AND METHOD FOR REAL-TIME NONDESTRUCTIVE MONITORING AND ANALYSIS OF HOLLOW FIBER MEMBRANE POLLUTION ~71:Tianjin University, No.92 Weijin Road, Nankai District, Tianjin City, People's Republic of China ~72: AN Zihan;LI Genfeng;TIAN Yimei;WU Xiuli~

2022/12829 ~ Complete ~54:AN OPTO-MECHANICAL DEVICE FOR DETECTING THE DIMENSIONS OF MECHANICAL PARTS ~71:Jiangsu College of Safety Technology, No. 1, Daxue Road, Jiawang District, Xuzhou City, Jiangsu Province, 221011, People's Republic of China ~72: Liu Hairui;Liu Yanli;Zou Shangyuan~

2022/12833 ~ Complete ~54:A CLASSIFICATION METHOD OF FINANCIAL TIME SERIES BASED ON LOW FREQUENCY INFORMATION REPRESENTATION ~71:Huainan Normal University, Dongshan West Road,

Tianjia;an District, Huainan, Anhui Province, 232038, People's Republic of China ~72: Cheng Huanhuan;Liu Bing;Zheng Chengli~

2022/12838 ~ Complete ~54:A NOVEL PASSIVE DOWNDRAUGHT EVAPORATIVE COOLING SYSTEM FOR IMPROVING AIR CIRCULATION IN BUILDINGS ~71:LOVELY PROFESSIONAL UNIVERSITY, JALANDHAR-DELHI G.T. ROAD, PHAGWARA, India ~72: BHATIA, Himmat;BUDDHI, Dharam;JOSHI, Mahendra;NARAYAN, Nagendra;SINGH, Arvind Kumar;SINGH, Davinderpal;SINGH, Rajesh~

**ASSIGNMENTS IN TERMS OF SECTION 60-REGULATIONS 58-60 AND 64 (1)**

Application Number	Assignor	Assignee
2014/06990	HAKAN ROSEN	SSY IP TECHNOLOGIES, LLC
2021/01117	TENEOBIO, INC.	TENEO TWO, INC.
2022/02375	REVIRAL LIMITED	PFIZER INC.
2016/03899	STICHTING RADBOUD UNIVERSITEIT	STICHTING RADBOUD UNIVERSITAIR MEDISCH CENTRUM
2016/05812	SEATTLE GENETICS, INC	SENTINEL ONCOLOGY LIMITED
2022/10094	TOMASZEWSKI, ADAM, KAJLEH, KHALAD, STEWART, GORDON, STEELE, EDWIN	LONGYEAR TM, INC. and GLOBALTECH CORPORATION PTY LTD.
2019/01913	AGIOS PHARMACEUTICALS, INC.	LES LABORATOIRES SERVIER
2018/01068	PAMUSHANA FAMILY TRUST	NANDE URBAN HUB (PTY) LTD
2022/05844	EISENBERGER, PETER	GLOBAL THERMOSTAT OPERATIONS, LLC
2017/02608	REVIRAL LIMITED	PFIZER INC.
2021/00660	TEIJIN LIMITED	JCR PHARMACEUTICALS CO., LTD.
2007/01862	DYNASAFE INTERNATIONAL AB	DYNASAFE DEMIL SYSTEMS AB
2020/05700	UNILEVER PLC	UNILEVER GLOBAL IP LIMITED
2013/09208	THE UNIVERSITY OF SYDNEY	KYNAN DUKE IP, LLC
2019/02085	THE UNIVERSITY OF SYDNEY	KYNAN DUKE IP, LLC
2015/08751	NCM INNOVATIONS (PTY) LTD	EPIROC HOLDINGS SOUTH AFRICA (PTY) LTD
2015/02039	BAYER PHARMA AKTIENGESELLSCHAFT	TRANSCOJECT GMBH
2016/00746	ASTELLAS PHARMA INC.	UPSTREAMBIO, INC.
2021/05449	VAN DEN BERG, GERHARD JOHAN	SAFE TAKE CASH (PTY) LTD.
2021/00846	COALESCE PRODUCT DEVELOPMENT LTD	SANDOZ AG
2019/04190	LEO PHARMA A/S	AQILION AB
2021/10041	NCP NEXTGEN A/S	PHILIP MORRIS PRODUCTS S.A.
2021/10037	NCP NEXTGEN A/S	PHILIP MORRIS PRODUCTS S.A.
2021/10039	NCP NEXTGEN A/S	PHILIP MORRIS PRODUCTS S.A.
2021/10040	NCP NEXTGEN A/S	PHILIP MORRIS PRODUCTS S.A.
2014/00532	LIVELEAF, INC.	LIVELEAF HOLDINGS LLC
2017/06202	NEW STEEL S.A.	VALE S.A.
2014/08098	ETHICON, INC.	ETHICON, LLC
2014/08098	ETHICON, LLC	CILAG GMBH INTERNATIONAL
2011/06974	LIVELEAF, INC.	LIVELEAF HOLDINGS LLC
2021/00660	TEIJIN LIMITED	JCR PHARMACEUTICALS CO., LTD

Application Number	Assignor	Assignee
2008/02119	INTERNATIONAL PAPER'S	GLOBAL HOLDINGS II, INC.
2021/04462	NANOFIBER SOLUTIONS, LLC	NFS IP HOLDINGS, LLC
2022/01188	JIANGXI UNIVERSITY OF SCIENCE AND TECHNOLOGY AND GUORUI SCIENTIFIC INNOVATION RARE EARTH FUNCTION MATERIALS (GANZHOU) CO., LTD.	JIANGXI SCIENCE AND TECHNOLOGY INDUSTRY CO. LTD
2022/01191	JIANGXI UNIVERSITY OF SCIENCE AND TECHNOLOGY AND GUORUI SCIENTIFIC INNOVATION RARE EARTH FUNCTION MATERIALS (GANZHOU) CO., LTD.	JIANGXI SCIENCE AND TECHNOLOGY INDUSTRY CO. LTD
2022/02106	TAIYUAN UNIVERSITY OF TECHNOLOGY	SHANXI-ZHEDA INSTITUTE OF ADVANCED MATERIALS AND CHEMICAL ENGINEERING
2018/07358	BYK USA INC. and BYK-CHEMIE GMBH	BYK-CHEMIE GMBH
2018/07262	BYK USA INC. and BYK-CHEMIE GMBH	BYK-CHEMIE GMBH
2018/07063	BYK USA INC. and BYK-CHEMIE GMBH	BYK-CHEMIE GMBH
2018/06931	BYK USA INC. and BYK-CHEMIE GMBH	BYK-CHEMIE GMBH
2014/01642	ESTETRA SPRL	MITHRA RECHERCHE ET DEVELOPPEMENT SA ("MITHRA R&D SA")
2021/08827	SCOTT CHARLES MULLINS	RAPTOR VISION, LLC
2014/04287	RECRO PHARMA, INC.	BAUDAX BIO, INC.
2019/03828	OBSHESTVO S OGRANICHENNOI OTVETSTVENNOSTIYU 'PHARMENTERPRISES'	LTD "VALENTA-INTELLEKT" AND NEBOLSIN, VLADIMIR EVGENIEVICH
2022/01188	JIANGXI UNIVERSITY OF SCIENCE AND TECHNOLOGY and GUORUI SCIENTIFIC RARE EARTH FUNCTIONAL MATERIALS (GANZHOU) CO., LTD.	JIANGXI SCIENCE AND TECHNOLOGY INDUSTRY CO. LTD
2015/00673	JOHNSON MATTHEY PLC	MACFARLAN SMITH LIMITED
2016/00559	JOHNSON MATTHEY PLC	MACFARLAN SMITH LIMITED
2014/02624	JOHNSON MATTHEY PLC	MACFARLAN SMITH LIMITED
2007/01784	JOHNSON MATTHEY PLC	MACFARLAN SMITH LIMITED
2016/00591	JOHNSON MATTHEY PLC	MACFARLAN SMITH LIMITED
2021/02613	BRIAN INVESTMENTS PTY LTD	METSO OUTOTEC FINLAND OY
2009/04966	SCANALYSE PTY LTD	OUTOTEC PTY LTD
2009/04966	OUTOTEC PTY LTD	METSO OUTOTEC FINALND OY

**CHANGE OF NAME IN TERMS OF REGULATION 39**



Application Number	In the name of	New name
2016/01085	ARGENX BVBA	ARGENX BV
2014/06373	FIRSTSTRING RESEARCH, INC.	XEQUEL BIO, INC.
2012/07548	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2014/01605	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2013/05430	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2018/06219	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2018/05404	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2017/06981	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2018/00927	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2018/01252	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2016/02157	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2014/006275	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2014/05150	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2016/02158	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2017/04041	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2016/03166	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2018/01251	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2009/06893	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2010/09299	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2015/02887	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2015/02132	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2015/01886	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2014/09388	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2014/06342	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2016/01292	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2016/01307	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2013/08610	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2019/07705	PERI GMBH	PERI SE
2018/07740	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2007/05092	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2005/00185	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2014/07624	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2014/08355	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2017/00876	METSO MINERALS INC	METSO OUTOTEC FINLAND OY
2019/04253	PERI GMBH	PERI SE
2018/03073	PERI GMBH	PERI SE
2017/08090	MYCO SCIENCES LIMITED	VM AGRITECH LIMITED
2022/08069	SHANGHAI MARITIME UNIVERSITY	SHANGHAI MARITIME UNIVERSITY
2016/03899	STICHTING KATHOLIEKE UNIVERSITEIT	STICHTING RADBOUND UNIVERSITEIT
2021/10503	FIRSTSTRING RESEARCH, INC.	XEQUEL BIO, INC.
2011/06974	METAACTIVE INC.	LIVELEAF, INC.
2020/02171	CHENGDU CONMED BIOSCIENCES CO., LTD	KEYMED BIOSCIENCES CO., LTD
2022/01138	HUBEI SURPASS SUN ELECTRIC CO., LTD.	HUBEI SURPASS SUN NEW ENERGY TECHNOLOGY CO., LTD.
2018/07126	PERI GMBH	PERI SE
2015/08744	PERI GMBH	PERI SE
2014/03726	PERI GMBH	PERI SE

Application Number	In the name of	New name
2008/09478	PERI GMBH	PERI SE
2022805149	ORIGO BIOPHARMA, S.L.	AGOMAB SPAIN, S.L.U.
2014/02569	GETINGE LA CALHENE	GETINGE LIFE SCIENCE FRANCE
2016/01331	GETINGE LA CALHENE	GETINGE LIFE SCIENCE FRANCE
2016/01173	CJ HEALTHCARE CORPORATION	HK INNO.N CORPORATION
2021/06428	DISPERSOL TECHNOLOGIES, LLC	AUSTINPX, LLC
2016/01349	GETINGE LA CALHENE	GETINGE LIFE SCIENCE FRANCE
2018/07446	DISPERSOL TECHNOLOGIES, LLC	AUSTINPX, LLC
2017/08469	DISPERSOL TECHNOLOGIES, LLC	AUSTINPX, LLC
2021/07833	GETINGE LA CALHENE	GETINGE LIFE SCIENCE FRANCE
2019/03648	GETINGE LA CALHENE	GETINGE LIFE SCIENCE FRANCE
2017/05217	GETINGE LA CALHENE	GETINGE LIFE SCIENCE FRANCE
2016/01350	GETINGE LA CALHENE	GETINGE LIFE SCIENCE FRANCE

**PATENT LICENSES IN TERMS OF SECTION 60-REGULATIONS 58-60 AND 64**

No records available

**PATENT APPLICATIONS ABANDONED OR WITHDRAWN**

Application Number	Not Open	Date
2022/11683	WITHDRAWN	31/10/2022
2021/07607	WITHDRAWN	19/10/2022
2021/07954	WITHDRAWN	19/10/2022
2020/04093	WITHDRAWN	27/07/2021
2021/06325	WITHDRAWN	16/08/2022

**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 to **MTHETHWA, THULILE OF ADAMS & ADAMS, PRETORIA** that made application for the restoration of the patent granted to said **MTHETHWA, THULILE** an invention **A REMOTE CONTROL DEVICE** numbered **2014/04380** dated **13/06/2014** which became void **13/06/2017** 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.

Notice is hereby given to **DAVID STUCKLEY INVESTMENTS PTY LTD OF BRIAN BACON INC. NEWLANDS, CAPE TOWN** that made application for the restoration of the patent granted to said **DAVID STUCKLEY**

**INVESTMENTS PTY LTD** an invention **SOLID-STATE RELAY** numbered **2018/01124** dated **25/08/2016** which became void **25/08/2019** 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.

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Notice is hereby given to **ROLL-N-LOCK CORPORATION OF VON SEIDELS, CENTURY CITY, CAPE TOWN** that made application for the restoration of the patent granted to said **ROLL-N-LOCK CORPORATION** an invention **RETRACTABLE TRUCK BED COVER HAVING SLAT ARRAY WITH FLEXIBLE JOINER MEMBERS AND SHIELDED SEAMS** numbered **2017/05187** dated **28/10/2014** which became void **28/10/2017** 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.

---

Notice is hereby given to **BIOMCO OF SPOOR & FISHER, CENTURION, PRETORIA** that made application for the restoration of the patent granted to said **BIOMCO** an invention **PROCESS FOR WINE-MAKING FROM CLARIFIED JUICE** numbered **2019/05522** dated **05/02/2018** which became void **05/02/2022** 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.

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Notice is hereby given to **SPITA, Barbara and LONGARDI, Luciano OF SIBANDA & ZANTWIJK, OAKLANDS, JOHANNESBURG** that made application for the restoration of the patent granted to said **SPITA, Barbara and LONGARDI, Luciano** an invention **A SAFETY DEVICE FOR PASSAGE OF PIPES ON BOATS** numbered **2020/02149** dated **26/09/2018** which became void **26/09/2021** 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.

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Notice is hereby given to **SQID TECHNOLOGIES LIMITED OF GALGUT & GALGUT, JOHANNESBURG** that made application for the restoration of the patent granted to said **SQID TECHNOLOGIES LIMITED** an invention **"TRANSACTION AUTHORISATION SYSTEM AND METHOD"** numbered **2009/01356** dated **01/08/2007** which became void **01/08/2021** 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.

---

Notice is hereby given to **DAFETI, SIPHO LAWRENCE OF DT DU PREEZ ATTOTNEYS INC, PRETORIA** that made application for the restoration of the patent granted to said **DAFETI, SIPHO LAWRENCE** an invention **TELECOMMUNICATION SYSTEM AND METHOD** numbered **2019/07940** dated **23/04/2018** which became void **23/04/2022** 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.

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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

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**APPLICATIONS TO AMEND SPECIFICATION**

THE PATENTS ACT, 1978

**APPLICATIONS TO AMEND SPECIFICATION**

**Applicant: THISCAP, INC. of 286 LAKE DRIVE, SAN BRUNO , CALIFORNIA, 94066, UNITED STATES OF AMERICA** request permission to amend the specification of letters patent no: **2021/02199** of **31 MARCH 2021** for **CAP FOR CONTAINER.**

A copy of the original specification on which the proposed amendment is indicated in red, is now available for public inspection at the Patent Office.

Any notice of opposition (on Patent Form 19) must be lodged at the Patent Office within two months from the date hereof.

**Registrar of Patents**

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**APPLICATION FOR CORRECTION IN TERMS OF SECTION 50**

**Applicant: Vanderbilt University of 305 Kirkland Hall 2201 West End Avenue, Nashville, TN 37240 United States of America** request permission to correct or to amend any patent, application for a patent or document lodged in pursuance of such application or in the register of Patent no: **2018/08219** a filing date of **5 DECEMBER 2018** entitled: **POSITIVE ALLOSTERIC MODULATORS OF THE MUSCARINIC ACETYLCHOLINE RECEPTOR M4**

A copy of the original application on which the proposed correction or amendment is indicated in red, is now available for inspection at the Patent Office.

Any notice of opposition (on form no. 19) must be lodged at the Patent Office within 2 months from the date hereof.

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**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.

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COPIES OF DOCUMENTS

The Patent Office, Private Bag X400, Pretoria, supplies copies of all patent and trade mark documents at the following rate:

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: 2011/06426. 22: 2011/09/01. 43: 2022/08/31

51: B65D; C08G; C08L; D01F

71: The Coca-Cola Company

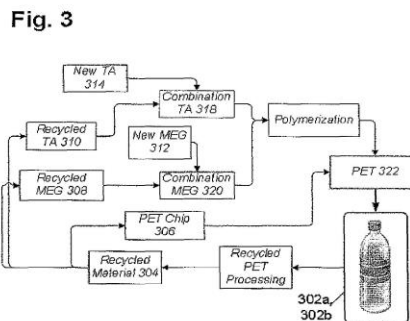
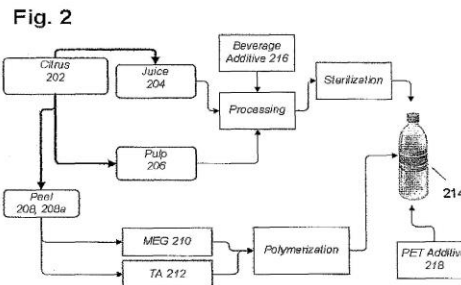
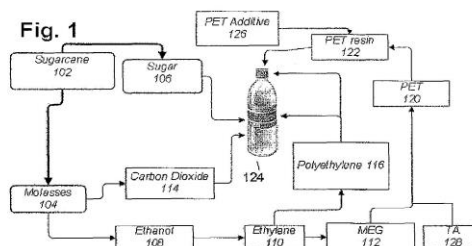
72: KRIEGEL, Robert M., HUANG, Xiaoyan, SCHULTHEIS, Mikell W., KOLLS, Brock H.

33: US 31: PCT/US09/35849 32: 2009-03-03

54: **BIO-BASED POLYETHYLENE TEREPHTHALATE PACKAGING AND METHOD OF MAKING THEREOF**

00: -

This invention relates to a method of making a bio-based PET packaging and particularly to a method of producing a bio-based PET from at least one bio-based material comprising: a) forming at least one PET component from at least one bio-based material, wherein the at least one PET component is selected from a monoethylene glycol ("MEG"), a terephthalic acid ("TA"), and combinations thereof; (b) processing said bio-based PET component into a bio-based PET.



21: 2011/07421. 22: 2011/10/10. 43: 2022/09/20  
51: A61K; A61P

71: F. Hoffmann-La Roche AG

72: TRAN, Jonathan Q.

33: US 31: 61/172,722 32: 2009-04-25

**54: METHODS FOR IMPROVING PHARMACOKINETICS**

00: -

The object of the present invention is to elevate the blood levels of a compound of formula I by co-administration with a cytochrome P450 inhibitor.

21: 2011/08906. 22: 2011/12/05. 43: 2022/09/20  
51: B65D; G01F

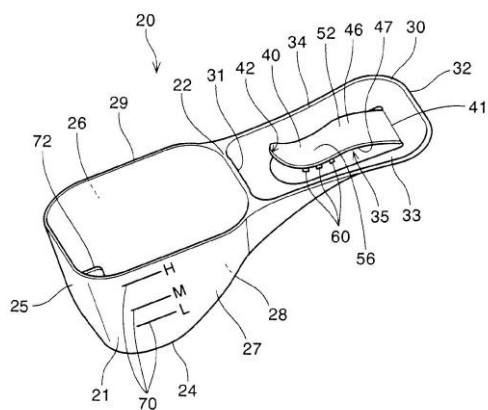
71: The Procter & Gamble Company

72: MANGIN, Raphael Louis, ZHANG, Wei, DING, Guangyan, SAINT-IGNAN, Katy, CHEN, Bin, WEI, Yi  
33: US 31: 61/221,584 32: 2009-06-30

**54: CLIP SCOOP**

00: -

A scoop (20) has a bowl (21) and a handle. The bowl has a bowl edge (22) and bowl width (Wb). The handle has a proximal handle edge (31) connecting to the bowl edge. The handle has a distal handle edge (32) opposite the proximal handle edge. The handle has a handle width (Wh). The handle has a clip (40) with a clip base (41) which connects the clip base to the distal handle edge. The clip protrudes from the distal handle edge toward the proximal handle edge. The clip has a free edge (42) opposite the clip base. The handle width is from about 50% to about 100% of the bowl width.



21: 2012/01222. 22: 2012/02/17. 43: 2022/08/31  
51: A61K; A61P; C07J

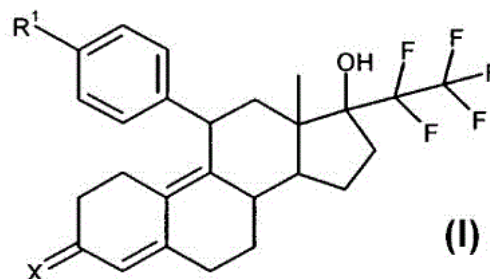
71: Bayer Intellectual Property GmbH

72: SCHWEDE, Wolfgang, KLAR, Ulrich, MÖLLER, Carsten, ROTGERI, Andrea, BONE, Wilhelm  
33: DE 31: 102009034362.8 32: 2009-07-20

**54: 17-HYDROXY-17-PENTAFLUORETHYL-ESTRA-4,9(10)-DIEN-11-ARYL DERIVATIVES, METHODS FOR THE PRODUCTION THEREOF AND USE THEREOF FOR TREATING DISEASES**

00: -

The invention relates to 17-hydroxy-17-pentafluorethyl-estra-4,9(10)-dien-11-aryl derivatives of formula (I) exhibiting progesterone-antagonistic effects and to methods for the production thereof, to the use thereof for the treatment and/or prophylaxis of diseases and to the use thereof for producing medicaments for the treatment and/or prophylaxis of diseases, in particular uterine fibroids (myomas, uterine leiomyomas), endometriosis, menorrhagia, meningiomas, hormone-dependent mammary carcinomas and menopause-associated troubles, or for fertility control and emergency contraception.



21: 2012/06187. 22: 2012/08/16. 43: 2022/08/31  
51: H04N

71: Samsung Electronics Co., Ltd.

72: LEE, Tammy, HAN, Woo-Jin

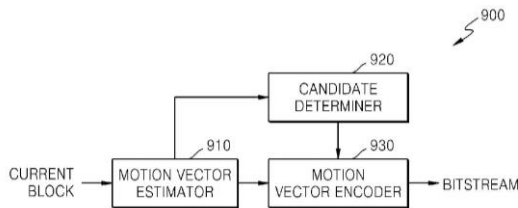
33: US 31: 61/296,163 32: 2010-01-19

**54: METHOD AND APPARATUS FOR ENCODING AND DECODING MOTION VECTOR BASED ON REDUCED MOTION VECTOR PREDICTOR CANDIDATES**

00: -

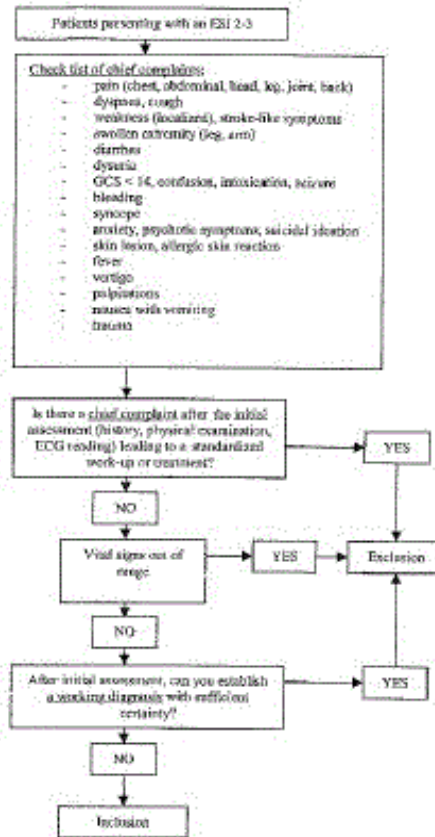
A method and apparatus for encoding and decoding a motion vector of a current block. The method of encoding including: generating information about the motion vector based on a motion vector of a current block and a motion vector predictor of the current block by estimating the motion vector and determining a first motion vector predictor candidate from among a plurality of motion vector predictor candidates as the motion vector predictor based on a result of the estimating; and generating a virtual motion vector by using a second motion vector

predictor candidate and the information about the motion vector, generating vector differences between the virtual motion vector and the plurality of motion vector predictor candidates, comparing the vector differences with the information about the motion vector, and selectively excluding the second motion vector predictor candidate according to the comparing.



21: 2013/03133. 22: 2013/04/29. 43: 2022/08/30  
 51: G01N  
 71: B.R.A.H.M.S. GmbH  
 72: STRUCK, Joachim, GIERSDORF, Sven, HARTMANN, Oliver, BINGISSER, Roland, NICKEL, Christian  
 33: EP(DE) 31: 10189598.5 32: 2010-11-01  
**54: PROGNOSIS AND RISK ASSESSMENT OF PATIENTS WITH NON-SPECIFIC COMPLAINTS**  
 00: -

The present invention relates to the determination of the level of marker peptides in a sample derived from a bodily fluid of a subject presenting to the emergency department with non-specific complaints.



21: 2013/06619. 22: 2013/09/03. 43: 2022/08/31  
 51: A61B; A61M  
 71: University of Massachusetts  
 72: DUNN, Raymond M.  
 33: US 31: 61/439,525 32: 2011-02-04  
**54: NEGATIVE PRESSURE WOUND CLOSURE DEVICE**  
 00: -

The present invention relates to a negative pressure wound closure system and methods for using such a system. Preferred embodiments of the invention facilitate closure of the wound by preferentially contracting to provide for movement of the tissue. Preferred embodiments can utilize tissue grasping elements to apply a wound closing force to the tissue.

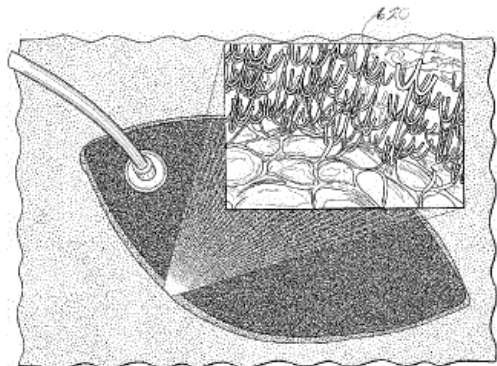


FIG. 8C

21: 2013/08155. 22: 2013/10/31. 43: 2022/08/30  
51: H03M

71: Panasonic Holdings Corporation

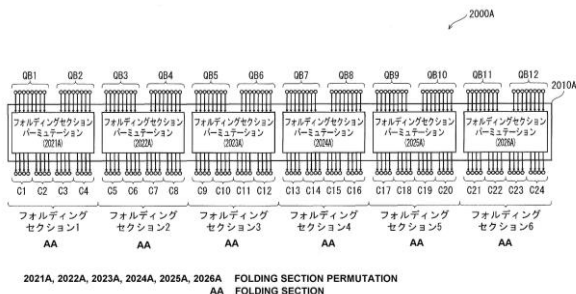
72: PETROV, Mihail

33: EP(DE) 31: 11004124.1 32: 2011-05-18

**54: PARALLEL BIT INTERLEAVER**

00: -

This bit interleave method performs bit permutation on QC LDPC code words consisting of N cyclic blocks of Q bits, and partitions said processed code words into multiple constellation words consisting of M bits. The code words are partitioned into FxN/M folding sections, and each constellation word is associated with one of the FxN/M folding sections. The bit permutation processing is performed such that the constellation words consist of F bits from each of M/F different cyclic blocks in the associated folding section.



21: 2013/08637. 22: 2013/11/18. 43: 2022/08/31  
51: A61K; A61P; C07K; C12N

71: H. Lundbeck A/S.

72: KOVACEVICH, Brian Robert, GARCIA-MARTINEZ, Leon F., OLSON, Katie, DUTZAR, Benjamin H., BILLGREN, Jens J., LATHAM, John A., MITCHELL, Danielle M., MCNEILL, Patricia Dianne, JANSON, Nicole M., LOOMIS, Maria-Cristina

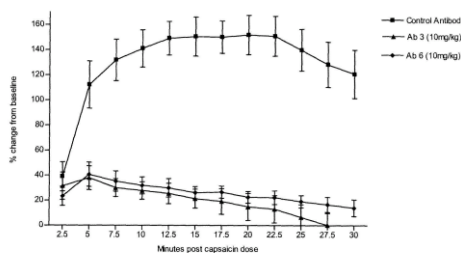
33: US 31: 61/488,660 32: 2011-05-20

**54: ANTI-CGRP COMPOSITIONS AND USE THEREOF**

00: -

The present invention is directed to antibodies and fragments thereof having binding specificity for CGRP. Another embodiment of this invention relates to the antibodies described herein, and binding fragments thereof, comprising the sequences of the VH, VL and CDR polypeptides described herein, and the polynucleotides encoding them. The invention also contemplates conjugates of anti-CGRP antibodies and binding fragments thereof conjugated to one or more functional or detectable moieties. The invention also contemplates methods of making said anti-CGRP antibodies and binding fragments thereof. Embodiments of the invention also pertain to the use of anti-CGRP antibodies, and binding fragments thereof, for the diagnosis, assessment and treatment of diseases and disorders associated with CGRP.

Reduction in Vasodilatation Following Capsaicin Administration



21: 2013/09305. 22: 2013/12/10. 43: 2022/09/20  
51: E02F

71: ESCO Group LLC

72: CHEYNE, Mark A., COWGILL, Noah, ROSKA, Michael B., CONKLIN, Donald M., ZENIER, Scott H., HAINLEY, Chris J.

33: US 31: 61/507,726 32: 2011-07-14

**54: WEAR ASSEMBLY**

00: -

A wear assembly for use on various kinds of earth working equipment that includes a base with a supporting portion, a wear member with a cavity into which the supporting portion is received, and a lock to releasably secure the wear member to the base. The supporting portion is formed with top and bottom recesses that receive complementary projections of the wear member. These recesses and projections include aligned holes so as to receive and position



the lock centrally within the wear assembly and remote from the wear surface. The hole in the wear member is defined by a wall that includes a retaining structure provided with an upper bearing surface and a lower bearing surface for contacting and retaining the lock against upward and downward movement in the hole.

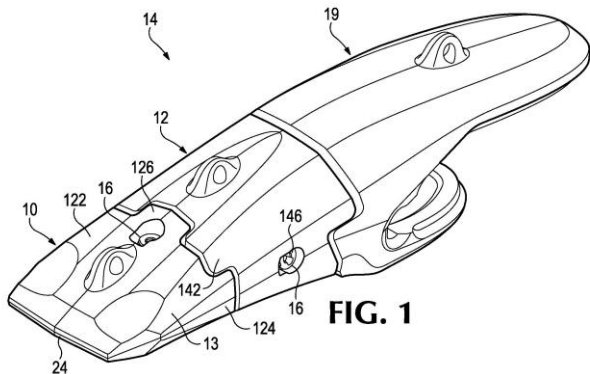


FIG. 1

21: 2014/00725. 22: 2014/01/30. 43: 2022/08/31  
51: C12N

71: Takeda Vaccines, Inc.  
72: STINCHCOMB, Dan T., OSORIO, Jorge E., WIGGAN, O'Neil

33: US 31: 60/910,579 32: 2007-04-06

**54: METHODS AND COMPOSITIONS FOR LIVE ATTENUATED VIRUSES**

00: -  
One or more live, attenuated viruses and compositions to reduce inactivation and/or degradation of the live, attenuated virus, including a vaccine are disclosed. This composition may include at least one carbohydrate, at least one protein and at least one high molecular weight surfactant.

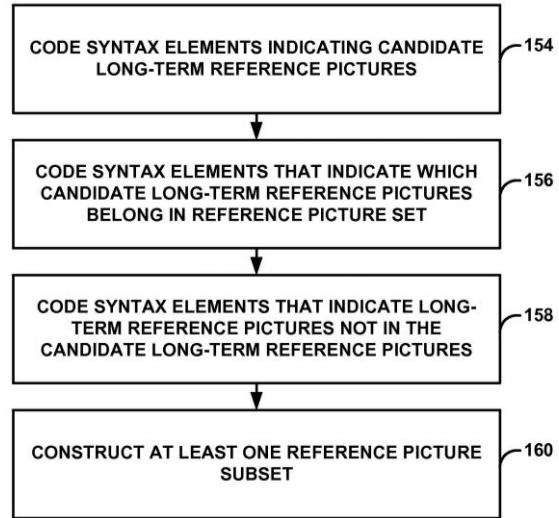
21: 2014/02900. 22: 2014/04/22. 43: 2022/08/30  
51: H04N

71: QUALCOMM Incorporated  
72: WANG, Ye-Kui, CHEN, Ying  
33: US 31: 61/538,787 32: 2011-09-23

**54: CODING REFERENCE PICTURES FOR A REFERENCE PICTURE SET**

00: -  
Techniques are described related to coding of long-term reference pictures for a reference picture set. In some examples, a video coder may code candidate long-term reference pictures in a parameter set. The video coder also code syntax elements that indicate which long-term reference pictures from the

candidate long-term reference pictures belong in the reference picture set.



21: 2014/04183. 22: 2014/06/06. 43: 2022/09/20  
51: H03M; H04N

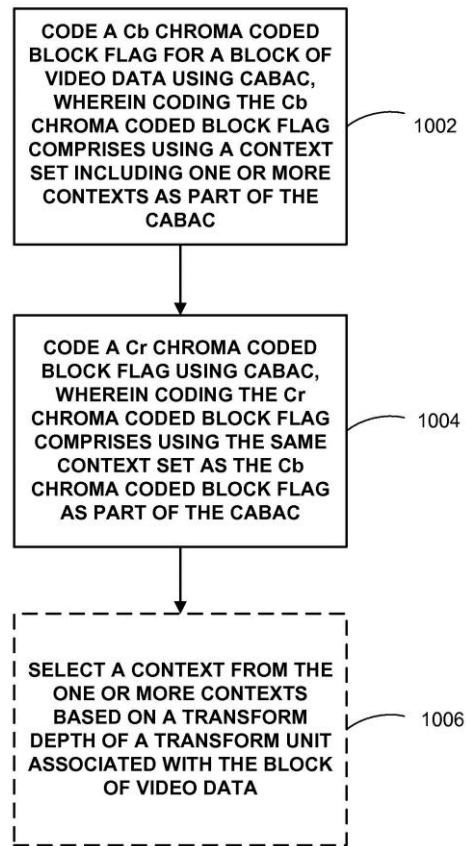
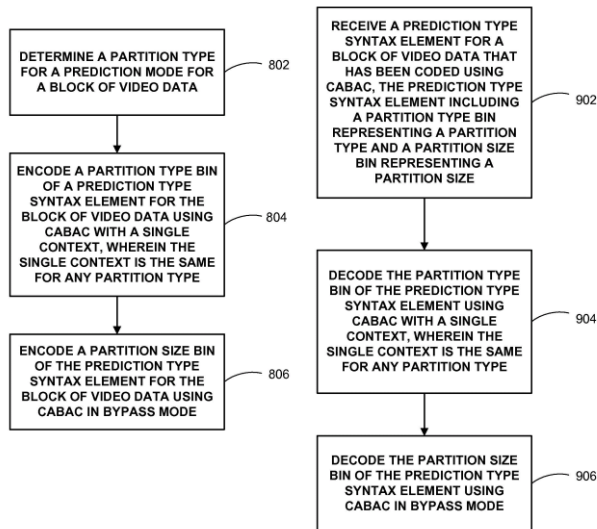
71: QUALCOMM Incorporated  
72: CHIEN, Wei-Jung, SOLE ROJALS, Joel, KARCZEWICZ, Marta

33: US 31: 61/557,325 32: 2011-11-08

**54: NUMBER OF CONTEXTS REDUCTION FOR CONTEXT ADAPTIVE BINARY ARITHMETIC CODING**

00: -  
A reduction in the number of binarizations and/or contexts used in context adaptive binary arithmetic coding (CABAC) for video coding is proposed. In particular, this disclosure proposes techniques that may lower the number of contexts used in CABAC by up to 56. A method of encoding video data comprising: determining a partition type for a prediction mode for a block of video data; encoding a partition type bin of a prediction type syntax element for the block of video data using context adaptive binary arithmetic coding (CABAC) with a single context, wherein the single context is the same for any partition type; and encoding a partition size bin of the prediction type syntax element for the block of video data using CABAC in bypass mode. The partition type is an asymmetric partition. The partition type bin indicates whether the asymmetric partition is vertically partitioned or horizontally partitioned. The partition size bin indicates whether a first partition is one-quarter of a size of the block of video data or whether the first partition is three-

quarters of the size of the block of video data. Also encoding apparatus and decoding method and apparatus.



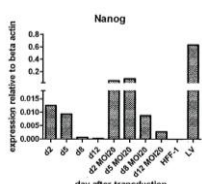
21: 2014/04184. 22: 2014/06/06. 43: 2022/08/31  
 51: H03M; H04N  
 71: QUALCOMM Incorporated  
 72: CHIEN, Wei-Jung, SOLE ROJALS, Joel, KARCZEWICZ, Marta  
 33: US 31: 61/557,325 32: 2011-11-08  
**54: NUMBER OF CONTEXT REDUCTION FOR CONTEXT ADAPTIVE BINARY ARITHMETIC CODING**

00: -  
 A reduction in the number of binarizations and/or contexts used in context adaptive binary arithmetic coding (CABAC) for video coding is proposed. In particular, this disclosure proposes techniques that may lower the number of contexts used in CABAC by up to 56. A method of coding video data comprising: coding a Cb chroma coded block flag for a block of video data using context adaptive binary arithmetic coding (CABAC), wherein coding the Cb chroma coded block flag comprises using a context set including one or more contexts as part of the CABAC; and coding a Cr chroma coded block flag using CABAC, wherein coding the Cr chroma coded block flag comprises using the same context set as the Cb chroma coded block flag as part of the CABAC. It selects a context from the one or more contexts based on a transform depth of a transform unit associated with the block of video data.

21: 2014/07468. 22: 2014/10/15. 43: 2022/08/31  
 51: C12N  
 71: AMVAC AG  
 72: WIEGAND, Marian  
 33: US 31: 61/652,913 32: 2012-05-30  
 33: EP 31: 12004148.8 32: 2012-05-30  
**54: METHOD FOR EXPRESSION OF HETEROLOGOUS PROTEINS USING A RECOMBINANT NEGATIVE-STRAND RNA VIRUS VECTOR**

00: -  
 The present invention provides a method of expressing at least one heterologous nucleic acid sequence in a cell, the method comprising introducing at least one heterologous nucleic acid sequence into a cell by infecting said cell with a recombinant negative-strand RNA virus vector comprising said at least one heterologous nucleic acid sequence, wherein the recombinant negative-strand RNA virus vector includes a viral genome coding for a mutated P protein, which leads to a loss of the viral genome replication ability without a loss of the viral transcription ability, and wherein said at

least one heterologous nucleic acid sequence encodes a cellular reprogramming or programming factor or a therapeutic protein. In addition, the present invention provides a cell or a population of cells prepared in vitro by said method as well as a pharmaceutical composition comprising said cell or population of cells.



21: 2014/09536. 22: 2014/12/23. 43: 2022/08/30

51: C12N

71: Cellectis

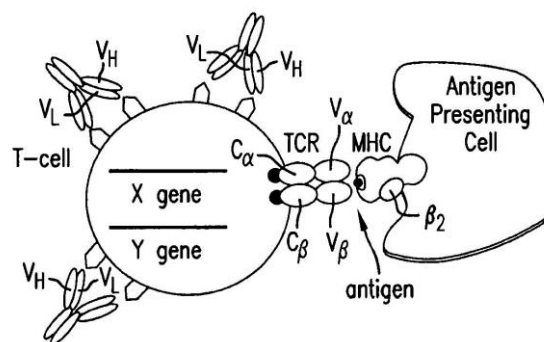
72: GALETTO, Roman, GOUBLE, Agnes, GROSSE, Stephanie, MANNIOUI, Cecile, POIROT, Laurent, SCHARENBERG, Andrew, SMITH, Julianne

33: US 31: 61/651,933 32: 2012-05-25

**54: METHODS FOR ENGINEERING ALLOGENEIC AND IMMUNOSUPPRESSIVE RESISTANT T CELL FOR IMMUNOTHERAPY**

00: -

Methods for developing engineered T-cells for immunotherapy that are both non-alloreactive and resistant to immunosuppressive drugs. The present invention relates to methods for modifying T-cells by inactivating both genes encoding target for an immunosuppressive agent and T-cell receptor, in particular genes encoding CD52 and TCR. This method involves the use of specific rare cutting endonucleases, in particular TALE-nucleases (TAL effector endonuclease) and polynucleotides encoding such polypeptides, to precisely target a selection of key genes in T-cells, which are available from donors or from culture of primary cells. The invention opens the way to standard and affordable adoptive immunotherapy strategies for treating cancer and viral infections.



21: 2015/01459. 22: 2015/03/03. 43: 2022/08/31

51: E02F

71: ESCO Group LLC

72: BRISCOE, Terry L., OLLINGER IV, Charles G., STROM, Joshua L.

33: US 31: 61/696,971 32: 2012-09-05

**54: BUCKET FOR CABLE SHOVEL**

00: -

A bucket for use with a cable shovel includes a shell and a door collectively defining a cavity for gathering material to be excavated. The door is pivotally secured about a pivot axis on the shell so that the door can pivot between a closed position for gathering the material and an open position for dumping the material. The pivot axis is positioned forward of an exterior surface of a back wall of the shell to create a shallower and less forceful door swing during dumping. The door has a front portion that is bent towards a digging edge on the shell so that the door has greater strength, improves bucket loading, and moves a portion of the shell away from the highest wear area.

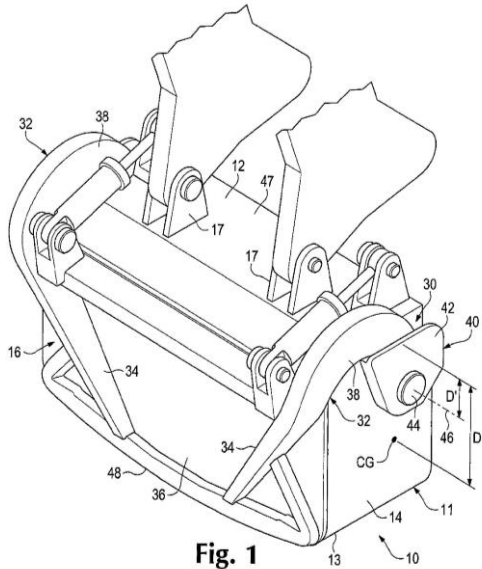
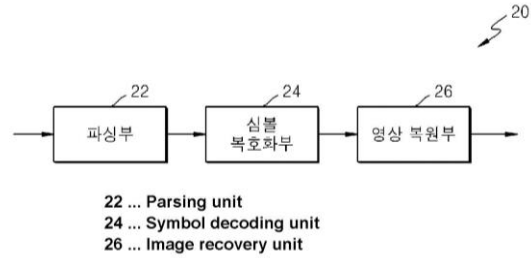


Fig. 1



22 ... Parsing unit  
24 ... Symbol decoding unit  
26 ... Image recovery unit

21: 2015/02762. 22: 2015/04/23. 43: 2022/08/30  
51: H04N

71: Samsung Electronics Co., Ltd.

72: SEREGIN, Vadim, KIM, Il-Koo

33: US 31: 61/502,038 32: 2011-06-28

**54: APPARATUS FOR DECODING A VIDEO**

00: -

The present invention discloses a method for decoding a video through symbol decoding. Disclosed is the method for decoding the video, comprising the steps of: parsing symbols of image blocks from a bitstream which is received; performing arithmetic coding according to each arithmetic coding formula, which is individually decided with respect to a prefix bit string and a suffix bit string, by categorizing a current symbol into the prefix bit string and the suffix bit string with a critical value that is decided based on the size of the current block; and performing reverse binarization, after the arithmetic coding, according to each binarization formula, which is individually decided with respect to the prefix bit string and the suffix bit string.

21: 2015/03159. 22: 2015/05/06. 43: 2022/10/12

51: B01J; C01B

71: ECOVYST CATALYST TECHNOLOGIES LLC

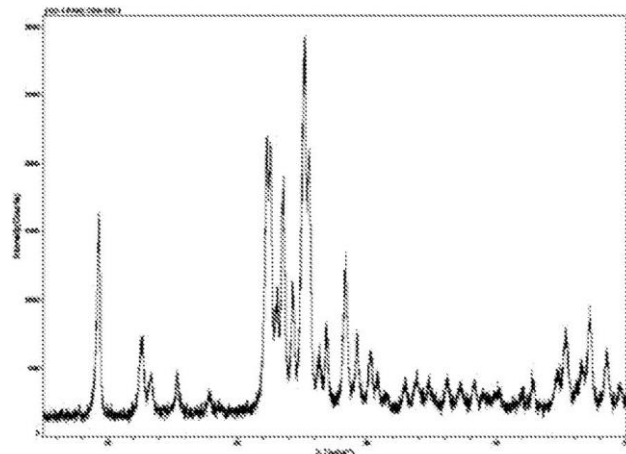
72: PETUSHKOV, ANTON, LI, HONG-XIN, CORMIER, WILLIAM E.

33: US 31: 61/724,136 32: 2012-11-08

**54: SMALL CRYSTAL FERRIERITE AND METHOD OF MAKING THE SAME**

00: -

There is disclosed a highly crystalline, small crystal, ferrierite zeolite prepared from a gel containing a source of silica, alumina, alkali metal and a combination of two templating agents. The resulting material includes ferrierite crystals having a particle size of about or less than about 200 nm. The desired crystal size can be achieved by using a specific composition of the gel. The purity of the material and the crystal size was determined by using X-ray powder diffraction and scanning electron microscopy. The material has excellent surface area and micropore volume as determined by nitrogen adsorption



21: 2015/03434. 22: 2015/05/14. 43: 2022/08/30

51: H04N

71: Samsung Electronics Co., Ltd.

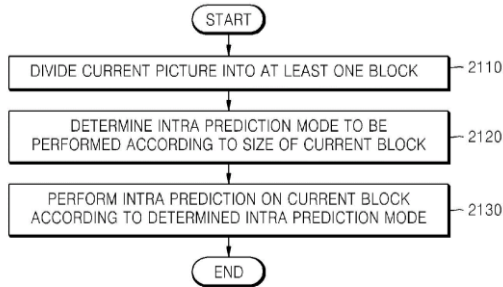
72: SONG, Hak-Sup, MIN, Jung-Hye

33: KR 31: 10-2009-0075854 32: 2009-08-17

**54: A METHOD OF DECODING AN IMAGE**

00: -

Disclosed are a method and a apparatus for encoding a video, and a method and apparatus for decoding a video, in which neighboring pixels used to perform intra prediction on a current block to be encoded are filtered and intra prediction is performed by using the filtered neighboring pixels.



21: 2015/05315. 22: 2015/07/23. 43: 2022/08/30

51: A61K

71: Coagulant Therapeutics Corporation

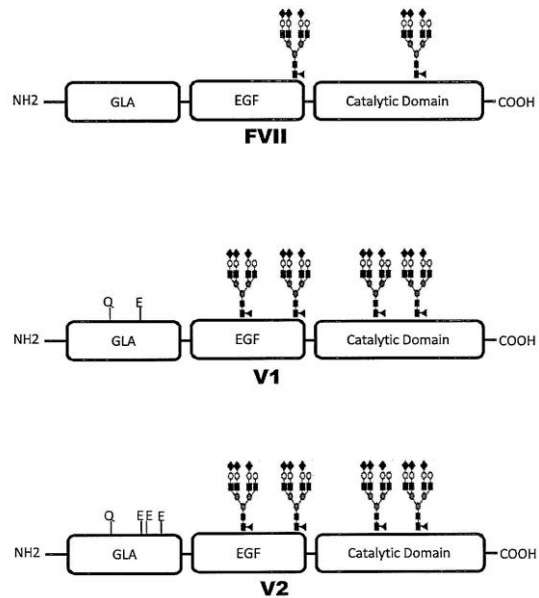
72: BAUZON, Maxine, HERMISTON, Terry

33: US 31: 61/745,674 32: 2012-12-24

**54: SHORT-ACTING FACTOR VII POLYPEPTIDES**

00: -

Short-acting Factor VII peptides are disclosed. A shortened half-life is desirable for treatment of acute bleeding and similar disorders. Modification of the sialylation and/or glycosylation of Factor VII and variants thereof produced peptides useful in treating conditions of acute bleeding. Human coagulation Factor VII variants and the polynucleotides encoding such variants, vectors and host cells comprising and expressing such variants, methods of obtaining such variants, methods of using such variants, compositions of the variants, and additional inventive features related thereto are provided herein.



21: 2015/06287. 22: 2015/08/28. 43: 2022/11/04

51: H04L, H04W, G08B

71: Andile Khoza

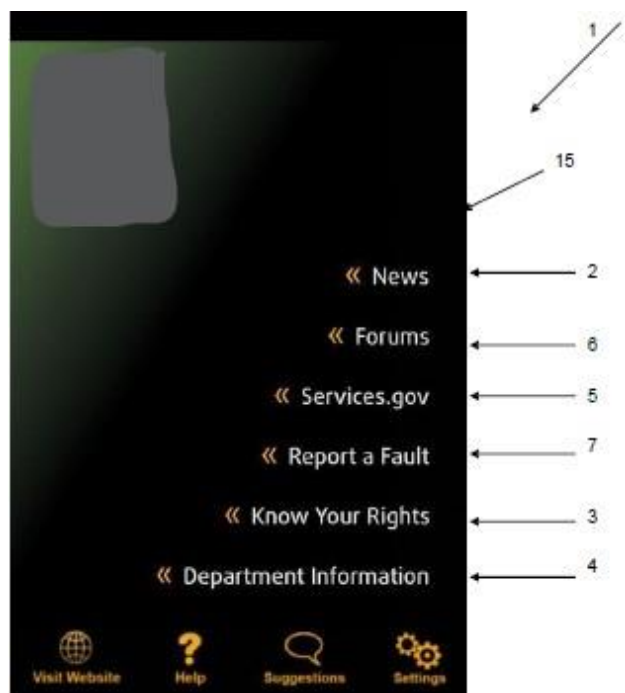
72: Andile Khoza

33: ZA 31: 2014/06936 32: 2014-09-23

**54: COMMUNICATION SYSTEM AND METHOD**

00: -

This invention relates to a communication system and method in and particular, but not exclusively, to a communication method and system for use in the provision of public services comprising an electronic device having an inputting means connected to the device for inputting by a user a complaint relating to public services; and a transmitting means for transmitting the complaint to a government department. There is further provided for the complaint to a fault relating to public services or information relating to inadequate public services which a user wishes to report to a government department. There is even further provided a compounding means for compounding faults arising from the same geo-location at approximately the same time and a compounded faults notification means to notify the government department and/or a pre-selected government official of faults reported within the same geo-location at the same time.



21: 2016/00324. 22: 2016/01/14. 43: 2022/09/28  
 51: E05B; E05C  
 71: FLY, DEREK MARK  
 72: FLY, DEREK MARK  
 33: ZA 31: 2013/04362 32: 2013-06-13

**54: LOCK ARRANGEMENT**

00: -  
 This invention relates to a lock arrangement 10A which comprising a housing 16 and a bolt 18 being displaceable relative to the housing 16 between a forward position, wherein the bolt 18 is engageable with a socket 20 in an adjacent body 14, and a retracted position wherein the bolt 18 is not engageable with the socket 20 and is retracted into the housing 16. The lock arrangement 10A further includes first biasing means 22 for biasing the bolt 18 to its retracted position, and a loading member 24 for activating and loading the first biasing means 22 whereby a biasing force exerted by it is increased. The loading member 24 is displaceable between an operative position in which the first biasing means 22 is fully loaded and an inoperative position in which the first biasing means 22 is not or partially loaded. When fully loaded, the first biasing means 22 exerts a biasing force which is sufficient to displace the bolt 18 to its retracted position.

21: 2016/00901. 22: 2016/01/27. 43: 2022/09/01  
 51: C07C; A61P

71: IMAGO BIOSCIENCES INC.  
 72: MCCALL, John M, RIENHOFF, Jr. Hugh Young, CLARE, Michael  
 33: US 31: 61/862,759 32: 2013-08-06  
 33: US 31: 61/954,276 32: 2014-03-17

**54: KDM1A INHIBITORS FOR THE TREATMENT OF DISEASE**

00: -  
 Disclosed herein are new compounds and compositions and their application as pharmaceuticals for the treatment of diseases. Methods of inhibition of KDM1A, methods of increasing gamma globin gene expression, and methods to induce differentiation of cancer cells in a human or animal subject are also provided for the treatment of diseases such as acute myelogenous leukemia.

21: 2016/02193. 22: 2016/03/31. 43: 2022/09/12  
 51: A61K; C07D

**71: AURIGENE DISCOVERY TECHNOLOGIES LIMITED**

72: SASIKUMAR, Pottayil Govindan Nair, RAMACHANDRA, Muralidhara, NAREMADDEPALLI, Seetharamaiah Setty Sudarshan  
 33: IN 31: 4011/CHE/2013 32: 2013-09-06

**54: 1,2,4-OXADIAZOLE DERIVATIVES AS IMMUNOMODULATORS**

00: -  
 The present invention relates to 1,2,4-oxadiazole and 1,2,4-thiadiazole compounds as therapeutic agents capable of inhibiting the programmed cell death 1 (PD1) signaling pathway. The invention also refers to derivatives of the therapeutic agents. The invention also encompasses the use of the said therapeutic agents and derivatives for treatment of disorders via immunopotential comprising inhibition of immunosuppressive signal induced due to PD-1, PD-L1, or PD-L2 and therapies using them.

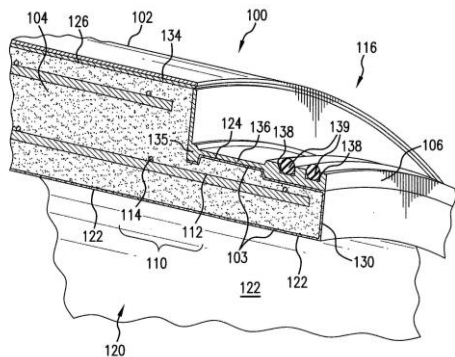
21: 2016/06974. 22: 2016/10/11. 43: 2022/09/01  
 51: F16L

71: FSC TECHNOLOGIES, LLC  
 72: SUBACCHI, Claudio  
 33: US 31: 61/991,694 32: 2014-05-12

**54: REINFORCED CONCRETE PIPE**

00: -  
 Structural body comprises a concrete core 104 and a cap 106 around the opening. A first wrap 102 is wrapped under tension around the concrete core

104 and a portion of the cap to form a continuous water resistant barrier around the outer surface of the concrete core. A second wrap 103 can be wrapped under tension around the inner surface of concrete core to form a continuous water resistant barrier around the inner surface of the concrete core 104. Structural body can be formed as a pipe with a male and female ends to interconnect multiple pipes. The joint formed between two structural bodies has a continuous water resistant barrier that prevents the environment from contacting the concrete core.



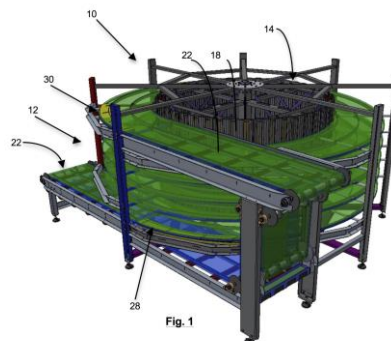
21: 2016/08188. 22: 2016/11/25. 43: 2022/08/16  
51: F03D  
71: WINDCARE INDIA PVT LTD  
72: SENTHOORPANDIAN, Anthonyraj Prem Kumar,  
NAGRATHINAM, Kalimuthu  
**54: METHOD AND SYSTEM FOR DE-ERECTION  
AND RE-ERECTION OF A BLADE OF A WIND  
TURBINE**

00: -  
A system for de-erection and re-erection of a blade of a wind turbine, the system comprising at least one first pulley, at least one second pulley, at least one third pulley, a receptacle disposed over a substantial length of the blade, a lifting line passing over the at least one first pulley, the at least one second pulley, the at least one third pulley and attached back to the at least one second pulley, at least one load bearing mechanism configured for pulling and releasing of the lifting line to enable vertical motion of the receptacle disposed over the blade, a load supporting mechanism connected to an operative bottom portion of the blade and configured to support the blade during de-erection and re-erection thereof and at least one holding mechanism attached to the at least one third pulley,

the at least one holding mechanism adapted to hold the receptacle.

21: 2016/08296. 22: 2016/12/01. 43: 2022/09/01  
51: B65G  
71: Dale Holdings (Pty) Ltd  
72: Dale, Chris  
33: ZA 31: 2015/06380 32: 2015-09-01  
**54: POSITIVE DRIVE CONVEYOR**  
00: -

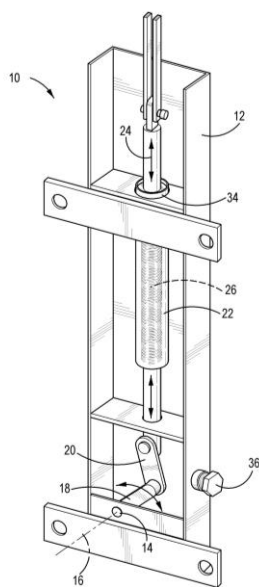
The invention is for a positive-drive conveyor, specifically a conveyor belt arrangement. The conveyor belt arrangement includes a central rotating drive tower having vertically extending protruding ridges and a conveyor path helically arranged around the central rotating drive tower, the conveyor path having lead-in- and a lead-out portions extending tangentially to the helical conveyor path. The conveyor belt arrangement further includes a conveyor belt extending along the conveyor path, the conveyor belt having interlinked segments with positive drive protrusions extending from the segments on an operative inside of the helical conveyor path and at least one spacing arrangement disposed on any one of the lead-in and lead-out portions of the conveyor path. The spacing arrangement being operable for directing the belt on the conveyor path.



21: 2016/08362. 22: 2016/12/05. 43: 2022/09/12  
51: B61L  
71: Steel King Trust  
72: FOURIE, Johan  
33: ZA 31: 2015/06455 32: 2015-09-03  
**54: RAILWAY SWITCH ACTUATOR**  
00: -

The invention is for a railway switch actuator. The railway switch actuator includes a crank axle rotatable about a crank axis. The railway switch

actuator also includes a crank arm which is connected to the crank axle and extending radially therefrom. The railway switch actuator further includes a linear actuation rod connected to the crank arm which is linearly displaceable tangentially to the crank axis. The linear actuation rod is displaceable between an extended and a retracted position by rotation of the crank arm.



21: 2017/00528. 22: 2017/01/23. 43: 2022/08/30  
51: A61K; A61P; C07K; C12N; G01N  
71: Akeso Biopharma, Inc.

72: LI, Baiyong, XIA, Yu, WANG, Zhongmin, ZHANG, Peng, PANG, Xinghua

33: CN 31: 201410377352.9 32: 2014-08-01

**54: ANTI-CTLA4 MONOCLONAL ANTIBODY OR ANTIGEN BINDING FRAGMENT THEREOF, MEDICINAL COMPOSITION AND USE**

00: -

The present invention belongs to the fields of tumor treatment and molecular immunology and provides an anti-CTLA4 monoclonal antibody or an antigen binding fragment thereof, a medicinal composition thereof, and a use thereof. The monoclonal antibody of the present invention blocks CTLA4 from binding to B7, thereby eliminating the immunosuppressive effect of CTLA4 on the host and activating T lymphocytes.

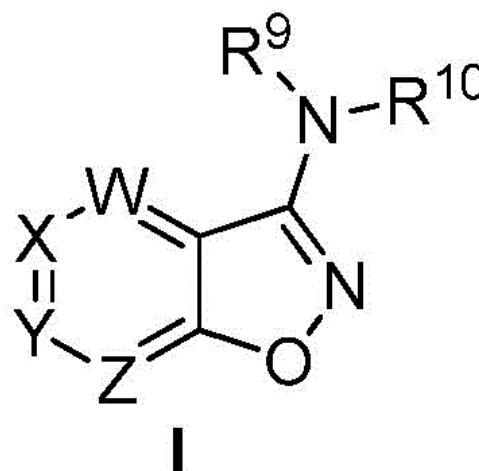
21: 2017/00924. 22: 2017/02/06. 43: 2022/08/30  
51: A61K; A61P; C07D  
71: Auckland UniServices Limited

72: PALMER, Brian Desmond, CHING, Lai Ming, GAMAGE, Swarnalatha Akuratiya  
33: NZ 31: 628688 32: 2014-08-13

**54: INHIBITORS OF TRYPTOPHAN DIOXYGENASES (IDO1 AND TDO) AND THEIR USE IN THERAPY**

00: -

Pharmaceutical compositions comprising 3-aminoisoxazolopyridine compounds of the Formula I having IDO1 and/or TDO inhibitory activity are described, where W is CR1, N or N-oxide; X is CR2, N or N-oxide; Y is CR3, N or N-oxide; Z is CR4, N or N-oxide; and at least one of W, X, Y, and Z is N or N-oxide; and R9 and R10 are as defined. Also described are methods of using such compounds in the treatment of various conditions, such as cancer.



21: 2017/00955. 22: 2017/02/07. 43: 2022/08/30  
51: A61K; A61P; C07K

71: Merck Sharp & Dohme LLC

72: WILLIAMS, Sybil M. G., LAFACE, Drake, FAYADAT-DILMAN, Laurence, RAGHUNATHAN, Gopalan, LIANG, Linda, SEGHEZZI, Wolfgang

33: US 31: 62/038,912 32: 2014-08-19

**54: ANTI-TIGIT ANTIBODIES**

00: -

The present invention relates to anti-TIGIT antibodies, as well as use of these antibodies in the treatment of diseases such as cancer and infectious disease.



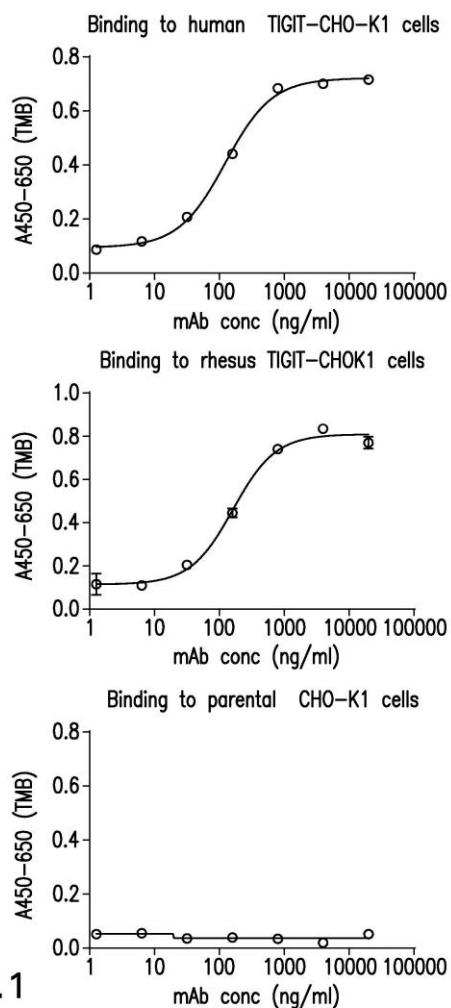


FIG. 1

21: 2017/04866. 22: 2017/07/18. 43: 2022/09/01  
51: A47G; B31D

71: GANT INNOVATIONS LIMITED

72: SHAW, Gail

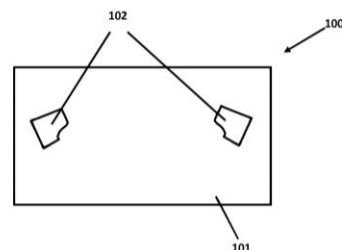
33: GB 31: 1422969.4 32: 2014-12-22

33: GB 31: 1504973.7 32: 2015-03-24

**54: PROTECTIVE ARTICLES**

00: -

A protective article is disclosed comprising a sheet with a first surface, and at least one adhesive portion arranged on the first surface. The adhesive is a water-based adhesive, such as a water-based acrylic adhesive, that allows the sheet to be non-permanently adhered to an object. The adhesive may be sprayed, rolled, printed, or stamped onto the first surface.



21: 2017/06000. 22: 2017/09/04. 43: 2022/08/30

51: A01N; A01P; C07D

71: Bayer Cropscience Aktiengesellschaft

72: FISCHER, Rüdiger, WILCKE, David, ILG,

Kerstin, GÖRGENS, Ulrich, PORTZ, Daniela,

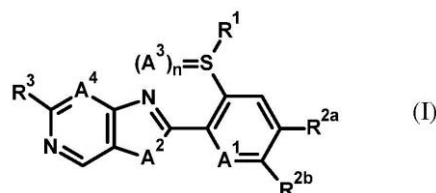
EILMUS, Sascha, TURBERG, Andreas

33: EP(DE) 31: 15153943.4 32: 2015-02-05

**54: 2-(HET)ARYL-SUBSTITUTED CONDENSED BICYCLIC HETEROCYCLE DERIVATIVES AS PEST CONTROL AGENTS**

00: -

The invention relates to novel compounds of formula (I), wherein R<sup>1</sup>, R<sup>2a</sup>, R<sup>2b</sup>, R<sup>3</sup>, A<sup>1</sup>, A<sup>2</sup>, A<sup>3</sup>, A<sup>4</sup> and n have the meanings indicated in the description, to the use thereof as acaricides and/or insecticides for controlling animal pests, and to methods and intermediate products for the production thereof.



21: 2017/06222. 22: 2017/09/13. 43: 2022/08/30

51: B01D

71: Outotec (Finland) Oy

72: MIKKOLA, Harri, SUIHKONEN, Pekka, LUOMA, Matti

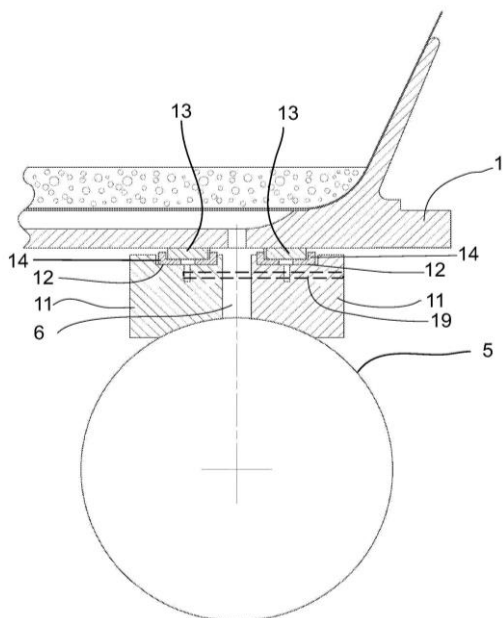
33: FI 31: 20155202 32: 2015-03-24

**54: DETACHABLE WEAR STRIP FOR USE IN THE VACUUM BELT FILTER DEVICE**

00: -

The invention relates to a detachable wear strip for an endless seal belt (13) of a vacuum belt filter device. The detachable wear strip (14) is configured to be arranged in a first groove (12) of a guide part (11) between the endless seal belt (13) and the guide part (11), wherein the endless seal belt (13) is configured to run in the first groove (12) in contact with a low pressure side of an endless moving filter

belt (1) of the vacuum belt filter device, wherein the guide part (11) being arranged between a vacuum box (5) of a vacuum arrangement (25) and the low pressure side, and wherein by the vacuum arrangement (25) being configured to produce a suction at a low pressure side of the endless moving filter belt (1) at a working zone (7) of the vacuum belt filter device.



21: 2017/06522. 22: 2017/09/27. 43: 2022/08/30  
 51: A61K; A61Q  
 71: Colgate-Palmolive Company  
 72: POTH, Tilo, WOLF, Hanspeter, SCHMID, Joshua, D'AMBROGIO, Robert  
 33: US 31: 62/168,048 32: 2015-05-29

**54: FOAMING DENTIFRICE WITH DESENSITIZING AGENTS**

00: -  
 The present invention relates to an oral care composition having an anionic surfactant, a cationic or amphoteric surfactant, and a potassium salt, wherein the oral care composition does not include a non-ionic surfactant.

21: 2017/07117. 22: 2017/10/19. 43: 2022/10/24  
 51: A61K; C07K  
 71: REGENERON PHARMACEUTICALS, INC  
 72: DAVIS SAMUEL, SMITH ERIC, VARGHESE BINDU, KIRSHNER JESSICA R, THURSTON GAVIN

**54: ANTIBODY COMPOSITIONS FOR TUMOR TREATMENT**

00: -  
 The present invention provides bispecific antibodies that bind to CD3 and tumor antigens and methods of using the same. According to certain embodiments, the bispecific antibodies of the invention exhibit reduced effector functions and have a unique binding profile with regard to Fc $\gamma$  receptors. The bispecific antibodies are engineered to efficiently induce T cell-mediated killing of tumor cells. According to certain embodiments, the present invention provides bispecific antigen-binding molecules comprising a first antigen-binding domain that specifically binds human CD3, a second antigen-binding molecule that specifically binds human CD20, and an Fc domain that binds Fc $\gamma$  receptors with a specific binding pattern. In certain embodiments, the bispecific antigen-binding molecules of the present invention are capable of inhibiting the growth of B-cell or melanoma tumors expressing CD20. The bispecific antibodies of the invention are useful for the treatment of various cancers as well as other CD20-related diseases and disorders.

Construction of chimeric hinge

Upper Hinge													Lower Hinge								
IgG1 numbering	EU 216	217	218	219	220	221	222	223	224	225	226	227									
IgG1 Kabat numbering	226	227	228	232 <sup>a</sup>	233 <sup>a</sup>	232 <sup>b</sup>	235	236	237	238	239	240									
IgG1 numbering																					
IgG1	E	P	K	S	C	D	K	T	H	T	C	P									
IgG4	E	S	K	Y	G																
IgG4 numbering	EU 216	217	218	219	220 <sup>a</sup>	221 <sup>a</sup>	222 <sup>a</sup>	223 <sup>a</sup>	224	225	226	227									
IgG4 Kabat numbering	226	227	228	229	230	231	232	233	237	238	239	240									
IgG2 numbering	EU 228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248
IgG2 Kabat numbering	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	

<sup>a</sup> means no corresponding number reported  
<sup>b</sup> means no corresponding amino acid  
<sup>c</sup> numbering according to the last updated IMGT Scientific Chart (IMGT<sup>®</sup>, the International ImMunoGeneTics information system<sup>®</sup>, [http://www.imgt.org/IMGTScientificChart/Numbering/Hu\\_IgH5nber.html](http://www.imgt.org/IMGTScientificChart/Numbering/Hu_IgH5nber.html), created: 17 May 2001, last updated: 10 Jan 2013)  
<sup>d</sup> numbering according to EU index as reported in Kabat, E.A. et al. Sequences of Proteins of Immunological Interest, 5<sup>th</sup> ed. US Department of Health and Human Services, NIH publication No. 91-3242 (1991).

21: 2017/07138. 22: 2017/10/20. 43: 2022/08/30  
 51: A61P; C07K  
 71: Bayer Pharma Aktiengesellschaft  
 72: WILLUDA, Jörg, TRAUTWEIN, Mark, GRITZAN, Uwe, FREIBERG, Christoph, DITTMER, Frank, SCHÖNFELD, Dorian, GLÜCK, Julian Marius, PINKERT, Jessica, GUTIERREZ, Eva-Maria, GOLFIER, Sven, HOLTON, Simon, BECKHOVE, Philip, GE, Yingzi  
 33: EP(DE) 31: 15160292.7 32: 2015-03-23  
**54: ANTI-CEACAM6 ANTIBODIES AND USES THEREOF**  
 00: -

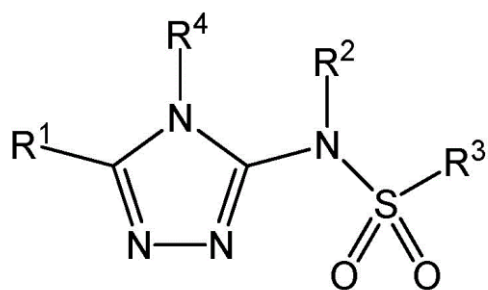
The present disclosure provides recombinant antigen-binding regions and antibodies and functional fragments containing such antigen-binding regions that are specific for human and *Macaca fascicularis* CEACAM6 (Carcinoembryonic antigen-related cell adhesion molecule 6, CD66c, Non-specific crossreacting antigen, NCA, NCA-50/90), and which do not significantly cross-react with the closely related human CEACAM1, human CEACAM3, and human CEACAM5. The disclosure further provides methods to generate this kind of antibodies. The antibodies, accordingly, can be used to treat cancer and other disorders and conditions associated with expression of the CEACAM6. The disclosure also provides nucleic acid sequences encoding the foregoing antibodies, vectors containing the same, pharmaceutical compositions and kits with instructions for use.

21: 2017/07321. 22: 2017/10/27. 43: 2022/08/30  
51: C21D; C22C; C23C  
71: ThyssenKrupp Steel Europe AG, thyssenkrupp AG  
72: THIESSEN, Richard G., HELLER, Thomas, MACHALITZA, Karsten, SEBALD, Roland  
33: PCT/EP(DE) 31: 2015/059968 32: 2015-05-06  
**54: FLAT STEEL PRODUCT AND METHOD FOR THE PRODUCTION THEREOF**  
00: -

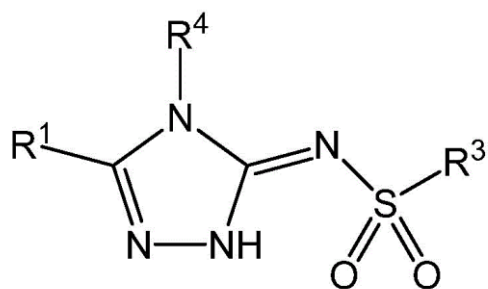
The invention relates to a flat steel product, having a tensile strength  $R_m \geq 950$  MPa, a yield strength  $\geq 800$  MPa and an elongation at break  $A_{50} \geq 8\%$ . According to the invention, the flat steel product consists of steel which is composed of (in weight-%) 0.05 - 0.20% C, 0.2 - 1.5% Si, 0.01 - 1.5% Al, 1.0 - 3.0% Mn,  $\leq 0.02\%$  P,  $\leq 0.005\%$  S,  $\leq 0.008\%$  N, and in each case optionally 0.05 - 1.0%, 0.05 - 0.2% Mo, 0.005 - 0.2% Ti, 0.001 - 0.05% Nb, 0.0001 - 0.005% B, the remainder being Fe and inevitable impurities, wherein:  $1.5 \leq \psi \leq 3$ , with  $\psi = (\%C + \%Mn/5 + \%Cr/6) / (\%Al + \%Si)$  and %C, %Mn, %Cr, %Al, %Si being the respective C, Mn, Cr, Al or Si content of the steel. At the same time the flat steel product has a structure which consists of (in area percentage)  $\leq 5\%$  bainite,  $\leq 5\%$  polygonal ferrite,  $\geq 90\%$  martensite and  $\leq 2\%$  by volume residual austenite, at least half of the martensite being tempered martensite. The invention also relates to a method for producing such a flat steel product.

21: 2017/07706. 22: 2017/11/14. 43: 2022/08/30  
51: A61K; A61P; C07D  
71: Amgen Inc.  
72: CHEN, Ning, CHEN, Xiaoqi, CHEN, Yinhong, CHENG, Alan C., CONNORS, Richard V., DEIGNAN, Jeffrey, DRANSFIELD, Paul John, DU, Xiaohui, FU, Zice, HEATH, Julie Anne, HORNE, Daniel B., HOUZE, Jonathan, KALLER, Matthew R., KHAKOO, Aarif Yusuf, KOPECKY, David John, LAI, Su-Jen, MA, Zhihua, MCGEE, Lawrence R., MEDINA, Julio C., MIHALIC, Jeffrey T., NISHIMURA, Nobuko, OLSON, Steven H., PATTAROPONG, Vatee, SWAMINATH, Gayathri, WANG, Xiaodong, YANG, Kevin C., YEH, Wen-Chen, DEBENEDETTO, Mikkel V., FARRELL, Robert P., HEDLEY, Simon J., JUDD, Ted C., KAYSER, Frank  
33: US 31: 62/164,106 32: 2015-05-20  
**54: TRIAZOLE AGONISTS OF THE APJ RECEPTOR**  
00: -

Compounds of Formula I and Formula II, pharmaceutically acceptable salt thereof, stereoisomers of any of the foregoing, or mixtures thereof are agonists of the APJ Receptor and have use in treating cardiovascular and other conditions. Compounds of Formula I and Formula II have the following structures where the definitions of the variables are provided herein.



I



II

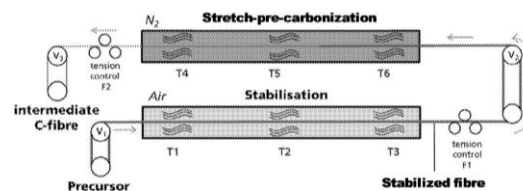


Figure 1: Processing line for producing highly oriented intermediate carbon fibers.

21: 2017/08110. 22: 2017/11/29. 43: 2022/08/30  
51: A47J; B65D

71: Société des Produits Nestlé S.A.

72: NOTH, André

33: EP(CH) 31: 15165924.0 32: 2015-04-30

**54: CODE AND CONTAINER OF SYSTEM FOR PREPARING A BEVERAGE OR FOODSTUFF**

00: -

A container for a foodstuff or beverage preparation machine, the container for containing beverage or foodstuff preparation material and comprising on a surface thereof a code encoding preparation information, the code comprising a reference portion and a data portion: the reference portion comprising a linear arrangement of at least two reference units defining a reference line  $r$ , the data portion comprising at least one data unit, wherein said data unit is arranged on an encoding line  $D$  that intersects the reference line  $r$ , the data unit occupies any continuous distance  $d$  along the encoding line  $D$  as a variable to at least partially encode a parameter of the preparation information, whereby said encoding line  $D$  is circular and is arranged with a tangent thereto orthogonal the reference line  $r$  at said intersection point.

21: 2017/07897. 22: 2017/11/21. 43: 2022/08/30

51: C08B; D01D; D01F; D02J

71: Stora Enso OYJ

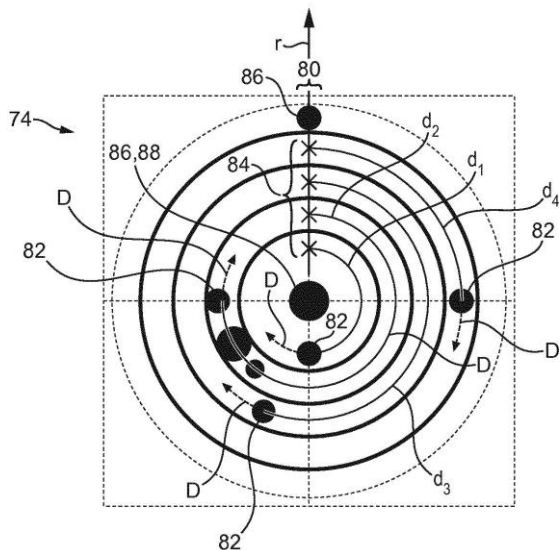
72: GAROFF, Niklas, PROTZ, Robert, ERDMANN, Jens, GANSTER, Johannes, LEHMANN, André

33: SE 31: 1550794-0 32: 2015-06-11

**54: A FIBER AND A PROCESS FOR THE MANUFACTURE THEREOF**

00: -

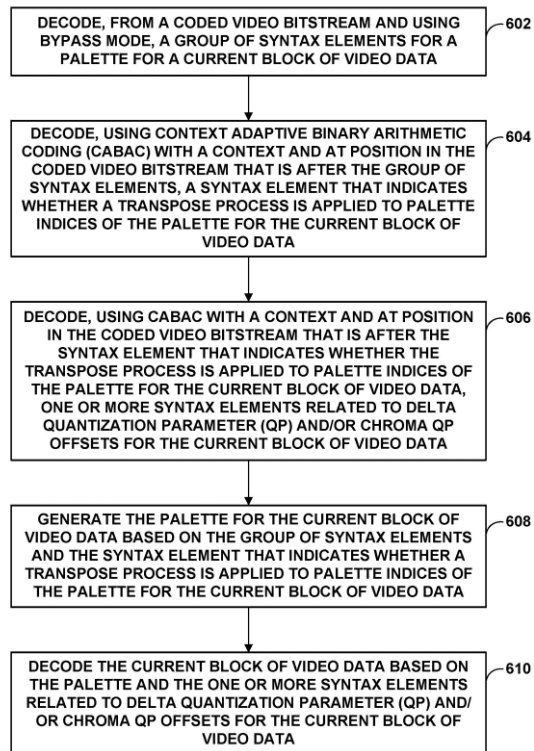
The present invention relates to a method for manufacturing thermally stabilized, non-sticky and stretchable fibers, which may be further processed into intermediate carbon fibers and finally also carbon fibers. Uses of said fibers are also disclosed. Also a highly oriented intermediate carbon fiber is disclosed together with a highly oriented carbon fiber.



21: 2017/08380. 22: 2017/12/11. 43: 2022/08/30  
 51: H04N  
 71: QUALCOMM Incorporated  
 72: JOSHI, Rajan Laxman, SEREGIN, Vadim, PU, Wei, ZOU, Feng, KARCZEWICZ, Marta  
 33: US 31: 62/175,137 32: 2015-06-12

**54: GROUPING PALETTE BYPASS BINS FOR VIDEO CODING**

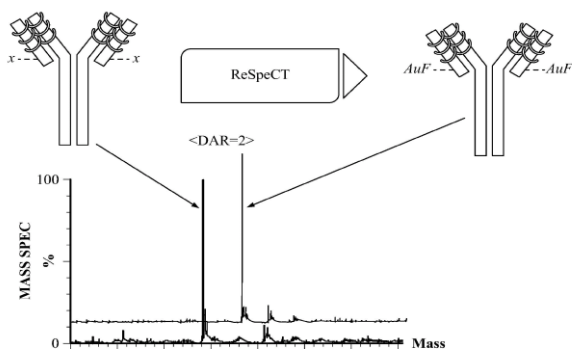
00: -  
 An example method of coding video data includes coding, from a coded video bitstream, a syntax element that indicates whether a transpose process is applied to palette indices of a palette for a current block of video data; decoding, from the coded video bitstream and at a position in the coded video bitstream that is after the syntax element that indicates whether the transpose process is applied to palette indices of the palette for the current block of video data, one or more syntax elements related to delta quantization parameter (QP) and/or chroma QP offsets for the current block of video data; and decoding the current block of video data based on the palette for the current block of video data and the one or more syntax elements related to delta QP and/or chroma QP offsets for the current block of video data.



21: 2017/08619. 22: 2017/12/18. 43: 2022/08/30  
 51: A61K; C07K  
 71: Eisai R&D Management Co., Ltd.  
 72: GRASSO, Luigi, SPIDEL, Jared, KLINE, James Bradford, ALBONE, Earl  
 33: US 31: 62/182,020 32: 2015-06-19

**54: CYS80 CONJUGATED IMMUNOGLOBULINS**

00: -  
 Provided herein are methods for generating conjugated immunoglobulins, the method comprising: decapping a cysteine at amino acid position 80 ("Cys80") in a light chain variable region of an immunoglobulin, wherein the immunoglobulin comprises a heavy chain variable region and the light chain variable region; and conjugating a thiol-reactive compound to the Cys80, wherein the thiol-reactive compound comprises a thiol-reactive group. Antigen-binding molecules and methods for generating the same, immunoglobulins as well as nucleic acid molecules encoding the immunoglobulins and host cells comprising the nucleic acid molecules, conjugated immunoglobulins, and light chain variable regions for use in a conjugated immunoglobulin are also provided.



21: 2017/08656. 22: 2017/12/19. 43: 2022/08/30

51: B60C

71: LANXESS Solutions US, Inc.

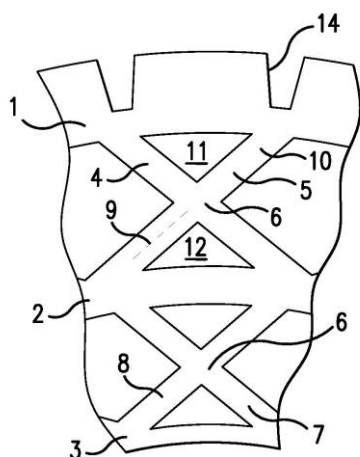
72: LASKOWITZ, Ian

33: US 31: 62/337,986 32: 2016-05-18

**54: NON-PNEUMATIC ELASTOMERIC TIRE WITH CROSSED SPOKE SIDEWALLS**

00: -

A non-pneumatic tire with an annular body of resilient elastomeric material comprises circumferential web members (1, 2, 3) supported by a plurality of circumferentially spaced crossed spoke pairs (4, 5, 7, 8). The thickness and angle of the spokes (4, 5, 7, 8) in each crossed spoke pair varies.



21: 2018/00122. 22: 2018/01/08. 43: 2022/08/30

51: A61K; A61P

71: Theranexus

72: JEANSON, Tiffany, CHARVERIAT, Mathieu, MOUTHON, Franck

33: EP(FR) 31: 15290186.4 32: 2015-07-15

**54: USE OF AMITRIPTYLINE FOR BLOCKING BRAIN HEMICHANNELS AND METHOD FOR POTENTIATING ITS EFFECT IN VIVO**

00: -

The present invention relates to the use of amitriptyline as an inhibitor of connexin hemichannels (HC) in the Central Nervous System (CNS). This HC-blocking agent is advantageously used to treat disorders involving misregulated HC (notably neuropathic pain, neurodegenerative disorders, ischemic brain injury and inflammatory intestinal conditions). Additionally, the invention provides a method to enhance the therapeutic effect of amitriptyline for its common indications. The method of the invention involves combining amitriptyline with another HC-blocking agent, mefloquine.

21: 2018/00128. 22: 2018/01/08. 43: 2022/08/30

51: B05B

71: Dispensing Technologies B.V.

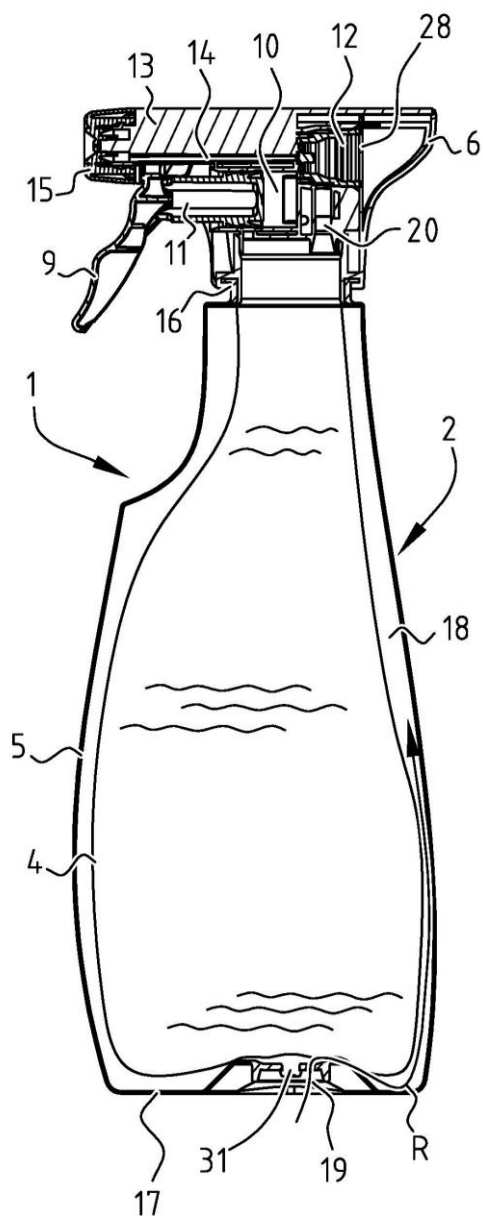
72: MAAS, Wilhelmus Johannes Joseph, NERVO, Paulo, SNIJDERS, Josephus Cornelis

33: EP(NL) 31: 15176166.5 32: 2015-07-09

**54: SYSTEM FOR DOSED DISPENSING OF A FLUID AND METHOD OF MANUFACTURING**

00: -

The invention relates to a system (1) for dosed dispensing of a fluid, comprising a container (2) for the fluid and a dispensing device connected therewith, wherein the container comprises a form-retaining outer container (5) and a flexible inner container (4) connected therewith, wherein a space to be brought into fluid communication with the ambient atmosphere can be developed between the inner and outer containers (5, 4), and wherein the dispensing device includes a housing and/or frame of which at least a part is integrally formed with the container. The invention further relates to a method of manufacturing a system for dosed dispensing of a fluid.



21: 2018/01992. 22: 2018/03/26. 43: 2022/08/31  
51: A61K; A61Q

71: Colgate-Palmolive Company  
72: AHMED, Rabab, PRENCIPE, Michael

**54: ORAL CARE COMPOSITIONS**

00: -

An oral care composition comprising a local anaesthetic agent, a film-forming polymer and a non-aqueous vehicle wherein the film-forming polymer comprises an alkyl vinyl ether-maleic acid or anhydride copolymer or salt thereof is provided.

21: 2018/02125. 22: 2018/04/03. 43: 2022/09/12

51: A61K; A61P

71: KANGPU BIOPHARMACEUTICALS, LTD  
72: GE, Chuansheng, LIAO, Baisong, LEE, Wen-Cheng

33: CN 31: 201510631654.9 32: 2015-09-29

**54: PHARMACEUTICAL COMPOSITION AND APPLICATION THEREOF**

00: -

Disclosed are a pharmaceutical composition and an application thereof. The pharmaceutical composition includes one or more of a benzoheterocyclic compound as shown in formula (I), a pharmaceutically acceptable salt thereof, a solvate thereof, a crystalline form thereof, a co-crystal thereof, a stereoisomer thereof, an isotope compound thereof, a metabolite thereof and a pro-drug thereof, and an androgen receptor pathway modulator. The pharmaceutical composition better inhibits prostate cancer cell growth

21: 2018/02328. 22: 2018/04/10. 43: 2022/08/30

51: A61B; G06F

71: «NeuroChat» LLC

72: KAPLAN, Aleksandr Yakovlevich, LIBURKINA, Sofya Pavlovna, GANIN, Ilya Petrovich, GRIGORYAN, Rafael Karenovich, GALKINA, Nataliya Valentinovna, MUSTAFIN, Yuriy Renatovich, LUZHIN, Aleksandr Olgerdovich

33: RU 31: 2016142493 32: 2016-10-28

**54: NEUROCOMPUTER SYSTEM FOR SELECTING COMMANDS ON THE BASIS OF RECORDING BRAIN ACTIVITY**

00: -

The invention relates to neurocomputer systems, to the field of contactless control of electronic computing devices or other technical devices, using brain-computer interfaces for selecting commands. The system contains: an

electroneuroencephalograph, electrodes configured for transmitting recorded impulses, an electronic computing device intended for analyzing recorded brain activity, and a visual stimulus environment module combining two control elements capable of creating visual stimuli, each of which is associated with a command. The control elements are combined in two groups, each of which consists of one control element and has one switching control element associated with a command, simultaneously initiating the creation of visual stimuli for all control elements in the group to which it relates, and switching off the creation of visual stimuli for all

control elements contained in other groups apart from the switching control elements of each of the groups. The system makes it possible to reduce the time spent on selecting an element in a visual stimulus environment containing a large number of elements, while maintaining a set level of selection reliability.

21: 2018/02899. 22: 2018/05/03. 43: 2022/09/20

51: B28D; E02F; E21C

71: IHC HOLLAND IE B.V.

72: CLEOPHAS, Eugenius Petrus Elisabeth Marie, BREKEN, Roelof

33: NL 31: 2015785 32: 2015-11-13

**54: ADAPTER SYSTEM FOR CUTTING TOOTH**

00: -

The invention relates to a tooth system for a cutter head, the tooth system comprising; a tooth member comprising a cutting portion and a mounting portion with at least one curved surface, a holder comprising a receiving portion with a curved surface complementary to the at least one curved surface of the tooth member, the receiving portion for receiving the mounting portion of the tooth member, wherein the mounting portion of the tooth member detachably engages the holder such that when engaged, the at least one curved surface of the tooth member and the receiving portion curved surface contact each other at a contact area.

Fig. 2

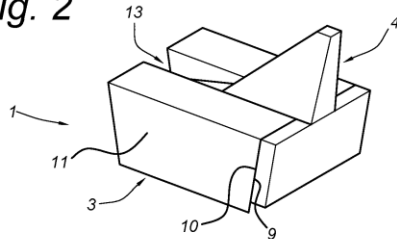
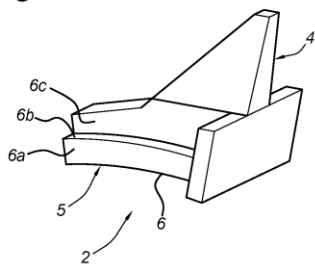


Fig. 5



21: 2018/04113. 22: 2018/06/20. 43: 2022/09/01

51: H02G; H02J

71: E-Charger Developments (Pty) Ltd

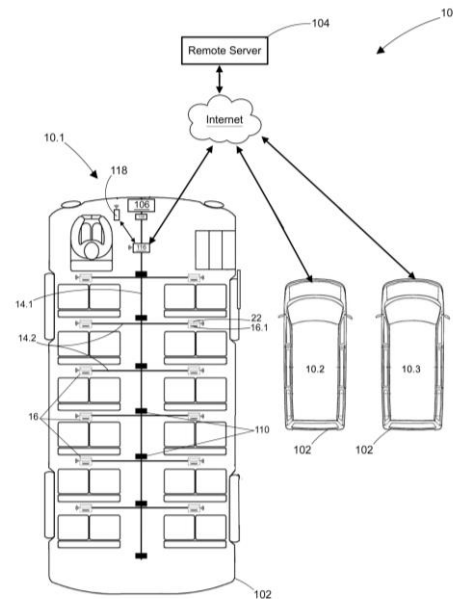
72: PRIORESCHI, Stefano, HINTEREGGER, Karl, MACAULAY, Donald Ian Sinclair

33: ZA 31: 2017/01953 32: 2017-03-22

**54: ELECTRICAL POWER DISTRIBUTION**

00: -

The invention relates to a power distribution device. The power distribution device includes an electrical arrangement which is connectable to an electrical power supply. The electrical arrangement has a plurality of electrical socket assemblies which are located at spaced apart positions in the electrical arrangement, with each electrical socket assembly consisting of one or more sockets and each socket being associated with a power switch. The power distribution device further includes a remote-control unit which is in communication with the power switches of the one or more sockets, the remote-control unit being arranged to control an electrical output of each socket. The invention further relates to an electrical power supply system and power supply system in a passenger transport vehicle.



21: 2018/04151. 22: 2018/06/21. 43: 2022/10/03

51: B65G

71: F. E. SCHULTE STRATHAUS GMBH & CO. KG

72: SCHULTE STRATHAUS, Michael, MATHIS, Harald P., HAASE, Andreas, STIEMER, Marcus, ROZGIC, Marco

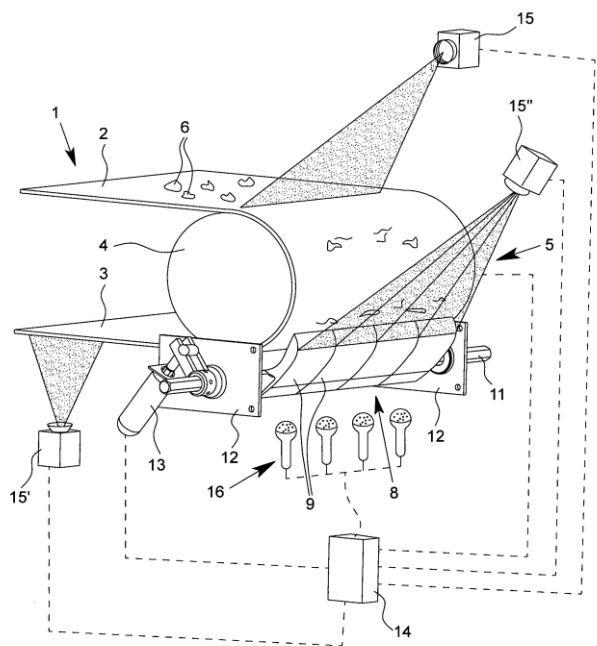
33: DE 31: 10 2015 016 461.9 32: 2015-12-21

33: DE 31: 10 2016 000 387.1 32: 2016-01-15



**54: METHOD AND DEVICE FOR REGULATING THE OPERATION OF A STRIPPING DEVICE ON A CONVEYOR BELT**

00: -  
 The subject of the invention is a method for regulating the operation of a stripping device on a conveyor belt (1) of a conveyor belt system for transported material (6), wherein, in order to strip transported material (6) adhering to the conveyor belt (1), a stripping segment (9) of the stripping device (8) is advanced onto the conveyor belt (1) with its stripping edge (10) by an advancing drive (13) and at least the advancing force with which the advancing drive (13) advances the at least one stripping segment (9) onto the conveyor belt (1) is regulated as a regulating variable by an electronic controller (14) on the basis of the value, determined by at least one sensor (15), of at least one guide variable. This method is optimized in that the output signal of an optical sensor (15, 15', 15'') that is embodied as an image processing electronic system is used as a guide variable, said sensor optically capturing the state of the conveyor belt (1) or of the stripping segment (9), and/or in that the output signal of at least one acoustic sensor (16) embodied as a microphone and/or as an electronic sound converter is used as a guide variable.

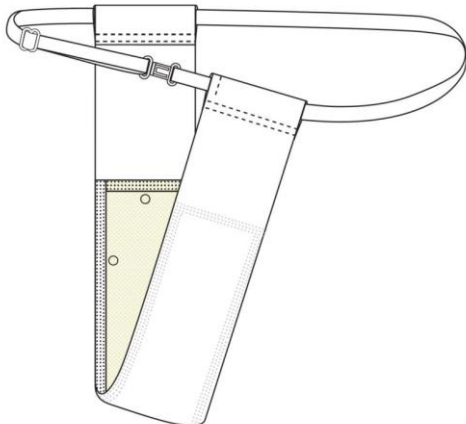


21: 2018/04153. 22: 2018/06/21. 43: 2022/10/17

51: A01N; A61F; A61L; A62B; B06B; B23K; B29C; B29L; D06M  
 71: GREEN IMPACT HOLDING AG  
 72: SWAMY, Sanjeev, KURIEN, Ashok  
 33: EP 31: 15203186.0 32: 2015-12-30  
 33: EP 31: PCT/EP2016/054245 32: 2016-02-29  
 33: EP 31: 16001875.0 32: 2016-08-26

**54: WASH-DURABLE, FLUID ABSORBENT SUBSTRATE WITH ANTIMICROBIAL PROPERTIES AND/OR IMPROVED WASHABILITY, AND HYGIENE PRODUCT SUCH AS REUSABLE SANITARY NAPKIN**

00: -  
 The present invention is directed to a substrate, in particular textile material to which one or more antimicrobial and/or hydrophilic and/or stain release agents are adhered. The agent(s) is/are adhered to the substrate in such a manner that they are not released from the textile even if the textile is wetted or washed, so that the textile is reusable. Washability and/or usability of the textile are improved where one or more hydrophilic and/or stain release agents are adhered to the textile. The substrate can be used, e.g., in a reusable sanitary napkin or other hygiene product. The structure of the hygiene product is disclosed, together with a process of attaching the different layers of the hygiene product together by ultrasonic welding. The invention further relates to a method of finishing a substrate by applying and binding antimicrobial and/or hydrophilic and/or stain release agents to the substrate so that the agents are essentially irreversibly adhered to the finished substrate.

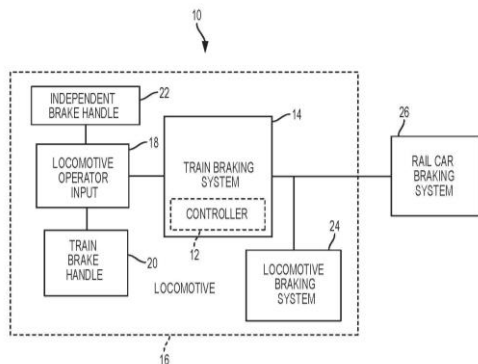


21: 2018/04175. 22: 2018/06/21. 43: 2022/09/01  
 51: B60T

71: NEW YORK AIR BRAKE, LLC  
 72: LEONARD, Erich, MCLAUGHLIN, Bryan,  
 JAMES, Daniel, GREETHAM, Peter

**54: AUTOMATIC BAIL OFF FOR LOCOMOTIVE BRAKING SYSTEM**

00: -  
 A system for automatically performing a bail off of the locomotive brakes in response to certain train braking operations without the need for the train operator to manually bail off the locomotive brakes. The system includes a controller that is programmed to determine when an appropriate train braking operation has been requested and to issue commands to the locomotive braking system to cause the locomotive brake cylinder to be reduced to zero pressure or a predetermined minimum pressure. The controller is also programmed to determine when an automatic bail off should be inhibited and/or cancelled depending on ongoing train conditions.

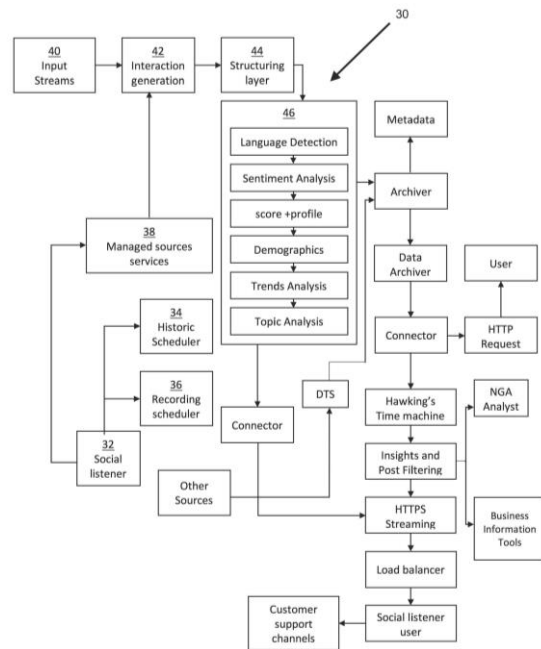


21: 2018/05189. 22: 2018/08/01. 43: 2022/09/01  
 51: G06F  
 71: GERMISHUYS, Dennis Mark  
 72: GERMISHUYS, Dennis Mark  
 33: ZA 31: 2016/00768 32: 2016-02-03

**54: SCORING OF INTERNET PRESENCE**

00: -  
 A method of allocating a score to a subject's Internet presence, the method including receiving search terms of a subject whose Internet presence is to be scored, conducting Internet searches using the search parameters, assessing the preliminary search results to confirm that the preliminary search results exceed a predefined minimum match threshold with the search terms, compiling final search results from the preliminary search results that exceeds the predefined minimum match threshold, compiling the

final search results in a structured database, assessing the text of the final search results in the structured database in relation to a set of predefined assessment criteria, allocating a score to each element in the set of predefined assessment criteria according to a predefined scoring scheme and compiling a final score of a subject's presence on websites by collating the scores of each of the elements in the set of predefined assessment criteria.

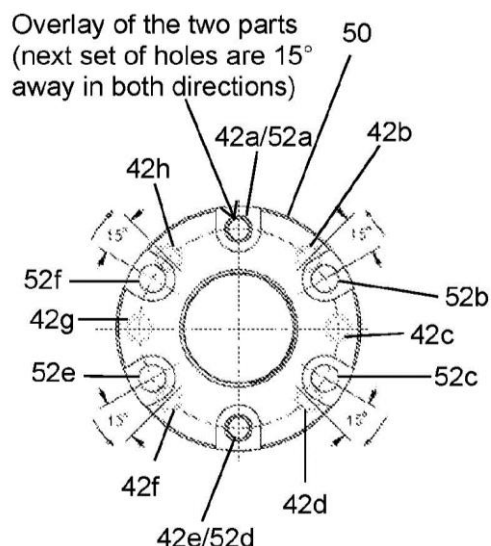


21: 2018/06594. 22: 2018/10/04. 43: 2022/08/30  
 51: F04D  
 71: ITT Manufacturing Enterprises LLC  
 72: PECKHAM, Jason D., PLAYFORD, Mark A.  
 33: US 31: 62/318,491 32: 2016-04-05

**54: EZ ADJUST IMPELLER CLEARANCE**

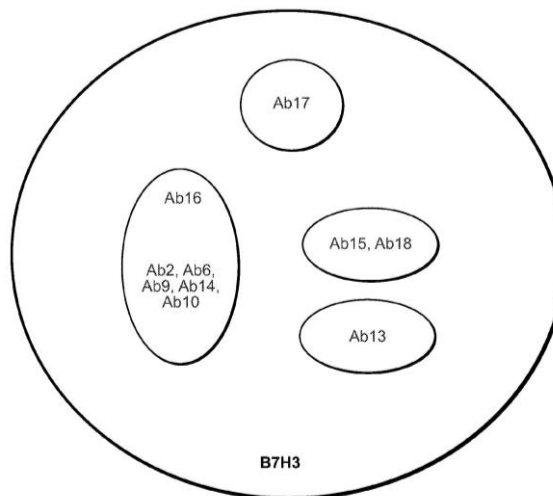
00: -  
 A pump features a bearing sleeve couples to a pump shaft, and includes a bearing sleeve surface having bores for receiving fasteners; and an adjusting nut having a central bore with central bore threads to rotationally couple to pump shaft threads, is configured to rotate in relation to the bearing sleeve and move the pump shaft axially to adjust an impeller clearance between a working side of an impeller arranged on the pump shaft and a casing of the pump, and is configured with an adjusting nut surface having openings different in number than the

bores, sets of corresponding bores and openings aligning at angular adjustment intervals, e.g. every 9 or 15°, when the adjusting nut is rotated in relation to the bearing sleeve in either direction in order to receive fasteners to couple the adjusting nut to the bearing sleeve when the adjustment of the impeller clearance is completed.



PHILLIPS, Andrew C., SOUERS, Andrew J., THAKUR, Archana  
 33: US 31: 62/347,476 32: 2016-06-08  
**54: ANTI-B7-H3 ANTIBODIES AND ANTIBODY DRUG CONJUGATES**

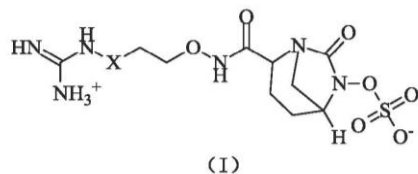
00: -  
 The invention relates to B7 homology 3 protein (B7-H3) antibodies and antibody drug conjugates (ADCs), including compositions and methods of using said antibodies and ADCs.



21: 2018/08552. 22: 2018/12/19. 43: 2022/09/01  
 51: A61K; C07D; A61P  
 71: QILU PHARMACEUTICAL CO., LTD  
 72: HU, Boyu, DING, Charles, HUANG, Zhigang, LIN, Ruibin, XIAO, Minliang, XIE, Jinsheng, CHEN, Shuhui, LI, Cheng  
 33: CN 31: 201610394846.7 32: 2016-06-03

**54: NOVEL B-LACTAMASE INHIBITORS**

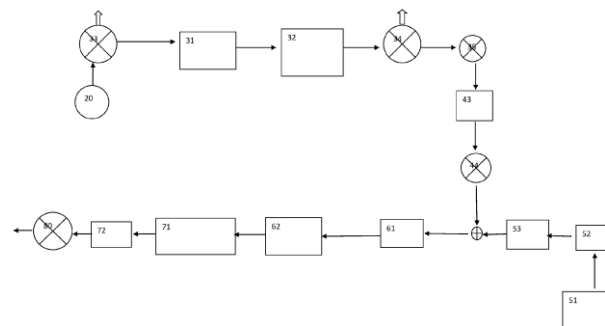
00: -  
 Disclosed in the present invention is a type of novel β-lactamase inhibitors, and specifically disclosed are a compound represented by formula (I) or a pharmaceutically acceptable salt thereof.



21: 2019/01465. 22: 2019/03/08. 43: 2022/09/12  
 51: B01J; C07B  
 71: INTENSICHEM GROUP LIMITED  
 72: TAMES, Oliver Alexander Albert  
 33: GB 31: 1615385.0 32: 2016-09-09

**54: HYDROGENATION PROCESS**

00: -  
 Hydrogenation Process and Apparatus. The present invention relates to a continuous flow hydrogenation process and process apparatus.



21: 2019/00059. 22: 2019/01/04. 43: 2022/09/20  
 51: A61K; C07K  
 71: AbbVie Inc.  
 72: BENATUIL, Lorenzo, BRUNCKO, Milan, CHAO, Debra, IZERADJENE, Kamel, JUDD, Andrew S.,

21: 2019/01708. 22: 2019/03/19. 43: 2022/09/26

51: C07K; A61K; C12N; A61P  
 71: BEIJING HANMI PHARMACEUTICAL CO., LTD.  
 72: LIU, JIAWANG, SONG, NANMENG, YANG,  
 DONGGE, YANG, YAPING, KIM, MAENGSUP  
 33: CN 31: 201610863814.7 32: 2016-09-29

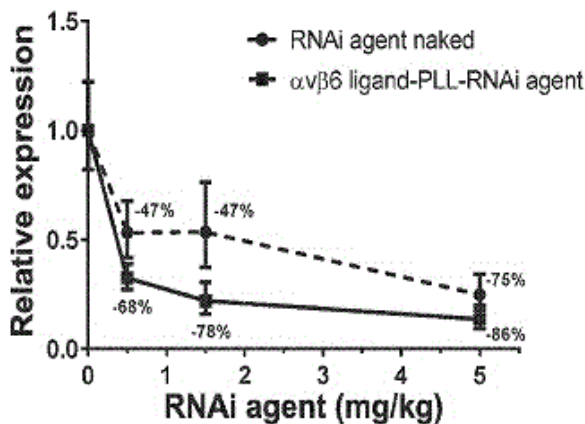
**54: HETERODIMERIC IMMUNOGLOBULIN CONSTRUCTS AND PREPARATION METHODS THEREOF**

00: -  
 Provided is a method for production of stable and highly specific heterodimeric immunoglobulin constructs, e.g., bispecific antibodies, retaining desirable properties of native IgG and lacking undesirable heavy chain-light chain mispairing, that can simultaneously bind two target molecules and are more potent in the treatment of complex diseases.

21: 2019/01905. 22: 2019/03/27. 43: 2022/09/26  
 51: C12N; C07K; A61K  
 71: ARROWHEAD PHARMACEUTICALS, INC.  
 72: ALMEIDA, AARON, LI, ZHEN, BUSH, ERIK W,  
 PEI, TAO, GLEBOCKA, ANGIESZKA, NICHOLAS,  
 ANTHONY, CARLSON, JEFFREY, FOWLER-  
 WATTERS, MATTHEW  
 33: US 31: 62/415,752 32: 2016-11-01

**54: ALPHA-V BETA-6 INTEGRIN LIGANDS AND USES THEREOF**

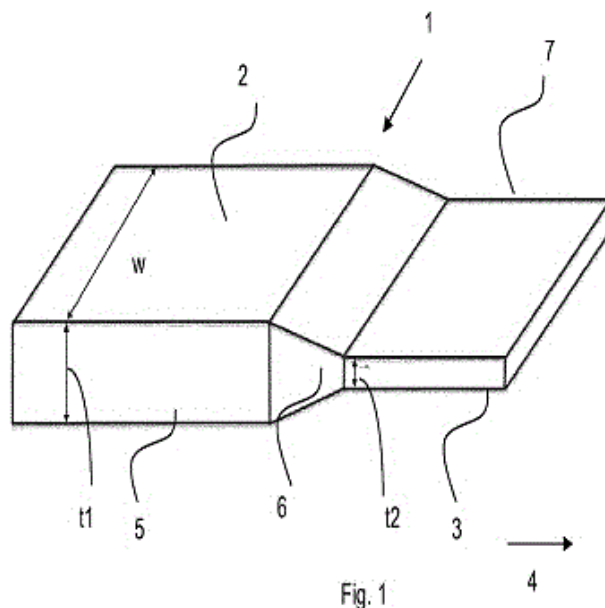
00: -  
 Integrin ligands having serum stability and affinity for  $\alpha v \beta 6$  integrins are described. Compositions comprising  $\alpha v \beta 6$  integrin ligands having serum stability and having affinity for  $\alpha v \beta 6$  integrins and methods of using them are also described.



21: 2019/02063. 22: 2019/04/02. 43: 2022/09/26  
 51: C21D; B21B

71: OUTOKUMPU OYJ  
 72: FRÖHLICH, THOMAS, LINDNER, STEFAN,  
 PINIEK, THORSTEN  
 33: EP 31: 16191364.5 32: 2016-09-29  
**54: METHOD FOR COLD DEFORMATION OF AN AUSTENITIC STEEL**

00: -  
 The invention relates for a method for partial hardening of an austenitic steel by utilizing during cold deformation the TWIP (Twinning Induced Plasticity), TWIP/TRIP or TRIP (Transformation Induced Plasticity) hardening effect. Cold deformation is carried out by cold rolling on at least one surface (2,3;12) of the material (1,11) to be deformed with forming degree ( $\Phi$ ) at the range of  $5 \leq \Phi \leq 60\%$  in order to achieve in the material (1,11) at least two consecutive areas (5,7;14,16) with different mechanical values in thickness, yield strength  $R_{p0.2}$ , tensile strength  $R_m$  and elongation having a ratio ( $r$ ) between ultimate load ratio  $\Delta F$  and the thickness ratio  $\Delta t$  at the range of  $1.0 > r > 2.0$ , and which areas are mechanically achieved to connect to each other by a transition area (6;15) which thickness is achieved variable from the thickness ( $t_1, t_3$ ) of the first area (5,14) in the deformation direction (4,13) to the thickness ( $t_2, t_4$ ) of the second area (7,16) in the deformation direction (4,13). The invention also relates to the use of the cold deformed product.



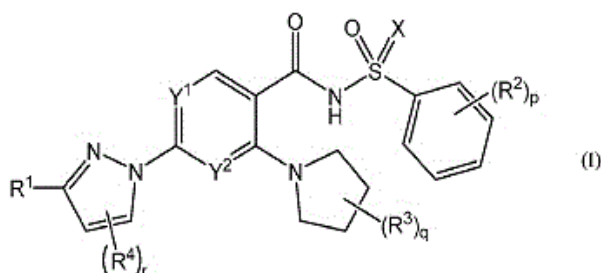
21: 2019/02124. 22: 2019/04/04. 43: 2022/09/26

51: C07D; A61K; A61P

71: VERTEX PHARMACEUTICALS  
INCORPORATED72: ALCACIO, TIMOTHY, BAEK, MINSON,  
GROOTENHUIS, PETER, HADIDA RUAH, SARA  
SABINA, HUGHES, ROBERT M, KESHAVARZ-  
SHOKRI, ALI, MCAULEY-AOKI, RACHEL,  
MCCARTNEY, JASON, MILLER, MARK THOMAS,  
VAN GOOR, FREDRICK, ZHANG, BEILI,  
ANDERSON, COREY, CLEVELAND, THOMAS,  
FRIEMAN, BRYAN A, KHATUYA, HARIPADA,  
JOSHI, PRAMOD VIRUPAX, KRENITSKY, PAUL  
JOHN, MELILLO, VITO, PIERRE, FABRICE JEAN  
DENIS, TERMIN, ANDREAS P, UY, JOHNNY,  
ZHOU, JINGLAN, ABELA, ALEXANDER RUSSELL,  
BUSCH, BRETT BRADLEY, PARASELLI,  
PRASUNA, SIESEL, DAVID ANDREW  
33: US 31: 62/410,353 32: 2016-10-19  
33: US 31: 62/419,935 32: 2016-11-09  
33: US 31: 62/402,838 32: 2016-09-30  
33: US 31: 62/415,409 32: 2016-10-31**54: MODULATOR OF CYSTIC FIBROSIS  
TRANSMEMBRANE CONDUCTANCE  
REGULATOR, PHARMACEUTICAL  
COMPOSITIONS, METHODS OF TREATMENT,  
AND PROCESS FOR MAKING THE MODULATOR**

00: -

Compounds of Formula (I), pharmaceutically acceptable salts thereof, deuterated derivatives of any of the foregoing, and metabolites of any of the foregoing are disclosed. Pharmaceutical compositions comprising the same, methods of treating cystic fibrosis using the same, and methods for making the same are also disclosed.



21: 2019/02260. 22: 2019/04/10. 43: 2022/09/26

51: D04H; D01D

71: LENZING AG

72: EINZMANN, MIRKO, HAYHURST, MALCOLM,  
SAGERER-FORIC, IBRAHIM

33: AT 31: A490-2016 32: 2016-10-21

**54: PROCESS AND DEVICE FOR THE  
FORMATION OF DIRECTLY-FORMED  
CELLULOSIC WEBS**

00: -

This invention relates to a process and a device for manufacturing cellulose-based webs which are directly formed from lyocell spinning solution and in particular for the washing of directly formed cellulose webs.

21: 2019/02320. 22: 2019/04/12. 43: 2022/09/26

51: C07J; A61K; A61P

71: COSMO TECHNOLOGIES LTD

72: GERLONI, MARA

33: EP 31: 14188063.3 32: 2014-10-08

**54: 17ALPHA,21-DIESTERS OF CORTEXOLONE  
FOR USE IN THE TREATMENT OF TUMORS**

00: -

The present invention provides certain cortexolone derivatives of formula (I) and the same for use as antitumor active ingredients for the curative or adjuvant, or neoadjuvant or palliative treatment of precancerous lesions, dysplasias, metaplasias and tumor diseases, including malignant neoplasias and metastasis. Another aspect of the invention relates to pharmaceutical compositions comprising cortexolone derivatives of formula (I) as active ingredients and at least one physiologically acceptable excipient, and to the use of said pharmaceutical compositions as antitumor medicinal products.

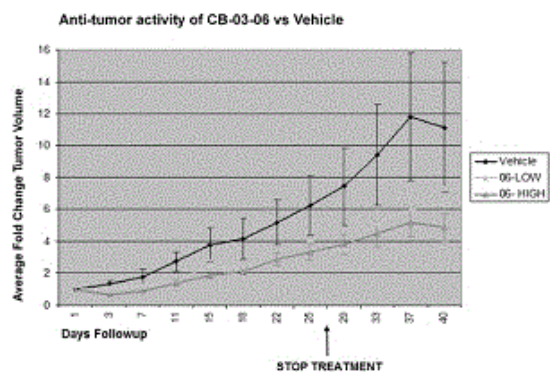
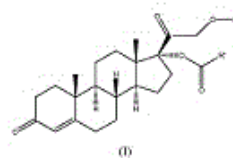


Figure 1

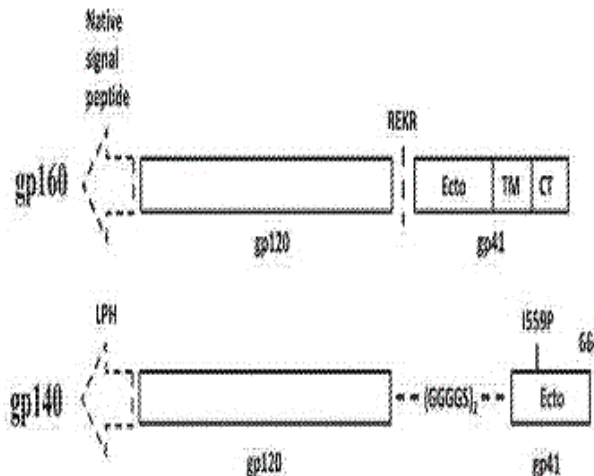


21: 2019/02465. 22: 2019/04/17. 43: 2022/09/26

51: A01N

71: PARAMOUNT PRODUCTS 1 LLC  
 72: LEFILES, JAMES HOLT, DAVIS, BILL  
 33: US 31: 62/445,124 32: 2017-01-11  
 33: US 31: 62/440,794 32: 2016-12-30  
 33: US 31: 62/606,130 32: 2016-11-02  
**54: ADJUVANT COMPOSITIONS FOR PLANT TREATMENT CHEMICALS**

00: -  
 The present invention is directed to an adjuvant premix composition for use with plant treatment chemicals. The adjuvant premix composition includes a thickener, a water soluble divalent salt, a foam control agent, a complexing agent, and a film forming agent. The present invention also relates to adjuvant compositions for use with plant treatment chemicals, plant treatment chemical formulations, methods of treating plants or plant seeds using the compositions of the present invention, and methods of treating a plant seed or growing plant using a plant treatment chemical and a coating material.

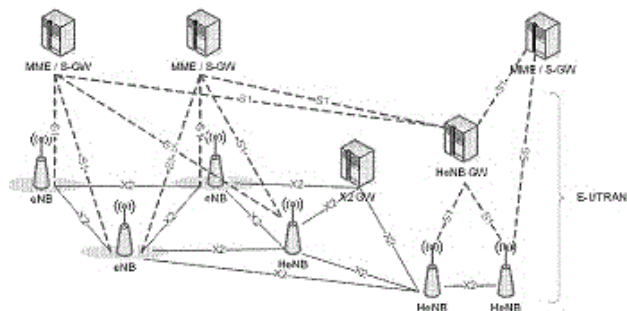


21: 2019/02535. 22: 2019/04/23. 43: 2022/09/26  
 51: C07K; A61K  
 71: UNIVERSITY OF CAPE TOWN  
 72: MEYERS, ANN ELIZABETH, WILLIAMSON, ANNA-LISE, RYBICKI, EDWARD PETER, MARGOLIN, EMMANUEL AUBREY, CHAPMAN, ROSAMUND  
 33: GB 31: 1617480.7 32: 2016-10-14  
**54: PRODUCTION OF SOLUBLE HIV ENVELOPE TRIMERS IN PLANTA**

00: -  
 The present invention relates to a method for producing a recombinant HIV glycoprotein polypeptide in a plant and to trimeric complexes of the recombinant, plant-produced HIV glycoprotein polypeptide which mimic the native HIV Env complex. The invention also relates to nucleic acids encoding the recombinant polypeptides, expression vectors containing the aforementioned nucleic acids and to pharmaceutical compositions, uses and methods of eliciting an immune response against HIV in a subject using the recombinant polypeptides and trimeric complexes.

21: 2019/03047. 22: 2019/05/15. 43: 2022/09/26  
 51: H04W  
 71: TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)  
 72: GUNNAR MILDH, ANGELO CENTONZA, PAUL SCHLIWA-BERTLING, PETER HEDMAN  
 33: US 31: 62/417,677 32: 2016-11-04  
**54: HANDLING LIMITED NETWORK SLICE AVAILABILITY**

00: -  
 According to certain embodiments, a method is disclosed for use in a network node. The method comprises obtaining network slice availability associated with one or more neighboring network nodes. The network slice availability indicates which of a plurality of network slices is supported by each of the one or more neighboring network nodes. The method further comprises managing slice connectivity of a wireless device based on the network slice availability of the one or more neighboring network nodes.



21: 2019/03183. 22: 2019/05/21. 43: 2022/09/26

51: A01H  
 71: CIBUS US LLC, CIBUS EUROPE B.V.  
 72: GOCAL, GREGORY F W, BEETHAM, PETER R, DE SCHOPKE, AURA, DUMM, SARAH, PEARCE, JAMES, SCHOPKE, CHRISTIAN, WALKER, KEITH A  
 33: US 31: 61/370, 436 32: 2010-08-03  
**54: MUTATED PROTOPORPHYRINOGEN IX OXIDASE (PPX) GENES**  
 00: -  
 Provided are compositions and methods relating to gene and/or protein mutations in transgenic or non-transgenic plants. In certain embodiments, the disclosure relates to mutations in the protoporphyrinogen IX (PPX) gene. In some embodiments the disclosure relates to plants that are herbicide resistant.

Figure 1: Amino acid sequence of *Anabaena doliopsis* chloroplast protoporphyrinogen oxidase (PPOX - A14g01690) (Accession # AX084732) (SEQ ID NO: 1)

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1  MELELLSPTTQSLLEPSPKFNLRNLNYYKPLRLRCVVAQOPTVQSSKIEGQ
51  GQTTITTEDCVIVGGIISGLCAQALATKHFDAAPNLIVTEAKDRVOGNI
101  TREENGFLEKRGPNPQSPDMLTAVVDSGLKDDVLGDEPTAPRFVLANG
151  KLRPVPSELTDLPPFDLNSIQGIRAGFALGCRFSPGPRESEVEEFVRR
201  NLGDEVFERLIEPFCGVAQDPSKLNKNAFGKRWKLEJNCGSIIGQTF
251  KAIQEKNAKAEKHPPLKPKQDQVGSFKGGLRMLPEAISAELEGGKVEL
301  SMFLGUITKLESQCNLYETPPQGLVSNQKSEVMVVFVSHVAGLLRPLS
351  ESAANALSKLYFFVAAVSISYFKEAIRTECLLDGELGFGQGLHFRTOV
401  KILGTIYSSSLFPNMAPGNILGLNYIGSSTNGILSKSGELVEAVDQD
451  LRHLIATNSTDPLKLDVVRVFAIQQFLVGRFDILDTAKESLITSSGVEG
501  LFLGRVVAAGVALORCYEGAYETAIEVDFMGRYAYK
    
```

21: 2019/03334. 22: 2019/05/27. 43: 2022/09/20  
 51: A61B  
 71: CREO MEDICAL LIMITED  
 72: HANCOCK, Christopher Paul, EBBUTT, Julian Mark, TURNER, Louis, MEADOWCROFT, Simon  
 33: GB 31: 1705171.5 32: 2017-03-30  
**54: ELECTROSURGICAL INSTRUMENT**  
 00: -  
 An electrosurgical vessel sealing device that can seal biological vessels using a confined microwave field that yields a well-defined seal location with low thermal margin. The device comprises a pair of jaws that are movable relative to each other to grip biological tissue. A blade for cutting the gripped tissue is slidable between the jaws. A coplanar microstrip antenna is mounted on the inner surface of one or both of the pair of jaws to emit microwave energy into the gap therebetween. The device may comprise a separate dissector element to enable fine tissue cutting and dissection to be performed.

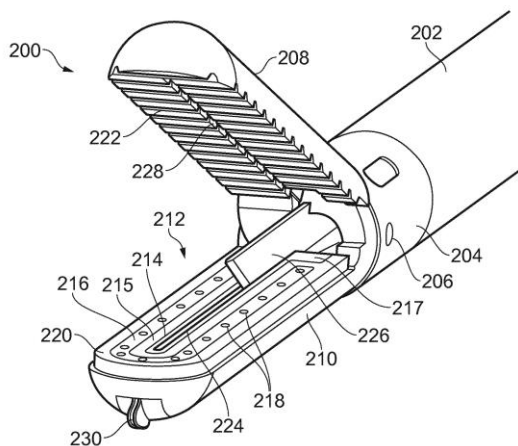
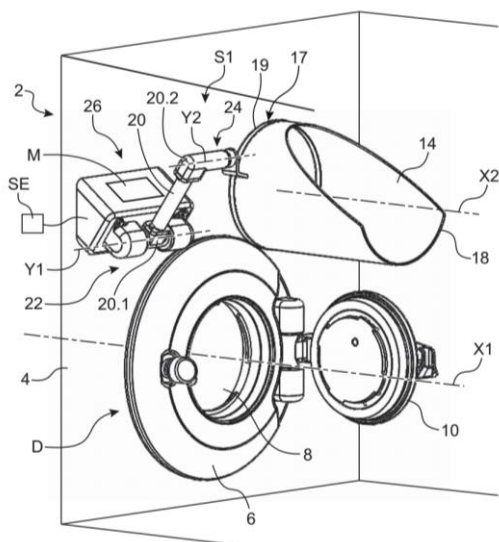


FIG. 2

21: 2019/03454. 22: 2019/05/30. 43: 2022/08/31  
 51: A61K; A61Q; C11D  
 71: GlaxoSmithKline Consumer Healthcare (UK) IP Limited  
 72: KING, Simon, PLATTS, Alexander Thomas  
 33: GB 31: 1620701.1 32: 2016-12-06  
**54: CLEANSING COMPOSITION**  
 00: -  
 Dental appliance cleansing composition comprising (a) fatty acid isopropyl ester, (b) polyoxyethylene sorbitan ester, (c) second sorbitan ester, wherein the cleansing composition does not contain methanol, ethanol or isopropyl alcohol. Dental appliance cleansing wipe impregnated with the composition. Use of the dental appliance cleansing composition or wipe for cleaning dental appliances and dentures.

21: 2019/03648. 22: 2019/06/07. 43: 2022/10/12  
 51: B25J; G21F; G21J  
 71: GETINGE LIFE SCIENCE FRANCE  
 72: AUBERT, Arthur, DANIEL, Wenceslas  
 33: FR 31: 1855085 32: 2018-06-11  
**54: TRANSFER SYSTEM FOR SEALED ENCLOSURE COMPRISING A DEVICE FOR SEALED CONNECTION WITH A CLOSED VOLUME**  
 00: -  
 Transfer system (S1) for sealed enclosure, said sealed enclosure (E) defining a first closed volume and comprising at least one device for sealed connection (D) to a second closed volume, said transfer system being intended to be arranged in said enclosure (E) and to be fixed to a wall thereof, said transfer system (S1) comprising at least one

arm (40), a first rotating hinge (22) between the arm intended to be arranged between the arm and said wall of the enclosure, said first rotating hinge (22) comprising a first axis of rotation (Y1), a chute (14) and a second rotating hinge (24) between the arm and the chute (14), said second rotating hinge (24) comprising a second axis of rotation (Y2), the chute (14) comprising a docking edge (17) configured to cooperate with the device for sealed connection.



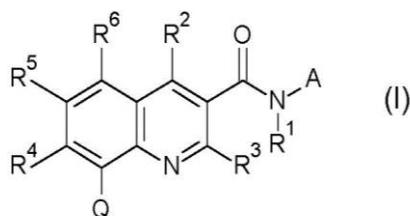
21: 2019/03708. 22: 2019/06/10. 43: 2022/09/20  
51: A61K; A61P; C07D  
71: Bayer Animal Health GmbH  
72: HÜBSCH, Walter, KÖBBERLING, Johannes, KÖHLER, Adeline, SCHWARZ, Hans-Georg, KULKE, Daniel, WELZ, Claudia, ILG, Thomas, BÖRNGEN, Kirsten, ZHUANG, Wei, GRIEBENOW, Nils, BÖHM, Claudia, LINDNER, Niels, HINK, Maike, GÖRGENS, Ulrich

33: EP(DE) 31: 16198550.2 32: 2016-11-11

**54: NEW ANTHELMINTIC QUINOLINE-3-CARBOXAMIDE DERIVATIVES**

00: -

The present invention covers new quinoline compounds of general formula (I) in which A, R



21: 2019/03750. 22: 2019/06/11. 43: 2022/09/20  
51: B01L; C12N; C12Q; G01N  
71: Cepheid

72: LAI, Edwin Wei-Lung, KOHLWAY, Andrew, VAN ATTA, Reuel, HIGUCHI, Russell, GALL, Alexander A., KOCMOND, Kriszten

33: US 31: 62/433,165 32: 2016-12-12

**54: INTEGRATED PURIFICATION AND MEASUREMENT OF DNA METHYLATION AND CO-MEASUREMENT OF MUTATIONS AND/OR MRNA EXPRESSION LEVELS IN AN AUTOMATED REACTION CARTRIDGE**

00: -

Methods of determining methylation of DNA are provided. In one illustrative, but non-limiting embodiment the method comprises i) contacting a biological sample comprising a nucleic acid to a first matrix material comprising a first column or filter where said matrix material binds and/or filters nucleic acids in said sample and thereby purifies the DNA; ii) eluting the bound DNA from the first matrix material and denaturing the DNA to produce eluted denatured DNA; iii) heating the eluted DNA in the presence of bi sulfite ions to produce a deaminated nucleic acid; iv) contacting said deaminated nucleic acid to a second matrix material comprising a second column to bind said deaminated nucleic acid to said second matrix material; v) desulphonating the bound deaminated nucleic acid and/or simultaneously eluting and desulphonating the nucleic acid by contacting the deaminated nucleic acid with an alkaline solution to produce a bi sulfite converted nucleic acid; vi) eluting said bi sulfite converted nucleic acid from said second matrix material; and vii) performing methylation specific PCR and/or nucleic acid sequencing, and/or high resolution melting analysis (HRM) on said bisulfite-converted nucleic acid to determine the methylation of said nucleic acid, wherein at least steps iv) through vi) are performed in a single reaction cartridge.

21: 2019/03759. 22: 2019/06/11. 43: 2022/09/26  
51: A23K  
71: AGRIGENETICS, INC.

72: PLEHN, STEVE, ANDERSON, JOHN

33: US 31: 62/429,217 32: 2016-12-02

**54: SILAGE PRODUCED FROM A CORN HYBRID COMPRISING BROWN MIDRIB AND FLOURY TRAITS, AND ANIMAL FEED COMPOSITIONS COMPRISING SAME**



00: -

A silage with increased digestibility is produced from a corn hybrid that includes both brown midrib (bmr) and floury traits. A growing ration comprises such silage. A finishing ration comprises such silage. A method of increasing the meat quantity of a silage fed animal comprises providing a silage produced from a corn hybrid that includes brown midrib (bmr) and floury traits, and feeding the animal with an animal feed composition that comprises the silage.

21: 2019/03796. 22: 2019/06/12. 43: 2022/09/26

51: C07K

71: MERCK PATENT GMBH

72: RÜKER, Florian, BÖNISCH, Maximilian

33: EP 31: 17154388.7 32: 2017-02-02

**54: PREFERRED PAIRING OF ANTIBODY DOMAINS**

00: -

An antigen-binding molecule (ABM) comprising a cognate LC/HC dimer of an antibody light chain (LC) composed of a VL and a CL antibody domain, associated to an antibody heavy chain (HC) comprising at least a VH and a CH1 antibody domain, which association is through pairing the VL and VH domains and the CL and CH domains, wherein the amino acids at the position 18 in the CL domain and at the position 26 in the CH1 domain are of opposite polarity, wherein numbering is according to the IMGT.

21: 2019/03808. 22: 2019/06/12. 43: 2022/09/26

51: C07D; A61P; A61K

71: RIVUS PHARMACEUTICALS, INC.

72: KHAN, SHAHARYAR M

33: US 31: 62/443,244 32: 2017-01-06

33: US 31: 62/585,326 32: 2017-11-13

33: US 31: 62/581,355 32: 2017-11-03

**54: NOVEL PHENYL DERIVATIVES**

00: -

The present application provides a novel phenyl derivative, 5-[(2,4- dinitrophenoxy)methyl]-l-methyl-2-nitro-1H-imidazole or a pharmaceutically acceptable salt thereof, which is useful for regulating mitochondria activity, reducing adiposity, treating diseases including diabetes and diabetes-associated complications.

21: 2019/03885. 22: 2019/06/14. 43: 2022/09/26

51: A01N

71: FMC CORPORATION

72: NICHOLSON, PAUL, KAUFFMAN, KARL

33: US 31: 62/436,519 32: 2016-12-20

**54: POLYMORPHS OF HERBICIDAL SULFONAMIDES**

00: -

Solid polymorphic forms of sulfentrazone are described. Particularly, a new polymorphic form of sulfentrazone is described herein as sulfentrazone-1, having surprising property advantages over technical sulfentrazone. Processes for the preparation of sulfentrazone-1, herbicidal compositions comprising sulfentrazone-1, and methods of its use are described.

21: 2019/04266. 22: 2019/06/28. 43: 2022/10/17

51: A23L

71: RED BULL GMBH

72: NACHBAGAUER, Josef, URBAN-KLIK, Manfred, BOEHRINGER, Volker

33: US 31: 15/395,432 32: 2016-12-30

33: EP 31: 16207626.9 32: 2016-12-30

**54: SWEETENING COMPOSITIONS**

00: -

The invention relates to a sweetening composition comprising a natural sweet-tasting carbohydrate, a stevia compound, rubusoside, and tannin, wherein component d) is present in an amount in the range from 1 mg/l to 400 mg/l. The invention also relates to a sweetening composition comprising a natural sweet-tasting carbohydrate, a stevia compound, rubusoside, tannin and oak extract or pomegranate extract. The invention further relates to a sweetening composition comprising acesulfam or aspartame, sucralose, a stevia compound, saccharin or cyclamate, neohesperidin, and tannin in an amount in the range from 1 mg/l to 400 mg/l. Moreover, the invention relates to a sweetening composition comprising a) 0,1 to 50 g/l of a natural sweet-tasting carbohydrate, b) 40 to 120 g/l of a natural sweet-tasting carbohydrate different from a), and c) 30 to 300 mg/l of rubusoside. And, the invention is about the use of said sweetening compositions for sweetening and preparing beverages.

21: 2019/04387. 22: 2019/07/03. 43: 2022/09/20

51: A61K; A61P

71: CENTRE FOR DIGESTIVE DISEASES

72: Thomas Julius Borody

33: US 31: 62/572,512 32: 2017-10-15

**54: COMPOSITIONS AND METHODS FOR TREATING, AMELIORATING AND PREVENTING H. PYLORI**

00: -

Provided are methods for treating, ameliorating, reversing and/or preventing a *Helicobacter pylori* (*H. pylori*) infection in an individual in need thereof, comprising: administering to the individual in need thereof a therapeutic combination comprising: (a) a composition comprising or consisting of: vonoprazan or a vonoprazan fumarate, or a 5-(2-fluorophenyl)-1-(pyridin-3-ylsulfonyl)-1H-pyrrol-3-yl)-N-methylmethanamine monofumarate, or a 1-(5-(2-fluorophenyl)-1-(pyridin-3-ylsulfonyl)-1H-pyrrol-3-yl)-N-methyl-methanamine fumarate), optionally TAKECABTM; and (b) an antimicrobial or antibiotic drug or composition.

21: 2019/04403. 22: 2019/07/04. 43: 2022/09/20  
51: A01N; A01P

71: ADAMA MAKHTESHIM LTD.

72: LEVY, SHLOMO, BERKOVITCH, MICHAEL, FIRER, VIACHESLAV

33: US 31: 62/431,342 32: 2016-12-07

**54: A STABLE, SELF-DISPERSIBLE, LOW FOAMING SOLID PESTICIDE FORMULATION**

00: -

The present subject matter relates to a stable pesticidal formulation which exhibits improved dispersibility in cold water and full compatibility with fertilizers.

21: 2019/04686. 22: 2019/07/17. 43: 2022/09/20  
51: B28D; E21C; G01N

71: Sandvik Mining and Construction Oy

72: HÄMÄLÄINEN, Pasi

33: EP(FI) 31: 18192024.0 32: 2018-08-31

**54: ROCK BREAKING DEVICE**

00: -

A rock breaking device (8) and a method of monitoring a condition of a tool (9) of a rock breaking device (8). The rock breaking device comprises a frame (8'), a tool (9), a device (5) for generating stress waves in the tool (9), measuring means (15) for measuring the stress wave propagating in the tool and at least one computing unit (16) for monitoring a condition of the tool on the basis of the measured stress wave. The at least one computing unit (16) is configured to determine a condition of the

tool on the basis of a time of propagation of at least one reflected stress wave component (RC1, RC2, RC3, RC4) of the stress wave and at least one additional property of the same reflected stress wave component.

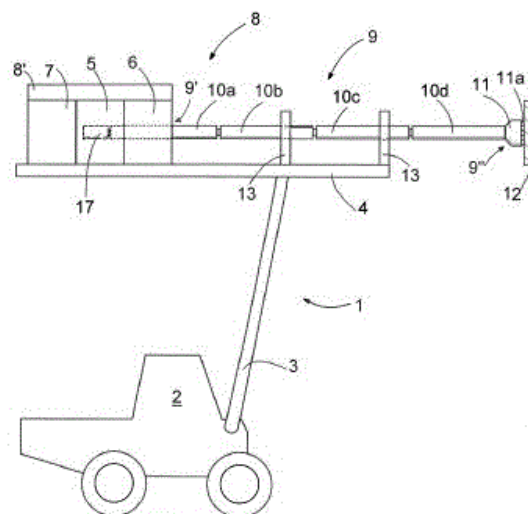


FIG. 1

21: 2019/04877. 22: 2019/07/25. 43: 2022/08/31  
51: A61K; A61P; C07D

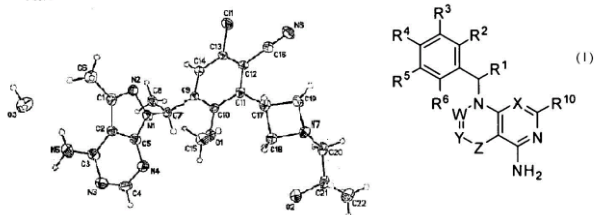
71: Incyte Holdings Corporation

72: LI, Yun-Long, YAO, Wenqing, COMBS, Andrew P., YUE, Eddy W., MEI, Song, ZHU, Wenyu, GLENN, Joseph, MADUSKUIE Jr, Thomas P., SPARKS, Richard B., DOUTY, Brent, HE, Chunhong  
33: US 31: 61/530,866 32: 2011-09-02**54: HETEROCYCLYLAMINES AS PI3K INHIBITORS**

00: -

The present invention provides heterocyclamine derivatives of Formula (I): wherein the variables are defined herein, 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.

FIG. 1



21: 2019/05350. 22: 2019/08/13. 43: 2022/09/20

51: C07D

71: MIKROCHEM SPOL. S R.O.

72: BENADIKOVÁ, DANIELA, CECH, JURAJ,  
JUHÁS, ERIK, OREMUS, VLADIMÍR,  
ŠMAHOVSKÝ, VENDEL

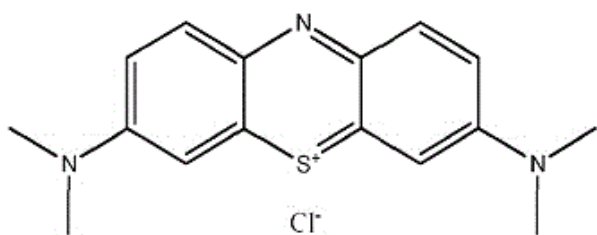
33: EP 31: 17161172.6 32: 2017-03-15

33: US 31: 62/471,651 32: 2017-03-15

**54: METHOD FOR PREPARATION OF 3,7-BIS-(DIMETHYLAMINO)-PHENOTHIAZIN-5-IUM CHLORIDE OR BROMIDE**

00: -

The present invention relates to: a process for preparing 3,7-bis-(dimethylamino)-phenothiazin-5-ium bromide or chloride; a method of converting 3,7-bis-(dimethylamino)-phenothiazin-5-ium bromide to 3,7-bis-(dimethylamino)-phenothiazin-5-ium chloride; and the purification of 7-bis-(dimethylamino)-phenothiazin-5-ium chloride by crystallization from aqueous solution of hydrochloric acid, leading to a pharmaceutically acceptable 3,7-bis-(dimethylamino)-phenothiazin-5-ium chloride (methylthioninium chloride, methylene blue, MTC) of formula I below reported.



3,7-bis(Dimethylamino)-phenothiazin-5-ium chloride

Formula I

21: 2019/05823. 22: 2019/09/03. 43: 2022/09/01

51: B65D

71: SCHEEPERS, Gideon

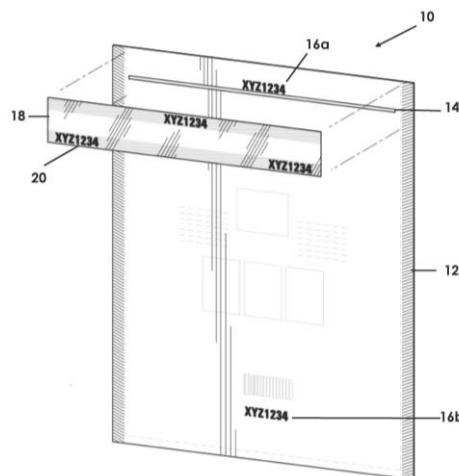
72: SCHEEPERS, Gideon

33: ZA 31: 2017/01537 32: 2017-03-02

**54: SECURITY BAGS**

00: -

The invention relates to security bags and in particular, to a tamper evident bag (10). The tamper evident bag includes a security bag (12) which has at least one opening (14) and is provided with a bag visual indicator (16a). The tamper evident bag (10) further includes a seal (18) for securely closing the at least one opening (14) of the security bag (12). The seal (18) is provided with a seal visual indicator (20) which is associated with the bag visual indicator (16a), such that unauthorized access to the security bag (12) is evident when the seal (18) has been tampered with. The invention extends to a tamper evident kit which includes a security bag (12) and a separate seal (18).



21: 2019/06012. 22: 2019/09/11. 43: 2022/09/01

51: H04W

71: GUANGDONG OPPO MOBILE  
TELECOMMUNICATIONS CORP., LTD.

72: CHEN, Wenhong, SHI, Zihua

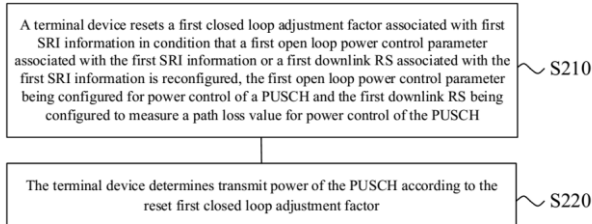
**54: POWER CONTROL METHOD, TERMINAL DEVICE AND NETWORK DEVICE**

00: -

A power control method, a terminal device and a network device are provided. The method includes: a terminal device resets a first closed loop adjustment factor associated with first Sounding Reference Signal Resource Indicator (SRI) information in condition that a first open loop power control parameter associated with the first SRI information or a first downlink Reference Signal (RS) associated with the first SRI information is reconfigured, the first open loop power control parameter being configured for power control of a Physical Uplink Shared Channel (PUSCH) and the

first downlink RS being configured to measure a path loss value for power control of over the PUSCH; and the terminal device determines transmit power of the PUSCH according to the reset first closed loop adjustment factor.

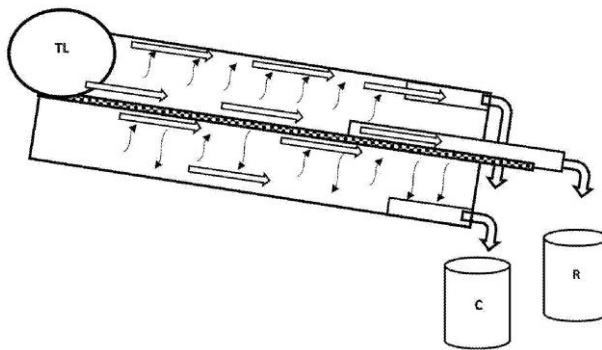
200



21: 2019/06030. 22: 2019/09/12. 43: 2022/09/26  
 51: B01D; C02F  
 71: MAXIM ELECTRICAL SERVICES (VIC) PTY LTD, DAWSON, Mark  
 72: MINNEY, Robert  
 33: AU 31: 2017900657 32: 2017-02-27  
 33: AU 31: 2017902315 32: 2017-06-16

**54: AN IMPROVED SOLAR WATER DISTILLATION MODULE**

00: -  
 An improved solar water distillation system including: a flow system for collecting one or more condensate streams from an input treatment liquid; and an input treatment liquid separator within the flow system adapted to collect excess input treatment liquid from the flow system separate from the one or more condensate streams; wherein the treatment liquid is maintained separate to the condensate streams to substantially minimise cross-contamination of the one or more condensate streams.



21: 2019/06043. 22: 2019/09/12. 43: 2022/09/26  
 51: A61K  
 71: SDG, INC.

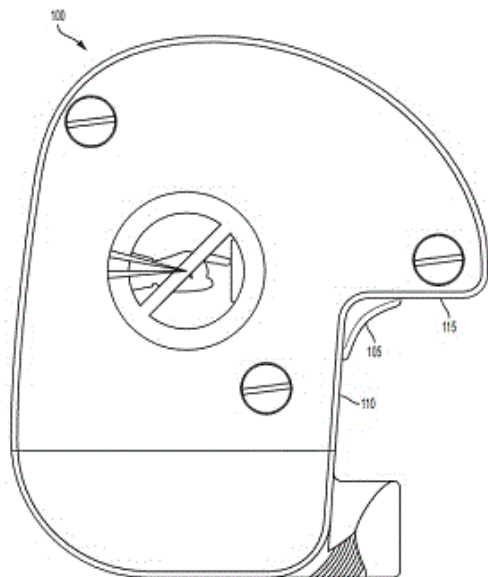
72: GEHO, W. BLAIR  
 33: US 31: 62/470,478 32: 2017-03-13  
**54: LIPID-BASED NANOPARTICLES WITH ENHANCED STABILITY**

00: -  
 The invention provides an improved lipid-based nanoparticle, which can be used to deliver a therapeutic agent to a subject, such as but not limited to a mammal, such as but not limited to a human. In certain embodiments, the nanoparticle of the invention has reduced aggregation properties as compared to those taught in the prior art.

21: 2019/06077. 22: 2019/09/13. 43: 2022/09/26  
 51: A61M  
 71: DESVAC  
 72: GAUTREAU, JEREMY, VEYRENT, STEPHANE  
 33: US 31: 15/458,508 32: 2017-03-14

**54: APPARATUS AND METHOD FOR A SINGLE SENSOR ACTION PLATE**

00: -  
 A vaccination device can be used to vaccinate day-old chicks. To vaccinate the day-old chicks safely while ensuring vaccination efficacy, the vaccination device can include a vaccination needle configured to extend from the vaccination device at a vaccination delivery location and an action plate. The action plate can be coupled to the vaccination device such that the action plate is positioned next to the vaccination delivery location. The action plate can include an action button, wherein the action button is configured to receive a day-old chick presented to the action plate in a predetermined loading position, receive a press of the action button, and in response to pressing the action button, cause the vaccination needle to extend from the vaccination device at the vaccination delivery location to deliver a subcutaneous injection to the day-old chick.



21: 2019/06127. 22: 2019/09/17. 43: 2022/09/26

51: A61K; C07D; A61P

71: EXELIXIS, INC.

72: SHAH, Khalid

33: US 31: 62/511,714 32: 2017-05-26

**54: CRYSTALLINE SOLID FORMS OF SALTS OF N-{4-[(6,7-DIMETHOXYQUINOLIN-4-YL)OXY]PHENYL}-N'-(4-FLUOROPHENYL) CYCLOPROPANE-1,1-DICARBOXAMIDE, PROCESSES FOR MAKING, AND METHODS OF USE**

00: -

The invention relates to novel crystalline solid forms of salts of the chemical compound N-{4-[(6,7-dimethoxyquinolin-4-yl)oxy]phenyl}-N'-(4-fluorophenyl) cyclopropane-1,1-dicarboxamide, and solvates thereof, including hydrates, that are useful for the treatment of cancer. Also disclosed are pharmaceutical compositions comprising the crystalline solid forms and processes for making the crystalline solid forms, as well as methods of using them for the treatment of cancer, particularly renal cell carcinoma (RCC) and medullary thyroid cancer (MTC).

21: 2019/06131. 22: 2019/09/17. 43: 2022/09/26

51: A01P

71: FMC CORPORATION

72: PURI, ATUL

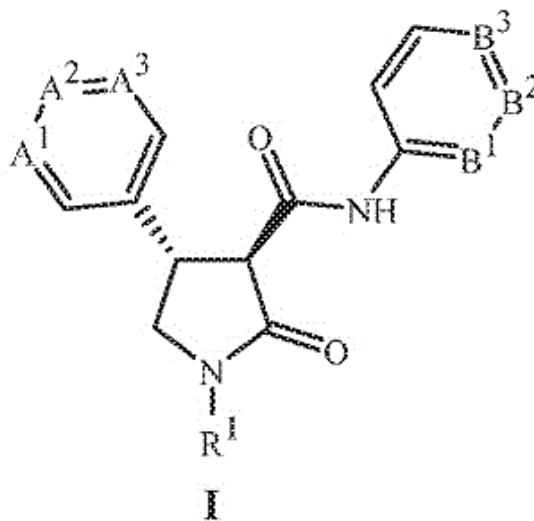
33: US 31: 62/572,057 32: 2017-10-13

33: US 31: 62/474,215 32: 2017-03-21

**54: HERBICIDAL MIXTURE, COMPOSITION AND METHOD**

00: -

Disclosed is a mixture comprising (a) a compound of Formula I and salts thereof wherein A<sup>1</sup>, A<sup>2</sup>, A<sup>3</sup>, R<sup>1</sup>, B<sup>1</sup>, B<sup>2</sup> and B<sup>3</sup> are defined in the disclosure, and (b) 2-pyridinecarboxylic acid, 4-amino-3-chloro-6-(4-chloro-2-fluoro-3-methoxyphenyl)-5-fluoro-phenylmethyl ester (i.e. florpyrauxifen-benzyl). Also disclosed is a composition comprising the mixture. Also disclosed is a method of applying the mixture to undesired vegetation comprising contacting the undesired vegetation or its environment with an effective amount of the mixture of the invention.



21: 2019/06151. 22: 2019/09/18. 43: 2022/09/01

51: H04W

71: GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.

72: XU, Hua

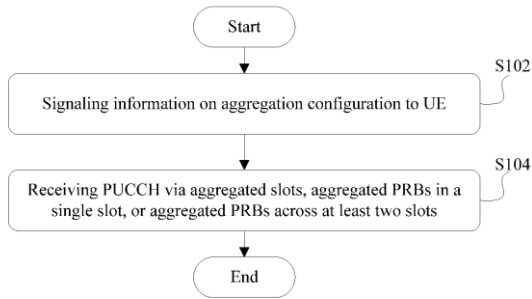
33: US 31: 62/471,002 32: 2017-03-14

**54: AGGREGATION METHODS, GNODEBS, USER EQUIPMENTS AND STORAGE MEDIUM**

00: -

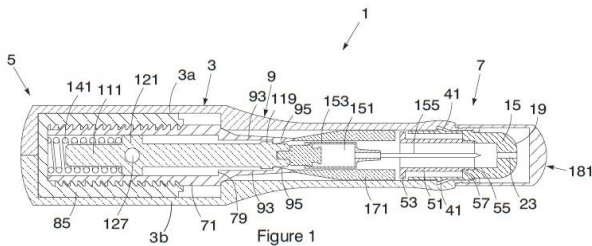
The present disclosure relates to slot/physical resource block (PRB) aggregation methods, gNodeBs (gNB), user equipments and storage medium. A method is carried out in a gNB and includes: signaling, by a gNodeB (gNB), information on at least part of aggregation configuration of one of a set of slots, a set of physical resource blocks (PRBs) in a single slot, and a set of PRBs across at least two slots to a user equipment (UE); and receiving, by the gNB, a long format physical uplink control channel (PUCCH) carried in the one of the set of slots, the set of PRBs in a single slot, and the

set of PRBs across at least two slots, which is aggregated according to the aggregation configuration, from the UE.



21: 2019/06448. 22: 2019/09/30. 43: 2022/09/01  
 51: A61M  
 71: UNIVERSITY OF CAPE TOWN  
 72: NAIR, Gokul Arjunan, LEVIN, Michael, SIVARASU, Sudesh  
 33: GB 31: 1703982.7 32: 2017-03-13  
**54: AN AUTO-INJECTOR**

00: -  
 An auto-injector is provided which includes a housing with a syringe slidably received therein. The syringe has a barrel with a piston movable therein and a needle extending therefrom. The piston is releasably secured to one end of a plunger which is slidably secured within a body in the housing and is operable through a bias provided by a motive source. In use, the plunger moves under the bias from a loaded condition to a discharged condition to move the syringe so that the needle extends from a tip at an injection end of the housing and to slide the piston within the barrel to expel the contents of the syringe. The plunger is held in the loaded condition against the bias by a detent extending from the body and which can be selectively released by operation of an actuator when pressure is applied to the tip.



21: 2019/07741. 22: 2019/11/22. 43: 2022/08/31  
 51: H03M; H04L

71: Huawei Technologies Co., Ltd.  
 72: WANG, Jun, ZHANG, Gongzheng, ZHANG, Huazi, XU, Chen, HUANG, Lingchen, DAI, Shengchen, LUO, Hejia, QIAO, Yunfei, LI, Rong, WANG, Jian, CHEN, Ying, POLIANSKII, Nikita, KAMENEV, Mikhail, SHEN, Zukang, HUANGFU, Yourui, DU, Yinggang  
 33: CN 31: 201710653644.4 32: 2017-08-02  
**54: METHOD AND DEVICE FOR ENCODING POLAR CODE**

00: -  
 The present application relates to the technical field of communications and discloses a method and a device for encoding a Polar code. The method improves the accuracy of reliability calculation and sorting for polarized channels. The method comprises: obtaining a first sequence for encoding K bits to be encoded, the first sequence comprising a number sequence of N polarized channels, the number sequence of N polarized channels being sorted into the first sequence according to the reliability of the N polarized channels, wherein K is a positive integer, N is a mother code length of a Polar code, N is 2 to the power of a positive integer, and K = N; selecting, in order of reliability from high to low, the number sequence of K polarized channels from the first sequence; and placing the bits to be encoded according to the selected number sequence of K polarized channels and performing Polar code encoding on the bits to be encoded.

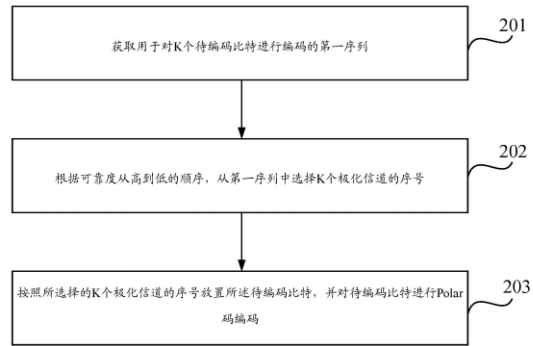


图 2

- 201 Obtain a first sequence for encoding K bits to be encoded
- 202 Select, in order of reliability from high to low, a number sequence of K polarized channels from the first sequence
- 203 Place the bits to be encoded according to the selected number sequence of K polarized channels and perform Polar code encoding on the bits to be encoded

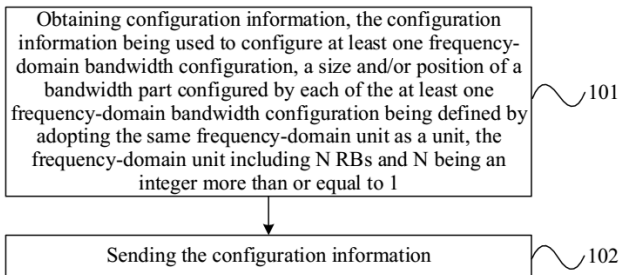
21: 2019/08101. 22: 2019/12/05. 43: 2022/09/01  
 51: H04W

71: GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.  
72: TANG, Hai

**54: BANDWIDTH PART CONFIGURATION METHOD, NETWORK DEVICE, AND TERMINAL**

00: -

The present invention provides a bandwidth part configuration method, a network device, and a terminal. In one aspect, in an embodiment of the present invention, configuration information is obtained, the configuration information being used for configuring at least one frequency-domain bandwidth configuration, the size and/or the position of a bandwidth part configured by each of the at least one frequency-domain bandwidth configuration being defined by using a same frequency-domain unit as a unit, the frequency-domain unit comprising N resource blocks, and N being an integer greater than or equal to 1; and the configuration information is sent. Because the size and/or the position of a bandwidth part configured by each frequency-domain bandwidth configuration is defined by using a same frequency-domain unit as a unit, the structures of control signaling can be unified compared with a manner in which a bandwidth part is configured by using different resource granularities, thereby effectively ensuring low control signaling overheads and reducing the complexity of a device.



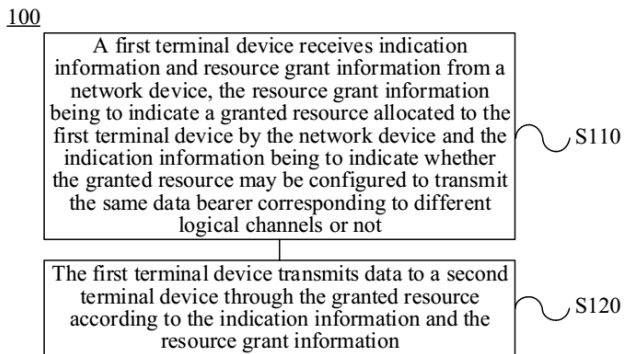
21: 2019/08103. 22: 2019/12/05. 43: 2022/09/01  
51: H04W  
71: GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.  
72: TANG, Hai

**54: RESOURCE SCHEDULING METHOD, TERMINAL DEVICE, AND NETWORK DEVICE**

00: -

The embodiments of the application relate to a resource scheduling method, a terminal device and a network device. The method includes that: a first

terminal device receives indication information and resource grant information from a network device, the resource grant information being to indicate a granted resource allocated to the first terminal device by the network device and the indication information being to indicate that the granted resource is configured to transmit data born on a target logical channel; and the first terminal device transmits the data born on the target logical channel to a second terminal device through the granted resource according to the indication information and the resource grant information. According to the resource scheduling method, terminal device and network device of the embodiments of the application, flexible configuration of a transmission resource for a terminal device in a special application scenario may be implemented.



21: 2020/00716. 22: 2020/02/04. 43: 2022/09/05  
51: B02C; B65D

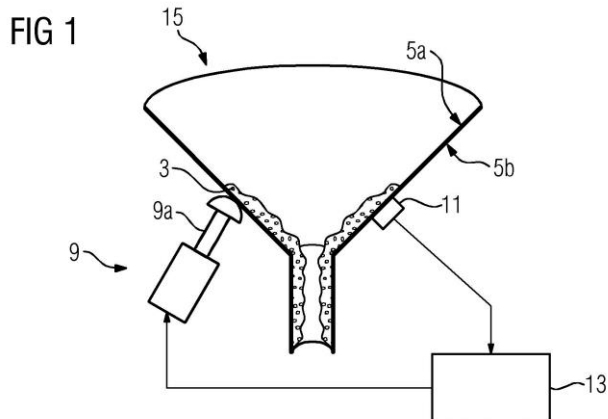
71: Siemens Aktiengesellschaft  
72: PROCKSCH, Andreas, FODOR, Dan Niculae  
33: EP(DE) 31: 17189596.4 32: 2017-09-06

**54: METHOD FOR OPERATING A SYSTEM, SYSTEM, AND COMPUTER PROGRAM PRODUCT**

00: -

The invention relates to a method and to a device for detecting and detaching an adherence (3). To this end, the first oscillation, which is excited by an excitation unit (9) by way of example, is registered using a sensor (11). The sensor (11) provides a sensor signal, wherein the sensor signal is analyzed in a control device (13) for the presence of an adherence (3). If the analysis (Ana) indicates an adherence (3), a second oscillation is applied to the component (1, 15) with the aid of the excitation unit (9). It is the purpose of the second oscillation to detach the adherence (3). By detaching the

adherence (3), the component (1, 15), or the system that includes the component (1, 15), can be operated without maintenance for a longer period of time.



21: 2020/00799. 22: 2020/02/07. 43: 2022/10/20  
51: H04W

71: PAYMENT24 GROUP (PTY) LTD

72: DANIEL, Nolan, RAHIL, Shadab

33: ZA 31: ZA 2019/00784 32: 2019-02-07

**54: FUEL STATION FORECOURT PAYMENT SYSTEM**

00: -

The invention provides a system to effect purchase and contemporaneous dispensation of fuel from a fuel retailer, the system including: a vehicle specific identification device fixable to a vehicle into which fuel is required to be dispensed; a wireless communication device which is configured to receive a vehicle identifier from the vehicle specific identification device and a fuel pump identifier, identifying a fuel pump adjacent the vehicle; and which is configured to transmit the vehicle identifier, the fuel pump identifier, a subscriber identifier associated with the wireless communication device and GPS co-ordinates of the wireless communication device; a remotely located central server with is configured for communication with the wireless communication device and with a forecourt controller of the fuel retailer; at least one database accessible to the central server that contains first information on a fuel purchasing customer which includes a first association between the customer, the subscriber identifier and the vehicle identifier, and second information on the fuel retailer which includes a second association between the GPS co-

ordinates and a location of the fuel retailer; wherein, on receipt of the vehicle identifier, the subscriber identifier, the GPS co-ordinates, the fuel pump identifier, and an amount of fuel that is required to be dispensed, sent by the wireless communication device, the server is operable to: interrogate the first information to identify the customer based on the first association, to ensure that funds are available to the customer for the purchase of the amount of fuel; interrogate the second information to identify the fuel retailer based on the second association; and send an instruction to the controller to actuate the fuel pump to dispense the amount of fuel.

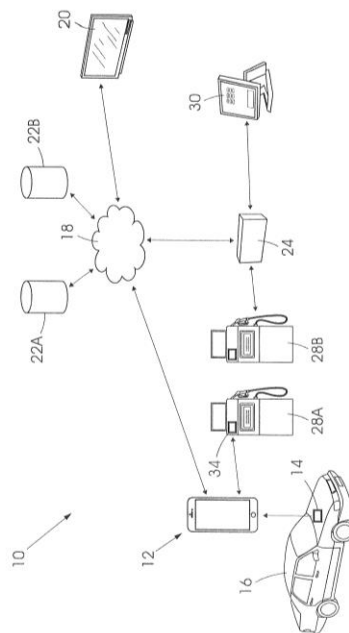


Figure. 1

21: 2020/01283. 22: 2020/02/28. 43: 2022/10/03  
51: A61K

71: PHARMACOSMOS HOLDING A/S

72: CHRISTENSEN, Tobias S., ANDREASEN, Hans B.

33: EP 31: 17190302.4 32: 2017-09-11

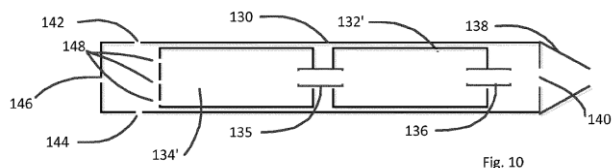
**54: IRON COMPLEX COMPOUNDS FOR THERAPEUTIC USE**

00: -

The present invention relates to iron complex compounds for therapeutic use which are low in arsenic, chromium, lead, cadmium, mercury and/or aluminum, compositions thereof and processes for preparing said iron complex compounds.







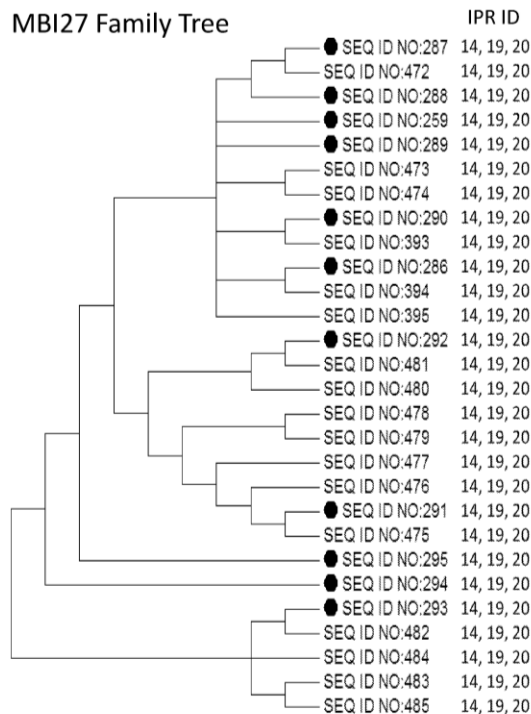
21: 2020/02041. 22: 2020/05/04. 43: 2022/10/20  
 51: A61K; C07D; A61P  
 71: JOINT STOCK COMPANY "BIOCAD"  
 72: ZAVIALOV, Kirill Vadimovich, GORBUNOVA, Svetlana Leonidovna, SHEKHAUTSOU, Artsiom Evgenievich, KASATKINA, Mariia Andreevna, BEKETOVA, Daria Dmitrievna, KOZHEMYAKINA, Natalia Vladimirovna, KULISH, Kirill Igorevich, MAKSIMENKO, Elena Aleksandrovna, MELESHINA, Marina Viktorovna, MELCHAEVA, Olga Anatolevna, MINDICH, Aleksei Leonidovich, MOROZOV, Dmitry Valentinovich, POPKOVA, Aleksandra Vladimirovna, SMETANIN, Iliia Alexeevich, SILONOV, Sergey Aleksandrovich, SOLDATOVA, Iaroslavna Alexandrovna, IAKOBSON, Georgii Viktorovich  
 33: RU 31: 2017135686 32: 2017-10-07  
 33: RU 31: 2018134159 32: 2018-09-28  
**54: EPIDERMAL GROWTH FACTOR RECEPTOR INHIBITORS**

00: -  
 The present group of inventions relates to novel compounds having formula (I), and to the salts, solvates or stereoisomers thereof, as well as to a pharmaceutical composition, a method of inhibiting the biological activity of epidermal growth factor receptor (EGFR), a method of treating diseases or disorders mediated by EGFR activity, and the use of the claimed compounds or the aforementioned composition for treating a disease or a disorder mediated by EGFR activity.

21: 2020/02067. 22: 2020/05/04. 43: 2022/10/03  
 51: A01N; C12N  
 71: EVOGENE LTD., MARRONE BIO INNOVATIONS, INC  
 72: ROTEM, Or, MARRONE, Pamela G., AYAL, Sharon, VASAVADA, Amit, PIERCE, Brittany, MEIHLS, Lisa N., REDDY, Vaka S., WILK, Debora, CORDOVA-KREYLOS, Ana-Lucia, PRESNAIL, James, EMMANUEL, Eyal  
 33: US 31: 62/560,254 32: 2017-09-19  
**54: BACTERIAL GENES AND ISOLATES FOR CONFERRING INSECT RESISTANCE**

00: -  
 Provided are biologically pure bacterial isolates characterized by a genome structure at least 90 %

similar to a genome structure of a bacterial species selected from the group consisting of: *Streptomyces* sp. E128 having an NRRL Accession No. B-67462, *Bacillus amyloliquefaciens* A190 having an NRRL Accession No. B-67464, *Bacillus subtilis* P243 having an NRRL Accession No. B-67459, *Bacillus thuringiensis* M979 having an NRRL Accession No. B-67457, *Massilia aurea* P63 having an NRRL Accession No. B-67461, *Rhodococcus* sp. G706, *Stenotrophomonas maltophilia* E132 having an NRRL Accession No. B-67460, *Streptomyces aurantiacus* A918, *Streptomyces badius* O180, *Streptomyces mirabilis* B670 having an NRRL Accession No. B67463, *Streptomyces scopuliridis* F427 having an NRRL Accession No. B-67458, and *Streptomyces* sp. L219. Also provided are whole cell broth or lysates thereof, and polynucleotide, polypeptides and constructs expressing same, compositions-of-matter comprising same and methods using same for killing or inhibiting the development of insects.



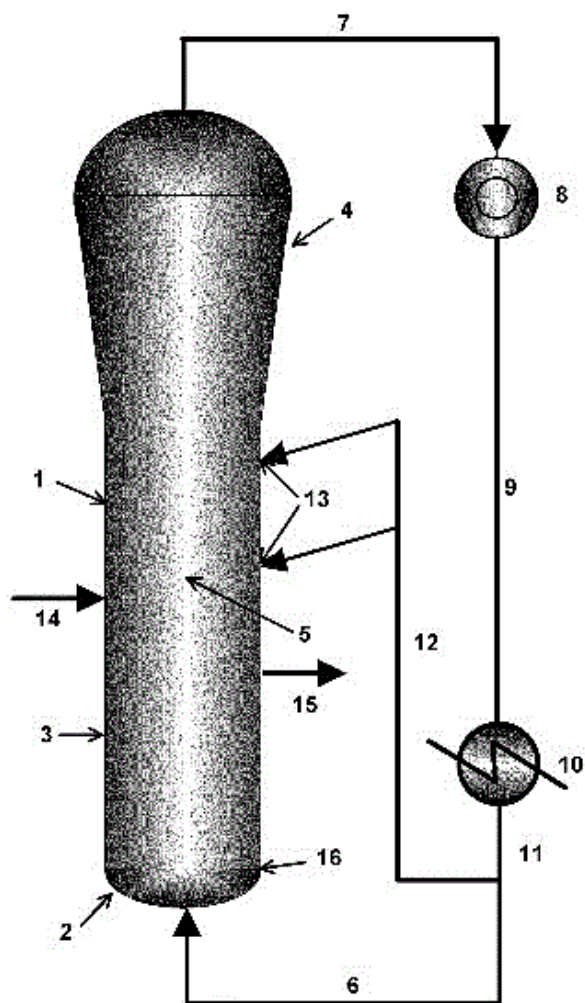
21: 2020/02481. 22: 2020/05/06. 43: 2022/10/12  
 51:  
 71: BOREALIS AG  
 72: WEICKERT, Günter, PRINSEN, Eric-Jan, NYFORS, Klaus, ELOVAINIO, Erno, KANELLOPOULOS, Vasileios

33: EP 31: 17202387.1 32: 2017-11-17

**54: METHOD OF SPLITTING THE RETURN FLUIDIZATION GAS IN A GAS SOLIDS OLEFIN POLYMERIZATION REACTOR**

00: -

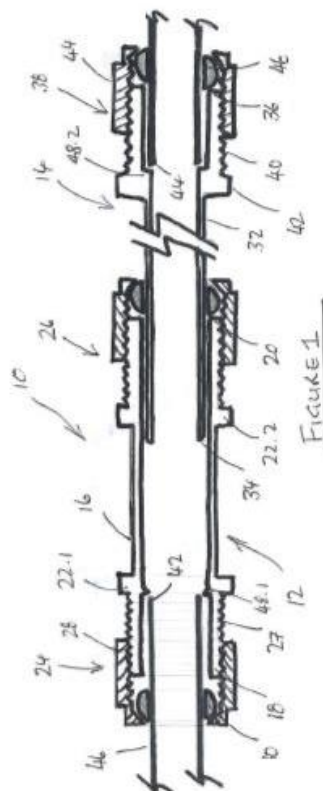
The present invention relates to a process for polymerizing olefin monomer(s) in a gas solids olefin polymerization reactor wherein the fluidization gas is split and returned to the reactor into the bottom zone of the reactor and directly into the dense phase formed by particles of a polymer of the olefin monomer(s) suspended in an upwards flowing stream of the fluidization gas in the middle zone of the reactor.



**54: EXTENSIBLE COMPRESSION COUPLER**

00: -

The invention provides an axially adjustable coupler which includes: a first tubular component which includes a first tube with a first and a second connector formation at each end of the tube; a second tubular component which includes a second tube with a third connector formation at one end of the tube; wherein the second tube is adapted for insertion into the first tube and the second connector formation is adapted to engage the second tube to connect the second tubular component to the first tubular component to provide the adjustable coupler; wherein the extensible compression coupler is variably axially adjustable for insertion into a gap in a water-supply conduit by adjusting a depth at which the second tube penetrates the second tube before the second connector formation engages the second tube; and wherein the first connector formation and the third connector formation are adapted to receive and engage with respective ends of the gap.



21: 2020/02816. 22: 2020/05/15. 43: 2022/10/20

51: F16L

71: YON, Frank Robert

72: YON, Frank Robert

33: ZA 31: 2019/03084 32: 2019-05-17

21: 2020/02993. 22: 2020/05/21. 43: 2022/10/10

51: A61K; C07D; A61P

71: NMD PHARMA A/S

72: J.S. KNUTSEN, Lars, KELLY, Nicholas, HOLM PEDERSEN, Thomas, E COOPER, Martin, W. BROWN, Andrew

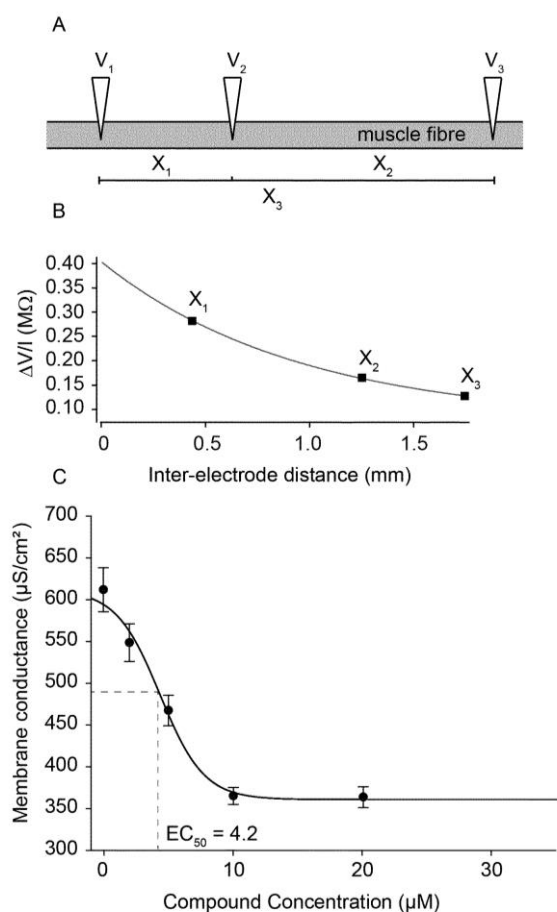
33: US 31: 15/842,823 32: 2017-12-14

33: EP 31: 17207375.1 32: 2017-12-14

**54: COMPOUNDS FOR THE TREATMENT OF NEUROMUSCULAR DISORDERS**

00: -

The present invention relates to compounds suitable for treating, ameliorating and/or preventing neuromuscular disorders, including the reversal of drug-induced neuromuscular blockade. The compounds as defined herein preferably inhibit the CIC-1 ion channel.



21: 2020/03217. 22: 2020/05/29. 43: 2022/09/20

51: C10B

71: TATA STEEL LIMITED, THE UNIVERSITY OF NOTTINGHAM

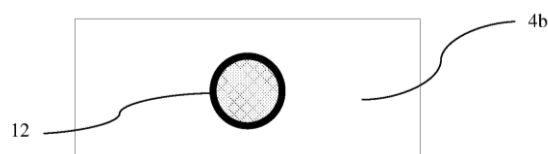
72: DAS, Bidyut, CHANDRA, Sanjay, PAL, Atanu Ranjan, DASH, Pratik Swarup, SUDAN, Munish, BINNER, Eleanor, DODDS, Christopher, LESTER, Edward Henry, WILLIAMS, Orla, KINGMAN, Samuel

33: IN 31: 201831004462 32: 2018-02-06

**54: A METHOD FOR PRODUCING METALLURGICAL COKE FROM NON-COKING COAL**

00: -

The present disclosure relates to a method for producing metallurgical coke from non-coking coal. The method comprising, densifying, the non-coking coal to form pellets. The densified pellets will be placed in a microwave oven within plurality of bricks and are subjected for pyrolysis. For carrying out pyrolysis, the pellets are carried out by heating, the pellets in the microwave oven at a predetermined temperature under an inert atmosphere at atmospheric pressure, and then the pellets are cooled in the microwave oven under the inert atmosphere. This process converts non-coking coal to the metallurgical coke in a quicker time, and without use of any susceptors.



21: 2020/03409. 22: 2020/06/08. 43: 2022/10/17

51: A61K; C07D; A61P

71: NODTHERA LIMITED

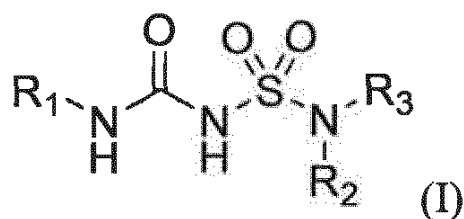
72: HARRISON, David, WATT, Alan Paul, BOCK, Mark G.

33: GB 31: 1721185.5 32: 2017-12-18

**54: SULPHONYL UREA DERIVATIVES AS NLRP3 INFLAMMASOME MODULATORS**

00: -

The present disclosure relates to compounds of Formula (I): (I) and to their pharmaceutically acceptable salts, pharmaceutical compositions, methods of use, and methods for their preparation. The compounds disclosed herein are useful for inhibiting the maturation of cytokines of the IL-1 family by inhibiting inflammasomes and may be used in the treatment of disorders in which inflammasome activity is implicated, such as inflammatory, autoinflammatory and autoimmune diseases and cancers.



21: 2020/03893. 22: 2020/06/26. 43: 2022/10/17

51: C07K; C12N; A61P

71: SHANGHAI LUMOSA THERAPEUTICS CO., LTD., LUMOSA THERAPEUTICS CO., LTD

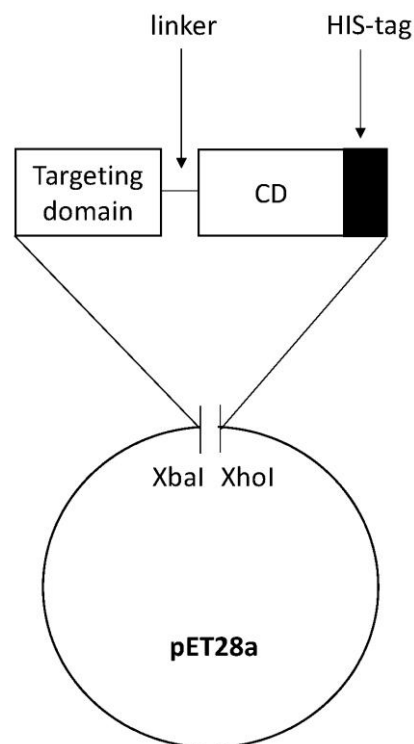
72: CHEN, Pei-jiun, LEE, Shu-hua

33: US 31: 62/613,653 32: 2018-01-04

**54: SINGLE-DOMAIN ANTIBODY-CYTOSINE DEAMINASE FUSION PROTEINS**

00: -

Disclosed are fusion proteins, methods of making fusion proteins, and methods of using fusion proteins, wherein the fusion proteins comprise a functional single-domain antibody (sdAb) or a functional variant thereof and a cytosine deaminase (CD) protein or a functional variant thereof, optionally connected via a peptide linker. The fusion proteins of the disclosure also have CD activity. Also disclosed are pharmaceutical compositions or formulations comprising such fusion proteins and pharmaceutically acceptable excipients, as well as medical uses of these fusion proteins.



21: 2020/03945. 22: 2020/06/29. 43: 2022/09/01

51: B65G; B66B; E21D

71: POWELL, Ben William

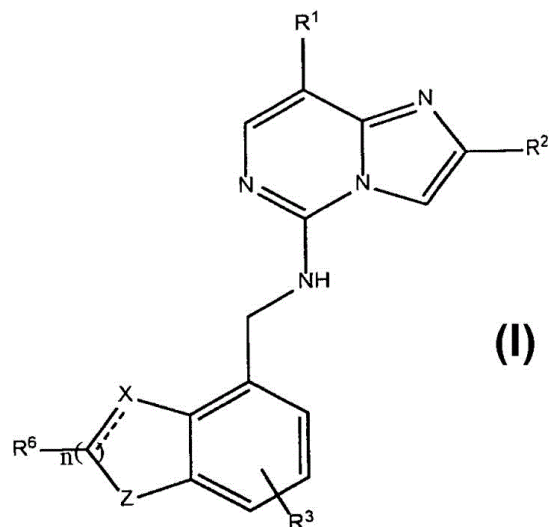
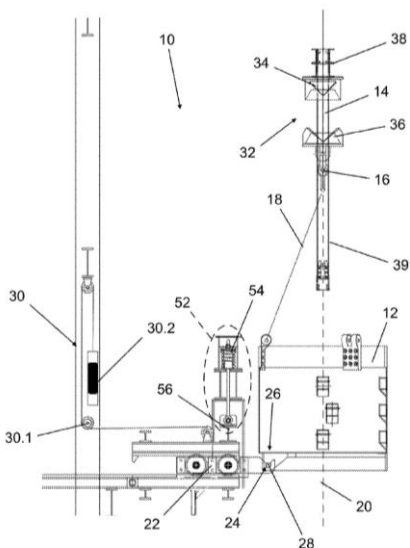
72: POWELL, Ben William

33: ZA 31: 2017/05859 32: 2017-08-29

**54: KIBBLE TIPPING SYSTEM**

00: -

The invention relates to a kibble tipping arrangement, which is used in a mining operation where a kibble (12) is vertically displaceable along a kibble displacement path to transport excavated material via a vertical mineshaft to the surface. The kibble tipping arrangement includes at least one catch (24) which is transversely displaceable between a non-interference position in which the catch does not interfere with the kibble (12) in the kibble displacement path and an interference position in which the catch (24) is capable of being engaged by an engagement formation (28) on the kibble (12) to allow the kibble (12) to tip and the excavated material to be dumped from the kibble (12). The kibble tipping arrangement further includes kibble alignment means, which consist of a locator and a positioner, for aligning the kibble's engagement formation (28) with the catch (24).



21: 2020/04453. 22: 2020/07/20. 43: 2022/09/20  
 51: A61K; C07D; A61P  
 71: MIRATI THERAPEUTICS, INC.  
 72: MARX, Matthew, Arnold, LEE, Matthew,  
 Randolph, BOBINSKI, Thomas, P, BURNS, Aaron,  
 Craig, ARORA, Nidhi, CHRISTENSEN, James, Gail,  
 KETCHAM, John, Michael  
 33: US 31: 62/624,176 32: 2018-01-31  
 33: US 31: 62/672,701 32: 2018-05-17  
 33: US 31: 62/747,736 32: 2018-10-19

#### 54: PRC2 INHIBITORS

00: -

The present invention relates to compounds that inhibit Polycomb Repressive Complex 2 (PRC2) activity. In particular, the present invention relates to compounds, pharmaceutical compositions and methods of use, such as methods of treating cancer using the compounds and pharmaceutical compositions of the present invention. (Formula (I))

21: 2020/04672. 22: 2020/07/29. 43: 2022/09/01  
 51: A01G; E04H

71: SPAMER, Hendrik Jacobus Venter

72: SPAMER, Hendrik Jacobus Venter

33: ZA 31: 2019/03488 32: 2019-05-31

#### 54: AGRICULTURAL NET INSTALLATIONS

00: -

The invention provides a stowing/deployment arrangement for a longitudinally extending hail net being supported at an elevated level. The hail net is rigidly attached to an elevated support on one side and an opposed side is displaceable between a deployed condition and a stowed condition via the stowing/deployment arrangement. The stowing/deployment arrangement includes at least one main tensile element which is displaceable in a longitudinal direction on one side of the hail net, and a plurality of secondary tensile elements fastened to the at least one main tensile element and extending transversely, such that the secondary tensile elements are retracted when the at least one main tensile element is drawn, to engage the opposed side of the hail net to move it into the deployed condition and the stowed condition. The invention extends to provide various hail net installations.

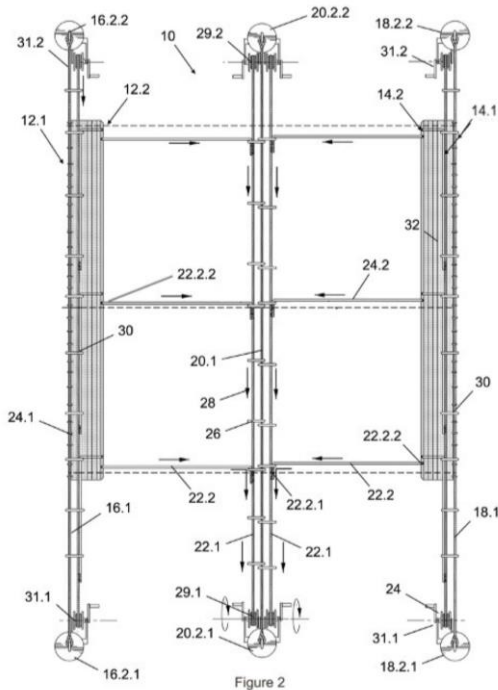
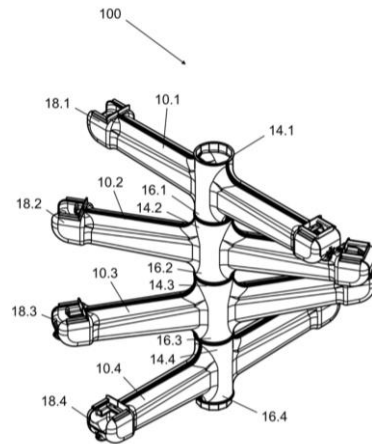


Figure 2



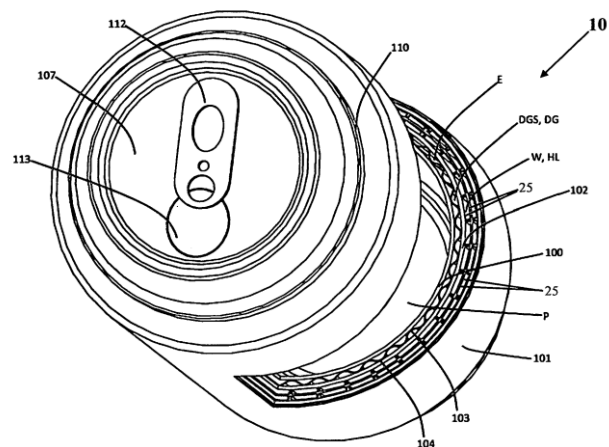
21: 2020/05487. 22: 2020/09/03. 43: 2022/10/05  
51: F25D

71: ANTHONY, Michael, Mark  
72: ANTHONY, Michael, Mark

**54: HUMIDIFICATION AND DEHUMIDIFICATION PROCESS AND APPARATUS FOR CHILLING BEVERAGES AND OTHER FOOD PRODUCTS AND PROCESS OF MANUFACTURE**

00: -

A novel self-cooling food product container apparatus (10) and a process for manufacturing the same is disclosed. A self-cooling food product container (20) combined with a substantive vapor transport system producing a humidification cooling process for cooling food and beverage products P. Methods of assembling and operating the apparatus (10) are also provided.



21: 2020/05705. 22: 2020/09/14. 43: 2022/09/14  
51: H01H

71: Hitachi Energy Switzerland AG

21: 2020/05002. 22: 2020/08/13. 43: 2022/09/01  
51: A01G

71: EHLERS, Jan Gerhardus  
72: EHLERS, Jan Gerhardus

33: ZA 31: 2019/02990 32: 2019-05-14

**54: HYDROPONICS SYSTEM**

00: -

The invention provides a planter which includes a body defining a central portion, having an upright channel therein, and at least one transversely extending arm. The upright channel includes a liquid inlet located in the central portion, which is connected in flow communication with a plant holder on a distal end of the at least one transversely extending arm for liquid to flow from the liquid inlet to the plant holder. The upright channel further includes a liquid outlet which is also located in the central portion and which is connected in flow communication with the plant holder on the distal end of the at least one transversely extending arm for liquid to flow from the plant holder to the liquid outlet. The invention extends to provide a planter arrangement and a hydroponic assembly.

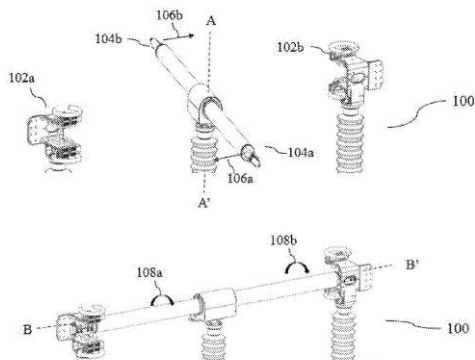
72: KADAM, Ajit, CHAUHAN, Shashwat, SINJONIA, Manish

33: IN 31: 201841009917 32: 2018-03-19

**54: CENTER TURN AND TWIST MECHANISM OF A SWITCHGEAR**

00: -

The invention relates to a switchgear having a turn and twist mechanism. The switchgear has a contact system for electrical current conduction and bus transfer switching. The contact system has a fixed contact assembly and a movable contact assembly. The turn and twist mechanism drives the movable contact assembly for engagement / disengagement of the movable contacts with the fixed contacts. The turn and twist mechanism comprises a cylindrical pipe and a driving assembly. The driving assembly comprises a driving base, a floating carrier and a driving pin arrangement, for driving the cylindrical pipe for the engagement / disengagement. The driving base drives the floating carrier for turning the cylindrical pipe about a first axis, and drives the driving pin arrangement for twisting the cylindrical pipe about a second axis.



21: 2020/05953. 22: 2020/09/28. 43: 2022/09/05

51: E04C; F16S

71: CULVERTURE (PTY) LTD

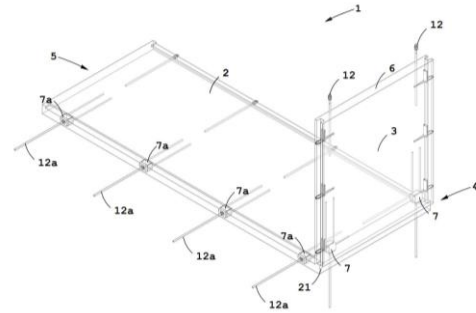
72: CRONÉ, Danièle, KAPP, Jaclyn Odette, CHEN, Lee Su-Nam, PETROV, Daniel Borislavov, CHAPMAN, Thomas Patrick

33: ZA 31: 2019/04150 32: 2019-06-26

**54: A CONSTRUCTION ELEMENT**

00: -

The invention provides for a construction element comprising a first structural member, a second structural member extending from the first structural member and primary attachment means, for attaching the construction element to another construction element to form a structure.



21: 2020/06044. 22: 2020/09/30. 43: 2022/10/20

51: E05D; E06B

71: Clear Creek Trading 167 (Pty) Ltd.

72: SWARTZ, Trevor Michael Valiant

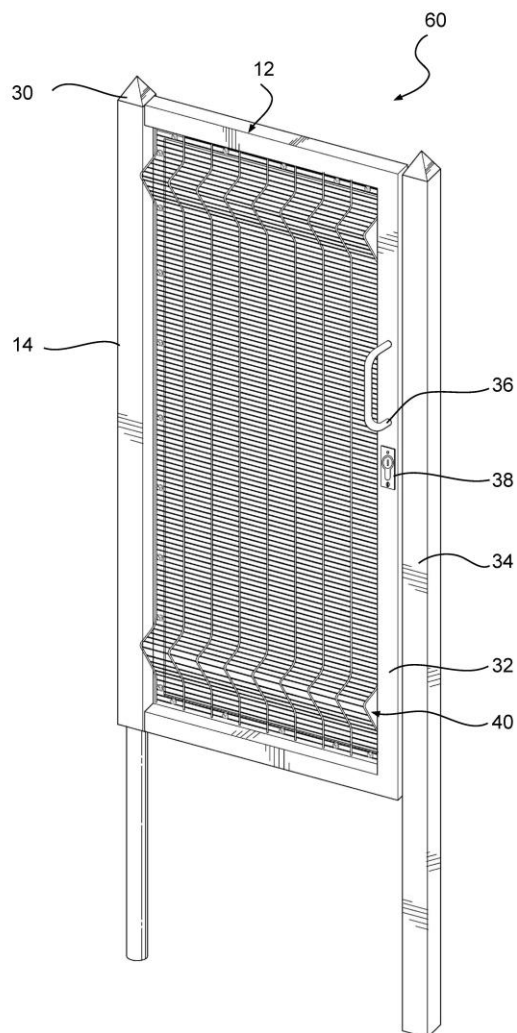
33: ZA 31: 2019/06419 32: 2019-09-30

**54: SWING GATE**

00: -

A swing gate which includes a frame provided with an upright rigid member at a hinged side of the frame and an anchor post for planting in the ground, the frame being pivotally mounted on the anchor post such that the anchor post is concealed by the upright rigid elongate member.





21: 2020/06215. 22: 2020/10/07. 43: 2022/09/05  
51: F03D

71: Wind Catching Systems AS

72: NES, Asbjørn

33: NO 31: 2018 0349 32: 2018-03-09

**54: LOCATION OF TURBINES IN A MATRIX RIG AND TRANSPORT OF ENERGY, AS WELL AS ONE METHOD FOR MOUNTING TURBINES WITH ASSOCIATED PROPELLER SET**

00: -

There is disclosed a construction of a wind turbine comprising a frame (10) on a floating pontoon (1,2,3) wherein the frame is constructed as a lattice rig (10) upright on the pontoon (1,2,3) forming a plurality of rectangular or square openings in the rig (10) for receiving respective interchangeable wind turbine generators (12) with associated drive propellers (14) driven by incoming wind (40), and each wind turbine generator (12) being arranged to travel up the rear of the rig (10) and through the openings towards the front of the rig (11). The wind power plant is characterized in that each turbine generator (12, 14) comprises one or more pairs of propeller blades (14a, b) forming a propeller set (14) having a blade diameter defining the turbine rotational plane (30), each propeller set (14) is arranged at a distance from the front side (11) of the rig (10), to be rotated by the incoming wind (40) towards the rig (10).

There is also described a method for mounting turbines with associated propeller sets and openings in the rig, respectively.

21: 2020/06092. 22: 2020/10/01. 43: 2022/09/01

51: A61K; C07D

71: BOARD OF REGENTS, THE UNIVERSITY OF TEXAS SYSTEM

72: LE, Kang, SOTH, Michael J., JONES, Philip, CROSS, Jason, CARROLL, Christopher L., MANDAL, Pijus K., MCAFOOS, TIMOTHY J.

33: US 31: 62/650,151 32: 2018-03-29

**54: IMIDAZOPIPERAZINE INHIBITORS OF TRANSCRIPTION ACTIVATING PROTEINS**

00: -

The present disclosure relates to heterocyclic compounds and methods which may be useful as inhibitors of transcription activating proteins such as CBP and P300 for the treatment or prevention of diseases such as proliferative diseases, inflammatory disorders, autoimmune diseases, and fibrotic diseases.

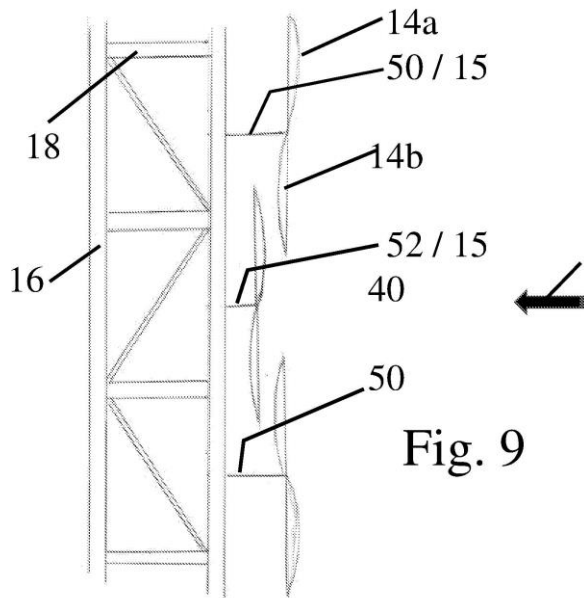


Fig. 9

**FOR AUTOMATIC ADJUSTMENT AND CONTROL THEREOF**

00: -  
 The invention provides a method for predicting a length of each of a plurality of electrodes in a submerged arc furnace and for making an adjustment to the length of an electrode based on the length as predicted, which method includes the steps of: entering into a processor which runs a program which includes an artificial intelligence algorithm a dataset which includes a measurement of the length of each electrode (“the measured length”) and information on one or more of the following which is associated with the measured length: the temperature of a hearth of the furnace, the temperature of a sidewall of a furnace, the electrical power supply to the electrodes, the rate at which the electrode moves through a holder of each electrode and the vertical position of the holder; entering into the processor data from one or more of the following: a first temperature sensor for measuring the temperature of the hearth, a second temperature sensor for measuring the temperature in the sidewall, a power measuring device for measuring the electrical power supply to the electrodes, a slip meter for measuring the rate at which the electrode moves through the holder, and a position sensor for measuring the vertical position of the holder; obtaining from the processor based on the dataset and the data an estimate of the length of each electrode (“the estimated length”); and adjusting the length of an electrode based on the estimated length of each electrode by changing the rate at which the electrode moves through the holder or by changing the vertical position of the holder.

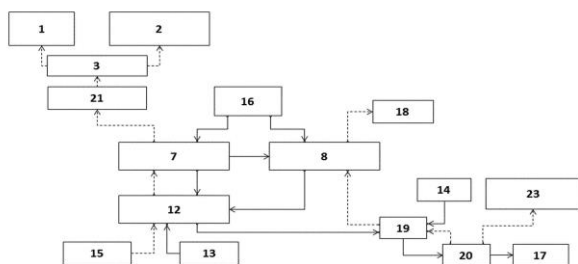
21: 2020/06754. 22: 2020/10/29. 43: 2022/08/31  
 51: C04B; F27B

71: thyssenkrupp Industrial Solutions AG  
 72: LEMKE, Jost, WILLMS, Eike

33: DE 31: 10 2018 206 674.4 32: 2018-04-30

**54: OXYFUEL CLINKER PRODUCTION WITHOUT RECIRCULATION OF THE PREHEATER EXHAUST GASES**

00: -  
 The invention relates to methods and installations for producing cement clinker without recirculation of the preheater exhaust gases, wherein, in said preheater, the ratio of supplied solid to waste gas is set to greater than 1.0 kg solid to gas.

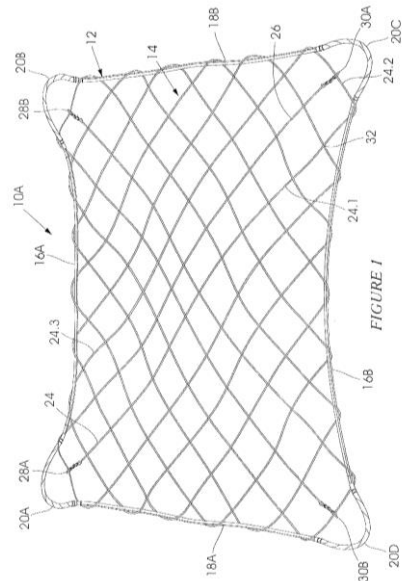
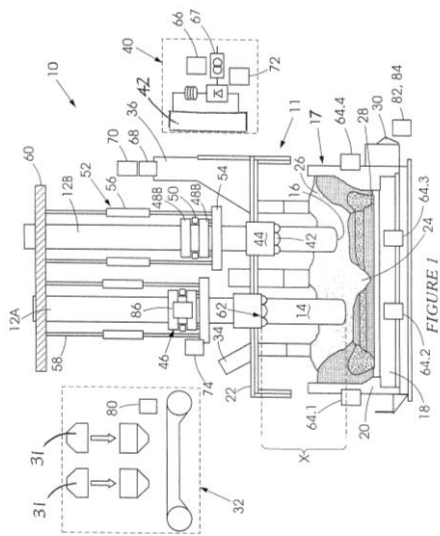


21: 2020/07003. 22: 2020/11/11. 43: 2022/10/20  
 51: C22B

71: BEYLEFELD, Jacques  
 72: BEYLEFELD, Jacques

33: ZA 31: 2019/06713 32: 2019-11-11

**54: A SYSTEM FOR PREDICTING SUBMERGED ORE FURNACE ELECTRODE LENGTHS AND**



21: 2020/07208. 22: 2020/11/19. 43: 2022/10/20  
 51: E21F; F16P  
 71: NICAUD COMPANIES 22 (PTY) LTD  
 72: FLANAGAN, Frederick William, VISSER, Henri  
 33: ZA 31: 2019/07663 32: 2019-11-20  
 33: ZA 31: 2020/04163 32: 2020-07-08  
**54: KNOTLESS WOVEN STEEL STRAND NET**  
 00: -

The invention provides a knotless woven steel rope safety net which includes a frame comprised of an integral length of a first rope formed into a quadrilateral shape and held in the shape by joining ends of the rope together thereby to define a pair of longitudinal sides and a pair of transverse sides, and a mesh within the frame comprised of an integral length of a second rope and an integral length of a third rope, wherein each of the second and third ropes provide a plurality of mesh sections, each mesh section extending between a respective longitudinal side and a respective transverse side of the frame in an oblique direction relatively to the side of the frame, wherein the mesh sections engage with one another at crossover points, and wherein each of which engages with the frame and to engage with one another; and wherein at each end of a mesh section, the respective second rope or third rope engages the respective side of the frame by looping under and over the first rope.

21: 2020/07229. 22: 2020/11/19. 43: 2022/09/12  
 51: G06Q  
 71: SUPPLANT LTD.  
 72: BEN-NER, Zohar, SLAVKIN, Leonid, LEVIN, Adolfo Gabriel, PIMSTEIN, Agustin, ZACHS, Igor, SHEMESH, Liyam  
 33: US 31: 62/665,654 32: 2018-05-02  
**54: SYSTEMS AND METHODS FOR APPLYING AN AGRICULTURAL PRACTICE TO A TARGET AGRICULTURAL FIELD**

00: -  
 There is provided a method comprising: computing state parameter(s) indicative of a state of a target crop at the target field based on output of crop physiological sensor(s), and classifying by a classifier(s), the state parameter(s) and the agricultural practice(s) into instructions for administration of the agricultural practice(s) to the target field, wherein yield and/or quality of the target crop at a future target event is predicted to be increased when the instructions are implemented relative to the yield and/or quality of the target crop that is predicted at the future target event when an alternative administration of the agricultural practice(s) is implemented, wherein the classifier(s) computes the instructions based on previously obtained instructions associated with respective reference fields associated with respective state parameter(s), and yield and/or quality of respective reference crops at respective reference fields at historical reference events corresponding to the future target event.

21: 2020/07324. 22: 2020/11/20. 43: 2022/09/12  
51: B62D

71: DE VILLIERS, Abraham Albertus

72: DE VILLIERS, Abraham Albertus

33: ZA 31: 2019/05630 32: 2019-08-27

**54: MODULAR TRAILERS**

00: -

The invention provides a modular storage kit, which includes a load platform defining a predetermined grid of standard module dimensions; and a plurality of utility modules which are removably mountable to the load platform within the predetermined grid of standard module dimensions, the kit allowing assembly of multiple arrangements of the plurality of utility modules within the predetermined grid of standard module dimensions. The invention extends to a cage superstructure for a trailer, which includes a frame which is removably mountable to the trailer, having predefined module receiving zones in which modular storage units can be received; and a plurality of extendable legs connected to the frame. The plurality of extendable legs can be extended downwards to allow the trailer to be used separately from the cage superstructure, and retracted upwards, to allow the trailer to move the cage superstructure with the modular storage kits for transportation thereof.



21: 2020/07505. 22: 2020/12/02. 43: 2022/09/08  
51: A61K

71: TARGAN Inc.

72: HUTCHINS, James, KARIMPOUR, Ramin,

TURPIN, Elizabeth, WOLFE, Stephen, GOFF, Joshua Steven

33: US 31: 62/696,261 32: 2018-07-10

**54: METHOD OF PREPARING AND DELIVERING OOCYST SOLUTIONS**

00: -

The present disclosure provides systems and methods for disrupting the outer membrane of an

oocyst in solution and delivering the solution to an animal. The system includes a vessel containing unbroken oocysts in solution, an oocyst processing chamber, and a delivery outlet. The unbroken oocysts are moved from the vessel through the processing chamber and a portion of the oocyst membranes are disrupted releasing sporocysts, the resulting solution is moved from the processing chamber into the delivery outlet where the solution is delivered to an animal. Methods of vaccination, including vaccination against an Eimeria infection, are also provided.

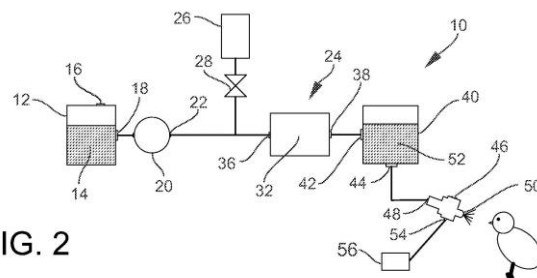


FIG. 2

21: 2021/00782. 22: 2021/02/04. 43: 2022/08/31  
51: B07C

71: Siemens Aktiengesellschaft

72: DIRSCHERL, Christian, FODOR, Dan Niculae, HELLMUTH, Torsten, TITZ, Holger

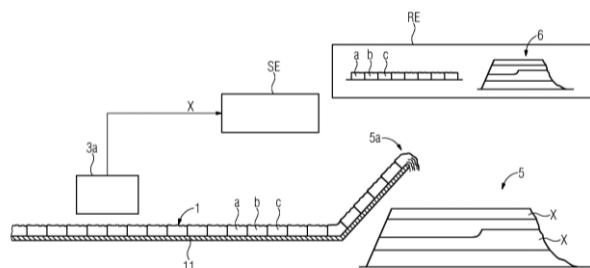
33: EP(DE) 31: 18181988.9 32: 2018-07-05

**54: METHOD AND DEVICE FOR MANAGING UNITS OF BULK MATERIAL, AND COMPUTER PROGRAMME**

00: -

The invention relates to a method and a device for managing units (a, b, c) of bulk material (1), in particular bulk material (1) of a mine, and to a computer programme. The method for managing units (a, b, c) of bulk material (1) comprises the following steps: - determining a material property (X) of each unit (a, b, c), in particular on a conveyor system (11), - storing an entry for each unit (a, b, c), containing the respective material property (X) of the unit (a, b, c) and the position of each unit (a, b, c), in a database (8), and further comprises at least one of the following steps: - determining a transport path downstream for each unit (a, b, c) on the basis of the respective entry in the database (8), - adapting the subsequent processing of each unit (a, b, c) on the basis of the material property (X) of the unit (a, b, c), - if a unit (a, b, c) is supplied to a repository (5),

creating a virtual model (6) of the repository (5), wherein a position of each unit (a, b, c) is stored, together with its respective material property (X), in the database (8).



21: 2021/01650. 22: 2021/03/11. 43: 2022/10/10  
51: G01R

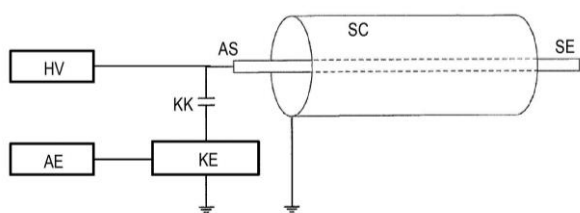
71: MASCHINENFABRIK REINHAUSEN GMBH  
72: WINKELMANN, Erik

33: DE 31: 10 2018 126 743.6 32: 2018-10-26

#### 54: STATE ANALYSIS OF AN ELECTRICAL OPERATING RESOURCE

00: -

According to a method for analysing the state of an electrical operating resource, a test voltage is applied to the operating resource. A measurement signal is then captured at a connection point (AS) of the operating resource. Depending on the measurement signal, transmission parameters which characterize a signal transmission from a location of a partial discharge in the operating resource to the connection point (AS) are determined. At least one characteristic variable of the partial discharge is determined on the basis of the transmission parameters. (FR)



21: 2021/01654. 22: 2021/03/11. 43: 2022/10/17  
51: C22B

71: COMMISSARIAT A L'ENERGIE ATOMIQUE ET  
AUX ENERGIES ALTERNATIVES, OCP S.A

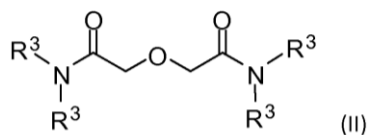
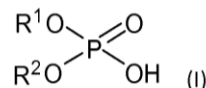
72: ANDREIADIS, Eugen, DUCHESNE, Marie-  
Thérèse, OUAATTOU, Abba, MAZOUZ, Hamid,  
DHIBA, Driss

33: FR 31: 1858788 32: 2018-09-26

#### 54: USE OF A SYNERGISTIC MIXTURE OF EXTRACTANTS FOR EXTRACTING RARE EARTH ELEMENTS FROM AN AQUEOUS MEDIUM COMPRISING PHOSPHORIC ACID

00: -

The invention relates to the use of a synergistic mixture of extractants for extracting at least one rare earth element from an aqueous medium comprising phosphoric acid. Said mixture comprises: - a first extractant of formula (I): wherein R1 and R2, which are identical or different, represent a linear or branched, saturated or unsaturated hydrocarbon group, comprising from 6 to 12 carbon atoms, or a phenyl group optionally substituted by a linear or branched, saturated or unsaturated hydrocarbon group, comprising from 1 to 10 carbon atoms; and - a second extractant of formula (II): in which R3 represents a linear or branched alkyl group, comprising from 6 to 12 carbon atoms. The invention can be used in the treatment of phosphate minerals with a view to recovering the rare earth elements contained in said minerals.



21: 2021/02776. 22: 2021/04/26. 43: 2022/08/22  
51: E02F

71: TALON ENGINEERING SDN BHD

72: DENNIS, Neil Robert

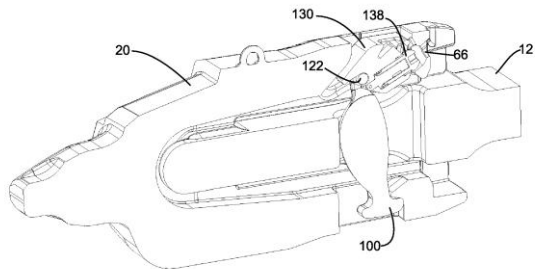
33: AU 31: 2018904293 32: 2018-11-09

#### 54: LOCKING MECHANISM FOR A WEAR ASSEMBLY

00: -

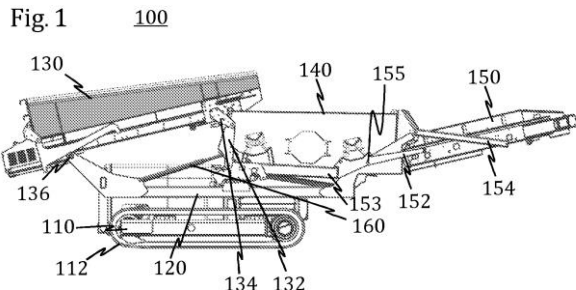
A wear assembly such as an adapter for a cable shovel having a Whisler-style lip has two legs extending over the lip, and a hole in the legs arranged to align with a hole in the lip. A locking member is inserted in the hole, and hooked around a pivot surface in the lower leg. An actuator is inserted into the hole in the upper leg, and engages with t top

end of the locking member. Movement of the actuator causes pivoting of the locking member, and results in the locking member bearing against the lip hole in order to lock the wear assembly in position.



21: 2021/03505. 22: 2021/05/24. 43: 2022/09/12  
 51: B07B  
 71: METSO OUTOTEC FINLAND OY  
 72: SALMINEN, Vesa-Matti  
 33: FI 31: 20186127 32: 2018-12-21  
**54: MOBILE MINERAL MATERIAL PROCESSING STATION**

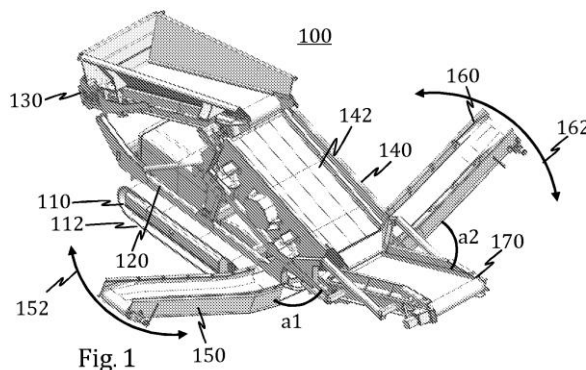
00: -  
 A mobile mineral material processing station (100) that has a mobile platform (110); a frame (120) supported by or formed by the mobile platform (110); supported by the frame (120) in line: a screen (140); and an exit conveyor (150); at least one actuator (160) configured to tilt the screen (140) in a first rotational direction; and a tilting mechanism (132, 134, 136, 152, 154) configured to tilt the exit conveyor (150), synchronized with the screen (140), in a second rotational direction opposite to the first rotational direction when the actuator (160) tilts the screen (140) in the first rotational direction.



21: 2021/03506. 22: 2021/05/24. 43: 2022/09/12  
 51: B07B  
 71: METSO OUTOTEC FINLAND OY  
 72: SALMINEN, Vesa-Matti

33: FI 31: 20186128 32: 2018-12-21  
**54: MOBILE MINERAL MATERIAL PROCESSING STATION**

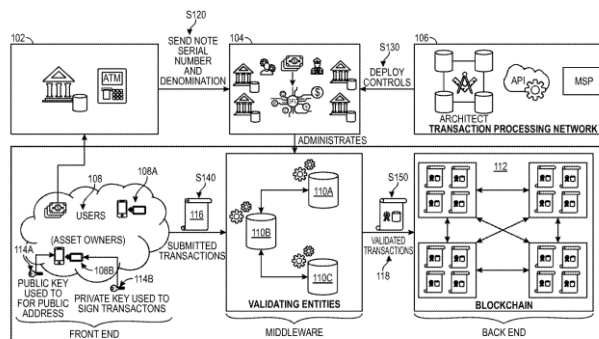
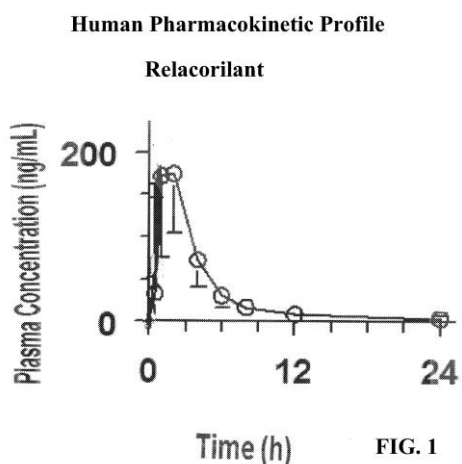
00: -  
 A mobile mineral material processing station has a mobile platform (110, 510) having tracks (112) or wheels (520) or a skids (530) for supporting or forming a body (120) that supports in line, in a transport configuration: a feed conveyor (130); a screen frame (140) and a multi-layer screen (142); first and second exit conveyors (150, 160); and a third exit conveyor (170) on top of the first and second exit conveyors (150, 160). The first exit conveyor (150) turns from a transport position, under the third exit conveyor (170), to a first operation direction (a1), onto a first side of the station (100), for operating the station (100), and back. The second exit conveyor (160) turns from a transport position, under the third exit conveyor (170), to a second operation direction (a2) onto a second side of the station (100), opposite to the first side, and back.



21: 2021/03561. 22: 2021/05/25. 43: 2022/10/17  
 51: A61K; A61P  
 71: CORCEPT THERAPEUTICS INCORPORATED  
 72: SCOTT, Ian, LEMONS, Travis, CHIA, Yip-Fong  
 33: US 31: 62/781,983 32: 2018-12-19  
**54: PHARMACEUTICAL FORMULATIONS CONTAINING RELACORILANT, A HETEROARYL-KETONE FUSED AZADECALIN COMPOUND**

00: -  
 Disclosed herein are novel formulations containing relacorilant ((R)-(1-(4-fluorophenyl)-6-((1-methyl-1H-pyrazol-4-yl)sulfonyl)-4,4a,5,6,7,8-hexahydro-1H-pyrazolo[3,4-g]isoquinolin-4a-yl)(4-(trifluoromethyl)pyridin-2-yl)methanone) that are

suitable for administration, including oral administration, to patients suffering from disorders amenable to treatment by glucocorticoid receptor modulators (GRMs). Single unit dosage forms comprise softgel capsules containing these formulations. Such softgel capsules may contain, e.g., relacorilant formulations containing 25 milligrams (mg), 50 mg, 100 mg, 200 mg, 300 mg, 400 mg, 500 mg, or other amounts of relacorilant. These novel formulations and single unit dosage forms may be used to treat diseases and disorders including Cushing's syndrome, Cushing's Disease, and other disorders.



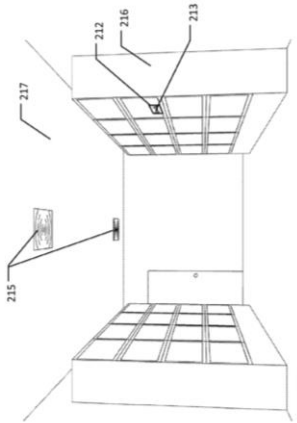
21: 2021/03897. 22: 2021/06/07. 43: 2022/08/31  
51: G06Q

71: REBOUND INTERNATIONAL, LLC  
72: JUNG, David, ZHANG, Yongbo  
33: US 31: 16/180,727 32: 2018-11-05  
33: US 31: 16/180,568 32: 2018-11-05  
33: US 31: 16/674,487 32: 2019-11-05

**54: A SYSTEM AND METHOD FOR MANAGING INVENTORY WITHIN A SMART BOX**

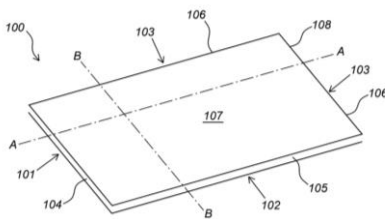
00: -  
A system and method for managing inventory within a smart box is described. The smart box system can comprise a smart box, one or more radio-frequency identification (RFID) readers, and a smart box control system. The smart box can be capable of housing a plurality of purchasable products. Each purchasable product of the plurality of purchasable products can comprise a radio-frequency identification (RFID) tag. The smart box control system can comprise a smart box memory and a smart box processor. The smart box memory can comprise a smart box application. The smart box processor that according to instructions from the smart box application can scan all RFID tags within the smart box during a first scan using the RFID readers and can record a first record in the smart box memory of all the RFID tags sensed during the first scan.

21: 2021/03783. 22: 2021/06/02. 43: 2022/10/17  
51: H04L; G06Q  
71: VISA INTERNATIONAL SERVICE ASSOCIATION  
72: HURRY, Simon J., PIERRE, Alexandre  
33: US 31: 62/758,430 32: 2018-11-09  
**54: DIGITAL FIAT CURRENCY**  
00: -  
Techniques are disclosed which include receiving, by a central entity computer, a request for digital currency. The request includes a serial number and a denomination of a physical currency. The central entity computer generates the digital currency for the denomination and linked to the serial number. The generating includes recording the digital currency on a blockchain. The central entity computer transmits a notification of the generation of the digital currency. The central entity computer causes removal of the physical currency from circulation in a fiat currency system.



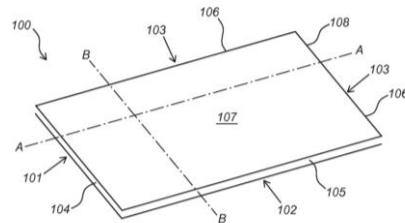
21: 2021/03938. 22: 2021/06/08. 43: 2022/08/31  
 51: B32B; C08K; C08L; E04F  
 71: I4F LICENSING NV  
 72: BOUCKÉ, Eddy Alberic  
 33: US 31: 62/775,078 32: 2018-12-04  
**54: DECORATIVE PANEL, AND DECORATIVE FLOOR COVERING CONSISTING OF SAID PANELS**

00: -  
 In the field of decorative floor coverings, decorative panels are known having a MDF (Medium Density Board) or HDF (High Density Board) based core layer on top of which a decorative substrate is attached to provide the panels a desired appearance. The invention relates to a panel, in particular a decorative panel, a floor panel, a ceiling panel or a wall panel. The invention also relates to a floor covering consisting of a plurality of mutually coupled panels.



21: 2021/04146. 22: 2021/06/17. 43: 2022/08/31  
 51: B32B; C08L; E04F  
 71: I4F LICENSING NV  
 72: BOUCKÉ, Eddy Alberic  
 33: NL 31: 2022136 32: 2018-12-05  
**54: DECORATIVE PANEL, AND DECORATIVE FLOOR COVERING CONSISTING OF SAID PANELS**

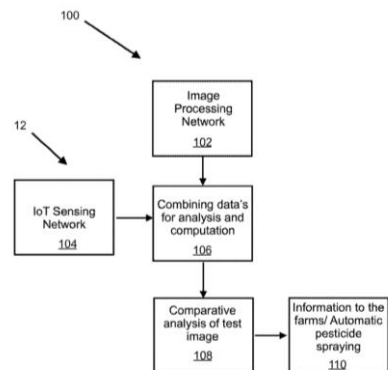
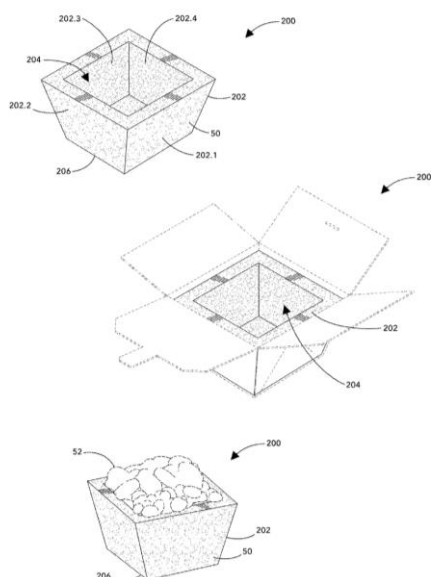
00: -  
 In the field of decorative floor coverings, decorative panels are known having a MDF (Medium Density Board) or HDF (High Density Board) based core layer on top of which a decorative substrate is attached to provide the panels a desired appearance. The invention relates to a panel, in particular a decorative panel, a floor panel, a ceiling panel or a wall panel. The invention also relates to a floor covering consisting of a plurality of mutually coupled panels.



21: 2021/04289. 22: 2021/06/22. 43: 2022/08/31  
 51: A23P  
 71: MARITZ, Rudolph Johan  
 72: MARITZ, Rudolph Johan  
 33: ZA 31: 2018/07713 32: 2018-11-16  
**54: FOOD MOULDING**

00: -  
 The invention provides a method of forming an edible food receptacle (200) which is ready-to-eat and in which a stew-type filling (52) is served. The method includes providing a pre-cooked pliable foodstuff (50) selected from any one of: maize porridge, mashed potatoes and rice; inserting a quantity of the pre-cooked pliable foodstuff in an outer mould (12) of a food moulding device (10); plunging a press mould (14) of the food moulding device into the pre-cooked pliable foodstuff in the outer mould (12); and removing the food receptacle shape from the food moulding device to provide the edible food receptacle (200) which is ready-to-eat. The invention extends to a food moulding device (10), a ready-to-eat food receptacle (200) for holding a stew-type filling (52), a method of preparing a fast-food take-away meal and a ready-to-eat meal which is served warm.





21: 2021/04290. 22: 2021/06/22. 43: 2022/08/31  
51: A01G

71: GERMISHUYS, Dennis Mark  
72: GERMISHUYS, Dennis Mark  
33: ZA 31: 2018/08074 32: 2018-11-29

**54: PLANT CULTIVATION**

00: -  
The invention provides a plant cultivation system and a method of cultivating plants. The system includes plant sensors in the form of image sensors, arranged to capture digital plant images; processing hardware including a processor, a data storage facility in communication with the processor and input/output interfaces connectable to the plant sensors and in communication with the processor, the hardware being configured to implement a convolutional neural network (CNN) trained from a library of plant images to recognize predefined plant conditions from the digital plant images captured by the image sensors and to provide a matching score of a plant image when compared to the predefined plant conditions with which the CNN has been trained; and a reference library containing treatment regimes associated with predefined plant conditions, the output interface of the processing hardware arranged to present the predefined plant condition and associated treatment regime to a user.

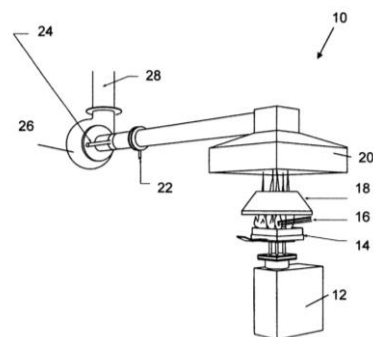
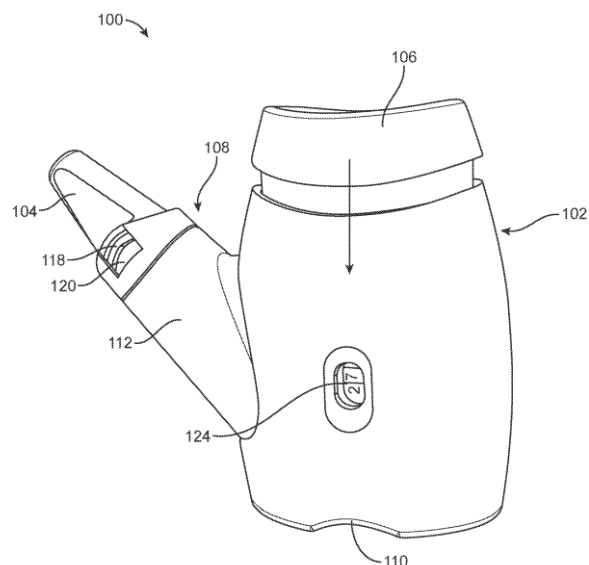
21: 2021/04452. 22: 2021/06/28. 43: 2022/09/20  
51: C01D; C22B; B01D

71: YANXIN ENVIRONMENTAL PROTECTION AND TECHNOLOGY CO., LTD.  
72: SHI, HONGJIAO, YUAN, DONGHUA, SHI, RENZHANG, LIANG, JINFENG, SHI, JUNYANG, WANG, QIN

**54: METHOD FOR PRODUCING SODIUM SULFITE BY REMOVING SULFUR FROM SULFUR-CONTAINING FLUE GAS USING INDUSTRIAL ALKALI RESIDUE CONTAINING ARSENIC**

00: -  
Provided is a method for producing sodium sulfite by removing sulfur from sulfur-containing flue gas using industrial alkali residue containing arsenic, comprising, circulating and slurring the industrial alkali residue containing arsenic with water, then performing pressure filtration, purifying the filtrate by adding excessive amount of lime to precipitate arsenic and adding a sodium sulfide solution, then performing pressure filtration, adding the alkali solution in the desulfurization absorption tower to absorb and desulfurize the flue gas containing sulfur, performing pressure filtration to obtain a clear solution containing sodium sulfite and sodium sulfate; adding appropriate amount of SO<sub>2</sub> and excessive amount of lime to this clear solution to reduce the sodium sulfate in the clear solution to sodium bisulfite, after performing pressure filtration, adding sodium hydroxide solution in the resulting filtrate to adjust the pH value so as to convert sodium bisulfite to sodium sulfite; finally, performing supersaturated crystallization by evaporation, dehydrating by centrifugation, drying the crystal to obtain a sodium sulfite product with mass concentration ≥90%.





21: 2021/04775. 22: 2021/07/08. 43: 2022/08/31  
51: C09K

71: SVENSSON, Mats

72: SVENSSON, Mats

33: SE 31: 1830256-2 32: 2018-09-10

**54: AFLAME RETARDANT COMPOSITION COMPRISING THE SALTS AMMONIUM SULPHA, AND DISODIUM HYDROGEN PHOSPHATE, AND A SOFTENER**

00: -

The invention regards an ecological flame retardant composition adapted to protect materials that are flammable, a method to prepare it. No bromine, or borax components are included in the composition. Its composition comprises at least one of a mixture of a predetermined amount of the salts ammonium sulphate, disodium hydrogen phosphate and a softener and a mixture of a predetermined amount of water including a predetermined amount of the salts ammonium sulphate, disodium hydrogen phosphate and a softener.

21: 2021/05490. 22: 2021/08/02. 43: 2022/08/31  
51: C02F

71: CHINA UNIVERSITY OF MINING AND TECHNOLOGY, XINJIANG INSTITUTE OF ENGINEERING, HENAN ENERGY AND CHEMICAL INDUSTRY GROUP CO.,LTD., YANSHAN UNIVERSITY

72: HUANG, Yanli, LEI, Yongchao, OUYANG, Shenyang, LI, Junmeng, GAO, Huadong, WU, Laiwei, GUO, Yachao, LI, Yingshun, LV, Fengyuan, ZHAI, Wen, YANG, Changde, MA, Kun, ZHANG, Weiguang, CHANG, Zhiguo, QI, Wenyue

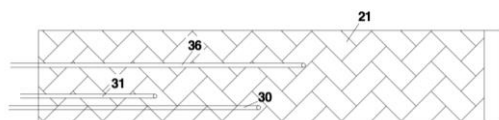
33: CN 31: 201910103645.0 32: 2019-02-01

**54: FULLY MECHANIZED MINING WORKING FACE MINE WATER RESOURCE UTILIZATION SYSTEM AND USE METHOD THEREOF**

00: -

Provided is a fully mechanized mining working face mine water resource utilization system. The system is composed of a working face sewage and goaf accumulated water collection and purification system, a silt treatment system and a feedback control system. The working face sewage and goaf accumulated water collection and purification system may be divided into four parts, namely a sewage collection region, a physical filtration region, a suspended matter treatment region and a heavy metal ion treatment region. The silt treatment system is composed of a return pipe, a sludge pump, a silt pumping pipe and a mechanical centrifuge. The detection and feedback system is composed of detectors, electronic control valves, an automatic control console and water pumps arranged in a roadway floor water channel. According to the system, sewage produced at the working face and goaf accumulated water are treated centrally at a purification device in a mining roadway, and the sewage is treated into production water and domestic water that are delivered to water use places underground and on the ground, thereby

achieving the objective of resource utilization of the sewage at the working face and the goaf.



21: 2021/05597. 22: 2021/08/10. 43: 2022/09/20

51: G06F; H04L

71: TMRW FOUNDATION IP SARL

72: YERLI, Cevat

33: US 31: 17/006,327 32: 2020-08-28

33: US 31: 17/060,485 32: 2020-10-01

**54: USE GRAPHICAL REPRESENTATION-BASED USER AUTHENTICATION SYSTEM AND METHOD**

00: -

A system enabling interactions in virtual environments comprises one or more cloud server computers comprising at least one processor and memory storing data and instructions implementing a virtual environment platform comprising at least one virtual environment; at least one camera obtaining live data feed from a user of a client device; and a client device communicatively connected to the one or more cloud server computers and at least one camera. The system generates a user graphical representation from the live data feed that is inserted into a selected virtual environment and is therein updated, enabling real-time multi-user collaboration and interactions in the virtual environment. Suitable system architectures and methods thereof are also herein disclosed.

21: 2021/05601. 22: 2021/08/10. 43: 2022/09/20

51: G06F; H04L

71: TMRW FOUNDATION IP SARL

72: YERLI, Cevat

33: US 31: 17/006,327 32: 2020-08-28

33: US 31: 17/060,623 32: 2020-10-01

**54: AD HOC VIRTUAL COMMUNICATION BETWEEN APPROACHING USER GRAPHICAL REPRESENTATIONS**

00: -

A system enabling interactions in virtual environments comprises one or more cloud server computers comprising at least one processor and memory storing data and instructions implementing a virtual environment platform comprising at least one virtual environment; at least one camera obtaining live data feed from a user of a client

device; and a client device communicatively connected to the one or more cloud server computers and at least one camera. The system generates a user graphical representation from the live data feed that is inserted into a selected virtual environment and is therein updated, enabling real-time multi-user collaboration and interactions in the virtual environment. Suitable system architectures and methods thereof are also herein disclosed.

21: 2021/05903. 22: 2021/08/10. 43: 2022/10/10

51: B65D

71: LÓPEZ-AROSTEGUI SÁENZ, Guillermo

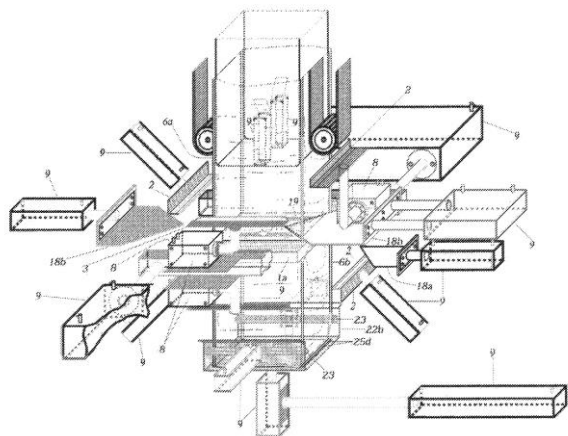
72: LÓPEZ-AROSTEGUI SÁENZ, Guillermo

**54: METHOD AND MACHINE FOR CREATING AND SEALING FLAPS OF FLEXIBLE PACKAGES, AND VARIOUS MODELS OF FLEXIBLE 3D PLUS-TYPE PACKAGES**

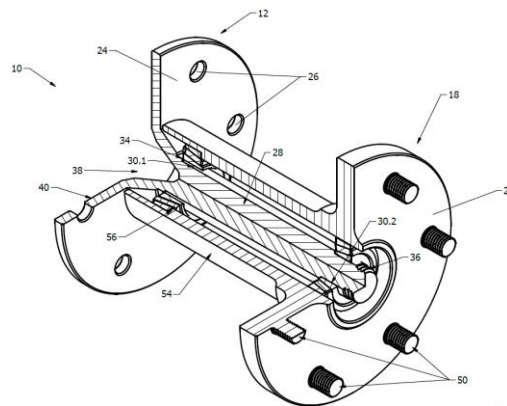
00: -

The method of the invention consists in producing and/or transforming flexible packages in vertical filling and sealing machines used to produce packaging of the gusseted, stable-bottom or pillow type, involving creating and sealing flaps at the top and/or at the bottom of the sides of the anterior pre-container (6a) or the posterior pre-container (6b) disposed in the vertical machine. The method involves the use of impact bodies (2; 3) installed in the vertical machine, which, once actuated, strike, push and fold at least part of at least one side or side face onto at least another part of another adjacent side or face, thereby creating at least one of the flaps, such as, for example: plus-type flaps (11; 12; 13), triangular flaps (14) or manipulated triangular flaps (15) such as a flap folded onto itself (15a) or a strip flap (15b). Subsequently, the flaps are sealed using a sealing method such as a resistance sealing method, so as to ensure that the resulting flap remains permanently stable. The invention also relates to devices installed in the vertical machine, which allow the flaps to be obtained in the optimal manner, such as for example: a rammer body (13) intended to widen and stretch the package or sheet of the lower part and/or the bottom bearing face of the pre-container (6a), or a press frame or platform (22) intended to push and crush the top part of the pre-container (8b) against the underside of the jaw (1a), such that the pre-container (8b) expands in three dimensions to form a

cube. The new machines of the invention comprise at least one impact body (2; 3) and/or at least one device (13; 20; 21; 22) of the invention. The invention also relates to different package models, such as for example, mixed packages, having one pillow-type half and one gusseted-type half.

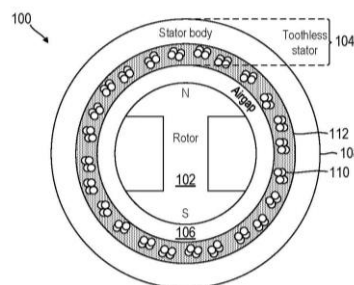


21: 2021/05950. 22: 2021/08/19. 43: 2022/09/02  
 51: B60B  
 71: BREED, Michiel, Andries  
 72: BREED, Michiel, Andries  
 33: ZA 31: 2020/05130 32: 2020-08-19  
**54: A DISPLACEMENT DEVICE**  
 00: -  
 The displacement device 10 includes a hub connector 12 which is sized, shaped and configured to be connected to a vehicle wheel hub assembly 14, typically being inoperable due to a failed wheel bearing (not shown) arranged between the wheel hub assembly 14 and an axle 16 of a vehicle (not shown), a wheel connector 18 which is sized, shaped and configured to permit interconnection with a wheel 20 of the vehicle (not shown) and a bearing arrangement including a pair of bearings 22 extending between and interconnecting the hub connector 12 and wheel connector 20 for allowing substantially co-axial displacement therebetween.



21: 2021/06033. 22: 2021/08/20. 43: 2022/09/02  
 51: H01F; H02K  
 71: The Trustees for the time being of the KMN FULFILMENT TRUST  
 72: MAKGERU, Kabu Walter  
 33: ZA 31: 2019/00703 32: 2019-02-04  
**54: AN ELECTRIC GENERATOR HAVING A TOOTHLESS STATOR**  
 00: -

A generator includes a central rotor with at least one magnet configured to generate a magnetic field and a toothless stator provided around the rotor, the rotor being configured to rotate within, and relative to, the toothless stator. The toothless stator comprises a stator body, windings coupled to the stator body, the windings configured to have an electric current induced therein by the magnetic field, and a magnetite material comprising at least magnetite and provided around the windings, such that the windings are embedded in, or surrounded by, the magnetite material.

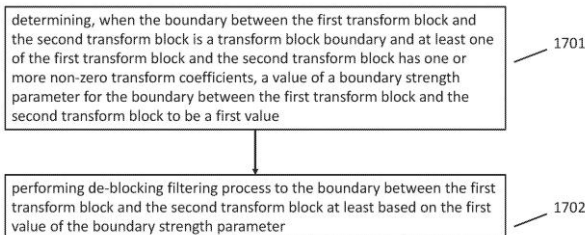


21: 2021/06061. 22: 2021/08/23. 43: 2022/09/02  
 51: H04N  
 71: Huawei Technologies Co., Ltd.  
 72: WANG, Biao, KOTRA, Anand Meher, GAO, Han, ZHAO, Yin, ESENLIK, Semih, CHEN, Jianle  
 33: US 31: 62/797,163 32: 2019-01-25

**54: AN ENCODER, A DECODER AND CORRESPONDING METHODS OF DEBLOCKING FILTER ADAPTATION**

00: -

The present invention provides a deblocking method, for deblocking a transform block boundary within a coding block in an image encoding and/or an image decoding, wherein the coding block comprising transform blocks is coded in inter prediction mode and the transform blocks comprises a first transform block and a second transform block which is adjacent to the first transform block; wherein the method comprises: determining, when the boundary between the first transform block and the second transform block is a transform block boundary (such as a SBT boundary) and at least one of the first transform block and the second transform block has one or more non-zero transform coefficients (one or more non-zero residual transform coefficients), a value of a boundary strength (BS) parameter for the boundary between the first transform block and the second transform block to be a first value; and performing de-blocking filtering process to the boundary between the first transform block and the second transform block at least based on the value of the boundary strength parameter.



21: 2021/06372. 22: 2021/08/31. 43: 2022/07/25  
51: G06F

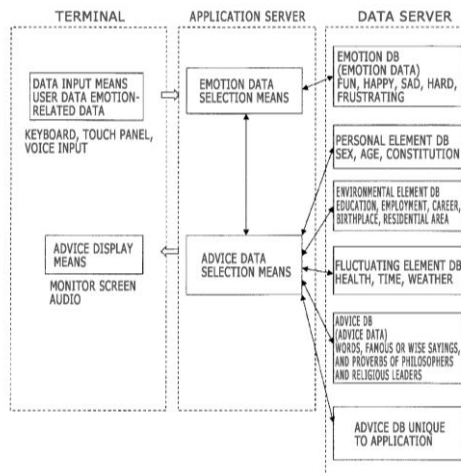
71: KAMEI, Masamichi  
72: KAMEI, Masamichi  
33: JP 31: 2019-040028 32: 2019-03-05

**54: ADVICE PRESENTATION SYSTEM**

00: -

An advice presentation system that combines functions of a terminal such as a smartphone, advice data such as famous or wise sayings that have been stored in a database, and functions such as a communications channel together, and provides appropriate advice according to the emotions of a user at that time. Firstly, emotion-related data

pertaining to the emotions of the user is entered from the terminal. The advice presentation system connects to a web server via Internet connection, and emotion data corresponding to the entered emotion-related data is selected and extracted from an emotion database by using an emotion data selection means for an application server. At least one piece of advice data stored in an advice database is selected and extracted by an advice data selection means for the application server, on the basis of the selected emotion data. The selected advice data is sent to the terminal of the user, and famous or wise sayings, etc., are presented from an advice display means as advice data.

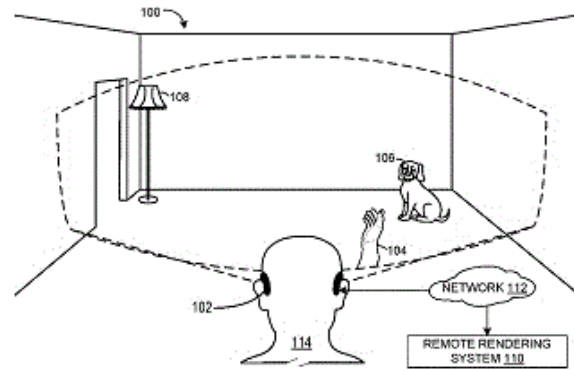
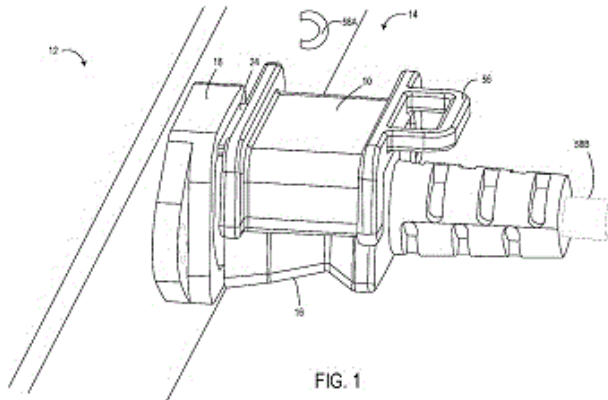


21: 2021/06432. 22: 2021/09/02. 43: 2022/09/12  
51: H01R  
71: MICROSOFT TECHNOLOGY LICENSING, LLC  
72: CANNON, LAWRENCE DALE  
33: US 31: 16/384,713 32: 2019-04-15  
**54: POWER PLUG RETENTION DEVICE**

00: -

A power plug retention device for use with a power plug inserted in a power receptacle is provided. The power plug retention device includes a body including an insertion portion and a gripping portion formed along an insertion axis of the body. The insertion portion is shaped as a wedge configured to be inserted in a gap between the power plug and the power receptacle. The gripping portion includes an insertion force receiving surface formed orthogonal to the insertion axis and configured to receive an insertion force from a user in an insertion direction along the insertion axis to thereby insert and lodge

the wedge in the gap to form an interference fit between the wedge, the power plug, and the power receptacle when the wedge is inserted in the gap.

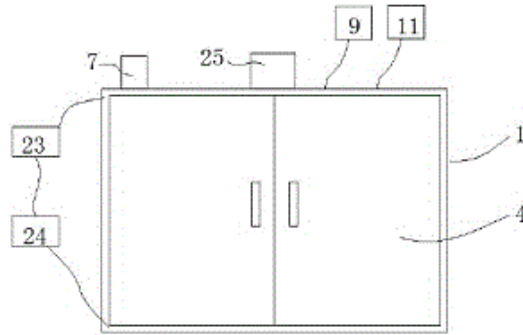
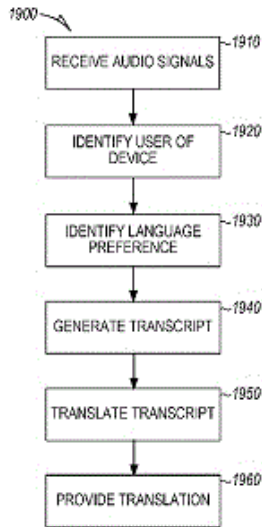


21: 2021/06433. 22: 2021/09/02. 43: 2022/09/12  
 51: G06F; G06T  
 71: MICROSOFT TECHNOLOGY LICENSING, LLC  
 72: FROMMHOLD, DAG BIRGER, LYONS, JONATHAN MICHAEL, THAUT, BENJAMIN MARKUS, MICHAEL, ASHRAF AYMAN  
 33: US 31: 16/379,693 32: 2019-04-09  
**54: HYBRID RENDERING**

00: -  
 One disclosed example provides a computing device comprising a processing device and a storage device storing instructions executable by the processing device to execute in a first local process an application that outputs digital content for rendering and display. During execution of the application, the instructions are executable to provide, to a second local or remote process, object information regarding an object to be rendered by the second local or remote process, receive, from the second local or remote process, a rendering of the object, output the rendering of the object to display the object, receive a manipulation made to the object, provide, to the second local or remote process, updated object information based on the manipulation made to the object, receive, from the second local or remote process, an updated rendering of the object, and output the updated rendering of the object to display the object.

21: 2021/06434. 22: 2021/09/02. 43: 2022/09/12  
 51: G10L; G06F  
 71: MICROSOFT TECHNOLOGY LICENSING, LLC  
 72: YOSHIOKA, TAKUYA, STOLCKE, ANDREAS, CHEN, ZHUO, DIMITRIADIS, DIMITRIOS BASILE, ZENG, NANSHAN, QIN, LIJUAN, HINTHORN, WILLIAM ISAAC, HUANG, XUEDONG  
 33: US 31: 16/398,836 32: 2019-04-30  
**54: CUSTOMIZED OUTPUT TO OPTIMIZE FOR USER PREFERENCE IN A DISTRIBUTED SYSTEM**

00: -  
 Systems and methods for providing customized output based on a user preference in a distributed system are provided. In example embodiments, a meeting server or system receives audio streams from a plurality of distributed devices involved in an intelligent meeting. The meeting system identifies a user corresponding to a distributed device of the plurality of distributed devices and determines a preferred language of the user. A transcript from the received audio streams is generated. The meeting system translates the transcript into the preferred language of the user to form a translated transcript. The translated transcript is provided to the distributed device of the user.



21: 2021/06481. 22: 2021/09/03. 43: 2022/09/21  
 51: A23B; A23L; A23N  
 71: SHANXI AGRICULTURAL UNIVERSITY  
 SHANXI FUNCTIONAL FOOD RESEARCH  
 INSTITUTE  
 72: YANG, CHUN, ZHANG, JIANGNING, HAN,  
 JIMING, YE, ZHENG, WU, JIANLI, JIN, YANG, LI,  
 QI, DING, WEIYING, MAO, KAI

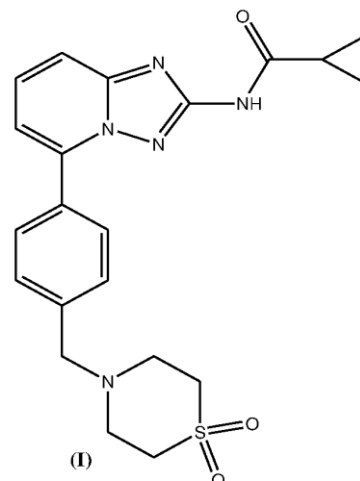
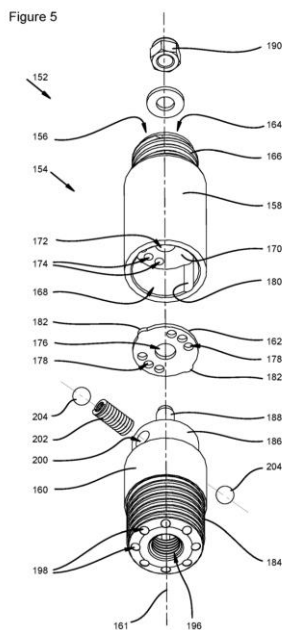
**54: ANTI-BROWNING FRUIT AND VEGETABLE PROCESSING DEVICE**

00: -  
 The present disclosure discloses an anti-browning fruit and vegetable processing device. A device housing thereof is internally provided with a first drying chamber and a second drying chamber separated from each other; a first drying assembly is disposed in the first drying chamber for first-stage dehydration of a material; a second drying assembly is disposed in the second drying chamber for second-stage dehydration of the material after the first-stage dehydration; and anti-browning assemblies are disposed in both the first drying chamber and the second drying chamber. The present disclosure can not only effectively prevent fruit and vegetable materials from browning, but also helps locking nutrients in the fruit and vegetable materials and avoids the loss of nutrients, thereby being beneficial to improve the crispness and taste of dried fruits and vegetable products.

21: 2021/06605. 22: 2021/09/08. 43: 2022/08/31  
 51: E21B  
 71: REFLEX INSTRUMENTS ASIA PACIFIC (PTY)  
 LTD  
 72: BEACH, Andrew, MOKARAMIAN, Amir  
 33: AU 31: 2019901165 32: 2019-04-04  
**54: TORQUE TRANSFER AND CONTROL  
 APPARATUS FOR A DRILLING TOOL**  
 00: -

There is disclosed a torque transfer apparatus for a mineral drilling tool used in a downhole assembly of a drill string. The drilling tool has a downhole drill bit and one or more uphole drill bits spaced apart from the downhole drill bit, with the torque transfer apparatus being located between them. The apparatus has an axial bore therethrough for fluid flow and comprises first and second members being rotatably joined to each other. The apparatus rotationally couples and transfers torque between the first and second members when a torque difference between torque on the downhole drill bit and torque on the uphole drill bit is below a threshold torque value. The apparatus disengages the rotational coupling while the torque difference exceeds the threshold torque value. The flow rate of drilling fluid flowing through the axial bore is altered when the apparatus engages and disengages the coupling.





21: 2021/07053. 22: 2021/09/21. 43: 2022/10/05  
51: C07D

71: UNICHEM LABORATORIES LIMITED  
72: SATHE, Dhananjay G., DAS, Arijit, PATEL, Bhavesh, KSHIRSAGAR, Eknath, PATIL, Dipak, MATALE, Ashok

33: IN 31: 201921012919 32: 2019-03-30

**54: NOVEL PROCESS FOR THE PREPARATION OF FILGOTINIB AND INTERMEDIATES THEREOF**  
00: -

The present invention relates to a novel process for the preparation of filgotinib or a pharmaceutically acceptable salt and intermediates thereof which avoid Suzuki coupling reaction. (I)

21: 2021/08360. 22: 2021/10/28. 43: 2022/09/06  
51: A22C

71: VISCOFAN, S.A.

72: GARCIA MARTINEZ, Ion, Iñaki, RAZQUIN ONGAY, Alfonso, JIMENEZ FUENTES, Joana, LONGO ARESO, Carlos, María

33: ES 31: P201930380 32: 2019-04-30

**54: CELLULOSE CASING, METHOD FOR PRODUCING SAME AND PRODUCT STUFFED IN SAID CASING**

00: -

The present invention relates to one or more cellulose casings, either reinforced or not, that are able to transfer colour to the product stuffed therein. Said casings contain a food colouring that can be transferred to the stuffing during the processing thereof. The present invention also relates to the method for producing the casing and the product stuffed in said casing.

21: 2021/08420. 22: 2021/10/29. 43: 2022/08/30  
51: E02F

71: ESCO Group LLC

72: JOHNSTON, Christopher A., CONKLIN, Donald M., ROSKA, Michael B., ROSSI, William D., STANGELAND, Kevin S.

33: US 31: 61/563,448 32: 2011-11-23

**54: WEAR ASSEMBLY**

00: -

Wear members for wear assemblies include a lock configured to secure the wear member to a base, where the lock has two engagement positions, namely: (a) a first position that secures the lock to the wear member, and (b) a second position that secures the wear member to the base. The locks are

further configured to be unlatched and removed from the wear member in two phases, a first retraction of the latching mechanism, followed by a rotation of the lock itself with removal from the wear member.

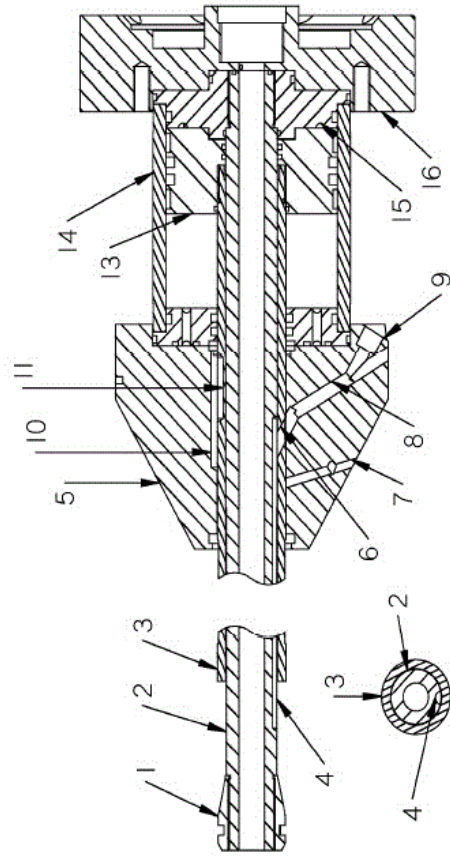
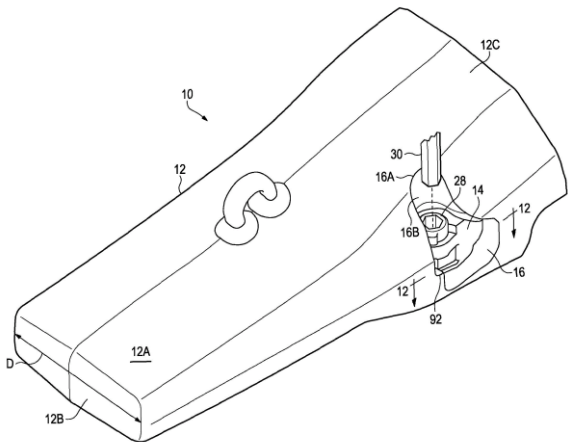


Fig. 1

21: 2021/08841. 22: 2021/11/09. 43: 2022/09/16  
 51: E21C  
 71: CFI Technologies, LLC  
 72: YOUNG III, Chapman, FRIAS, J. Roberto  
**54: BOREHOLE SEALING AND IMPROVED FOAM PROPERTIES FOR CONTROLLED FOAM INJECTION (CFI) FRAGMENTATION OF ROCK AND CONCRETE**

00: -  
 Breaking rock and concrete, based upon a Controlled-Foam Injection or PCF (Penetrating Cone Fracture) uses a high-pressure fluid to pressurize a pre-drilled hole. A high pressure seal is formed between the injection barrel and walls of the pre-drilled hole in the material to be broken. A leak-free poppet valve holds a fluid in a pressure vessel before rapid discharge. Variable charges of foam/water are generated and delivered to the breaker. The injection barrel is prefilled with a low viscosity fluid. An annular reverse acting poppet valve allows concurrent injection of chemical additives and/or micro particles to modify foam viscosity during its high pressure release into the material to be broken. A high pressure foam generator is compacted and reliable. Removal and wash-out of the seal frees the injection barrel.

21: 2021/09200. 22: 2021/11/17. 43: 2022/10/05  
 51: A61K; C12N  
 71: ACCESS TO ADVANCED HEALTH INSTITUTE  
 72: ERASMUS, Jesse  
 33: US 31: 62/859,683 32: 2019-06-10  
**54: METHODS AND COMPOSITIONS OF ASTROVIRUS REPLICONS**

00: -  
 The present invention provides recombinant replicons and methods of their use for expression of a secreted protein of interest so as to induce an enhanced immune response.

21: 2021/09248. 22: 2021/11/18. 43: 2022/10/05  
 51: A61K  
 71: ACCESS TO ADVANCED HEALTH INSTITUTE  
 72: KRAMER, Ryan, ARCHER, Michelle, FOX, Christopher, ORDOUBADI, Mani, CARRIGY, Nicholas, . VEHRING, REINHARD, GOMEZ, MELLISSA  
 33: US 31: 62/852,983 32: 2019-05-25  
**54: COMPOSITION AND METHOD FOR SPRAY DRYING AN ADJUVANT VACCINE EMULSION**

00: -

The invention provides for thermostable spray dried formulations including vaccines and pharmaceutical compositions for inducing or enhancing an immune response and methods of use thereof. The spray dried formulations are a dry powder generally comprising an antigen and / or an adjuvant, a metabolizable oil, and one or more excipients.

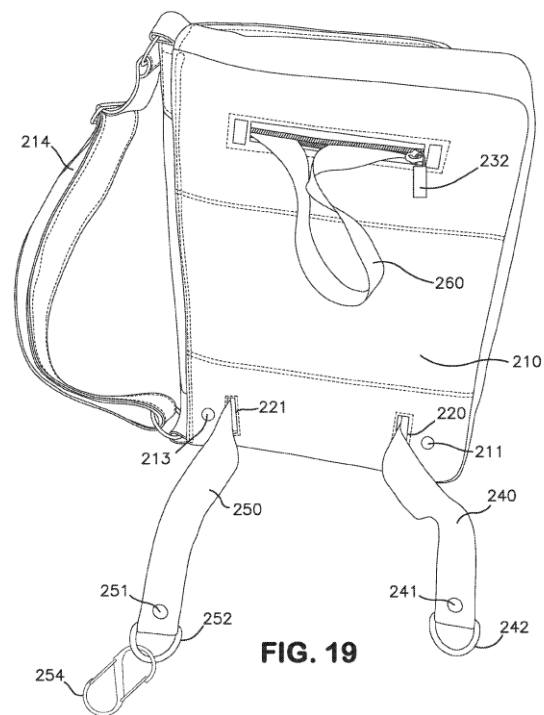
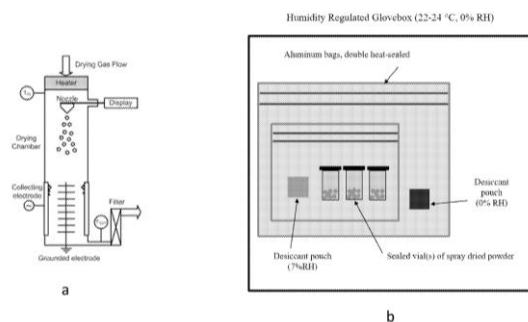


FIG. 19

21: 2021/09249. 22: 2021/11/18. 43: 2022/10/03  
51: A45C; F41H

71: WALSH, Timothy, FEDKIN, Kostyantyn

72: WALSH, Timothy, FEDKIN, Kostyantyn

33: US 31: 62/841,756 32: 2019-05-01

33: US 31: 16/811,496 32: 2020-03-06

**54: PERSONAL PROTECTIVE DEVICES WITH CARRYING BAGS**

00: -

Personal protective devices have a carrying bag, such as a purse, and a separate bullet resistant vest or penetration resistant (to stab wounds) vest comprises at least one neck sling and at least one torso strap. The bullet/penetration resistant vest is dimensioned to removably fit within the carrying bag. The carrying bags are configured to provide a "ready state" wherein a bullet resistant shield and neck sling are within the carrying bag while at least a connector attached to the end of deployable torso strap(s) is outside of the carrying bag. The carrying bag has at least one slot designed to allow the torso strap(s) to be pre-fed from the interior of the carrying bag to a position exterior of the carrying bag. The neck sling and torso straps are deployable to secure the vest to a wearer's torso in the deployed position.

21: 2021/09573. 22: 2021/11/25. 43: 2022/10/03

51: A61K; C07D; A61P

71: LUPIN LIMITED

72: NAIR, Prathap Sreedharan, GUDADE, Ganesh Bhausaheb, TRYAMBAKE, Mahadeo Bhaskar, PAWAR, Chetan Sanjay, LAGAD, Dipak Raychand, KULKARNI, Chaitanya Prabhakar, SINDKHEDKAR, Milind Dattatraya, PALLE, Venkata P., KAMBOJ, Rajender Kumar

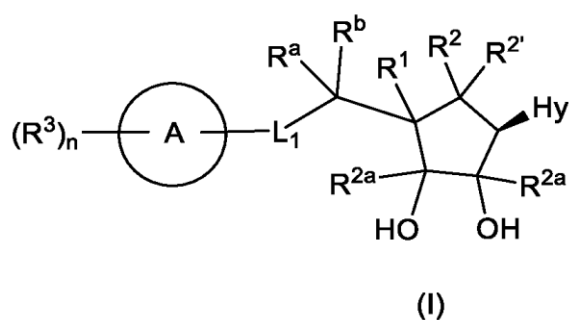
33: IN 31: 201921022971 32: 2019-06-10

33: IN 31: 201921022972 32: 2019-06-10

**54: PRMT5 INHIBITORS**

00: -

The invention relates to substituted nucleoside analogues of formula (I), pharmaceutically acceptable salts thereof and pharmaceutical compositions for treating diseases, disorders or conditions associated with the overexpression of PRMT5 enzyme. The invention also relates to methods of treating diseases, disorders or conditions associated with the overexpression of PRMT5 enzyme.



21: 2021/09576. 22: 2021/11/25. 43: 2022/10/10  
51: A23K; C07C

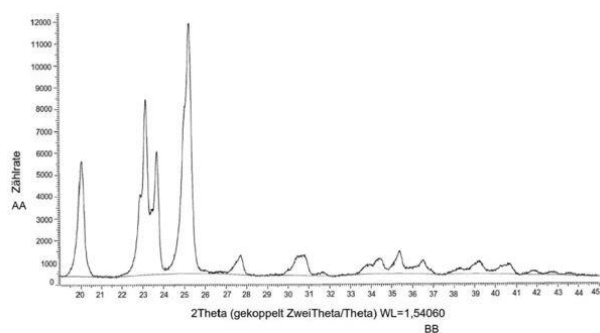
71: ALZCHEM TROSTBERG GMBH  
72: Thomas GÜTHNER, Franz THALHAMMER,  
Jürgen SANS

33: DE 31: 10 2019 118 893.8 32: 2019-07-12  
33: DE 31: 10 2019 118 894.6 32: 2019-07-12

**54: METASTABLE CRYSTAL MODIFICATION  
AND METHOD FOR THE PRODUCTION  
THEREOF (I)**

00: -

The present invention relates to novel crystal modification of N-(aminoiminomethyl)-2-aminoethanoic acid and to a process for producing said crystal modification.



Figur 2

AA Count rate  
BB 2Theta (coupled two Theta/Theta) WL= 1.54060

21: 2021/09845. 22: 2021/12/01. 43: 2022/09/20  
51: A61K; C07K; C12N

71: Jacobio Pharmaceuticals Co., Ltd.  
72: LIU, Qinghao, ZHOU, Wenlai, YANG, Haiyan,  
WANG, Hongling

33: PCT/CN 31: 2019/090366 32: 2019-06-06

**54: BINDING MOLECULE SPECIFIC FOR CD73  
AND USE OF BINDING MOLECULE**

00: -

A binding molecule specific for CD73 and a use of the binding molecule. Specifically, provided are a

separate antibody binding CD73 and inhibiting the activity of CD 73 or an antigen binding part of the separate antibody, and a use of the separate antibody or the antigen binding part thereof in treatment of diseases; also provided are a nucleic acid molecule encoding the separate antibody or the antigen binding part thereof, an expression vector for expressing the separate antibody or the antigen binding part thereof, a host cell, and a preparation method.

21: 2021/10345. 22: 2021/12/13. 43: 2022/06/21  
51: A01K; B09B; C05F

71: YB INSECT FARMING LTD

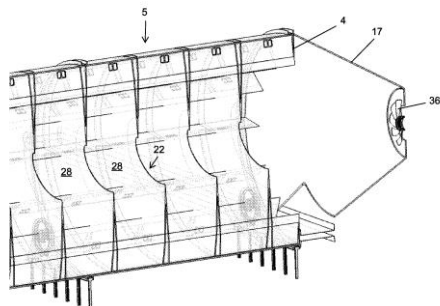
72: BAR, Yaniv

33: IL 31: 267413 32: 2019-06-17

**54: INSECT-BASED BIOWASTE PROCESSING  
APPARATUS**

00: -

The present invention relates to insect-based biowaste processing apparatus. More specifically, the present invention relates to a substantially continuous insect-based biowaste processor that comprises a tubular drum having a longitudinal axis and an interior; a drive for rotatably driving said drum about said axis; a shaftless screw conveyor fixedly connected to an inner surface of said drum; a plurality of circumferentially spaced cantilevered blades that are connected to said inner drum surface and that each longitudinally extend throughout said drum; and means for introducing a conglomerate portion that includes biowaste and insect larvae into said drum interior, wherein said screw conveyor is subdivided into a plurality of longitudinally spaced rearing chambers for the introduced insect larvae, each of said rearing chambers being defined by two longitudinally adjacent flights of said screw conveyor and by said circumferentially spaced cantilevered blades and within which insect larvae of a substantially uniform developmental stage are retained, wherein two or more of said circumferentially spaced cantilevered blades are configured to firmly hold and unify said conglomerate portion at any given instance throughout its residing time within said drum interior while being distally conveyed, and wherein the insect larvae are progressively more developed within a more distally located rearing chamber.



21: 2021/10440. 22: 2021/12/14. 43: 2022/07/07  
 51: A61F; A61L; C08G; C08J  
 71: EUDAEMON TECHNOLOGIES PTY LTD  
 72: GORKIN III, Robert, COOK, Simon,  
 SHEPHERD, David  
 33: AU 31: 2019902307 32: 2019-06-28

**54: MOULDED POLYURETHANE HYDROGELS**

00: -

The technology relates to a method of producing a moulded polyurethane hydrogel, for example a condom. The method involves forming a solution of at least one polyurethane having a molecular weight of between about 40000 to about 500000 in a water:organic polar solvent comprising less than about 40% (v/v) water; applying a layer of the solution to a mould; drying the layer of the first solution to form a polyurethane film on the mould; and contacting the polyurethane film with a swelling agent under conditions such that the film forms a polyurethane hydrogel with a swelling agent content of between about 1% to about 95%.

21: 2022/00725. 22: 2022/01/14. 43: 2022/09/26  
 51: A01N; A61K  
 71: COROMANDEL INTERNATIONAL LTD.  
 72: LAKSHMI KANTHAN, Baburaj, NARASIMHA  
 RAO, Kothapalli, BALAJI, Sambamoorthy,  
 RAMAMURTHI, Radhakrishnan, SADHASIVAM,  
 Kathiresan, SURESH KUMAR, Chinaga,  
 MANIMARAN, Ponnusamy, JAYABAL,  
 Govindasamy  
 33: IN 31: 201841048985 32: 2019-06-24

**54: A NATURAL MOSQUITO REPELLENT COMPOSITION AND PROCESS OF PREPARING THE SAME**

00: -

The present invention relates to a natural mosquitoes repellent composition comprising: neem oil, a mixture of plant extracts and solvent. The present invention particularly relates to the natural mosquito repellent composition comprising neem oil,

a mixture of plant extracts, such as Geraniol, Eucalyptus oil, Cedar oil and Citronella oil. The present invention further provides a process for preparing the mosquito repellent composition.

21: 2022/01238. 22: 2022/01/26. 43: 2022/08/03  
 51: A61K  
 71: CELLIX BIO PRIVATE LIMITED  
 72: KANDULA, Mahesh  
 33: IN 31: 201941030819 32: 2019-07-30

**54: COMPOSITION AND METHODS FOR THE TREATMENT OF ANAL AND RECTAL DISORDERS**

00: -

The present invention relates to compounds or its pharmaceutical acceptable polymorphs, solvates, enantiomers, stereoisomers, prodrugs, hydrates and or derivatives thereof. The Pharmaceutical composition comprises an effective amount of compounds of formula I, formula II, formula III, formula IV, Formula V, formula VI or formula VII and the methods of using the composition for treating disorder affecting the anus and rectum. The composition can be formulated for oral administration, rectal administration, topical administration, transmucosal, transdermaladministration, spray, injection or other known formulation in the art.

21: 2022/01461. 22: 2022/02/01. 43: 2022/09/01  
 51: H04W  
 71: NEC Corporation  
 72: TAMURA, Toshiyuki, TAKAKURA Tsuyoshi  
 33: JP 31: 2019-174767 32: 2019-09-25

**54: CORE NETWORK NODE, ACCESSIBILITY MANAGEMENT DEVICE, AND COMMUNICATION METHOD**

00: -

The purpose of the present invention is to provide an accessibility management device with which it is possible to properly assess the allowability of access to a network slice. An accessibility management device (10) according to the present disclosure comprises: a communication unit (11) for transmitting first information to a core network node (15), the first information indicating whether a network slice-specific authentication and authorization (NSSAA) function is supported, and receiving second information from the core network node (15), the second information pertaining to a

network slice that corresponds to the first information; and a control unit (12) for assessing, on the basis of the second information, whether to permit the use of the network slice by a wireless terminal.

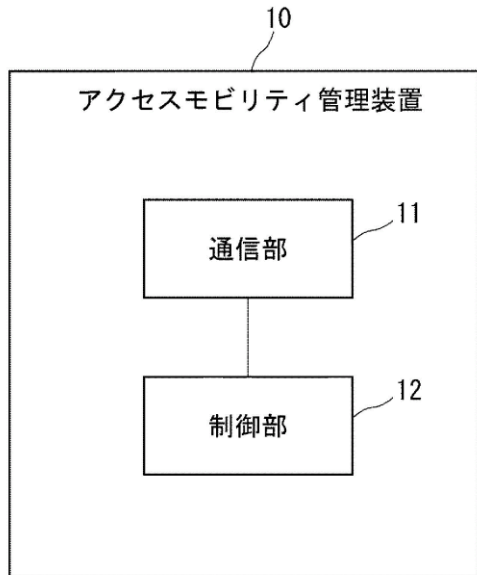
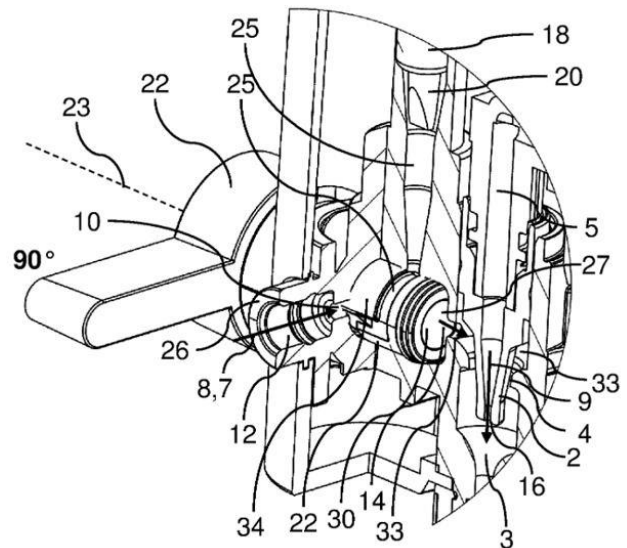


Fig. 1

10 Accessibility management device  
 11 Communication unit  
 12 Control unit

section (10) which acts as a flow rate reducer for the air stream (15) and the milk stream (8) (figure 8).



21: 2022/01504. 22: 2022/02/02. 43: 2022/10/03  
 51: G05B  
 71: ARCELORMITTAL  
 72: David SLOAN

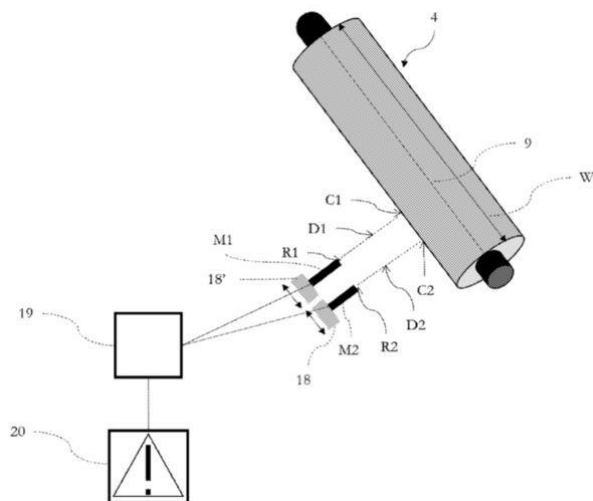
**54: EDGE BUILD-UP MEASUREMENT**

00: -  
 This invention relates to a method for controlling, on a metallic coated coil being wound, the coating thickness homogeneity, said method comprising the following steps: A) measuring a first distance between a first reference point and a first point on the coil surface B) measuring a second distance between a second reference point and a second point on the coil surface - said first and second points on the coil being situated at different spots along the coil width C) computing a difference between said first distance and said second distance, said difference is noted  $\Delta 12_{true}$  D) saving said difference  $\Delta 12_{true}$  - defining a threshold value, - comparing each saved difference  $\Delta 12_{true}$  to said threshold value and/or comparing a sum of differences  $\Delta 12_{true}$  to said threshold value, - emitting an alert when said difference  $\Delta 12_{true}$  and/or said sum of differences  $\Delta 12_{true}$  is higher than said threshold value.

21: 2022/01487. 22: 2022/02/02. 43: 2022/10/03  
 51: A47J  
 71: JURA ELEKTROAPPARATE AG  
 72: Sandro KLEPZIG  
 33: EP 31: 19193185.6 32: 2019-08-22

**54: MILK FOAMING DEVICE AND METHOD FOR PRODUCING MILK FOAM**

00: -  
 The invention relates to improving the quality of a milk foam (13) which is produced by means of a milk foaming device (1) having a mixing chamber (3) in which air (6) and milk (7) can be foamed by means of a steam flow (9) to provide the milk foam (13). According to the invention, for this purpose the respective flow rates of an air stream (15) and of a milk stream (8), each of which flows into the mixing chamber (3), are set by the air (6) and the milk (7) always flowing together into the mixing chamber (3) through an adjustable, variable opening cross-



21: 2022/01556. 22: 2022/02/04. 43: 2022/10/03

51: A01N; A01P

71: SIPCAM OXON S.P.A.

72: Marco BERNARDINI, Francesca BORGIO,  
Cristina RAPETTI, Gianluca VALIERI

33: IT 31: 1020190000144 32: 2019-08-08

#### 54: FUNGICIDE COMPOSITION

00: -

The present invention refers to an aqueous composition comprising prothioconazole, optionally chlorothalonil, and at least one sulfonate surfactant, said composition having a pH <7. The present invention also refers to a production process of said composition, and to the use of the composition in the treatment and/or the prevention of fungal infections in plants.

21: 2022/01563. 22: 2022/02/04. 43: 2022/08/31

51: C08B

71: Infinited Fiber Company Oy

72: HARLIN, Ali, MALANIN, Erkki, MÄKELÄ, Jani

33: FI 31: 20195717 32: 2019-08-30

#### 54: CELLULOSE PRETREATMENT

00: -

According to an example aspect of the present invention, there is provided a method for pretreating cellulose, e.g. cotton, comprising the steps of providing a mixture having a solid content, said mixture comprising cellulose, and a liquid, and mechanically working the mixture to open the fibril structure of cell walls of cellulose. The mechanical working comprises shear mixing in a continuous mechanical mixing device.

21: 2022/01564. 22: 2022/02/04. 43: 2022/08/31

51: A61B; C12M

71: Becton, Dickinson and Company

72: LOHAN, Daniel Justin, WENGER, Kevin,  
ARMSTRONG, Robert Edward, POHL, Brent  
Ronald, LENTZ, Ammon David, ZERWECK, Jason,  
MURRAY, Christopher

33: US 31: 62/883,796 32: 2019-08-07

#### 54: HIGH DENSITY BOTTLE DRUM FOR STORAGE, AGITATION AND READING OF BLOOD CULTURE BOTTLES AND METHODS OF STORING

00: -

An apparatus for storing and monitoring blood culture bottles. The apparatus has a moveable rack configured as a drum having a plurality of receptacles therein for receiving blood culture bottles. The drum is disposed in a housing. The housing includes a heater and a blower for incubating the blood culture bottles at elevated temperatures. Optionally the apparatus has a plurality of drums, each having a plurality of receptacles for receiving blood culture bottles.

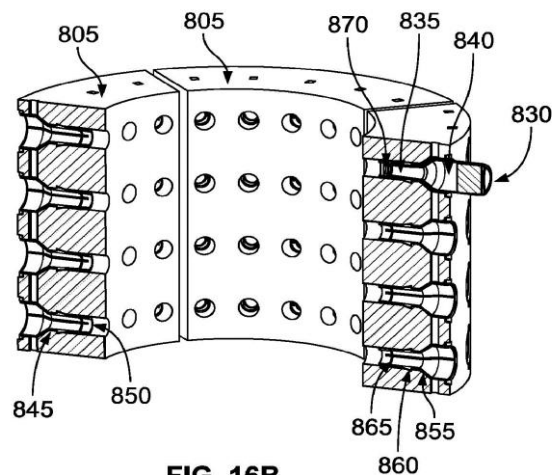


FIG. 16B

21: 2022/01663. 22: 2022/02/08. 43: 2022/10/03

51: B60R; B62D

71: ARCELORMITTAL

72: Alexandre SOTTY, Elie GIBEAU, Nicolas  
SCHNEIDER, Yves DROUADAINÉ

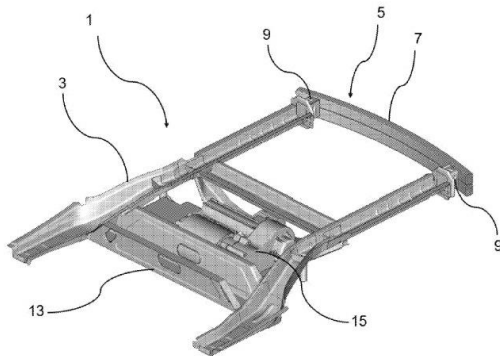
33: IB 31: PCT/IB2019/057481 32: 2019-09-05

#### 54: REAR STRUCTURE FOR AN ELECTRIC VEHICLE

00: -

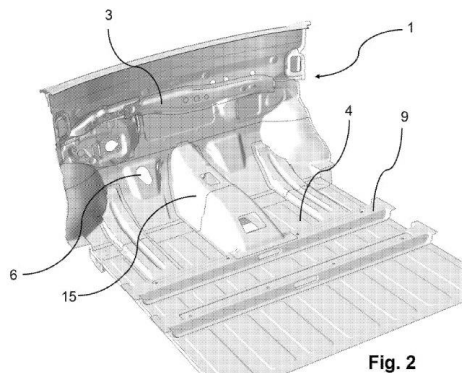
Rear structure for an electric vehicle having a rear rail which comprises a rear portion, a front portion

and a transition zone, such that in the event of a rear crash the rear portion and the transition zone are both able to deform to maximize the amount of energy absorption.



21: 2022/01664. 22: 2022/02/08. 43: 2022/10/03  
 51: B60K; B62D  
 71: ARCELORMITTAL  
 72: Alexandre SOTTY, Elie GIBEAU, Nicolas SCHNEIDER, Yves DROUADAINÉ  
 33: IB 31: PCT/IB2019/057513 32: 2019-09-06  
**54: FRONT STRUCTURE FOR AN ELECTRIC VEHICLE**

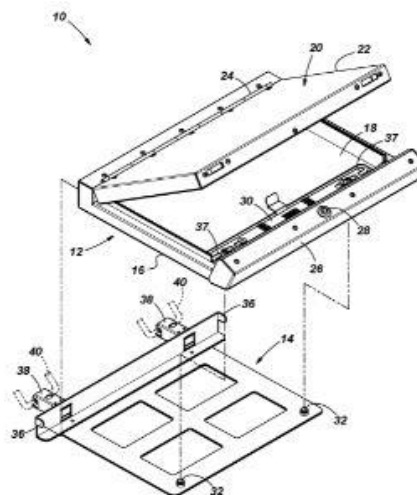
00: -  
 Front structure for an electric vehicle comprising a lower dash panel, a seat cross-member and a tunnel nose, such that the tunnel nose is designed to absorb energy in its front portion while resisting intrusion in its rear portion, optimizing the energy absorption in the part during a front crash and protecting the battery pack from being breached by the downward pushing effect of the lower dash panel.



21: 2022/01667. 22: 2022/02/08. 43: 2022/10/03

51: B60R; E05B; E05G  
 71: BIAGI SAGA TECHNOLOGIES (PTY) LTD  
 72: KUISIS, Gerald  
 33: ZA 31: 2019/04709 32: 2019-07-18  
**54: PORTABLE SAFE**

00: -  
 The subject invention is a portable safe that consists of a safe body and a safe engagement mechanism. The safe body generally comprises an interior compartment to receive a valuable item, the safe body defining either a box closable by a lid or a drawer slidably received into the interior compartment of the safe body. The safe body operationally engaging with the safe engagement mechanism, said safe engagement mechanism simultaneously engaging with a fixed point on a vehicle so that said safe is secured to the vehicle thereby preventing the removal of the portable safe from the vehicle.



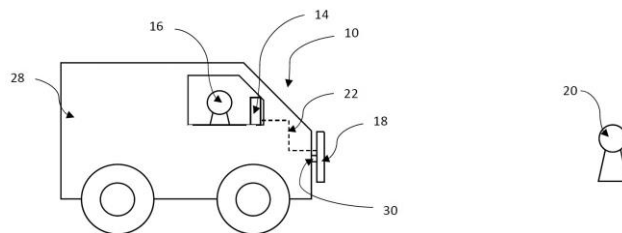
21: 2022/01737. 22: 2022/02/09. 43: 2022/09/12  
 51: F41C; F41G  
 71: MAGGIORE, Lorenzo  
 72: MAGGIORE, Lorenzo

**54: CELL PHONE MOUNT FOR BUG KILLING GUNS**

00: -  
 A cell phone mount for bug killing guns includes a cell phone clamping portion and a bug gun rail attaching portion. The clamping portion has retaining jaws urged together to hold edges of a cell phone. The attaching portion has a base, a cover, attaching claws and a cam lock. The attaching claws move laterally and vertically to attach to a top rail of the

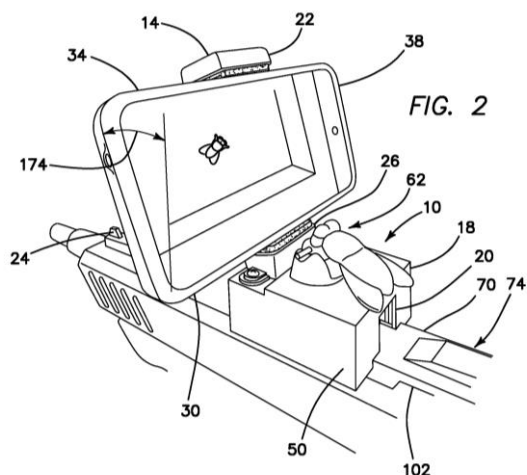


gun. The cam lock has a rotating portion with a vertical shaft, is rotatably mounted to the base and engages the attaching claws. The cam lock has a lever with attached rotary cam. The cam is mounted to the vertical shaft and bears on the cover. When the lever is rotated, the attaching claws move laterally and when the lever is moved vertically, the rotary cam move the attaching claws vertically, attaching the cell phone mount to the top rail of the bug killing gun.



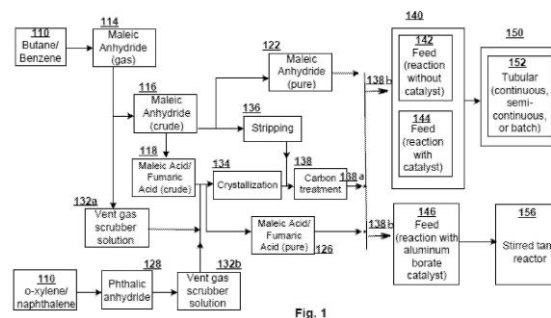
21: 2022/01939. 22: 2022/02/15. 43: 2022/09/01  
 51: C07K  
 71: Thirumalai Chemicals Limited  
 72: RANGASWAMY, Parthasarathy  
 33: IN 31: 201921028680 32: 2019-07-16  
**54: PRODUCTION OF MALIC ACID**  
 00: -

A method of production of malic acid includes treating a first intermediate product to form a second intermediate product. The treating includes substantially removing impurities from the first intermediate product to obtain a treated intermediate product by gas stripping the crude maleic anhydride, or subjecting a mixture of one or more of the crude maleic acid, the crude fumaric acid, and the vent gas scrubber solution obtained from a phthalic anhydride production process or a maleic anhydride production process to crystallization, passing an aqueous solution of the treated intermediate product through a carbon column to substantially remove retained impurities to form the second intermediate product, obtaining a feed that includes the second intermediate product, and causing the feed to undergo hydration reaction in a tubular reactor or a continuous stirred tank reactor to produce malic acid.



21: 2022/01926. 22: 2022/02/15. 43: 2022/09/01  
 51: G09F  
 71: MDAKA, Mpimo, Archibald  
 72: MDAKA, Mpimo, Archibald  
 33: ZA 31: 2021/01000 32: 2021-02-15  
**54: A DISPLAY DEVICE**  
 00: -

According to the invention, there is provided a display device (10) including a control unit (12) configured to receive information relating to a radio communication device (14) utilised by a user (16) and a display (18) arranged in electrical communication with the control unit (12) for displaying the information of the communication device (14) to a viewer (20) to facilitate communication between the viewer (20) and the user (16).



21: 2022/01994. 22: 2022/02/16. 43: 2022/10/10  
 51: H04W  
 71: TELEFONAKTIEBOLAGET LM ERICSSON  
 (PUBL)

72: MUÑOZ DE LA TORRE ALONSO, Miguel Angel, ALVAREZ DOMINGUEZ, Rodrigo, PUENTE PESTAÑA, MIGUEL ANGEL

33: EP 31: 19382862.1 32: 2019-10-04

**54: PROVISIONING AND EXPOSING USER EQUIPMENT (UE) COMMUNICATION PATTERN ASSOCIATED WITH AN APPLICATION TO REQUEST TRAFFIC OF THE APPLICATION TO BE ANALYZED IN THE CORE NETWORK (CN)**

00: -

Embodiments include a method, in an application function, AF, for exchanging UE communication pattern information with a core network, CN. The method comprises provisioning, to a network exposure function, NEF, in the CN, communication information related to one or more user equipment, UEs, the communication information including an identifier of an application associated with the AF and an indication of one or more first parameters describing a first UE communication pattern associated with the application. The method further comprises sending, to the NEF, a subscription request, wherein the subscription request includes the identifier of the application. Further still, the method comprises receiving, from the NEF, a report indicative of an analysis of traffic of the application based at least on the one or more first parameters.

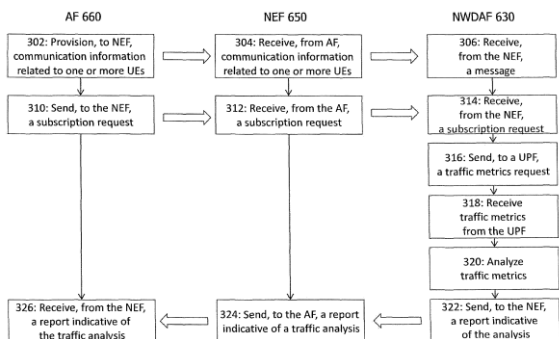


Fig. 5C

21: 2022/02098. 22: 2022/02/18. 43: 2022/09/12

51: E05B; E05C

71: ULTRAFAB (PROPRIETARY) LIMITED

72: VAN NIEKERK, HENDRIK JOHANNES

33: ZA 31: 2021/01102 32: 2021-02-18

**54: SECURITY LOCK**

00: -

This invention concerns a security lock for use with a lock unit. The security lock includes a base locatable inside a casing and an elongate locking bolt. The bolt is operable between a first, operative position in which an end projects from the base and a second, inoperative position in which the end is substantially withdrawn. First biasing means is used to bias the bolt towards its inoperative position such that it is, in use, moved against the spring bias from its inoperative to its operative position. The lock further includes a locking mechanism comprising a catch which is, in use, operable by the lock unit such that unlocking the lock unit operates the catch into its unlocked state to release the locking bolt to move from its operative position to its inoperative position under the action of the first biasing means. Second biasing means is used for biasing the catch towards its first, locked state such that the catch automatically secures the locking bolt in its operative position.

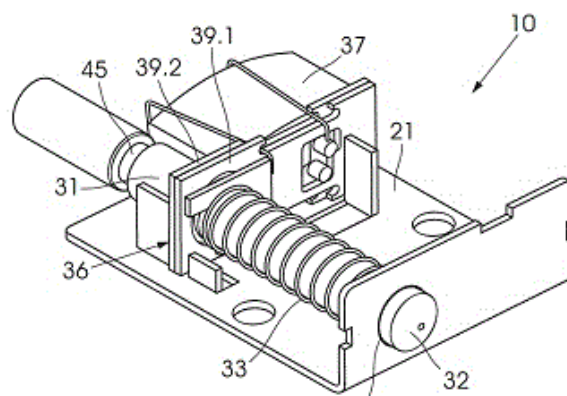


Fig. 2

21: 2022/02100. 22: 2022/02/18. 43: 2022/09/01

51: F04B; F16J

71: IPTREE TRUST (TRUST NUMBER 503/2009)

72: BÜHRMANN, Rudolph, BÜHRMANN, Rudolph Teodor

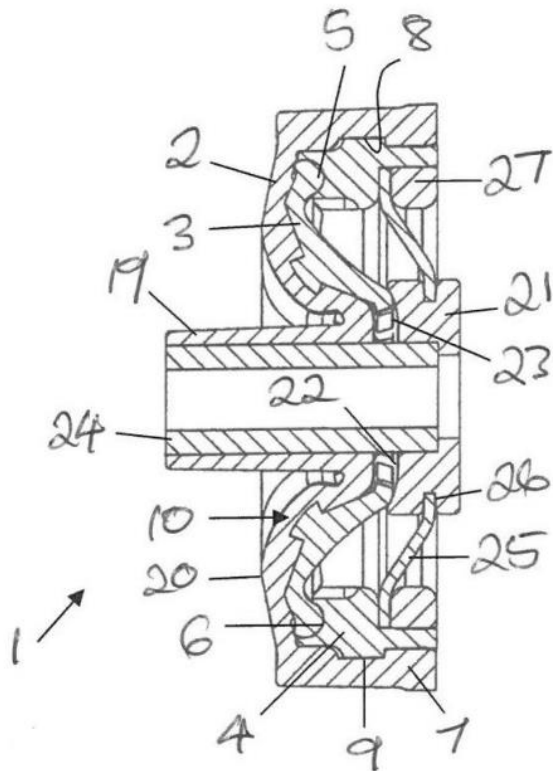
33: ZA 31: 2021/01132 32: 2021-02-19

**54: A SEALING DIAPHRAGM**

00: -

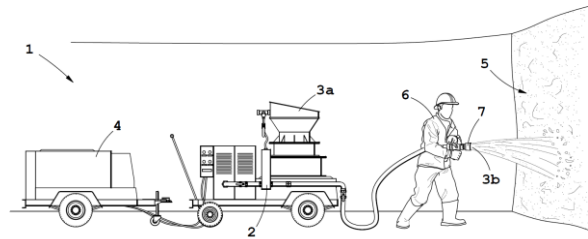
The invention relates to a diaphragm assembly comprising a flexible diaphragm overlying a closely packed radial arrangement of rigid segments with outer edges of the segments hingedly retained on a rigid annular base, the segments movable with the diaphragm between a first, retracted condition and a second, extended condition. Two such diaphragm

assemblies can be arranged to either side of a valve closure with the parts provided to have substantially the same displacement volume for operation in unison and use as a pump chamber delivery valve.



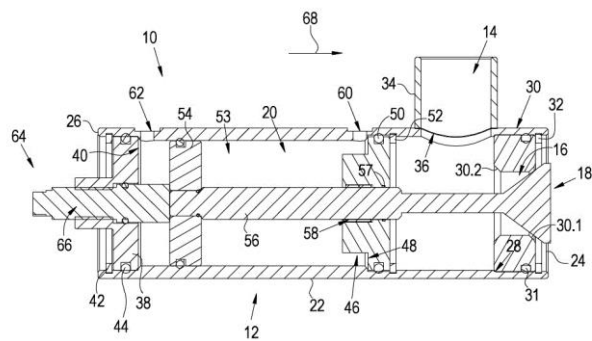
21: 2022/02105. 22: 2022/02/18. 43: 2022/08/29  
 51: E21F  
 71: THASASA (PTY) LTD  
 72: MAKHETHA, Masasa Ronald  
 33: ZA 31: 2020/07242 32: 2020-11-20  
**54: METHOD FOR APPLYING STONE DUST**  
 00: -

This invention relates to a method for applying stone dust and more specifically, but not exclusively, to a method for applying stone dust in an underground mine. In accordance with the invention there is provided a method for applying stone dust comprising: providing a pneumatic projecting apparatus; filling the apparatus with dry stone dust; providing a pneumatic pressure source to the apparatus; and operating the apparatus to project the dry stone dust to an area in an underground mine. It is envisaged that the invention will provide a simple, fast, and time-effective method for applying stone dust to a confined area in an underground mine in order to prevent coal dust explosions.



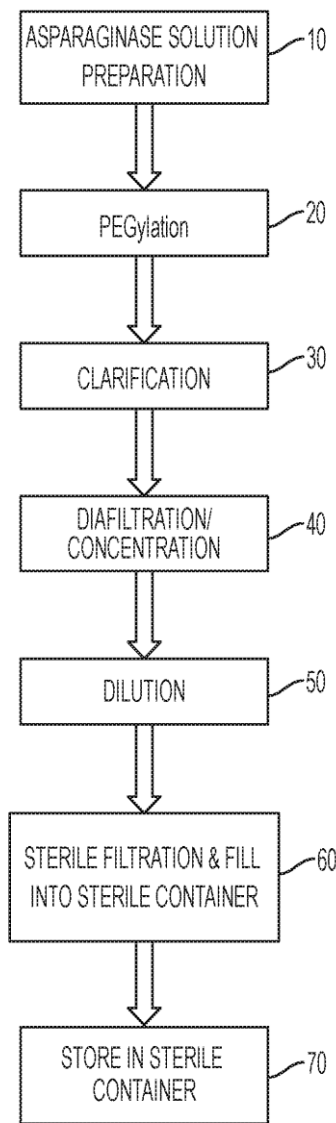
21: 2022/02224. 22: 2022/02/22. 43: 2022/09/08  
 51: B05B; F15D  
 71: Afri-Tech Mining Supplies (Pty) Limited  
 72: Richard, ARENDS  
 33: ZA 31: 2021/01414 32: 2021-03-02  
**54: A Nozzle**

00: -  
 The invention provides a nozzle 10 which includes a body 12, an inlet 14 which is connectable to a fluid source and an outlet 16 which is spaced from and connected in flow communication with the inlet 14. The nozzle 10 includes a throttle element 18 and a displacement arrangement 20 whereby the throttle element 18 is displaceable relative to the body 12 from a rest or operative condition in which the throttle element 18 and outlet 16 together define a discharge opening, and a displaced or flushed condition in which the spacing between the throttle element 18 and outlet 16 is increased to permit foreign matter to be discharged from the nozzle.



21: 2022/02259. 22: 2022/02/23. 43: 2022/10/03  
 51: A61K  
 71: SERVIER IP UK LIMITED  
 72: FORNASINI, Gianfranco, SOUKHAREVA, Nadejda, PHILLIPS, Christopher  
 33: US 31: 62,344,249 32: 2016-06-01  
 33: US 31: 62/344,252 32: 2016-06-01  
 33: US 31: 62/344,256 32: 2016-06-01  
**54: FORMULATIONS OF POLYALKYLENE OXIDE-ASPARAGINASE AND METHODS OF MAKING AND USING THE SAME**

00: -  
 Aspects of the invention include polyalkylene oxide-asparaginase compositions. In some instances, the composition is a lyophilized storage stable composition. In some instances, the lyophilized compositions include one or more of a buffer, a salt, and a sugar. Aspects of the invention further include methods of making the compositions. The compositions find use in a variety of applications, e.g., in the treatment of a neoplastic condition in a subject.



21: 2022/02260. 22: 2022/02/23. 43: 2022/08/30  
 51: B64D

71: AERODYNE RESEARCH MANUFACTURING (PTY) LTD

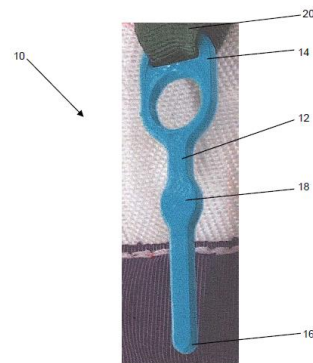
72: GODWIN, Robert Alexander

33: ZA 31: 2021/01263 32: 2021-02-25

**54: A QUICK RELEASE PIN**

00: -

The invention provides closing pin for use in combination with a closing loop in a quick release system. The closing pin comprises an elongated shank receivable in use by the closing loop and a protrusion is located partway along the length of the shank and configured to interact with the closing loop to delay the premature removal of the pin from the quick release system.



21: 2022/02370. 22: 2022/02/24. 43: 2022/09/14  
 51: C12N

71: G Tech Bio LLC

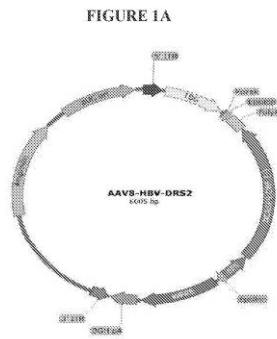
72: GUMRUKCU, Serhat

33: US 31: 62/893,460 32: 2019-08-29

**54: COMPOSITIONS AND METHODS FOR TREATING VIRAL INFECTIONS**

00: -

The disclosure provides methods and compositions utilizing recombinant nucleic acid constructs or a replication incompetent virus-like particle encoding a chemokine, cytokine, or apoptosis inducing protein (e.g. Caspase 9 (Casp9)), or other toxins in a form which can only be transcribed in the presence of a viral polymerase. These methods can be adapted to target many viral infections and reduce or eliminate viral load, and provide a fundamentally different treatment for viral infections.



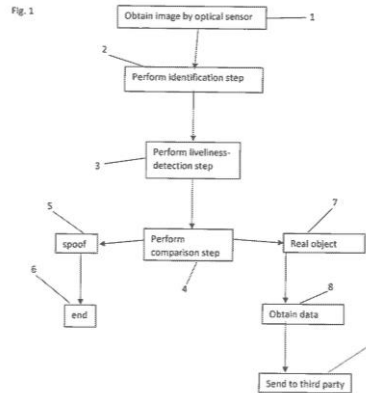
21: 2022/02374. 22: 2022/02/24. 43: 2022/09/01  
 51: G06K  
 71: Identy Inc.

72: GUPTA, Hardik, MURUGAN, Sathesh,  
 BHASKARAN, Saneesh  
 33: IN 31: 201941036800 32: 2019-09-12

**54: A METHOD FOR OBTAINING DATA FROM AN IMAGE OF AN OBJECT OF A USER THAT HAS A BIOMETRIC CHARACTERISTIC OF THE USER**  
 00: -

A method for obtaining data from an image of an object of a user that has a biometric characteristic of the user, like a fingerprint or a set of fingerprints of fingertips, a palm of the hand of the user, a face of the user, an eye of the user, a bottom of a foot of the user, the method comprising: on a mobile device, performing the following steps: obtaining, by an optical sensor of the mobile device, the image of the object wherein the image contains either the spoof or the real object; processing, in an identification-step, the image, thereby identifying both, the position of the object and the object in the image; wherein processing further comprises a liveness-detection step, comprising calculating at least one of: a distance map representative of a distance of a plurality of pixels to the optical sensor, the pixels constituting at least a portion of the object within the image; a reflection pattern representative of light reflection associated with a plurality of pixels constituting at least a portion of the object within the image; and wherein processing further comprises a comparison-step comprising comparing at least one of the calculated distance map or the calculated reflection pattern with a known distance map or a known reflection pattern, thereby determining, based on an outcome of the comparison, that the image contains either the spoof or the real object; obtaining, from the image, after the processing, data

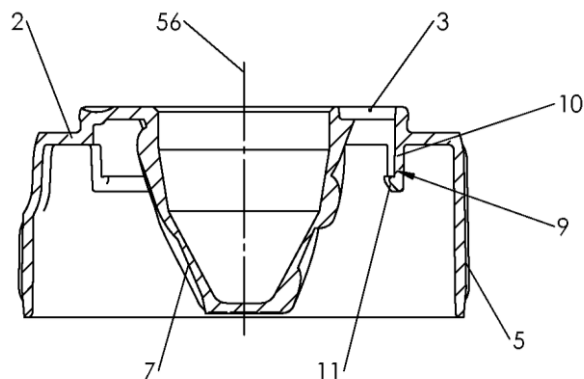
comprising at least the biometric characteristic and optionally storing the data in a storage device; sending, to a third party computing device, data comprising at least the biometric characteristic.



21: 2022/02578. 22: 2022/03/02. 43: 2022/09/14  
 51: A47J

71: JOMA KUNSTSTOFFTECHNIK GMBH  
 72: FRIES, Rudolf  
 33: AT 31: A 50900/2019 32: 2019-10-18  
**54: UPPER PART FOR A SPICE MILL**  
 00: -

The invention relates to an upper part (1) for a spice mill (15), consisting at least partly of a plastic material and having the following: - an upper cover surface (2) with at least one opening (3), in particular a through-opening (4) for ground spices, - a circumferential lateral surface (5), and - a milling element (7) or a mounting for the milling element (7), wherein a preferably elastically deformable snap-action element (9), by which the upper part (1) can be rotatably connected to a lower part (16), is arranged so as to be flush with the opening (3) in plan view.



21: 2022/02611. 22: 2022/03/03. 43: 2022/09/27  
 51: B60J  
 71: MANITOU ITALIA S.R.L.  
 72: IOTTI, MARCO  
 33: IT 31: 102021000008540 32: 2021-04-06  
**54: TELEHANDLER WITH FACILITATED ASCENT AND DESCENT**

00: -  
 Described is a telehandler equipped with a carriage movable on wheels and a driver's cab (1), located above the carriage, which comprises an access door (10) equipped with two side jambs (11, 12), to each of which is fixed a continuous handle (2, 3) the length of which is greater than half the length of the respective jamb (11, 12).

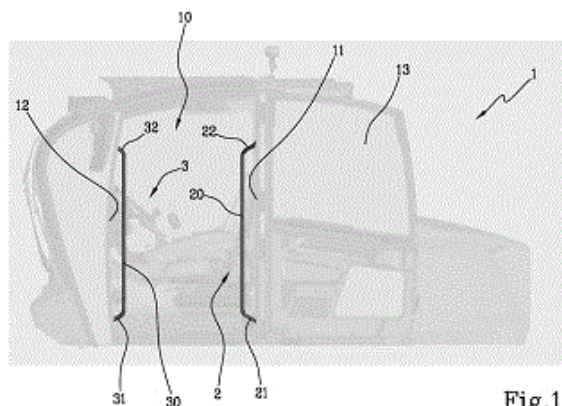


Fig.1

21: 2022/02617. 22: 2022/03/03. 43: 2022/09/27  
 51: A61K; A61P  
 71: BEIGENE, LTD.  
 72: JIANG, Beibei, YANG, Liu, CHEN, Cheng  
 33: CN 31: PCT/CN2019/105418 32: 2019-09-11  
**54: TREATMENT OF CANCER USING A COMBINATION COMPRISING MULTI-TYROSINE KINASE INHIBITOR AND IMMUNE CHECKPOINT INHIBITOR**  
 00: -

Provided herein is a method for the prevention, delay of progression or treatment of cancer in a subject, comprising administering to the subject in need thereof a multi-tyrosine kinase inhibitor, N- (3-fluoro-4- ( (2- (5- ( (2-methoxyethyl) amino) methyl) pyridin-2-yl) thieno [3, 2-b] pyridin-7-yl) oxy) phenyl) - N- (4-fluorophenyl) cyclopropane-1, 1-dicarboxamide or a pharmaceutically acceptable salt thereof, in combination with an immune checkpoint inhibitor. Also, provided a pharmaceutical combination comprising a multi-tyrosine kinase inhibitor, N- (3-fluoro-4- ( (2- (5- ( (2-methoxyethyl) amino) methyl) pyridin-2-yl) thieno [3, 2-b] pyridin-7-yl) oxy) phenyl) - N- (4-fluorophenyl) cyclopropane-1, 1-dicarboxamide or a pharmaceutically acceptable salt thereof, in combination with an immune checkpoint inhibitor and the use thereof.

21: 2022/02670. 22: 2022/03/04. 43: 2022/09/15  
 51: G01N  
 71: BIOLOGICAL E LIMITED  
 72: BURKI, Rajendar, MATUR, Ramesh Venkat, MANTENA, Narender Dev, DATLA, Mahima  
 33: IN 31: 201941039796 32: 2019-10-01  
**54: METHODS FOR QUANTIFICATION OF CARBOHYDRATES**

00: -  
 The present invention provides a colorimetric based method for quantifying carbohydrates in a given aqueous sample. The method provided by the invention uses 2-Phenoxyethanol as a novel reagent for quantifying carbohydrates in a given sample. The present invention is a rapid, sensitive, simple and direct method for carbohydrate quantification.

21: 2022/02722. 22: 2022/03/07. 43: 2022/09/27  
 51: C23C; G05B  
 71: ARCELORMITTAL  
 72: Diego DIAZ FIDALGO, Silvano FERNANDEZ ALZUETA, Segundo ALVAREZ GARCIA, David MENDEZ HERES  
 33: IB 31: PCT/IB2019/059691 32: 2019-11-12  
**54: METHOD FOR SCHEDULING PRODUCTION ON A CONTINUOUS GALVANIZING LINE**

00: -  
 The invention relates to a method for setting the production schedule of a multiplicity of galvanized coils of metallic strip on a continuous galvanizing line, the method comprising the steps of evaluating, for each possible combination of two uncoated coils,

the impact of the transition from the first uncoated coil to the second uncoated coil on the quality of the galvanized coils, allocating to each possible combination of uncoated coils a weighting factor which depends on the results of the previous step and which takes into account the line constraints, computing the results of the previous step by calculating, for a number of possible schedules of the multiplicity of uncoated coils, a score which depends on the sum of the weighting factors attributed to the combinations of uncoated coils involved in the given schedule and by selecting the schedule with the optimal score.

21: 2022/02783. 22: 2022/03/08. 43: 2022/09/27  
 51: F16K  
 71: EDUAN TEK VERVAARDIGING BK  
 72: JOHANNES JACOBUS NAUDÉ  
 33: ZA 31: 2021/01606 32: 2021-03-10  
**54: A PIN OPERATED VALVE**  
 00: -

The invention provides a valve for altering the liquid flow rate in a liquid passage. The valve comprises a housing unit having a liquid passage through it and means at one end of the housing unit for connecting the housing to a supply of liquid under pressure; a seal located concentrically around the liquid passage wherein the inner diameter of the seal is exposed to the liquid passage; a valve pin including a cylindrical pin section at one end and a taper down section at the other end, the valve pin being axially displaceable in the liquid passage between a closed position in which the valve is closed with the cylindrical pin section sealing against the inner diameter of the seal, an progressively open position where the tapered down pin section traverses the inner diameter of the seal.

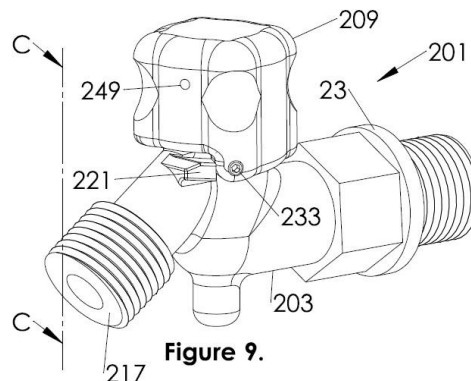
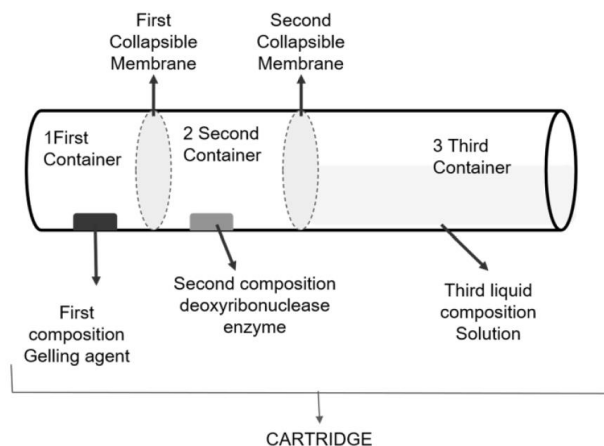


Figure 9.

21: 2022/02798. 22: 2022/03/08. 43: 2022/09/26  
 51: A61K; C07D; C12N  
 71: CONSEJO NACIONAL DE INVESTIGACIONES CIENTIFICAS Y TECNICAS, UNIVERSIDAD NACIONAL DE TUCUMAN, UNTECH INC.  
 72: VERNIERI, Alberto Ramos, DE LOS ANGELES LAZARTE, Maria, CHAVEZ JARA, Romina Mabel, CERUSICO, Nicolas Abel  
 33: US 31: 62/896,784 32: 2019-09-06  
**54: PHARMACEUTICAL COMPOSITION FOR TOPICAL WOUND TREATMENT**  
 00: -

A pharmaceutical composition for topical wound treatment comprising one or more nitrogenous heterocyclic compound of 5 or 6 atoms with imide group; one or more deoxyribonuclease enzyme with activity pH between 4.5 and 6.5; and one or more carboxylic acid; kits and process to obtain this pharmaceutical composition and uses for wounds treatment.



21: 2022/02804. 22: 2022/03/08. 43: 2022/09/26  
 51: C03C  
 71: JUSHI GROUP CO., LTD.

72: ZHANG, LIN, XING, WENZHONG, CAO, GUORONG, YAO, ZHONGHUA

33: CN 31: 202010664254.9 32: 2020-07-10

**54: HIGH MODULUS GLASS FIBER COMPOSITION, GLASS FIBER THEREOF, AND COMPOSITE MATERIAL**

00: -

A high modulus glass fiber composition, a glass fiber thereof, and a composite material. The content of each component of the glass fiber composition, expressed in percentage by weight, is as follows: 42-56.8% SiO<sub>2</sub>; 15.8-24% Al<sub>2</sub>O<sub>3</sub>; 9.2-18% MgO; 0.1-6.5% CaO; greater than 8% and less than or equal to 20% Y<sub>2</sub>O<sub>3</sub>; 0.01-4% TiO<sub>2</sub>; 0.01-1.5% Fe<sub>2</sub>O<sub>3</sub>; 0.01-1.5% Na<sub>2</sub>O; 0-1.5% K<sub>2</sub>O; 0-0.7% Li<sub>2</sub>O; 0-3% SrO; and 0-2.9% La<sub>2</sub>O<sub>3</sub>; the total content of the described components is greater than or equal to 98%, and the range of the percentage by weight ratio  $C1 = Y_2O_3/CaO$  is greater than or equal to 2.1. The glass fiber composition significantly increases the glass fiber modulus, reduces the glass fining temperature and bubble rate, and also significantly improves the ability of the glass fiber to cool, and effectively reduces the glass crystallization rate. The glass fiber composition is suited to large-scale production of high-modulus glass fiber.

21: 2022/02862. 22: 2022/03/09. 43: 2022/09/15

51: C01B; C01G; C25B; B82Y

71: Qingdao University of Science and Technology

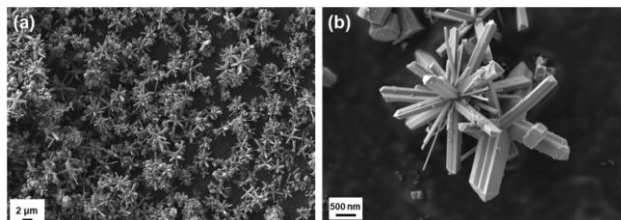
72: Jianjian LIN, Mengyou GAO, Dehua ZHENG, Zhongxin JING, Huizhong XU, Lei SUN

**54: A SULFUR DOPED IRON SELENIDE NANOROD MATERIAL, PREPARATION METHOD AND APPLICATION**

00: -

The invention belongs to the technical field of electrocatalytic decomposition of water, in particular to a sulfur doped iron selenide nanorod material and a preparation method and application thereof, comprising the following steps: S1. Dissolve sulfur powder, selenium powder and soluble iron salt in solvent under shielding gas atmosphere to prepare mixture; S2. Heat treat the mixture prepared by S1 at 100-250 °C, then cool to room temperature, purify and prepare sulfur doped iron selenide nanorod material; The invention uses sulfur powder, selenium powder and soluble iron salt as raw materials to prepare sulfur doped iron selenide nanorod material by one-step hydrothermal method, which is used as OER electrochemical catalyst to improve catalytic activity; The raw materials are easy to obtain, the

price is cheap, and the synthesis process is simple, which greatly reduces the production cost, which provides a new path for the discovery and research of high activity and low-cost iron-based electrolytic water catalysts in the future, and is expected to play an important role in a wider emerging field.



21: 2022/02873. 22: 2022/03/09. 43: 2022/09/28

51: C21B; C21C; F27D; G01B; G01M; G01N

71: ARCELORMITTAL

72: Pablo GÓMEZ GARCÍA, José Paulino FERNANDEZ ALVAREZ, Ignacio BAQUET GONZÁLEZ, José Tomás SÍMARO, Ignacio HERRERO BLANCO, Enol FERNÁNDEZ DIÉGUEZ, Carlos Javier SUÁREZ LÁZARE

33: IB 31: PCT/IB2019/060326 32: 2019-11-29

**54: SYSTEM AND METHOD FOR ESTIMATING BOTH THICKNESS AND WEAR STATE OF REFRACTORY MATERIAL OF A METALLURGICAL FURNACE**

00: -

The invention relates mainly to a system for estimating both thickness and wear state of refractory material (1) of a metallurgical furnace (12), comprising at least processing means comprising a database of simulated frequency domain data named simulated spectra representing simulated shockwaves reflected in simulated refractory materials of known state and thickness, each simulated spectrum being correlated with both known state and thickness data of the considered simulated refractory material, wherein the processing means are configured to record a reflected shock wave as a time domain signal, and to convert it into frequency domain data named experimental spectrum, and are further configured to compare the experimental spectrum with at least a plurality of simulated spectra from the database, to determine the best fitting simulated spectrum with the experimental spectrum and to estimate thickness and state of the refractory material (1) of the furnace (12) using known state and thickness data correlated with the best fitting simulated spectrum.



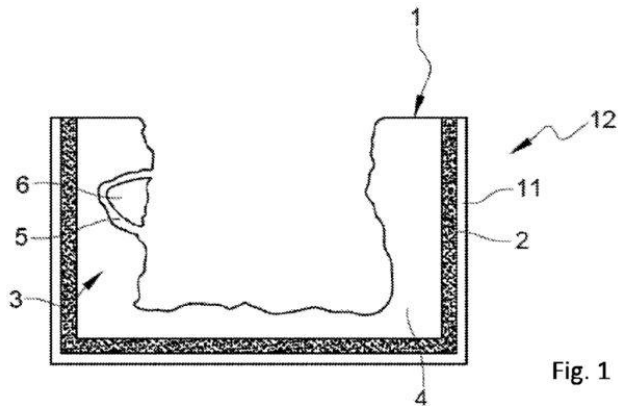


Fig. 1

21: 2022/02874. 22: 2022/03/09. 43: 2022/09/28

51: B29C; B29D; B29K

71: ALEPH SAS

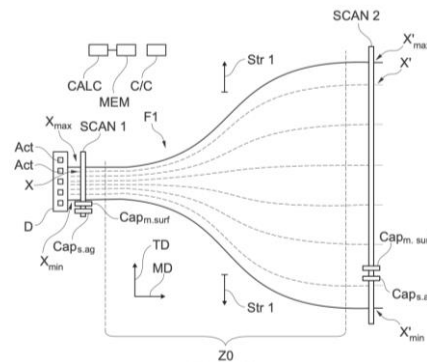
72: GAUDAEN, Jan

33: FR 31: FR1910947 32: 2019-10-03

**54: A METHOD OF MANUFACTURING A FILM INCLUDING CAVITIES, WITH PROFILES BEING DETERMINED FOR STRETCH, DENSITY, THICKNESS AND/OR POROSITY OF THE FILM**

00: -

A method of manufacturing a film (F1) including cavities and formed from a polymer in which a cavitating agent is dispersed, said method including a step of extruding the polymer through an extrusion die equipped with adjustment actuators for adjusting thickness of the extruded film, and a step of stretching (Str1) the film, as well as establishing a mapping function of the film on the basis of mass-per-unit-area profiles of the film before and after the stretching step, establishing a stretch profile of the film as stretched on the basis of said mapping function and of said transverse mass-per-unit-area profiles, and establishing a characteristic transverse profile that is characteristic of the film on the basis of said stretch profile and of a transverse profile of the concentration by mass of cavitating agent in the film as stretched that makes it possible to take into account the distribution of the cavities in the film; in which method said adjustment actuators are controlled as a function of said characteristic transverse profile.



21: 2022/02893. 22: 2022/03/10. 43: 2022/09/26

51: B66C

71: MANITOU ITALIA S.R.L.

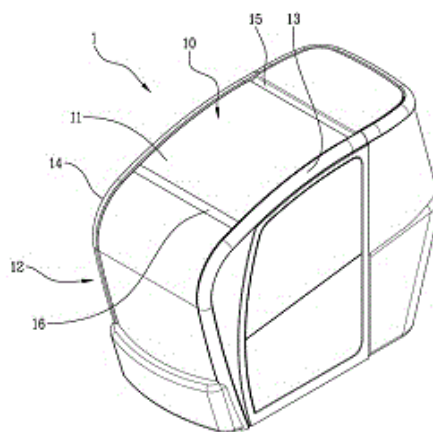
72: IOTTI, MARCO

33: IT 31: 102021000006734 32: 2021-03-19

**54: TELEHANDLER PROVIDED WITH IMPROVED CAB**

00: -

Described is a telehandler having a cab (1) equipped with a roof (10) defined by a transparent or semi-transparent protective cover (11) which comprises one or more materials designed to withstand the falling of hazardous material for the safety of an operator onboard the cab (1). The cover includes a plurality of layers made of polymeric material, including one made of polycarbonate or polyurethane.



21: 2022/02927. 22: 2022/03/10. 43: 2022/09/08

51: A61K

71: OmniActive Health Technologies Limited

72: T. K., Sunil Kumar, NALAWADE, Pravin, LAL, Jangir Mohan, MORDE, Abhijeet, THAKARE, Ravindra

33: IN 31: 201921041676 32: 2019-10-15

**54: XANTHOPHYLL COMPOSITION COMPRISING LUTEIN AND ZEAXANTHIN WITH ENHANCED BIOAVAILABILITY**

00: -

The present invention relates to a xanthophyll composition comprising selective isomers of trans-R,R lutein and trans-R,R zeaxanthin in preferred particle size and pharmaceutically and/or nutraceutically acceptable excipients such as carriers, solubility enhancers, bioavailability enhancing agents, antioxidants and optionally flavoring agents with selective ratio which exerts enhanced bioavailability. The xanthophyll composition at least 80% of total xanthophyll comprised of at least 65% by weight of trans-R,R lutein and at least 10 % by weight of trans-R,R zeaxanthin, which is prepared combinedly from marigold and paprika oleoresins with definite proportion to produce the preferred ratio of trans-R,R lutein and trans-R,R zeaxanthin.

21: 2022/02931. 22: 2022/03/10. 43: 2022/09/08

51: A61M; G16H; G16C

71: UNIVERSITY OF CAPE TOWN

72: COETZEE, Etienne

33: GB 31: 1911611.0 32: 2019-08-14

**54: SYSTEM AND METHOD FOR INFUSION OF DRUGS**

00: -

The invention provides a user-guidance device for informing a required change to a pump volume displacement parameter of a manual drug infusion pump assembly, for use with manually-controlled infusion of a drug into a patient. The user-guidance device comprises a measurement component arranged to measure the pump volume displacement parameter. The device further comprises a computing device arranged to calculate a measured rate of infusion of the drug based on the measured pump volume displacement parameter; and to calculate with reference to said measured rate of infusion and to at least one model selected from the group consisting of pharmacokinetic and pharmacodynamic models, a model-simulated drug concentration in the patient. The computing device may be arranged to derive user-guidance information based on the model-simulated drug concentration. The invention also provides a drug infusion system which includes the disclosed user-

guidance device in combination with a manual drug infusion pump assembly.

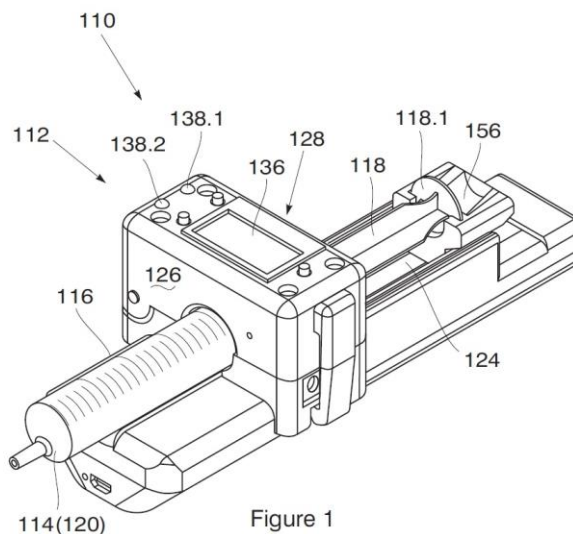


Figure 1

21: 2022/02932. 22: 2022/03/10. 43: 2022/10/10

51: A61K; C07D; A61P

71: SHENZHEN SALUBRIS PHARMACEUTICALS CO. LTD

72: WU, Junjun, LU, Yinsuo, XIAO, Ying, HONG, Zexin, WU, Jianli, XING, Wei

33: CN 31: 201910923960.8 32: 2019-09-27

33: CN 31: 201911318870.2 32: 2019-12-19

33: CN 31: 202010902000.6 32: 2020-09-01

**54: FXIA INHIBITORS AND PREPARATION METHOD THEREFOR AND PHARMACEUTICAL USE THEREOF**

00: -

Provided in the present invention is a series of selective Factor XIa (FXIa) inhibitors, relating to the technical field of chemical drugs. The present invention also relates to pharmaceutical compositions containing said compounds and a use of said compounds in drugs for the treatment of diseases such as thromboembolism.

21: 2022/02964. 22: 2022/03/11. 43: 2022/09/08

51: A01K

71: NANJING INSTITUTE OF ENVIRONMENTAL SCIENCES, MINISTRY OF ECOLOGY AND ENVIRONMENT OF THE PEOPLE'S REPUBLIC OF CHINA

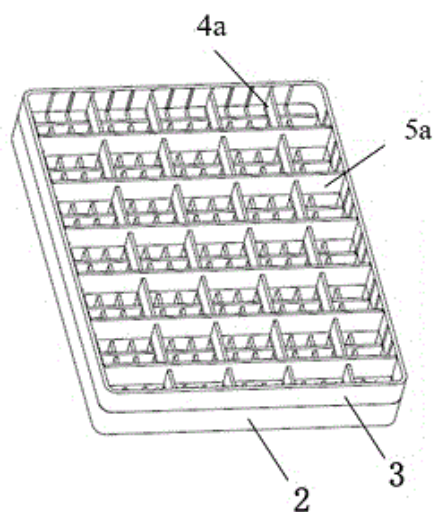
72: LIAO, JIANHUA, XU, WEILI, ZHU, YUXUAN, SHAN, DIDI, SHENG, YULIANG, WANG, HONGWEI, YAN, XINLI, YU, YUE, SHI, LILI

33: CN 31: 2021115444 24.0 32: 2021-12-16

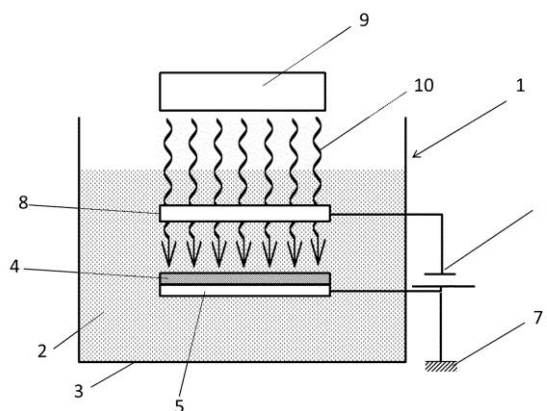
**54: GROUPED HATCHING INCUBATOR TRAY APPARATUS FOR QUAILS FOR TEST**

00: -

The present invention discloses a grouped hatching incubator tray apparatus for quails for test. The apparatus comprises a quail hatching incubator tray for a test, an upper cover and a supporting net. The present invention meets a demand on quail grouped hatching for a test and accords with a demand on relevant state chemical and pesticide environment safety evaluation test criterion. The present invention is high in operability, and the device is simple in structure and convenient to assemble, manufacture and maintain. Through practical operations, the test time is saved and the work efficiency is improved.



photons are sent onto the surface of the substrate. To this end, the invention also relates to a device for liquid phase synthesis of carbonaceous films comprising a synthesis vessel inside which are arranged means for applying a voltage in a reaction zone, and photonic means arranged to send photons towards the reaction zone.



21: 2022/02977. 22: 2022/03/11. 43: 2022/09/27  
51: C23C

71: ARCELORMITTAL

72: Frida GILBERT, Lydia RACHIELE, Delphine THAI, Christian ALLELY

33: IB 31: PCT/IB2020/059548 32: 2019-10-16

**54: METAL SHEET TREATMENT METHOD AND METAL SHEET TREATED WITH THIS METHOD**

00: -

The invention relates to a steel substrate coated on at least one of its faces with a metallic coating based on zinc or its alloys wherein the metallic coating is itself coated with a conversion layer comprising: - zincsulphate hydrate, - aluminium in an amount up to 14 mg.m<sup>-2</sup>, wherein the conversion layer comprises neither zinc hydroxysulphate, nor free water molecules nor any compounds having free hydroxyl groups, the surface density of sulphur in the conversion layer being greater than or equal to 5.0 mg/m<sup>2</sup>. The invention also relates to the corresponding treatment method.

21: 2022/02976. 22: 2022/03/11. 43: 2022/09/08

51: C25B; C25D; C30B

71: DIAROTECH SA

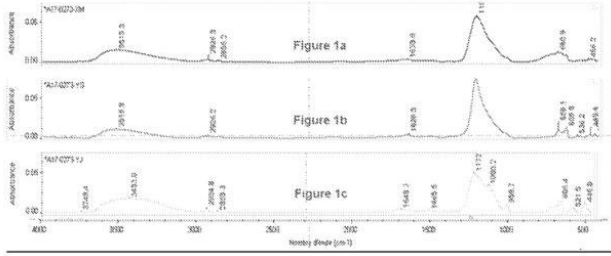
72: TELLEZ OLIVA, Horacio J., BALTHASART, Etienne

33: BE 31: BE2019/5605 32: 2019-09-11

**54: METHOD AND DEVICE FOR SYNTHESIS OF DIAMOND AND ALL OTHER ALLOTROPIC FORMS OF CARBON BY LIQUID PHASE SYNTHESIS**

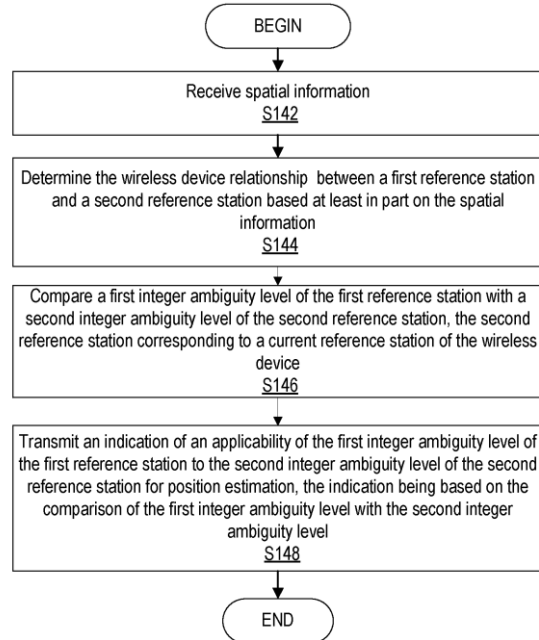
00: -

The invention relates to the field of liquid phase synthesis of diamond or all other allotropic forms of carbon and more particularly to a method for liquid phase synthesis of carbonaceous films, according to which a voltage is applied, in a solution containing carbonaceous molecules, to a substrate on which it is sought to deposit a carbonaceous layer and



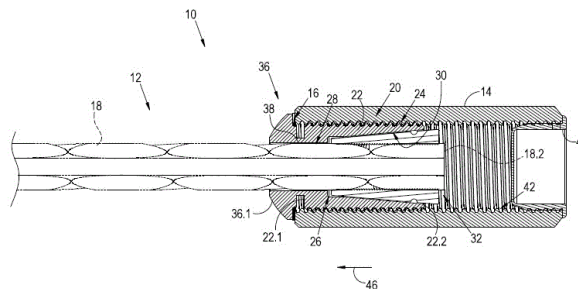
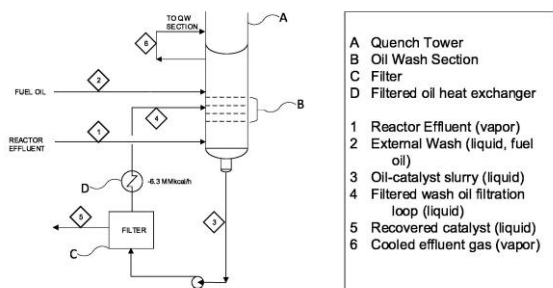
21: 2022/02988. 22: 2022/03/11. 43: 2022/09/27  
 51: G01S  
 71: TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)  
 72: GUNNARSSON, Fredrik, MODARRES RAZAVI, Sara, SHREEVASTAV, Ritesh  
 33: US 31: 62/910,131 32: 2019-10-03  
**54: METHODS FOR INDICATION OF REFERENCE STATION GNSS RTK INTEGER AMBIGUITY LEVEL**

00: -  
 According to one aspect of the disclosure, a location node configured to communicate with a wireless device is provided. The location node includes processing circuitry configured to: receive spatial information; determine the wireless device relationship between a first reference station and a second reference station based at least in part on the spatial information; compare a first integer ambiguity level of the first reference station with a second integer ambiguity level of the second reference station, the second reference station corresponding to a current reference station of the wireless device; and transmit an indication of an applicability of the first integer ambiguity level of the first reference station to the second integer ambiguity level of the second reference station for position estimation, the indication being based on the comparison of the first integer ambiguity level with the second integer ambiguity level.



21: 2022/02993. 22: 2022/03/11. 43: 2022/09/12  
 51: B01J  
 71: Kellogg Brown & Root LLC  
 72: REYNEKE, Rian, URQUIAGA, Jose Manuel, VU, Truc, CATON, Jeffrey Donald  
 33: US 31: 16/570,029 32: 2019-09-13  
**54: USE OF A FUEL OIL WASH TO REMOVE CATALYST FROM A FLUIDIZED-BED PROPANE DEHYDROGENATION REACTOR EFFLUENT**

00: -  
 A process where external fuel oil is used to wash entrained catalyst from a fluidized-bed propane dehydrogenation reactor effluent, where the fuel oil and catalyst mixture is returned to the reactor to provide the net fuel required for catalyst regeneration. Optionally the fluidized-bed propane dehydrogenation reactor effluent and the fuel oil are contacted in a direct contact inline device before entering a flash zone in the reactor vessel.



21: 2022/02997. 22: 2022/03/11. 43: 2022/09/08  
 51: A01H; C07K; C12N  
 71: BIOTECHNOLOGY RESEARCH INSTITUTE ,  
 CHINESE ACADEMY OF AGRICULTURAL  
 SCIENCES

72: PU, Li, YU, Jia, XU, Fan

33: CN 31: 201910742857.3 32: 2019-08-13

**54: APPLICATION OF ZM5008 IN REGULATING  
 PLANT HEIGHT AND INTERNODE LENGTH IN  
 MAIZE**

00: -

This invention discovered the application of gene Zm5008 and its encoded protein Zm5008 in regulating maize plant height and/or internode length. This invention also found the application of the RNA inhibiting Zm5008 protein activity or inhibiting Zm5008 expression in regulating maize plant height and/or internode length.

21: 2022/03053. 22: 2022/03/15. 43: 2022/09/08  
 51: E21D  
 71: LULL STORM TRADING (PTY) LTD.  
 72: WILSON, Langdon Roger  
 33: ZA 31: 2021/03163 32: 2021-05-11

**54: A Rock Anchor**

00: -

The invention provides a rock anchor 10 which includes an elongate anchor element 12 and a tensioning nut 14 which is screw threadedly mounted on the anchor element 12. The rock anchor 10 further includes a stop 16 which is configured to inhibit relative rotation between the nut 14 and the anchor element 12 when the torque applied to the nut 14 is below a predetermined torque and to permit relative rotation between the nut 14 and the anchor element 12 when the torque applied to the nut 14 exceeds the predetermined torque. The invention further relates to a rock anchor component and a rock anchor kit.

21: 2022/03080. 22: 2022/03/15. 43: 2022/09/08  
 51: B65D; B29C

71: SACMI COOPERATIVA MECCANICI IMOLA  
 SOCIETÀ COOPERATIVA

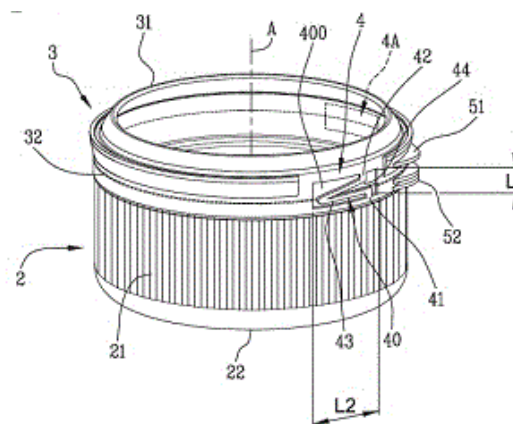
72: ZUFFA, ZENO

33: IT 31: 102021000006557 32: 2021-03-18

**54: CAP FOR A CONTAINER**

00: -

A cap for a container comprises: a body (2), configured to be coupled and uncoupled relative to the neck of the container and including an internally threaded side wall (21), which extends around a longitudinal axis (A), and a transverse wall (22); a tamper evident ring (3), including a retaining element (31), configured to engage a locking member on the neck of the container, and a joining portion (32), where the tamper evident ring (3) is joined to the cap body (2), the joining portion (32) being configured to be torn along a perimeter surrounding the longitudinal axis (A) in response to a movement of the body (2) away from the tamper evident ring (3), wherein the cap comprises a connecting window (4) including a connecting band (40) and a film (400) which is thinner than the connecting band (40).



21: 2022/03098. 22: 2022/03/15. 43: 2022/09/26  
 51: B32B; C21D; C22C; C23C

71: ARCELORMITTAL

72: Raisa GRIGORIEVA, Florin DUMINICA, Brahim NABI, Pascal DRILLET, Thierry STUREL

33: IB 31: PCT/IB2019/059287 32: 2019-10-30

**54: A PRESS HARDENING METHOD**

00: -

The present invention relates a press hardening method comprising the following steps: A. the provision of a steel sheet for heat treatment, being optionally precoated with a zinc- or aluminum-based pre-coating, B. The deposition of a hydrogen barrier pre-coating comprising chromium and not comprising nickel over a thickness from 10 to 550 nm, C. the cutting of the precoated steel sheet to obtain a blank, D. the heat treatment of the blank at a furnace temperature from 800 to 970°C, during a dwell time from 1 to 12 minutes, in an atmosphere having an oxidizing power equal or higher than that of an atmosphere consisting of 1 % by volume of oxygen and equal or smaller than that of an atmosphere consisting of 50% by volume of oxygen, such atmosphere having a dew point between -30 and +30°C, E. the transfer of the blank into a press tool, F. the hot-forming of the blank at a temperature from 600 to 830°C to obtain a part, G. the cooling of the part obtained at step E) to obtain a microstructure in steel being martensitic or martensito-bainitic or made of at least 75 % in terms of volume fraction of equiaxed ferrite, from 5 to 20 % in volume of martensite and bainite in amount less than or equal to 10 % in volume.

21: 2022/03099. 22: 2022/03/15. 43: 2022/09/26

51: B32B; C21D; C22C; C23C

71: ARCELORMITTAL

72: Raisa GRIGORIEVA, Florin DUMINICA, Brahim NABI, Pascal DRILLET, Thierry STUREL

33: IB 31: PCT/IB2019/059288 32: 2019-10-30

**54: A PRESS HARDENING METHOD**

00: -

The present invention relates a press hardening method comprising the following steps: A. the provision of a steel sheet for heat treatment being optionally coated with a zinc- or aluminum-based pre-coating, B. the flexible rolling of the steel sheet in the rolling direction so as to obtain a steel sheet having a variable thickness, C. the cutting of the rolled steel sheet to obtain a tailored rolled blank, D. the deposition of a hydrogen barrier pre-coating over a thickness from 10 to 550 nm, E. the heat treatment of the tailored rolled blank to obtain a fully austenitic

microstructure in the steel, F. the transfer of the tailored rolled blank into a press tool, G. the hot-forming of the tailored rolled blank to obtain a part having a variable thickness, H. the cooling of the part having a variable thickness obtained at step G) to obtain a microstructure in steel being martensitic or martensito-bainitic or made of at least 75% in terms of volume fraction of equiaxed ferrite, from 5 to 20% in volume of martensite and of bainite in amount less than or equal to 10% in volume.

21: 2022/03155. 22: 2022/03/16. 43: 2022/09/07

51: B01D

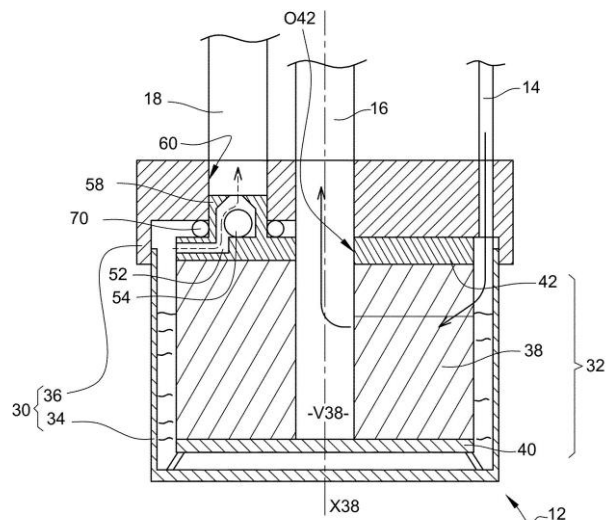
71: Volvo Truck Corporation

72: COSTE, Hervé, BOUTIN, Baptiste

**54: A FILTER CARTRIDGE FOR A LIQUID SUCH AS FUEL, THE UPPER END PLATE OF WHICH INCLUDING AN AUTOMATIC DEGASSING VALVE**

00: -

The invention relates to a filter cartridge (32) for a liquid such as fuel, said filter cartridge being intended to be positioned inside a filter housing (30) and comprising a filter media (38) defining an inner volume (V38), a lower end plate (40), and an upper end plate (42), including a liquid passage opening (O42), which communicates with the inner volume of the filter media. The upper end plate (42) includes an automatic degassing valve (50).



21: 2022/03156. 22: 2022/03/16. 43: 2022/09/07

51: H04N

71: Huawei Technologies Co., Ltd.

72: KOTRA, Anand Meher, ALSHINA, Elena Alexandrovna, ESENLIK, Semih, WANG, Biao, GAO, Han, CHERNYAK, Roman Igorevich  
33: PCT/EP(DE) 31: 2019/072643 32: 2019-08-23

**54: AN ENCODER, A DECODER AND CORRESPONDING METHODS FOR PERFORMING CHROMA DEBLOCKING FOR BLOCKS WHICH USE JOINT CHROMA CODING**

00: -

A deblocking method, for deblocking a chroma block edge (903, 913, 923, 933, 943, 953, 963, 973) between a first chroma block (901, 911, 921, 931, 941, 951, 961, 971) of a first image block (601, 601') and a second chroma block (902, 912, 922, 932, 942, 952, 962, 972) of a second image block (602, 602'), in an image encoding and/or an image decoding, wherein the deblocking method comprises: performing a decision process for the chroma block edge, wherein the decision process comprises: determining a first chroma quantization parameter ( $QpCp$ ) for the first chroma block (901, 911, 921, 931, 941, 951, 961, 971) based on a first luma quantization parameter ( $QpYP$ ) of a first luma block (801) of the first image block (601, 601') and a chroma QP mapping table for the first chroma block; determining a second chroma quantization parameter ( $QpCq$ ) for the second chroma block (902, 912, 922, 932, 942, 952, 962, 972) based on a second luma quantization parameter ( $QpYQ$ ) of a second luma block (802) of the second image block (602, 602') and a chroma QP mapping table for the second chroma block; determining an averaged and rounded chroma quantization parameter ( $QpC$ ) based on the first chroma quantization parameter ( $QpCp$ ) and the second chroma quantization parameter ( $QpCq$ ); and determining a threshold parameter ( $tC$ ) based on the averaged and rounded chroma quantization parameter ( $QpC$ ); and performing a filtering process for the chroma block edge based on the threshold parameter ( $tC$ ).

**1601**

1611, determining a first chroma quantization parameter ( $QpCp$ ) for the first chroma block (901, 911, 921, 931, 941, 951, 961, 971) based on a first luma quantization parameter ( $QpYP$ ) of a first luma block (801) of the first image block (601, 601') and a chroma quantization parameter (QP) mapping table for the first chroma block

1621, determining a second chroma quantization parameter ( $QpCq$ ) for the second chroma block (902, 912, 922, 932, 942, 952, 962, 972) based on a second luma quantization parameter ( $QpYQ$ ) of a second luma block (802) of the second image block (602, 602') and a chroma QP mapping table for the second chroma block

1631, determining a third chroma quantization parameter ( $QpC$ ) based on the first chroma quantization parameter ( $QpCp$ ) for the first chroma block (901, 911, 921, 931, 941, 951, 961, 971) and the second chroma quantization parameter ( $QpCq$ ) for the second chroma block (902, 912, 922, 932, 942, 952, 962, 972)

1641, determining a threshold parameter ( $tC$ ) based on the third chroma quantization parameter ( $QpC$ )

21: 2022/03157. 22: 2022/03/16. 43: 2022/09/07  
51: G10L; H04S

71: Orange

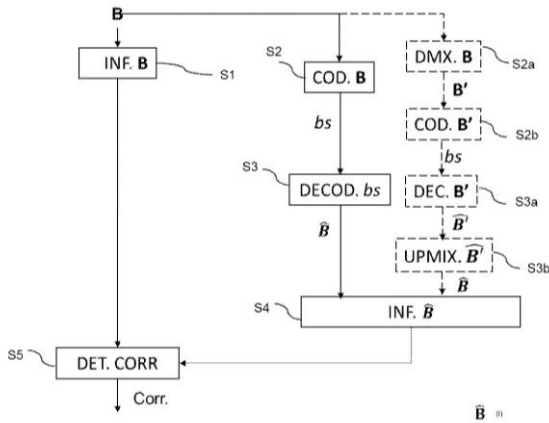
72: MAHE, Pierre Clément, RAGOT, Stéphane, DANIEL, Jerome

33: FR 31: 1910907 32: 2019-10-02

**54: DETERMINING CORRECTIONS TO BE APPLIED TO A MULTICHANNEL AUDIO SIGNAL, ASSOCIATED CODING AND DECODING**

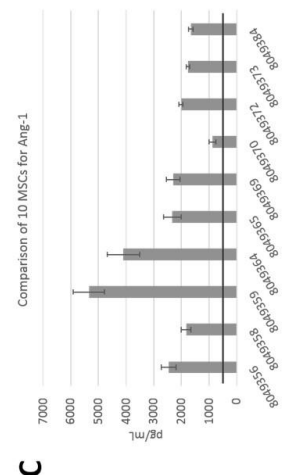
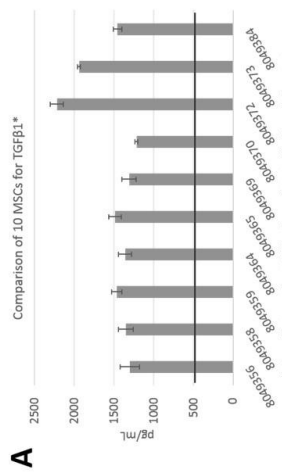
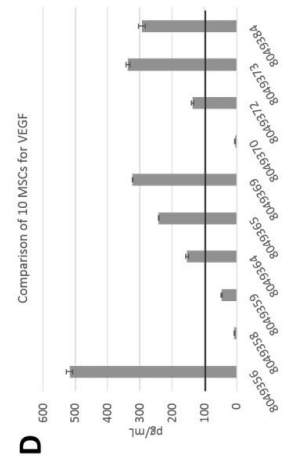
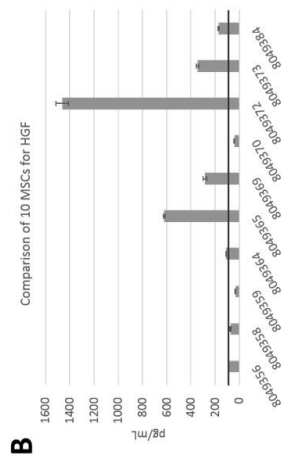
00: -

The invention relates to a method for determining a set of corrections (Corr.) to be made to a multichannel sound signal, in which the set of corrections is determined on the basis of an item of information representative of a spatial image of an original multichannel signal (Inf.B) and an item of information representative of a spatial image of the original multichannel signal that has been coded and then decoded (Inf. B). The invention also relates to a decoding method and a coding method implementing the determining method, and to the associated coding and decoding devices.



21: 2022/03195. 22: 2022/03/17. 43: 2022/09/12  
 51: A61K; C12N; G01N; A61P  
 71: CELLRESEARCH CORPORATION PTE. LTD.  
 72: PHAN, Toan Thang  
 33: US 31: 62/912,374 32: 2019-10-08  
**54: A METHOD OF ASSESSING WOUND HEALING POTENCY OF A MESENCHYMAL STEM CELL POPULATION AND RELATED METHODS OF SELECTING MESENCHYMAL STEM CELLS AND IDENTIFYING TISSUE AS STARTING MATERIAL FOR PRODUCING A MESENCHYMAL STEM CELL POPULATION**

00: -  
 The present invention relates to a method of assessing the wound healing potency of a mesenchymal stem cell (MSC) population. In addition, the present invention concerns a method of selecting a MSC for producing a stem cell population under cGMP conditions, a method of selecting a MSC population for producing a stem cell population for subsequent pharmaceutical administration. Further the present invention relates to a method of selecting a MSC population for generating a master cell bank and a method for identifying a tissue suitable as starting material for producing a MSC for pharmaceutical use. Said methods comprise determining in a medium the level of at least two proteins selected from the group consisting of Angiopoietin 1 (Ang-1), Transforming Growth Factor  $\beta$  (TGF- $\beta$ ), Vascular Endothelial Growth Factor (VEGF) and Hepatocyte Growth Factor (HGF) secreted in a medium by the MSC.



21: 2022/03217. 22: 2022/03/17. 43: 2022/10/03  
 51: C05F  
 71: TOOPI ORGANICS  
 72: ROES, Michaël, HUGUIER, Pierre  
 33: FR 31: 1910186 32: 2019-09-16  
**54: METHOD FOR TREATING HUMAN OR ANIMAL URINE AND USES OF THE TRANSFORMED URINE OBTAINED IN PARTICULAR AS FERTILISER**

00: -  
 The invention relates to a method for treating human or animal urine, which comprises performing the following steps: - a step of acidifying the urine so that the urine has a pH lower than 6, - a step of filtering the urine, - a step of transforming the urine by fermentation. The invention also relates to the urine obtained and to the co-products of this method, as well as to their uses, in particular as fertiliser.



21: 2022/03256. 22: 2022/03/18. 43: 2022/09/26

51: B01J; C22B

71: CIECHULSKI, Andrzej

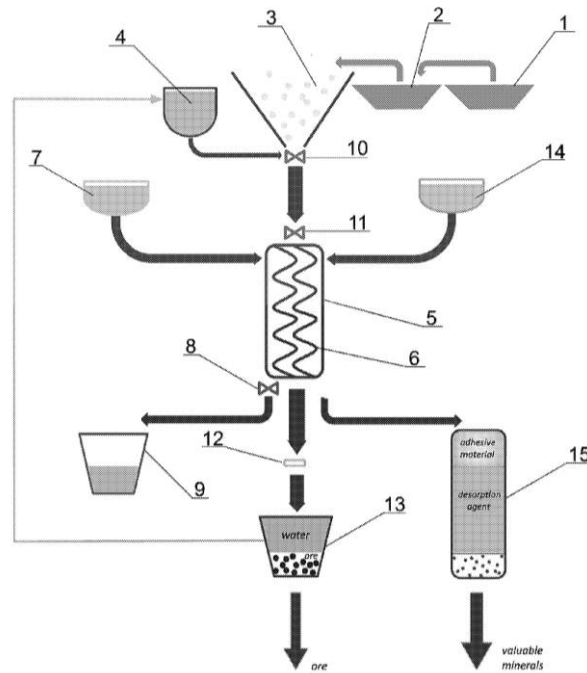
72: CIECHULSKI, Andrzej

33: PL 31: P.430975 32: 2019-08-28

**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**

00: -

The 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, consecutively covering known stages such as: - initial separation consisting in sieving fractions up to 5000  $\mu\text{m}$  from alluvial (rubble) ore or crushing primary (rock) ore to a fraction causing the separation of valuable minerals from gangue and where appropriate separating ferromagnetics from ores by means of a known method; - forming the suspension by mixing the initially separated fraction of ore with liquid; - adsorption of valuable minerals from the suspension on the adhesive coating and also recovering water from the process.



21: 2022/03257. 22: 2022/03/18. 43: 2022/10/25

51: F03B

71: LI, Wenbo

72: LI, Wenbo

**54: OFFSHORE FLOATING WAVE POWER GENERATION ASSEMBLY**

00: -

An offshore floating wave power generation assembly, which belongs to the technical field of mechanical engineering, characterized in that, a floating platform is configured in the water, water turbines, pendulum wave power generation devices, vertical axis wind power generation devices and solar power generation devices are moved to the floating platform in the sea, and mechanical energy of the water turbines, and hydraulic energy generated by swinging of the swinging boards are used to drive the power generators to generate electricity so as to compensate wind power and solar power, moreover, functions of naturally evaporated fresh water and rainwater collection are provided in the device; both power generation and collection of the fresh water have not consumed any fossil energies; each set of the assembly is mutually connected flexibly, extending infinitely, covering water surface and capturing wave energy to generate electricity to the greatest extent; the present invention is simple in structure, low in cost

and high in efficiency; can be manufactured and installed quickly, be ready with power supply and water supply capacity swiftly, enclose one or more islands and offshore working platforms soon, protect national territories and life and property safety of people and reinforce national defense.

21: 2022/03332. 22: 2022/03/22. 43: 2022/09/14  
51: A01M

71: KVERNELAND GROUP NIEUW-VENNEP B.V.

72: BEERS, JOHAN C, KORSUIZE, VINCENT

33: EP 31: 21166680.5 32: 2021-04-01

**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**

00: -

A method for operating a spray fluid operation system (1) for an agricultural sprayer is disclosed, comprising: providing a spray fluid in a fluid reservoir (2); and conveying a fluid comprising at least one of the spray fluid from the fluid reservoir (2) and an additional fluid different from the spray fluid and provided in an additional fluid reservoir (25) into a fluid flow system by a pump and control system (12). The fluid flow system is having a dispensing flow system (14) comprising a dispensing device (3) having a plurality of dispensing elements (4) configured to dispense a first pumped fluid received from the pump and control system (12) to a field, and a backflow system fluidly (15) connected to the fluid reservoir (2) and configured to pipe second pumped fluid received from the pump and control system (12) back to the fluid reservoir (2). The method further comprises: determining a fluid level of the spray fluid in the fluid reservoir (2) by a level measuring device (13); receiving measurement data in a control device (11), the measurement data being indicative of the fluid level determined by the level measuring device (13); generating the second pumped fluid by the pump and control system (12); and controlling, by the control device (11), allocation of at least part of the second pumped fluid according to an allocation ratio dependent on the fluid level to: a first return device (19; 20; 22; 23) connected to the backflow system and configured to return the second pumped fluid to the fluid reservoir (2); and a second return device (19; 20; 22; 23) connected to

the backflow system and configured to return the second pumped fluid to the fluid reservoir (2). Further, a spray fluid operation system (1) for an agricultural sprayer, an agricultural sprayer, and a method for operating an agricultural sprayer are provided.

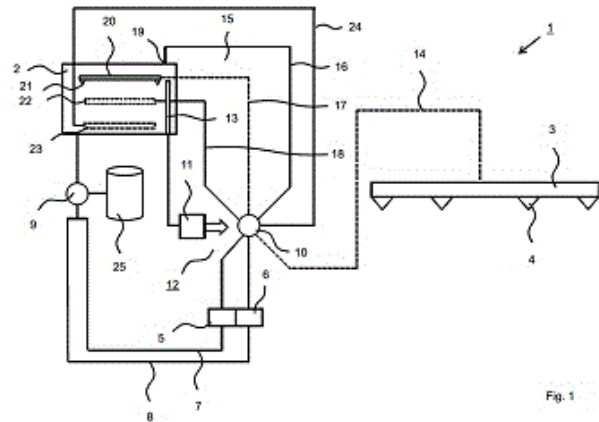


Fig. 1

21: 2022/03333. 22: 2022/03/22. 43: 2022/09/14  
51: H01H

71: General Equipment and Manufacturing Company, Inc. d/b/a Topworx, Inc.

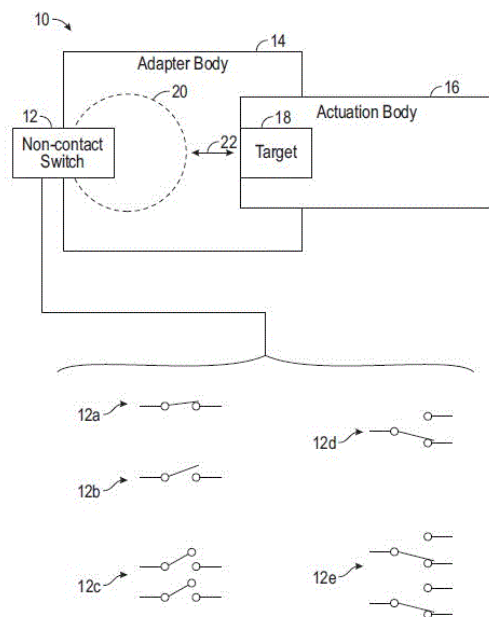
72: LAFOUNTAIN, Robert L., SIMMONS, Michael John

33: US 31: 17/210,203 32: 2021-03-23

**54: SWITCH ACTUATOR ADAPTER**

00: -

A switch assembly for adapting a non-contact switch into a contact triggered switch, such that the internal electrical state of the non-contact switch can be triggered by mechanical contact with an object or surface. The switch assembly can include an adapter body coupled to the non-contact switch and an actuation body coupled to the adapter body. The actuation body can be movable relative to the adapter body to selectively position a target supported by the actuation body within a sensing region of the non-contact switch. The actuation body can be moved by an external object making contact with a portion of the actuation body.



temperature for 6 months or more. In a curing process of the epoxy resin, an additional cross-linking system is introduced, thus realizing double-network cross-linking and achieving excellent mechanical properties and toughness.

21: 2022/03468. 22: 2022/03/24. 43: 2022/09/14  
51: A01H; A01N; A23L

71: PureCircle USA Inc.

72: MARKOSYAN, Avetik, JING, Runchun, ONG, Seong Siang, WONG, Yeen Yee, BU, Yucheng, CHEN, Jianning, WANG, Chunhui

33: US 31: 62/904,835 32: 2019-09-24

**54: STEVIA CULTIVAR '320032' WITH SUPER HIGH REBAUDIOSIDE A CONTENT**

00: -

A stevia cultivar with super high Rebaudioside A content, designated '320032', is disclosed. Another embodiment relates to the plant parts of stevia cultivar '320032', to the plants of stevia '320032' and to methods for producing a stevia plant produced by crossing the cultivar '320032' with itself or another stevia variety, including methods using marker assisted breeding. Another embodiment further relates to hybrid stevia seeds and plants produced by crossing the cultivar '320032' with another stevia cultivar. Twelve highly polymorphic SNPs loci and the corresponding genomic sequences used to identify plant variety '320032'- derived plant materials are also disclosed.

21: 2022/03442. 22: 2022/03/24. 43: 2022/09/14  
51: C08G

71: INSTITUTE OF CHEMICAL INDUSTRY OF FOREST PRODUCTS CAF

72: LI, MEI, XU, LINA, DENG, TIANXIANG, XIA, JIANLING, DING, HAIYANG, LI, SHOUHAI, YANG, XIAOHUA, ZHANG, YAN, YAO, NA

33: CN 31: 2021106921630 32: 2021-06-22

**54: OIL-BASED LATENT RESIN AND PREPARATION METHOD AND USE THEREOF**

00: -

An oil-based latent resin and a preparation method and use thereof. Eleostearic acid/linolenic acid and the like and polyglycidyl ether in a molar ratio of 1:1-1:1.5 are reacted at 100-150°C for 2-12 hours to obtain an oil-based epoxy monomer; an unsaturated bond-containing aldehyde compound and an amine curing agent are reacted at 20-50°C for 2-24 hours to obtain a latent curing agent; 20-100% of the oil-based epoxy monomer, 0-80% of epoxy resin and 0-30% of an epoxy diluent are mixed uniformly, and the obtained mixture and the latent curing agent are stirred and mixed uniformly according to a molar ratio of 2:(1-1.5) between an epoxy group in the obtained mixture and a Schiff base group contained in the latent curing agent, to obtain the oil-based latent resin. In the present invention, biomass is adopted as a raw material, the synthesis steps are simple, and the prepared epoxy resin has excellent storage stability and can be stored at room

SEQ/ SNP ID No:	Sequences
SNP No: 1	AAAAATAGACTTTTACCATCTCTCCCTCAAGTCTCAATCTCAACACCTACACRTGTATGTTTTTCAAACAAACCACACACATGGTTTTGATCTAAA; Where "R" is G or A
SNP No: 2	GGTAATAACAACCTTAGTTGCTAATATATATGCTCTGTGATGAATTTCCAATCTAAYTGACTTGTAGCTAATATAGAAAACCTAGTTGCCACATT; Where "Y" is C or T
SNP No: 3	TAACTTGCACACATCATATAACCAGGACTTACCTTGAACAATSTAAAGTTCCCTCTCTGGCATTGTATAAACAACACTCCAATTACCAATCTTGAATAACACTCCAAA TG; Where "S" is G or C
SNP No: 4	AAAATGGAAAACATTTTCTTTTACATTTCAGCATCTGAGTTGACTCGGYTGCAATCACAAAATATGGGAAAAATGGTATACCAAGTCCAGAGTT; Where "Y" is T or C
SNP No: 5	ATGGAAAGTGAACCTGATGTTCTGAAACAACCTCGTTCCGATCGGTTWGTCTCGAAA TCCATTCACAAGTTCTTTATATGACTGATTGATCTTAGGG; Where "W" is A or T
SNP No: 6	AGAAGAACAGTCCGCAAGATAATCTGTGGCGCTAAAGTGATCCAACCAAYACCCCTGT TCTCCAGTTATATAAAGATTAAAAATGCTAGTTGCTTCGC; Where "Y" is C or T
SNP No: 7	AAAGATTCTTATATTTCTTCAATTACTTTGATGGATTAATCAACTATTCATGTT KTA AAAAGGGGATTAATCACTGACCAATCGCGGATTAATCGTAAATGGTAACCCAC C; Where "K" is T or G
SNP No: 8	AAATTTCTTCTTAAATCATGTCATGATAAACATTTAGCACCTGAAAAGAAGAAAAY AATTGGAGATTAACATAAAAAATGATAATTTGGATAAATTTGAAACTAAAATT T; Where "Y" is C or T
SNP No: 9	TTTTATTATACACCTCTTTTATGATTTTATCGAAGATTTCGATTATATGTAATGA TATYGCITTTTAAAAAATAACTAGGCTGTGATATAATGTTCAACTAACAAAA A; Where "Y" is T or C
SNP No: 10	AATACCCAAACTCATTAGAAAACTGAAAGCACACTTGTACTATGTTTTCTTAGTAC ATTTACYGAAACTGTATGTAAATAACTCCAACCTACGAAAAACAAACCTATTTTT Where "Y" is T or C
SNP No: 11	TTGTGCCAAACCAATTAAGAAGTCTGACTTATTAAGAGGTAAGTTCTGAATGATTCAGC TAGTTCRTGAAACTTAACCAATTAGAATTTAGATGCTTCAGGAACCAATTAAGAAGGT TA; Where "R" is A or G
SNP No: 12	GCAACCATGACAAGAGTTGGCTCATGAGAAGAAAACAATAACGCACYGACACCAAT CCGTGTCTATATCAGATTCAAAACACAGTAT; Where "Y" is C or T

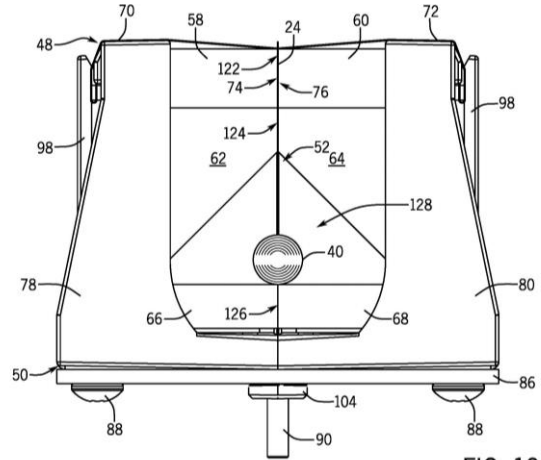


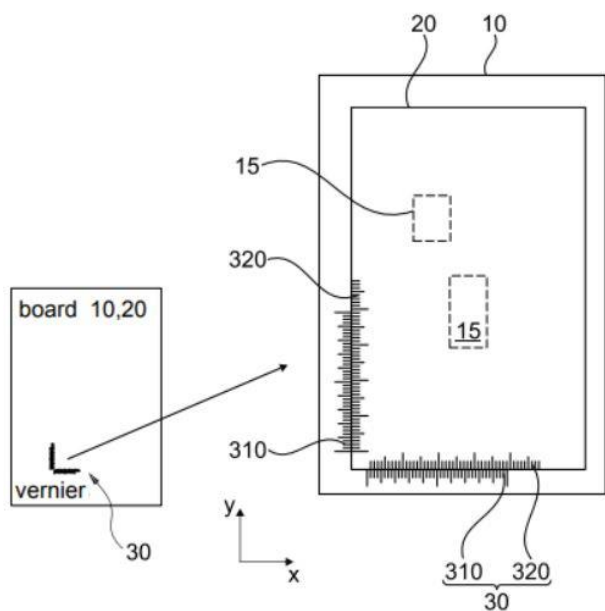
FIG. 10

21: 2022/03473. 22: 2022/03/24. 43: 2022/09/14  
 51: B42D; G06K  
 71: Brady Worldwide, Inc.  
 72: GUERRERO, Moises  
 33: US 31: 16/577,825 32: 2019-09-20  
**54: LABEL FLAGGER**  
 00: -

Systems and methods include an assembly for a label wrapper to adhere a label to an elongated object, such as a wire. The assembly includes a support structure defining a receiving space. One or more resilient members are positioned within the receiving space and define one or more channels. One or more flexible sheets are disposed over the resilient members and within the channels. The first and second flexible sheets may provide a substantially uniform pressure on the label being applied to the wire regardless of the size of the wire and the label. In some instances, the label is configured to fold around the wire and have first and second opposing end segments that couple with one another remotely from the wire thereby forming a flag label.

21: 2022/03481. 22: 2022/03/25. 43: 2022/09/14  
 51: B33Y; B29C; H05K  
 71: HENSOLDT Sensors GmbH  
 72: SANDER, Jörg, BALTES, Rolf, SALOMON, Andreas, ZIMMER, Felix, HEHN, Tobias  
 33: EP 31: 21166339.8 32: 2021-03-31  
**54: ADDITIVELY MANUFACTURED STRUCTURE AND METHOD OF MANUFACTURING THE SAME**  
 00: -

A structure comprises: a plurality of substructures (10, 20) and a vernier-based position marker (30). The plurality of substructures (10, 20) include a first substructure (10), a second substructure (20), and at least one electronic component (15). The second substructure (20) is at least partially additively manufactured on the first substructure (10). The vernier-based position marker (30) is configured to indicate a relative offset between the first substructure (10) and the second substructure (20).



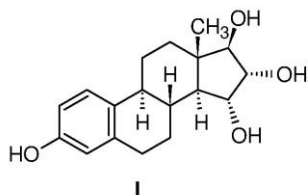
21: 2022/03557. 22: 2022/03/28. 43: 2022/09/28  
 51: A61K; C07J; A61P  
 71: RICHTER GEDEON NYRT.

72: LOVAS, Róbert, MAHÓ, Sándor, BACSA, Ildikó, MAYER, Beatrix

33: HU 31: P1900315 32: 2019-09-03

**54: INDUSTRIAL PROCESS FOR THE PREPARATION OF HIGH PURITY ESTETROL**

00: -  
 The invention relates to the preparation of estetrol of formula (I), derivatives thereof protected at positions 3,15a,16a,17β of general formula (III), and 3-hydroxy derivatives thereof protected at positions 15a,16a,17β of general formula (IV), and to the intermediates of general formulae (III) and (IV) applied in the process. Another aspect of the invention is the use of estetrol of formula (I) obtained by the process of the invention for the preparation of a pharmaceutical composition.



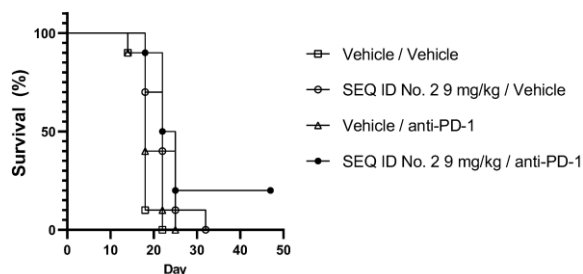
21: 2022/03567. 22: 2022/03/28. 43: 2022/09/14  
 51: A61K; C07K; A61P  
 71: ALKERMES PHARMA IRELAND LIMITED

72: LOSEY, Heather C., LOPES, Jared, WINQUIST, Raymond J.

33: US 31: 62/916,936 32: 2019-10-18

**54: IMMUNOMODULATORY IL-2 AGENTS IN COMBINATION WITH IMMUNE CHECKPOINT INHIBITORS**

00: -  
 The invention provides compositions and methods of treating cancer in a patient with a combination therapy comprising a fusion protein of SEQ ID NO: 1 in combination with an immune checkpoint inhibitor. Preferably the patient has failed to achieve complete or partial response with prior or ongoing treatment with an immune checkpoint inhibitor



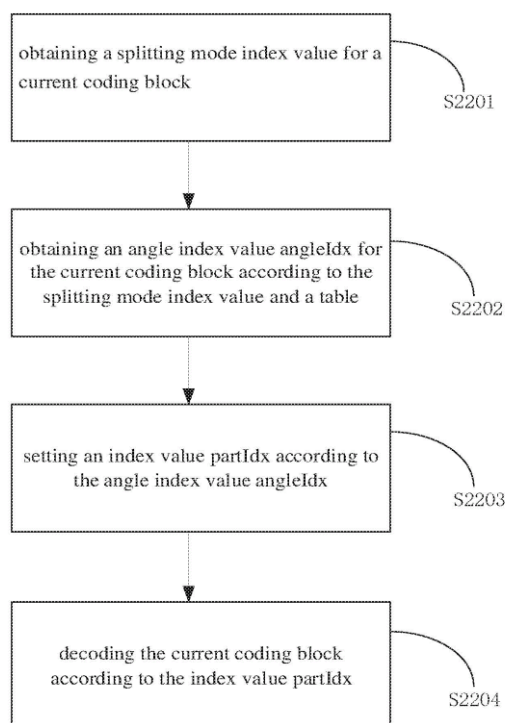
21: 2022/03572. 22: 2022/03/28. 43: 2022/09/14  
 51: H04N

71: Huawei Technologies Co., Ltd.

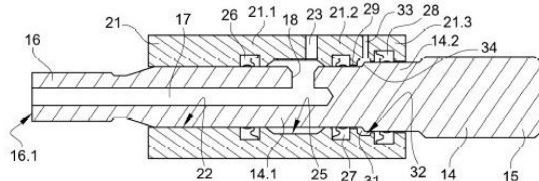
72: GAO, Han, ESENLIK, Semih, ALSHINA, Elena Alexandrovna, KOTRA, Anand Meher, WANG, Biao  
 33: PCT/EP(DE) 31: 2019/076805 32: 2019-10-03

**54: CODING PROCESS FOR GEOMETRIC PARTITION MODE**

00: -  
 The present disclosure provides a method of coding implemented by a decoding device, the method comprising: obtaining a splitting mode index value for a current coding block; obtaining an angle index value angleIdx for the current coding block according to the splitting mode index value and a table that specifies the angle index value angleIdx based on the splitting mode index value; setting an index value partIdx according to the angle index value angleIdx; and decoding the current coding block according to the index value partIdx.



feed-in inlet (23) and an annular inner groove (25) fluidly connected to the fluid feed-in inlet; a shank (14) including a fluid injection conduit (17) fluidly connected to the annular inner groove (25); front and rear main sealing gaskets (26, 27) disposed on either side of the annular inner groove (25) and configured to cooperate with a first shank portion (14.1) of the shank (14); a rear backup sealing gasket (28) located at the rear of the rear main sealing gasket (27) and configured to cooperate with a second shank portion (14.2) of the shank (14); a leakage passage (29) defined between the shank (14) and the fluid injection portion; pressure drop generation means configured to generate pressure drops in the leakage passage (29) when a leakage flow flows in the leakage passage (29).



21: 2022/03580. 22: 2022/03/28. 43: 2022/09/28  
 51: A61K; C07D; A61P  
 71: DICE ALPHA, INC.  
 72: FATHEREE, Paul R., LINSELL, Martin S., JACOBSEN, John R., VAN DER LINDEN, Wouter A., CHURCH, Timothy J., AQUINO, Claudio, PAULICK, Margot G.  
 33: US 31: 62/901,249 32: 2019-09-16  
 33: US 31: 16/783,268 32: 2020-02-06  
 33: US 31: 63/061,719 32: 2020-08-05  
 33: WO 31: PCT/US2020/016925 32: 2020-02-06  
**54: IL-17A MODULATORS AND USES THEREOF**  
 00: -  
 The disclosure herein provides compounds and pharmaceutical compositions for the modulation of IL-17A useful for the treatment of inflammatory conditions, such as psoriasis.

21: 2022/03655. 22: 2022/03/30. 43: 2022/09/28  
 51: C14C  
 71: BEKEN ITALIA S.R.L.  
 72: NEGRETTO, Mirko  
 33: IT 31: 10202000017719 32: 2020-07-22  
**54: ENVIRONMENTALLY FRIENDLY PROCESS FOR TANNING HIDES**  
 00: -  
 The present invention relates to a process for the tanning of animal hides characterised, compared to currently adopted processes, by the non-adoption of the step known in the industry as "pickling". The invention also concerned hides tanned by said process.

21: 2022/03584. 22: 2022/03/29. 43: 2022/09/30  
 51: B25D; E21B  
 71: MONTABERT  
 72: ESCOLLE Michel  
 33: FR 31: 21/04176 32: 2021-04-21  
**54: HYDRAULIC ROTARY-PERCUSSIVE HAMMER DRILL**  
 00: -  
 The hydraulic rotary-percussive hammer drill includes a fluid injection portion comprising a fluid

21: 2022/03665. 22: 2022/03/30. 43: 2022/09/30  
 51: B65D; C08L  
 71: ACTEGA DS GMBH  
 72: Dany MÄNGEL  
 33: EP 31: PCT/EP2019/084454 32: 2019-12-10  
**54: VESSEL CLOSURE SEAL AND VESSEL CLOSURE**  
 00: -  
 The application relates to a vessel closure seal, in particular for fat-containing filling materials, comprising a polymer compound of which the seal

consists essentially or entirely, a) wherein the polymer compound is PVC-free and comprises at least one TPS, and at least two different co-PPs, or at least one co-PP with a Shore A hardness of max. 80, a crystallisation enthalpy of max. 30 J/g and a melting point of at least 155degC, b) and the polymer compound has a Shore A hardness at 70degC of between 30 and 85 and a Melt Flow Index (5kg/190degC) of less than 20g/10 min.

21: 2022/03666. 22: 2022/03/30. 43: 2022/09/30

51: C23C; F16C

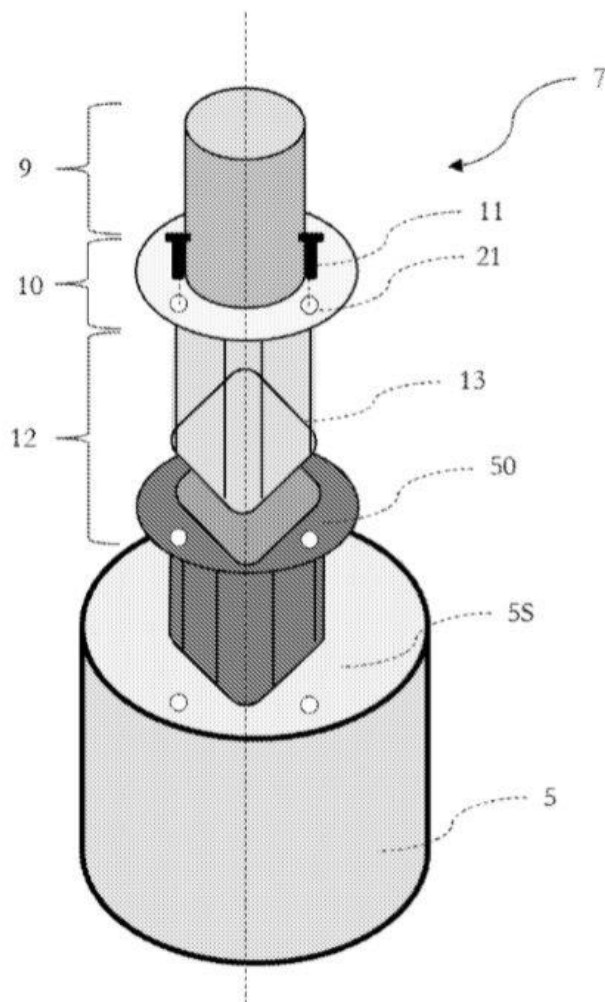
71: ARCELORMITTAL

72: François NONNE, Pauline BRIAULT

**54: ROLL CONNECTION**

00: -

The present invention relates to a method and an equipment permitting to optimally handle and support a roll made of at least an inert material and transfer the torque from a bearing to a roll or the other way around without damaging them. Said roll and bearing being immersed in molten metal.



21: 2022/03669. 22: 2022/03/30. 43: 2022/09/14

51: G01C; G01S; G08C

71: MAHINDRA & MAHINDRA LIMITED

72: NATTERI, Ajay Mangadu, SURENDRAN,

Jayalakshmi, RAJ, Bob Paul, SUBRAMANIAN,

Loganathan Gobi, PUSHPARAJ, Karthikesh,

SARAVANAN, N, SINGHA, Partha Sarathi

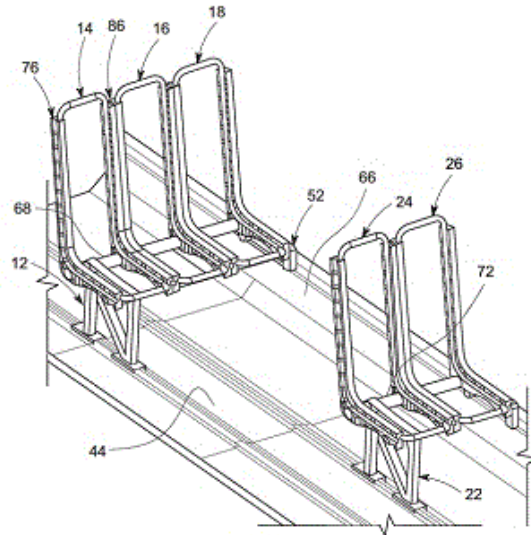
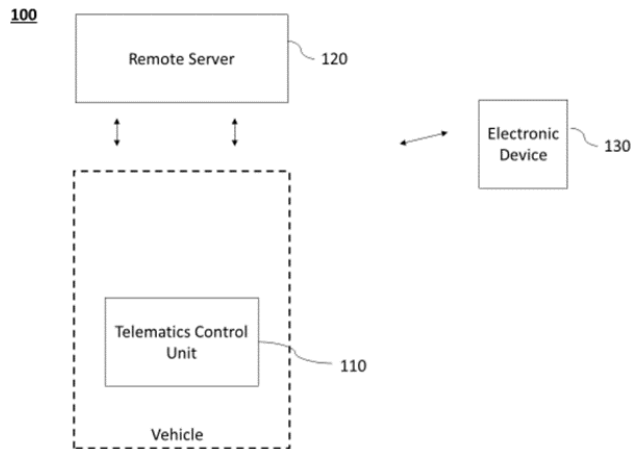
33: IN 31: 202041053459 32: 2020-12-08

**54: A SYSTEM AND METHOD FOR GENERATING UTILIZATION DATA OF A VEHICLE**

00: -

The present invention generates utilization data of a vehicle, whereby data from a telematics control unit of vehicle is received by a host system, the data comprising at-least location data, speed data, RPM data of the vehicle. The data is classified into plurality of segments, each segment comprising a cluster of location points or GPS points with speed data and RPM data; and each segment is analyzed to identify from the plurality of segments an on-road segments or on-field segments based upon at-least

density of location points in the segment; and utilization data of the vehicle for on-road segments and/or on-field segments is generated.



21: 2022/03702. 22: 2022/03/31. 43: 2022/09/28  
 51: B60N; B64D; B61D  
 71: INTERNATIONAL TRUCK INTELLECTUAL PROPERTY COMPANY, LLC  
 72: WONG, PETER S, HOULIHAN, EDWARD , KIELY, HECTOR R  
 33: US 31: 17/332,151 32: 2021-05-27  
**54: SEATING IN A VEHICLE**

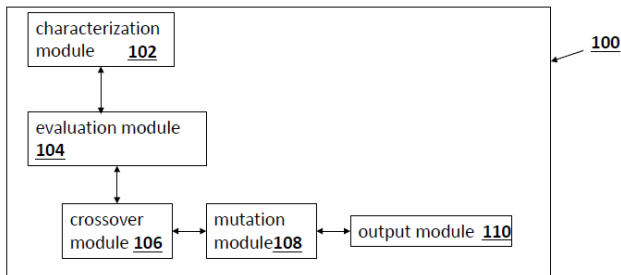
00: -  
 Seating in a passenger compartment of a vehicle comprises a first base in the passenger compartment of the vehicle. First and second apertures are disposed on opposite ends of the first base. A modified first base having third and fourth apertures is located adjacent the first base. A first rod is disposed in the first and third apertures. A second rod is disposed in the second and fourth apertures. A seat module has an end support including a fifth aperture for accepting the first rod. An opening is disposed on the end support for accepting the second rod.

21: 2022/03709. 22: 2022/03/31. 43: 2022/11/17  
 51: H04L  
 71: Sheeba ARMOOGUM  
 72: Sheeba ARMOOGUM

**54: AN EXTENDED GENETIC TECHNIQUE-BASED PREVENTION SYSTEM AGAINST DENIAL OF SERVICE/DISTRIBUTED DENIAL OF SERVICE FLOOD ATTACKS IN VOICE OVER IP SYSTEMS AND A METHOD THEREOF**

00: -  
 A system (100) for Denial of Service/Distributed Denial of Service Flood attacks in Voice over IP Systems, comprises of: a characterization module (102) for characterizing each individual of an initial population by a set of parameters; an evaluation module (104) for evaluating a fitness functionality of each individual for determining the flood attacker, wherein the individual with highest value of fitness functionality is determined as the flood attacker, and with least value is determined as a legitimate user; a crossover module (106) for performing a crossover by the initial population using 'divide and swap' concept at a crossover point to form a resultant subarray, wherein each of the resultant subarrays undergo a mutation process by a mutation module (108); and an output module (110) for returning the resultant subarrays, as a new population for a next generation.





21: 2022/03764. 22: 2022/04/01. 43: 2022/10/17

51: G01N

71: SENSOR DEVELOPMENT CORPORATION

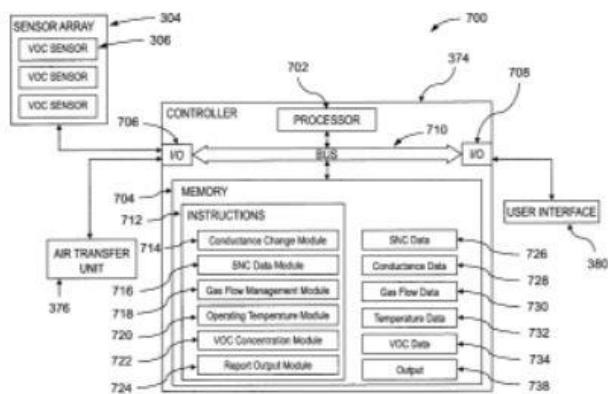
72: SMILANICH, Nicholas Joseph, REICHERT, Samuel Firestone, TUDRON, Frank Bernam

33: US 31: 16/558,490 32: 2019-09-03

**54: DEVICE FOR DETECTING INSECT LARVAE AND ADULT INSECTS IN STORED PRODUCTS BY SENSING THEIR VOLATILE PHEROMONES AND SEMIOCHEMICALS**

00: -

Minimal-cost, high-accuracy, and portable devices used to detect the presence of insects at all stages of life, including in the egg stage, in stored products by sensing gas phase markers such as volatile pheromones, semiochemicals, and kairomones. The methods, devices, and systems disclosed herein utilize a sensor array configured to simultaneously measure a plurality of target markers and filter background gases while remaining compact, highly accurate, and easy to operate.



21: 2022/03765. 22: 2022/04/01. 43: 2022/10/17

51: B01L; G01N

71: FOSS ANALYTICAL A/S

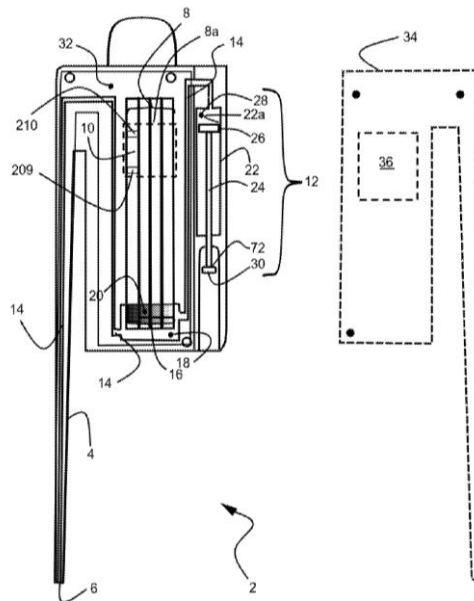
72: BORN, Christian, ABBONDIO, Allan Bjerre, MATTHIESEN, Steen Hauge

33: DK 31: PA202000257 32: 2020-02-28

**54: SAMPLE TEST CASSETTE AND ANALYTE TEST SYSTEM UTILIZING THE SAME**

00: -

A sample test cassette (2) comprising an inlet (4) for introducing a sample liquid into the sample test cassette (2); and one or more elongate channels (8), each for receiving an elongate lateral flow test strip (10) and each configured with a first end (16) in liquid communication with the inlet (4); wherein the sample test cassette (2) further comprises an integral mechanical transport system (12) operable to generate a flow of liquid from outside of the inlet (4) and towards the first end (16) of each of the one or more elongate channels (8).



21: 2022/03821. 22: 2022/04/04. 43: 2022/10/17

51: A61K

71: Qingdao University of Science and Technology

72: Zhang Chuanliang

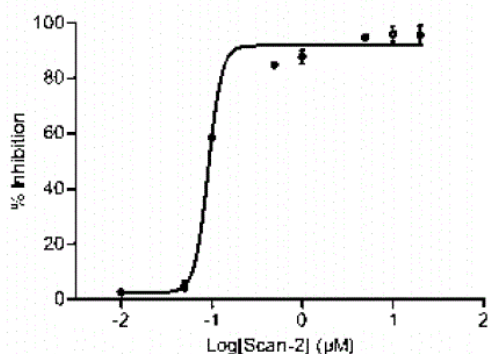
33: CN 31: 202011518318.0 32: 2020-12-21

**54: NEW BH3 MIMETIC PEPTIDE ANALOGUE FOR INHIBITING PTP1B ACTIVITY AND APPLICATION THEREOF**

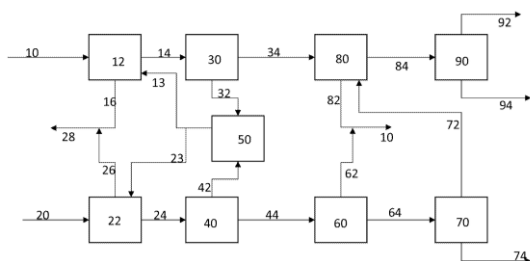
00: -

The invention discloses a novel BH3 mimetic peptide analogue for inhibiting PTP1B activity and its application. The structural formula of the novel BH3 mimetic peptide analogue is as follows: R1-AAQELRRIGDEF-R2; R1-IAAELRRIGDEF-R2; R1-IAQALRRIGDEF-R2; R1-IAQEARRIGDEF-R2; R1-IAQELARIGDEF-R2; R1-IAQELRAIGDEF-R2; R1-

IAQELRRAGDEF-R2; R1-IAQELRRIADEF-R2; R1-IAQELRRIGAEF-R2; R1-IAQELRRIGDAF-R2; R1-IAQELRRIGDEA-R2; R3-IAQELRRIGDEF-R2; The peptidomimetic compound is derived from the core region of Bim-BH3 domain, and is prepared by polypeptide solid-phase synthesis method. The amino acids in its structure are all natural amino acids. The new BH3 mimetic peptide analogue has remarkable activity of inhibiting PTP1B, and has potential application value in medicine development of related diseases such as diabetes, cancer, Alzheimer's disease and so on with PTP1B as the target.



21: 2022/03832. 22: 2022/04/04. 43: 2022/10/17  
51: C07C  
71: LUMMUS TECHNOLOGY LLC  
72: ALMERING, Martinus Johannes, BARIAS, Rosette, LEMOINE, Romain, SCOTT, Michael Jon  
33: US 31: 62/911,541 32: 2019-10-07  
**54: CO-PRODUCTION OF HIGH PURITY ISOBUTANE AND BUTENE-1 FROM MIXED C4S**  
00: -  
Systems and processes disclosed may be used to produce a high purity isobutane stream and a high purity 1-butene stream from mixed C4 streams having disparate starting compositions.



21: 2022/03842. 22: 2022/04/04. 43: 2022/10/17

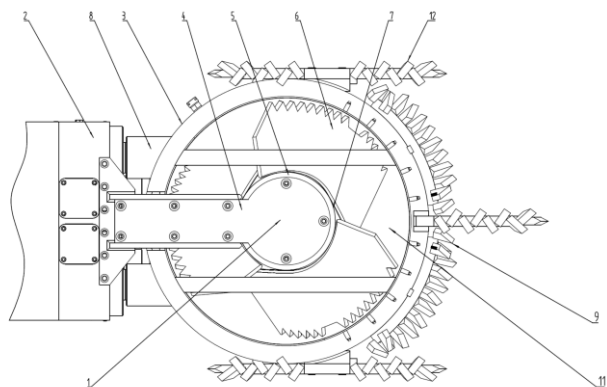
51: C08J; C08K; C08L  
71: ZHEJIANG SHANLIAN NEW MATERIALS TECHNOLOGY CO., LTD  
72: CAI, Jianyong, LI, Ruiya, CAI, Lichenxia  
33: CN 31: 201910845341.1 32: 2019-09-09  
**54: INORGANIC DEGRADABLE PLASTIC MASTERBATCH MATERIAL, AND PREPARATION METHOD THEREFOR**

00: -  
An inorganic degradable plastic masterbatch material, which allows prepared products to comply with degradation requirements, has a higher mechanical strength and more rapid degradation than found in common manufactured plastic products, and may be used to make various types of environmentally friendly degradable manufactured products. The inorganic degradable plastic masterbatch material contains the following components: 56-72% mass of calcium carbonate mineral powder, 3-10% mass of polyethylene, 18-30% mass of polypropylene, 2-5% mass of glass fiber, and 3-5% mass of additives.

21: 2022/03859. 22: 2022/04/05. 43: 2022/10/17  
51: E21C  
71: LIU, Suhua  
72: LIU, Suhua  
33: CN 31: 201910852883.1 32: 2019-09-10  
**54: METHOD FOR ROTARY CLEARING IN STRIPPING TOOTH HOLDER OF MINING MACHINE AND ROTARY CLEARING DEVICE IN STRIPPING TOOTH HOLDER**

00: -  
Disclosed are a method for rotary clearing in a stripping tooth holder of a mining machine and a rotary clearing device in a stripping tooth holder implementing the method. The rotary clearing device includes a reciprocating impact power box (2), a stripping tooth holder (3), a rotary clearer supporting mechanism (4) and a rotary clearer (5), where the rotary clearer (5) includes a shifter (6) and a clearing drive roller (7), the reciprocating impact power box (2) includes a reciprocating impact power box power member (8), the reciprocating impact power box power member (8) supports and drives the stripping tooth holder (3), the rotary clearer supporting mechanism (4) is arranged on the reciprocating impact power box (2) or on the stripping tooth holder (3), a rear end of the stripping tooth holder (3) is connected to the reciprocating impact power box

power member (8), a front end of the stripping tooth holder is provided with a reciprocating impact tooth (9) or a reciprocating impact saw plate (10), the stripping tooth holder (3) includes a rotary discharging tooth holder hole (11), the rotary clearer (5) is arranged in the rotary discharging tooth holder hole (11) of the stripping tooth holder (3), the rotary clearer (5) rotates under supporting by the rotary clearer supporting mechanism (4), the clearing drive roller (7) rotates to drive the shifter (6), and the shifter (6) spirally pushes material stripped off by the stripping tooth holder (3) from the rotary discharging tooth holder hole (11), thus reducing resistance of reciprocating operation of the stripping tooth holder and traveling resistance of a machine body.



21: 2022/03917. 22: 2022/04/06. 43: 2022/10/18

51: G01N

71: Binzhou University

72: ZHANG Qingtao, XING Xueyang, HU Yingying, ZHOU Gang, LI Bo, SHEN Jianjun, FU Mingming, LI Xiaofei, XU Lanjuan, DU Shuai, JIA Xinlei, YIN Zhenjiang, ZHANG Qianqian, ZANG Jie, CAO Qing, MA Hui, ZHAO Lei

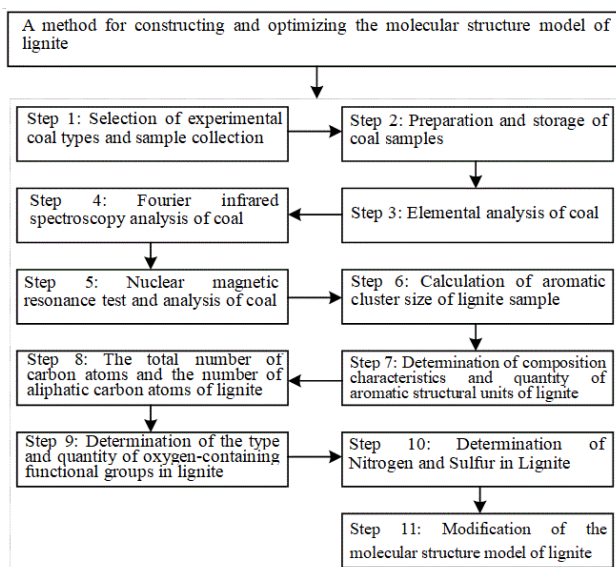
33: CN 31: 202111111980.9 32: 2021-09-23

**54: CONSTRUCTION AND OPTIMIZATION METHOD OF LIGNITE MOLECULAR STRUCTURE MODEL**

00: -

The invention discloses a method for constructing and optimizing a molecular structure model of lignite, including: collecting and processing lignite samples, and obtaining lignite experimental samples; analyze the lignite experimental sample to obtain the elemental analysis results, the content of aromatic hydrocarbons, aliphatic hydrocarbons, and various oxygen-containing functional groups, and carbon structure parameters of the lignite experimental

sample; calculate the number of carbon atoms of lignite and other parameters, obtain the size of aromatic clusters, and determine the composition characteristics and number of aromatic structural units of lignite; calculate the total number of carbon atoms and fat carbon atoms of lignite; based on the content of aromatic hydrocarbons, aliphatic hydrocarbons and various oxygen-containing functional groups, obtain the type and quantity of oxygen-containing functional groups in lignite, and design the structural forms of nitrogen and sulfur elements; construct a molecular structure model of lignite. The invention enables the constructed lignite molecular structure model to be closer to the real structure of the coal type, and avoids the problem of similarity of research conclusions due to similar structures.



21: 2022/03965. 22: 2022/04/07. 43: 2022/10/17

51: A47J

71: JOMA KUNSTSTOFFTECHNIK GMBH

72: FRIES, Rudolf

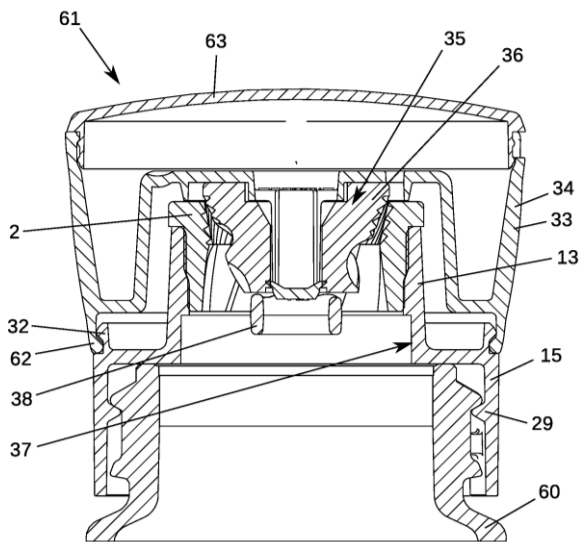
33: AT 31: A 50939/2019 32: 2019-11-04

**54: SPICE MILL PART AND METHOD FOR PRODUCING A SPICE MILL PART**

00: -

The invention relates to a spice mill part (14), more particularly a spice mill lower part (15), for a spice mill, having a housing (16), which consists at least in part of a plastic material and which can be rotatably connected to a further spice mill part (33), more particularly a spice mill upper part (34). A receiving element (13) is provided on the housing (16), in

which receiving element there is arranged a milling element (1), more particularly a milling ring (2), made from a ceramic material, with the milling element (1) being clamped in the receiving element (13) in a frictionally engaged manner by means of a compressive force directed substantially radially inwardly and acting on a self-contained outer bearing face (6) of the milling element (1), the compressive force acting substantially along the entire circumference on the external bearing face (6) of the milling element (1).



first end (15) below the first and second sealing surface (27a, 27b).

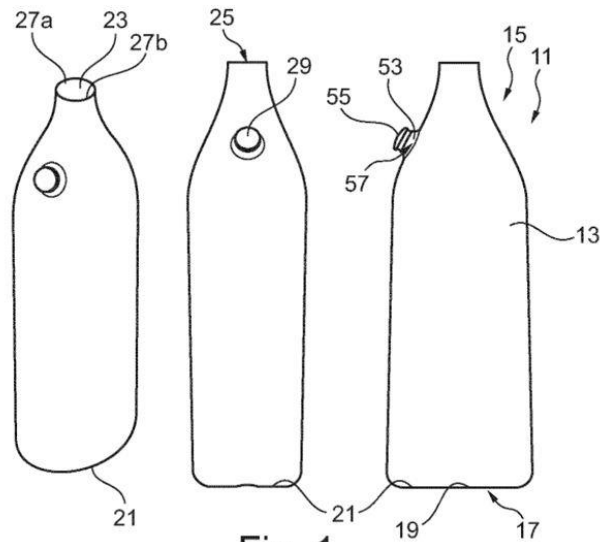


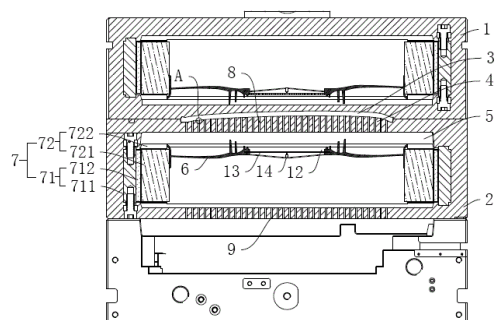
Fig. 1

21: 2022/03975. 22: 2022/04/07. 43: 2022/10/18  
 51: B65D  
 71: ALPLA WERKE ALWIN LEHNER GMBH & CO. KG  
 72: Oliver UNTERLECHNER  
 33: CH 31: 01377/19 32: 2019-10-31  
**54: EXTRUSION BLOW MOULDED CONTAINER**  
 00: -

The invention relates to a container (11) produced from a plastic material in extrusion blow moulds, comprising a container body (13), having a first end (15) and a second end (17) substantially opposite the first end, a first and second sealing surface (27a, 27b) formed on the inner wall (23) of the first end (15), wherein the first and second sealing surface (27a, 27b) surround a filling opening (25) and can be connected to one another in a fluid-tight manner, and a container base (19) having a standing surface (21) formed at the second end (17). A pouring element (29) is formed on the container (11) at the

21: 2022/04141. 22: 2022/04/12. 43: 2022/10/19  
 51: B29C  
 71: PAN, Yong  
 72: PAN, Yong  
 33: CN 31: 202111355777.6 32: 2021-11-16  
**54: LOW PRESSURE INJECTION MOLD**  
 00: -

The present disclosure provides a low pressure injection mold, including a low pressure injection mold, including: a movable mold provided with a core and a fixed mold having a mould cavity, the core cooperated with the mould cavity to form a molding chamber, wherein the movable mold has a mounting chamber, a main turbine is rotatably arranged in the mounting chamber, and a main driving mechanism is provided in the mounting chamber, the main driving mechanism is used to drive the main turbine to rotate in a forward direction or in a reverse direction, the movable mold has a plurality of first connecting air holes, the first connecting air holes are used to communicate the mounting chamber with the molding chamber, the movable mold has a plurality of second connecting air holes, and the second connecting air holes are used to communicate the mounting chamber with the outside world.



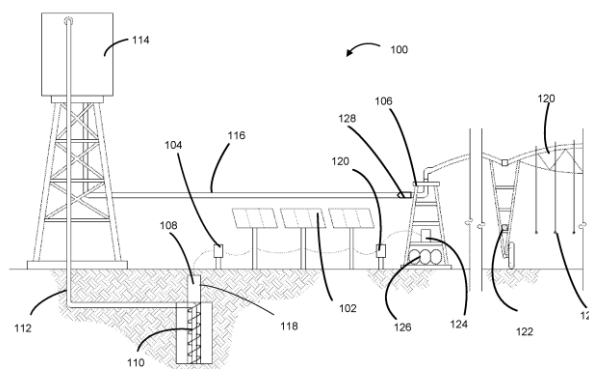
21: 2022/04158. 22: 2022/04/12. 43: 2022/10/18  
 51: B65D; C08L  
 71: ACTEGA DS GMBH  
 72: Dany MÄNGEL  
**54: ROTARY VACUUM VESSEL CLOSURE WITH VESSEL CLOSURE SEAL**

00: -  
 The invention relates to a rotary vacuum vessel closure, in particular for fat-containing filling materials, with a vessel closure seal comprising a polymer compound of which the seal consists substantially or entirely: a) wherein the polymer compound is PVC-free and comprises at least one TPS and at least one co-PP, b) and the polymer compound has a Shore A hardness (ASTM D2240, DIN ISO 7619-1) at 70 degC between 30 and 85 and has an MFR (DIN ISO 1133, 5kg/190 degC) of less than 20g/10 min.

21: 2022/04194. 22: 2022/04/13. 43: 2022/10/18  
 51: A01G  
 71: VALMONT INDUSTRIES, INC.  
 72: STROMP, Daniel J.  
 33: US 31: 62/947,040 32: 2019-12-12  
**54: SYSTEM, METHOD AND APPARATUS FOR PROVIDING A SOLAR PUMP SYSTEM FOR USE WITHIN A MECHANIZED IRRIGATION SYSTEM**

00: -  
 The present invention provides a solar power system for use with a mechanized irrigation system. According to a first preferred embodiment, the solar power system of the present includes solar panels which produce DC current which is used to power the irrigation system and to store water in an elevated storage tank. The systems of the present invention selectively use the water stored in the elevated storage tank to provide water pressure to the irrigation system. According to a further preferred

embodiment, the system of the present invention preferably converts the power from the solar panels to AC current and uses AC current to power the movement of the irrigation system and other sub-systems.



21: 2022/04249. 22: 2022/04/13. 43: 2022/10/19  
 51: G06Q  
 71: JACOB STEPHANUS JANSE VAN RENSBURG  
 72: JACOB STEPHANUS JANSE VAN RENSBURG  
 33: ZA 31: 2019/06746 32: 2019-10-14  
**54: FINANCIAL MANAGEMENT METHOD AND SYSTEM**

00: -  
 A financial management method and system and more particularly, but not exclusively, a financial management method and system for managing insurance. This financial management system has a number of groups of clients, and election means to elect each member of each group, communication means to facilitate communication between at least the members of a group and computing means for computing parameters of insurance accordance with group behaviour.

21: 2022/04370. 22: 2022/04/19. 43: 2022/10/18  
 51: A61K; A61P  
 71: SHENZHEN SALUBRIS PHARMACEUTICALS CO. LTD  
 72: SUN, Jingchao, JING, Xiaolong  
 33: CN 31: 201910890853.X 32: 2019-09-20  
 33: CN 31: 202010901984.6 32: 2020-09-01  
**54: USES OF COMPLEX OF ANGIOTENSIN II RECEPTOR ANTAGONIST METABOLITE AND NEP INHIBITOR IN TREATING HEART FAILURE**

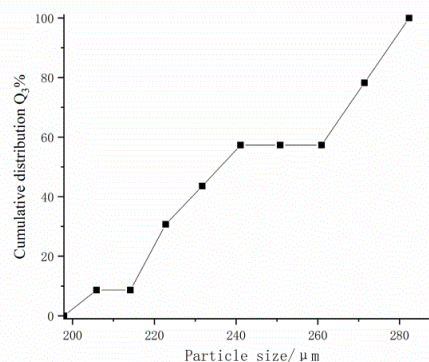
00: -  
 Uses of a complex of an angiotensin II receptor antagonist metabolite and a NEP inhibitor in treating

heart failure, specifically related are uses of the complex in preparing a medicament for use in heart failure with reduced ejection fraction (HFrEF).

CC	AA	BB
诊断标准	HFrEF	HFrEF
1	症状和/或体征 DD	症状和/或体征 DD
2	LVEF<40%	LVEF 40% - 49%
3		LVEF>50%
备注	利尿剂升高,并符合以下至少1条:(1)左心室腔扩大,或左心房扩大,(2)左心室舒张功能异常	利尿剂升高,并符合以下至少1条:(1)左心室腔扩大,或左心房扩大,(2)左心室舒张功能异常
FF	随机临床试验主要纳入此类患者,有效的治疗已得到证实	此类患者临床特征、病理生理、治疗和预后尚不清楚,单独此组有利于对其开展相关研究
GG		需要排除患者的症状是由非心脏病引起的,有效的治疗尚不明确

图 1

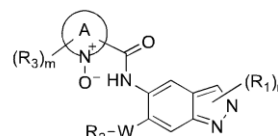
AA Table 1  
 BB Categories of heart failure and diagnostic criteria  
 CC Diagnostic criteria  
 DD Symptoms and/or signs  
 EE Natriuretic peptide elevated and at least one of the following is satisfied: (1) left ventricular hypertrophy and/or left atrium enlargement, and (2) diastolic dysfunction  
 FF Remarks  
 GG Randomized clinical trials, this type of patients is included primarily, and an effective treatment has been proven  
 HH Clinical features, pathophysiology, treatment and prognosis for this type of patients, and the separated listing of this group facilitates relevant research to be carried out  
 II Patients whose symptoms are induced by non-heart diseases, and an effective treatment remains unclear  
 JJ Note: HFrEF is heart failure with reduced ejection fraction, HFmEF is heart failure with medium ejection fraction, HFpEF is heart failure with preserved ejection fraction, LVEF is left ventricular ejection fraction; natriuretic peptide elevated is natriuretic peptide type B (BNP) > 35 ng/L and/or N-terminal pro-natriuretic peptide type B (NT-proBNP) > 125 ng/L, and, see thoracic echocardiograph part in diagnosis and assessment of heart failure for diastolic dysfunction indicators



21: 2022/04441. 22: 2022/04/20. 43: 2022/10/18  
 51: A61K; C07D; A61P  
 71: SHANGHAI MEIYUE BIOTECH DEVELOPMENT CO., LTD.

72: YE, Guozhong, DING, Chenli, DING, Yawen, HE, Qian, WANG, Chaodong  
 33: CN 31: 201910906833.7 32: 2019-09-24  
**54: IRAK INHIBITOR AND PREPARATION METHOD THEREFOR AND USE THEREOF**  
 00: -

Disclosed is a compound represented by formula I, a stereoisomer, racemate, tautomer, isotopic label, prodrug thereof or a pharmaceutically acceptable salt thereof, and a pharmaceutical composition comprising same, a preparation method therefor, and medical use thereof. The structure is as shown in formula I.



21: 2022/04477. 22: 2022/04/21. 43: 2022/10/19  
 51: F24C  
 71: Gao Wei  
 72: Gao Wei

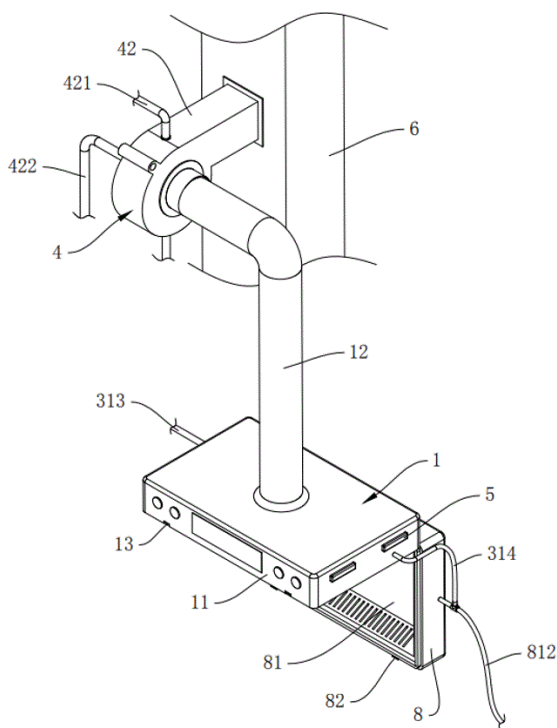
**54: RANGE HOOD WITH GOOD FILTERING EFFECT AND CLEANING DEVICE FOR RANGE HOOD**

00: -  
 The present invention discloses a range hood with a good filtering effect and a cleaning device for the range hood. By installing a filtering device comprising several filtering assemblies in the range hood body, the cooking fume can enter a filtering box through a cooking fume air inlet pipe after being

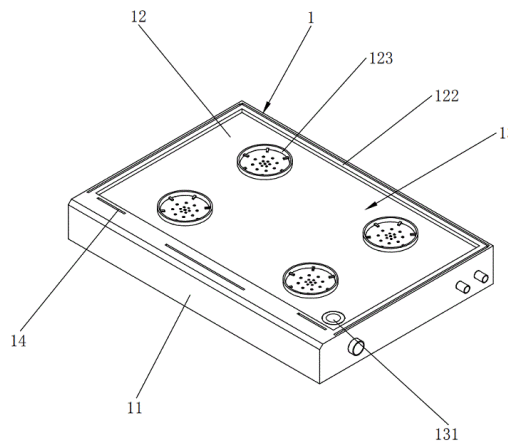
21: 2022/04371. 22: 2022/04/19. 43: 2022/10/18  
 51: A23L  
 71: HAINAN TROPICAL OCEAN UNIVERSITY  
 72: HU, Yaqin, HU, Lingping, HU, Zhiheng, PEI, Zhisheng  
 33: CN 31: 202111113646.7 32: 2021-09-23  
**54: GOLDEN POMFRET FISH PRODUCT AND PREPARATION METHOD THEREOF**  
 00: -

The present invention belongs to the technical field of food processing, and particularly relates to a golden pomfret fish product and a preparation method thereof. The product includes the following components by weight: 80-200 parts of golden pomfret fish, 10-20 parts of egg white powder, 8-15 parts of whey protein powder, 8-15 parts of soybean protein powder, 10-15 parts of vegetable oils, 3-10 parts of starch, 2-5 parts of edible salt, and 0.2-1 part of sodium glutamate. The product is prepared from golden pomfret fish as a main raw material, supplemented with egg white powder, whey protein powder, soybean protein powder, vegetable oils, starch, edible salt, sodium glutamate, and water. The product has rich nutrition and delicious taste, making a golden pomfret resource utilized fully. Results of embodiments indicate that the product shows rose pink, and is smooth and soft and rich in delicious taste, without flocculates or agglomerates.

sucked in, and then be discharged from a ventilating pipe after being filtered by a filtrate or a solid filtering medium in the filtering box so that the filtering effect of the cooking fume can be effectively improved, the cooking fume attached at the distal end of the filtering device in the range hood can be reduced, the working efficiency of the air sucking system is ensured to be stable, and little flue gas pollutants and particulate matter are discharged. Meanwhile, by connecting the cleaning device at one side of the range hood body, the cleaning device can rotatably cover and close the bottom of the range hood body, and then the position where the bottom of the range hood body is in direct contact with the cooking fume can be embedded in the cleaning cavity and cleaned by ultrasonic wave or high temperature so as to remove the oil stain attached to the range hood body, making cleaning convenient. It provides good cleaning effect and high efficiency, and reduces human participation.



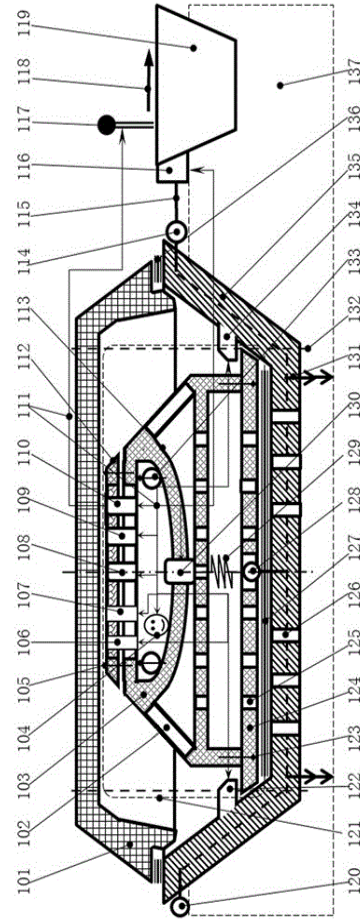
00: -  
 The invention discloses a multi-functional gas stove comprising a stove body and a hob assembly mounted on the stove body. The stove body comprises an enclosure wall and a cooking bench provided on the enclosure wall, the cooking bench is provided with a mounting opening adapted to the number and position of the hob assembly, the interior of the enclosure wall is hollow to form a warm water cavity, and the warm water cavity is provided with a water inlet in communication with a cold water inlet pipeline and a water outlet in communication with a warm water outlet pipeline. The invention has zero oil drop splashing and zero smoke overflowing, which effectively avoids the shortcoming of rapid temperature rising when the kitchen is in use, and at the same time, reduces flame heat loss, and improves fuel gas utilization efficiency and reduces fuel gas waste, It also reduces the waste of cold water at the end of the whole house hot water pipe, and reduces the total consumption, total weight, total material use, and total space occupation of the user's gas household appliance.



21: 2022/04478. 22: 2022/04/21. 43: 2022/10/18  
 51: F24C  
 71: Gao Wei  
 72: Gao Wei  
 33: CN 31: 202111373782X 32: 2021-11-19  
**54: MULTI-FUNCTIONAL GAS STOVE**

21: 2022/04531. 22: 2022/04/22. 43: 2022/10/17  
 51: G01S  
 71: Guangdong Ocean University  
 72: LEI Guibin, WANG Shuqing, ZHANG Tianyu, XIE Lingling, LING Zheng, LIU Dazhao, PENG Yingqiao  
 33: CN 31: 202110607467.2 32: 2021-06-01  
**54: REMOTE PLACEMENT INTELLIGENT SEABED OBSERVATION SYSTEM TOWED BY UNMANNED BOAT**  
 00: -

The invention discloses an intelligent seabed observation system towed by an unmanned boat, which relates to the technical field of high-end equipment for ocean observation. The intelligent seabed observation system includes a box body, instruments carried by the seabed observation system, an acoustic releaser, a connecting rope and a counterweight, wherein the acoustic releaser arranged in the box body is connected with a connecting ring arranged in the middle of the bottom of the counterweight through the connecting rope. The counterweight is a flat-bottomed hull made of reinforced concrete; a water inlet device is arranged at the bottom of the counterweight; and a release device, a draw-bar and a traction ring form a releasable connection between the counterweight and the unmanned boat. The controller connects with the satellite communication device, the release device and the water inlet device by the signal cable. The remote placement person controls the release device and the water inlet device to complete the placement. During transportation, the ship-shaped counterweight is a container to hold seabed observation system, and after placement, it is an anchor to fix the seabed observation system, which not only saves the time and expense of the ship, but also improves the placement quality, and avoids the accidents of equipment and personnel at abominable sea state.



21: 2022/04532. 22: 2022/04/22. 43: 2022/10/17

51: G06T

71: Guangdong Ocean University

72: LIU Dazhao, LIU Qiubin, GUO Bifeng, LI Zhuo

33: CN 31: 202111001811.X 32: 2021-08-30

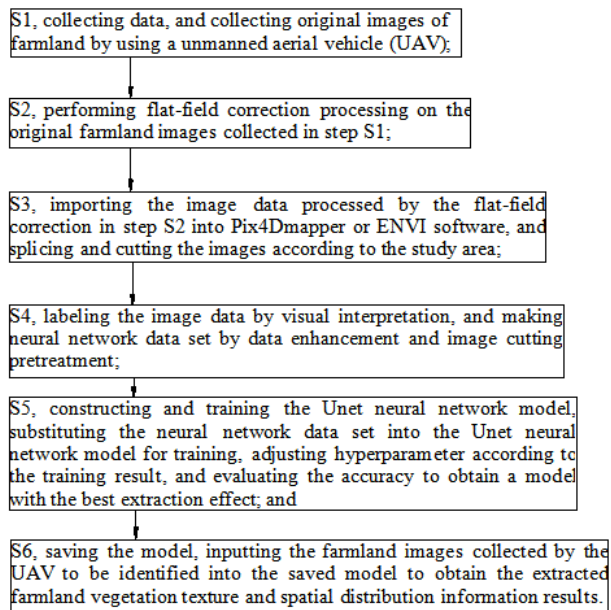
**54: HIGH-PRECISION METHOD FOR EXTRACTING FARMLAND VEGETATION INFORMATION**

00: -

The invention discloses a high-precision method for extracting farmland vegetation information, which relates to the technical field of agricultural remote sensing. The key points of its technical scheme are: collecting original images of farmland; performing flat-field correction processing on the original farmland images; importing the image data processed by the flat-field correction into Pix4Dmapper or ENVI software, and splicing and cutting the images; labeling the image data by visual interpretation, and making neural network data set by data enhancement and image cutting



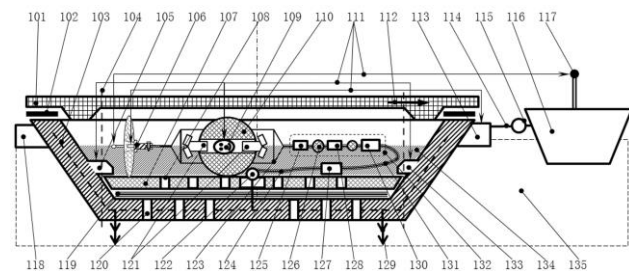
pretreatment; constructing and training the Unet neural network model; and saving the model, inputting the farmland images to be identified into the saved model to obtain the extracted farmland vegetation texture and spatial distribution information results. The method can quickly and accurately obtain the texture and spatial distribution information of crops from remote sensing images of farmland, and solve the problems of complicated manual screening characteristics and low recognition accuracy in satellite remote sensing interpretation of farmland images.



21: 2022/04533. 22: 2022/04/22. 43: 2022/10/17  
 51: B63B  
 71: Guangdong Ocean University  
 72: WANG Shuqing, LEI Guibin, ZHANG Tianyu, XIE Lingling, LING Zheng, LIU Dazhao, PENG Yinqiao  
 33: CN 31: 202110607615.0 32: 2021-06-01  
**54: REMOTE PLACEMENT INTELLIGENT MOORING SYSTEM TOWED BY UNMANNED BOAT**

00: -  
 The invention relates to the technical field of ocean observation. A remote placement intelligent mooring system towed by unmanned boat includes a main floating ball, a stainless steel bracket, ADCPs, instruments chain, an acoustic releaser, an anchor chain, a satellite communication device, a controller and a boat-shaped counterweight, wherein the acoustic releaser is connected with the boat-shaped

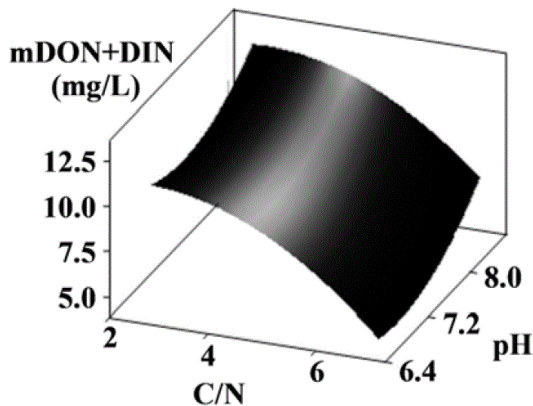
counterweight through the anchor chain; an unmanned boat uses a release device to tow the boat-shaped counterweight; the controller connects the satellite communication device, the release device and the water inlet device respectively using signal cables; the controller receives a placement instruction sent by a remote placer through the satellite communication device, and according to the instruction, controls the release device to release the connection between the boat-shaped counterweight and the unmanned boat and the water inlet device let seawater pour into the boat-shaped counterweight to realize the remote placement. During transportation, the boat-shaped counterweight is used as a container to hold the mooring system, and after placement, it is used as an anchor to fix the mooring system, which not only saves the time and expense of the ship, but also improves the placement quality and avoids the accidents of equipment and personnel at abominable sea states.



21: 2022/04658. 22: 2022/04/26. 43: 2022/10/14  
 51: C02F  
 71: Nanjing University  
 72: Haidong HU, Xian CUI, Kewei LIAO, Lili DING, Bing WU, Hongqiang REN  
 33: CN 31: 202111652401.1 32: 2021-12-30  
**54: COLLABORATIVE OPTIMIZATION CONTROL METHOD OF ORGANIC NITROGEN AND INORGANIC NITROGEN IN DENITRIFICATION PROCESS**

00: -  
 A method for collaborative optimization control method for organic nitrogen and inorganic nitrogen in a denitrification process is provided. The method includes: establishing ASM-mDON-DIN models for simultaneous simulation of microbial dissolved organic nitrogen (mDON) and inorganic nitrogen (DIN) in denitrification processes; and selecting a corresponding ASM-mDON-DIN model according to a set carbon/nitrogen ratio to collaboratively optimize

the concentration values of mDON and DIN in the effluent in the denitrification process, to obtain best process operation parameter values.

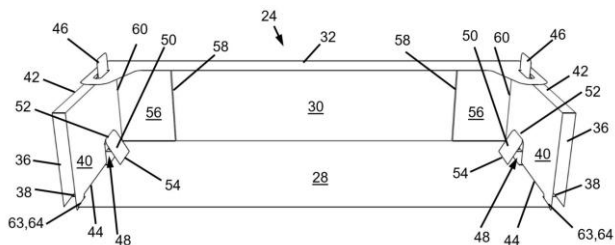


21: 2022/04702. 22: 2022/04/28. 43: 2022/10/17  
51: B65D

71: APL CARTONS (PTY) LTD  
72: PORTWIG, Heinrich

**54: STACKABLE CONTAINER SUITABLE FOR SMALL ITEMS, AND METHOD OF FORMING IT**

00: -  
A container (24) is erected from a blank (26) by folding an inner wall panel (40) inwards towards an outer wall panel (36) and while folding the inner wall panel (40) a distal end (54) of a tab (50) engages a base (28) of the container and folds relative to the inner wall panel (40) due to interference between the distal end (54) and the base (28). When erected, the tab (50) covers a stacking aperture (48) in part to prevent small articles from falling through the stacking aperture (48).

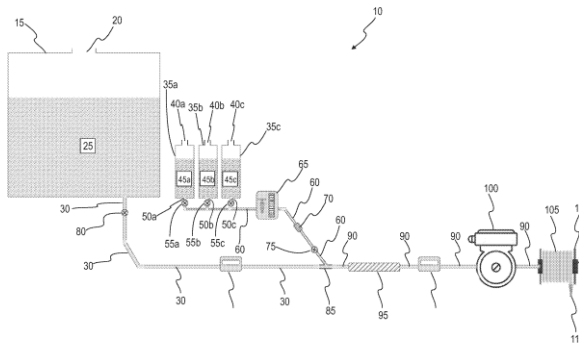


21: 2022/04718. 22: 2022/04/28. 43: 2022/10/13  
51: A01N; B01F; B05B; G05D

71: CARPENTER, Bradley John  
72: CARPENTER, Bradley John

33: AU 31: 2019903797 32: 2019-10-09  
**54: SYSTEM FOR PREPARING A DILUTED COMPOSITION**

00: -  
The invention relates generally to contrivances for dispensing or applying biologically active compositions such as insecticides and herbicides. More particularly, the invention provides a system that is capable of dispensing or applying one composition from a selection of available compositions and at a required concentration. In one version, the system comprises first and second concentrate reservoirs, a diluent reservoir, and a diluent composition conduit, and the system is configured such that a diluent in the diluent reservoir is contactable with a concentrate of the first or second concentrate reservoir to form a first diluted composition or a second diluted composition of a specified concentration.



21: 2022/04755. 22: 2022/04/28. 43: 2022/10/12  
51: A61K

71: CLEVEXEL PHARMA, INSTITUT GUSTAVE ROUSSY, UNIVERSITE PARIS-SACLAY  
72: BRICOUT, Denis, WANG-ZHANG, Xiuping, DEUTSCH, Eric, CLEMENSON, Céline  
33: FR 31: 19211244.9 32: 2019-11-25

**54: FREEZE-DRIED POWDER CONTAINING 2-[(3-AMINOPROPYL)AMINO]ETHANETHIOL AND ITS USE FOR PREPARING A THERMOGEL**

00: -  
A freeze-dried powder for preparing a thermogel comprising: - from 1% to 35% of 2-[(3-aminopropyl)amino]ethanethiol or one of its pharmaceutically acceptable salt; - from 40% to 85% of one or more poloxamer; and - from 0,1% to 20% of one or more carbohydrate compound.

21: 2022/04809. 22: 2022/04/29. 43: 2022/10/13  
51: A61K; C07D; A61P  
71: LOPHORA APS

72: KRISTENSEN, Jesper Langgaard, JENSEN, Anders Asbjørn, LETH-PETERSEN, Sebastian  
 33: US 31: 17/090,457 32: 2020-11-05  
 33: EP 31: 19207578.6 32: 2019-11-07

**54: 5-HT<sub>2A</sub> AGONISTS FOR USE IN TREATMENT OF DEPRESSION**

00: -  
 The present invention relates to agonists of the 5-HT<sub>2A</sub> serotonin receptors and their medical uses. In one aspect the invention relates to 5-HT<sub>2A</sub> agonists of formula (I). In another aspect, the invention relates to 5-HT<sub>2A</sub> agonists for use in the treatment of a depressive disorder, more particular a 5-HT<sub>2A</sub> agonist for the use in the treatment of treatment-resistant depression.

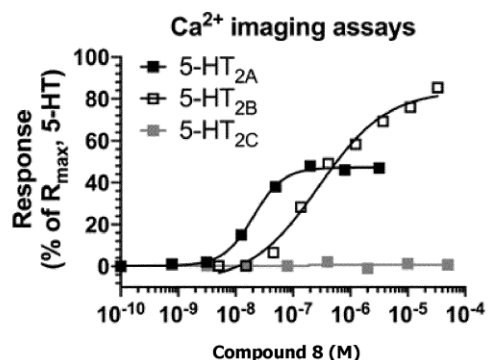


FIG. 1A

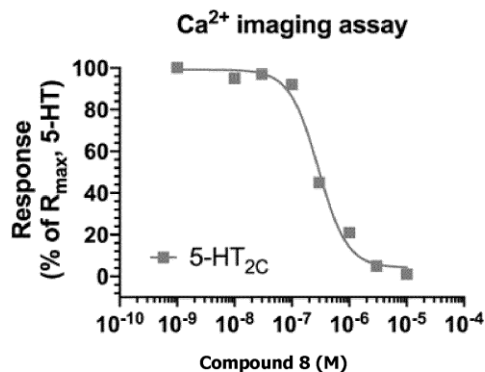
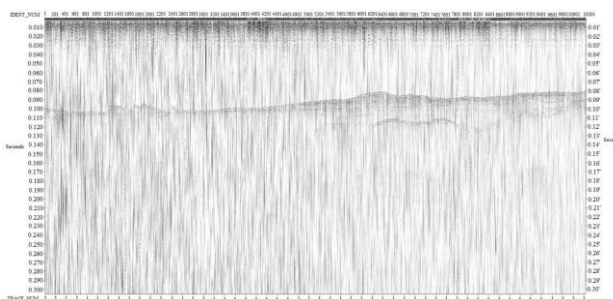


FIG. 1B

The present invention provides a sub-bottom-profile seismic data acquisition auxiliary apparatus and a construction method thereof. The auxiliary apparatus includes a floating body and a cable carrying device, wherein the floating body is connected with the cable carrying device through a floating ball rope, a cable of a sub-bottom profiler is installed on the cable carrying device, and a cable depth is controlled by adjusting a release length of the floating ball rope, i.e., by a balance between the buoyancy of the floating body and the gravity of the cable carrying device. The acquisition efficiency and the acquisition effect are improved. Moreover, whether in forward flow or reverse flow, the acquired sub-bottom-profile seismic data are consistent in appearance, greatly reducing the seismic data processing cost.

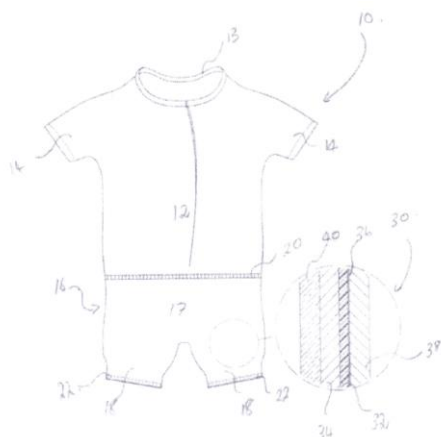


21: 2022/05077. 22: 2022/05/09. 43: 2022/10/26  
 51: A41B  
 71: KASSEL, Lee-Anne  
 72: KASSEL, Lee-Anne  
 33: ZA 31: 2021/03268 32: 2021-05-10  
**54: EVAPORATIVE BABY BODYSUIT**  
 00: -

An infant bodysuit for encasing an infant and for moisture management of said infant, comprising: an outer body part formed of a fabric material which is configured to cover a torso of said infant, a collar through which a neck of the infant extends at a top end region of the outer body part, sleeves and legs which define an infant body containment area; said infant body containment area including a multi-layer fabric construction including an inner fabric layer laminated to an inside of the bodysuit fabric material, said inner fabric layer consists of a waterproof micro porous semi permeable membrane, wherein said semi permeable membrane serves to retain moisture on the inside thereof and allows transfer of moisture through the semi

21: 2022/04989. 22: 2022/05/06. 43: 2022/11/08  
 51: G01V  
 71: BINZHOU UNIVERSITY  
 72: LIU, Feifei, PAN, Jun, SUN, Yaoting  
**54: SUB-BOTTOM-PROFILE SEISMIC DATA ACQUISITION AUXILIARY APPARATUS AND CONSTRUCTION METHOD THEREOF**  
 00: -

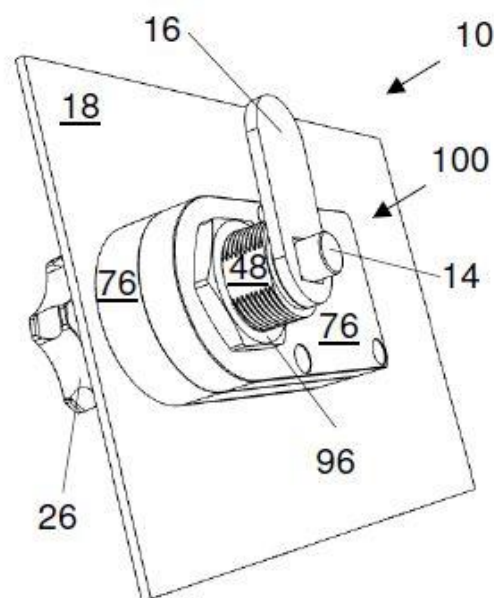
permeable membrane and evaporation thereof on the outside of the membrane.



21: 2022/05079. 22: 2022/05/09. 43: 2022/10/26  
 51: E05B; E05G  
 71: VAN REENEN, Rudi Paul, CORDINER, Alastair, CORDINER, Dorian  
 72: VAN REENEN, Rudi Paul, CORDINER, Alastair, CORDINER, Dorian  
 33: ZA 31: 2021/03118 32: 2021-05-10

**54: A LOCK**

00: -  
 There is disclosed a lock. The lock includes a cylinder having a moveable plug with a locking tongue. The moveable plug with locking tongue is moveable by one of a manual turning member and a key moving the locking tongue between a locked position and an unlocked position. The lock further includes a lug extending from the cylinder, an electrically operated lock arranged to lock the lug to inhibit movement of the locking tongue by the manual member and to unlock the lug to enable movement of the cylinder and locking tongue by the manual turning member, and an internal locking mechanism of the cylinder which is unlockable by the key for moving the plug and locking tongue by the key independently of the lug.



21: 2022/05163. 22: 2022/05/10. 43: 2022/11/11  
 51: A01H  
 71: WUHE COUNTY GREEN AGRICULTURE PRODUCTS ASSOCIATION  
 72: YIN, Chaokui  
 33: CN 31: 202111164883.6 32: 2021-09-30

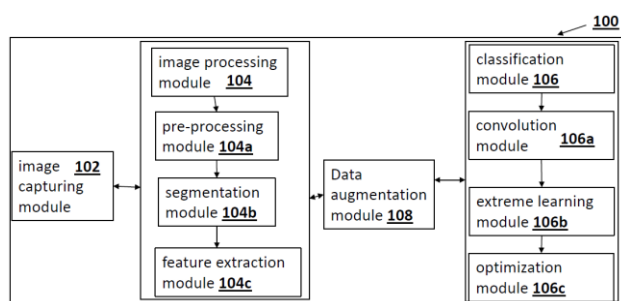
**54: METHOD FOR SCREENING STABLE YIELD WHEAT VARIETY WITH STRONG TOLERANCE**

00: -  
 The present invention relates to a method for screening stable yield wheat variety with strong tolerance, which belongs to the field of wheat variety screening, including: firstly, planting wheats according to a wheat planting method, and performing data collection during planting to collect germination rate  $F_{ij}$ , unit output  $D_{ij}$ , mature spike number  $C_{ij}$  and grain number per spike  $L_{ij}$  of all wheats; then, performing concentrated analysis on the collected data and calculating a production evaluation value  $P_{ij}$  according to relevant algorithms to obtain column-three seed groups of all planting land groups, wherein the column-three seed groups include column-three group one to column-three group nine; obtaining a primary seed group preliminarily by the above method, and dividing the seeds into specially selected seeds, over-selected seeds and biased seeds according to the number of times each seed appears; these seeds can adapt to different environments.

21: 2022/05202. 22: 2022/05/11. 43: 2022/08/30  
 51: A61K  
 71: Dr. Satyasis Mishra, Dr. Mohammed Siddique, Dr. Sunita Satapathy, Dr. Goutam Kumar Mahato, Dr. Tumbanath Samantara, Dr. Sasmita Nayak, Mr. Nilamadhab Dash, DR. RAMESH CHANDRA MOHANTY  
 72: Dr. Satyasis Mishra, Dr. Mohammed Siddique, Dr. Sunita Satapathy, Dr. Ramesh Chandra Mohanty, Dr. Goutam Kumar Mahato, Dr. Tumbanath Samantara, Dr. Sasmita Nayak, Mr. Nilamadhab Dash

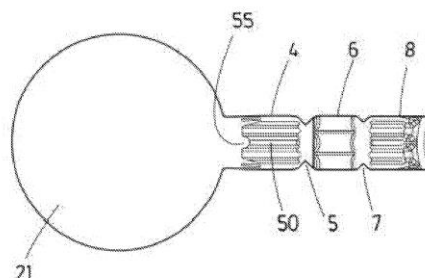
**54: A SYSTEM AND A METHOD OF IMPROVED SCA-ELM BASED DENSENET121 FOR CLASSIFICATION OF FRUIT DISEASES**

00: -  
 A system (100) for classification of disease in a fruit, comprises of: an image capturing module (102) for capturing atleast an image of the fruit, wherein an image processing module (104) for processing the captured image comprises of pre-processing, image segmentation and data augmentation for obtaining a plurality of features and training data respectively; and a classification module (106) for taking the obtained plurality of features and the training data to classify predicted diseases into a plurality of classes, comprises of: a convolution module (106a) comprising of a plurality of convolutional layers; an ELM (106b) to provide the plurality of features as input to the fully connected layer for updating a plurality of weights of the fully connected layer using a SCT; and an optimization module (106c) for optimizing the updated plurality of weights using a backpropagation technique.



21: 2022/05348. 22: 2022/05/13. 43: 2022/08/18  
 51: B65D  
 71: DESARROLLOS TAMARIT PLAZA SL  
 72: TAMARIT RIOS, Ramón  
**54: CROWN CAP**  
 00: -

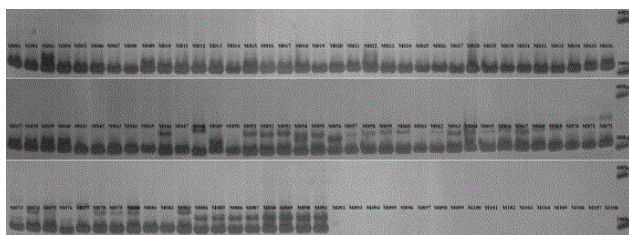
The present invention relates to a crown cap for bottles, of the type constituted by a metal plate, although it could be made of another material, having a structural configuration which favors the opening operation of the bottle by means of the removal of the crown cap with the thumb of the hand holding the bottle.



21: 2022/05529. 22: 2022/05/19. 43: 2022/09/09  
 51: C12N; C12Q  
 71: YUNNAN TOBACCO QUALITY SUPERVISION MONITORING STATION, Yunnan Academy of Tobacco Agricultural Sciences, Yunnan Academy of Agricultural Sciences  
 72: ZHANG, Ke, ZHANG, Xiaowei, TONG, Zhijun, ZHANG, Suhua, YANG, Shuming, SUN, Haowei, CHEN, Dan, WANG, Chunqiong, XIAO, Bingguang, LONG, Jie, ZHANG, Jiwu, CAI, Jieyun, GAI, Xiaolei, FANG, Dunhuang, LIU, Zhonghua, SUI, Xueyi, CHEN, Xuejun, LI, Haiyan, GU, Jianlong, WEI, Jia, PENG, Lijuan, CHI, Yuan, HAN, Xiaoyuan, YANG, Bing, ZHAO, Lin  
 33: CN 31: 202110558610.3 32: 2021-05-21  
**54: A SPECIFIC MOLECULAR MARKER FOR DISCRIMINATING HOMOLOGOUS RAW MATERIALS FROM TOBACCO ORGANIC FERTILIZER AND APPLICATION THEREOF**  
 00: -

The present invention belongs to the field of molecular biotechnology. More specifically, it relates to a specific molecular marker for discriminating homologous raw materials from tobacco organic fertilizer and application thereof. The numbers of the specific molecular marker are Ntsp027 and Ntsp151, and the nucleotide sequences of the PCR amplified products thereof are shown in SEQ ID No .1 and SEQ ID No .2, respectively. The application is to use the specific molecular marker as described above to perform PCR amplification on the genomic DNA of the tobacco organic fertilizer to detect whether there is a specific nucleotide sequence of the PCR amplified products, and to accurately determine

whether homologous raw materials are present in the tobacco organic fertilizer. The specific molecular marker of the present invention realizes the rapid and effective identification and detection of homologous raw materials in the tobacco organic fertilizer, improves the scientificity, accuracy and authority of the identification and detection of the tobacco organic fertilizer, reduces the risk of purchasing the tobacco organic fertilizer, and further improves the technical level of quality supervision of the tobacco organic fertilizer.



21: 2022/05540. 22: 2022/05/19. 43: 2022/11/02  
51: B23K

71: China Railway Jiujiang Bridge Engineering Co., Ltd.

72: GUO, Hongyan, FU, Jianhui, CHEN, Qian, LIANG, Hui, HUANG, Xuguang, LI, Fangmin, ZHU, Dongming, WANG, Yuangen, LI, Zhengbing, PAN, Yunlong, XU, Weiyu, GAO, Bo, WANG, Lei, HUANG, Yong, LIU, Xiang, XIAO, Huidong, WANG, Zhongmei

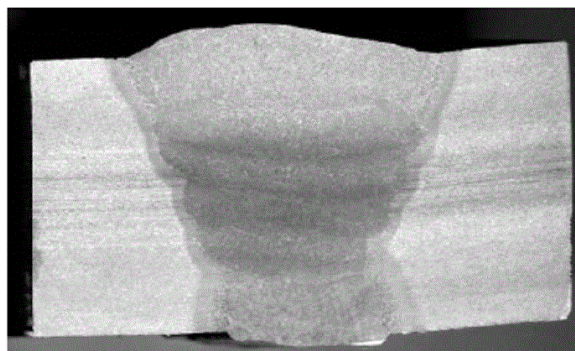
33: CN 31: 202011585358.7 32: 2020-12-28

**54: PROCESS METHOD FOR SINGLE-SIDE WELDING AND DOUBLE-SIDE MOLDING OF Q500qENH WEATHER-RESISTANT STEEL IN ALPINE REGION**

00: -

The present invention discloses a process method for single-side welding and double-side molding of Q500qENH weather-resistant steel in an alpine region. The process method can overcome adverse effects of an alpine environment in a plateau on welding performance, and improve low-temperature toughness, crack resistance and weather resistance of a welded joint, so as to obtain the welded joint with various good mechanical properties and weather resistance, and realize matched welding of long-span, heavy-load, high-strength, high-toughness and high-weather-resistance bridge steel in an alpine region of a plateau; and at the same time, the method does not need pre-welding preheating and post-welding heat treatment, thereby

improving production efficiency and reducing energy consumption.



21: 2022/05846. 22: 2022/05/26. 43: 2022/10/12  
51: B08B; H02S

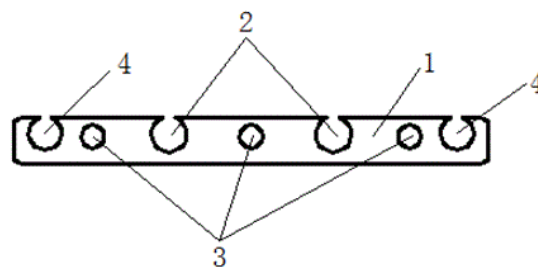
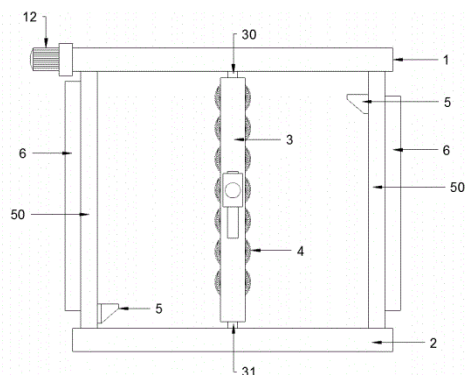
71: WEST ANHUI UNIVERSITY

72: LIU, Xiangyuan, HE, Rui, FANG, Jie, KONG, Min  
33: CN 31: 202110429154.2 32: 2021-04-21

**54: MOBILE ROTATING MECHANISM AND PHOTOVOLTAIC POWER GENERATION DEVICE WITH SELF-CLEANING FUNCTION**

00: -

The present invention relates to a mobile rotating mechanism and a photovoltaic power generation device with a self-cleaning function. The mobile rotating mechanism comprises a cleaning box and cleaning brushes, and a cleaning driving mechanism is arranged inside the cleaning box. The cleaning driving mechanism comprises a rotary motor and a reduction gear box. The reduction gear box is slidably arranged inside the cleaning box in a front-rear direction as a whole, and a pair of strong magnets attracted to each other are respectively fixed oppositely on front and rear end faces of the reduction gear box and front and rear inner walls of the cleaning box. The left and right sides of a driving carriage are provided with staggered touch heads to separate the reduction gear box from the cleaning box and to drive the reduction gear box to slide in the front-rear direction inside the cleaning box.



21: 2022/05921. 22: 2022/05/27. 43: 2022/11/02  
51: B65H  
71: Jiangsu Little Sun Technology Development Co., Ltd.

72: Cainan ZHANG, Sheng ZHANG, Enguang DU  
33: CN 31: 202123140751.8 32: 2021-12-15

**54: NON-DEFORMABLE BLADE FOR CLOTH CLIP AND CLOTH CLIP WITH NON-DEFORMABLE BLADE**

00: -

The invention discloses a non-deformable blade for a cloth clip. The blade includes a cuboid blade body, wherein a plurality of first grooves are arranged in one long edge of the blade body. The invention further discloses the cloth clip with the non-deformable blade. According to the blade and the cloth clip, the plurality of first grooves are arranged in the blade body; after the blade is cast into a knife clip body, notches connected with the first grooves are arranged in the knife clip body to divide the blade into a plurality of sections, so that the knife edges of the plurality of sections of blade can be kept on the same straight line, and the blade can be divided into the plurality of sections. When the blade is divided into the plurality of sections at the high temperature of about 200 DEG C and aluminum alloy expands, a certain stretching space can be provided, and the blade cannot deform, so that the knife edges of the blade are on the same straight line, and the effective occlusion length is long.

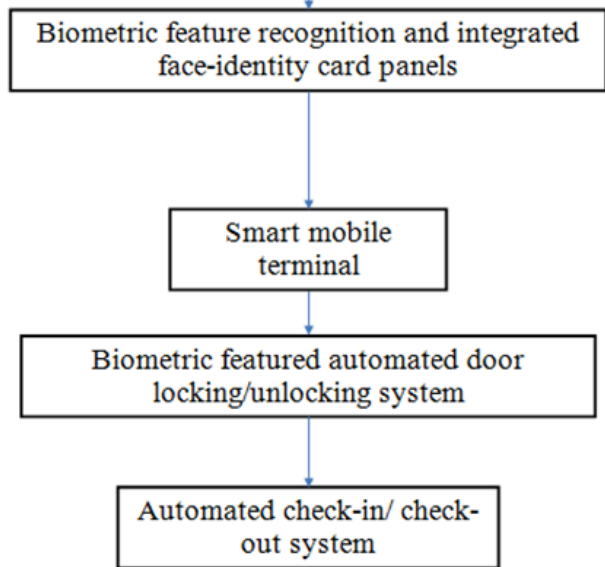
21: 2022/06804. 22: 2022/06/20. 43: 2022/08/22  
51: G06Q

71: SHARMA, Viveka Nand, RAI, Shailendra Kumar, GANGULY, Suvojit, SHARMA, Manoj Kumar, SINGH, UdayPratap, VASANTH, Nirmal, SAINI, Nikhil, AWASTHI, Saurabh, MUKHERJEE, Sudipta  
72: SHARMA, Viveka Nand, RAI, Shailendra Kumar, GANGULY, Suvojit, SHARMA, Manoj Kumar, SINGH, UdayPratap, VASANTH, Nirmal, SAINI, Nikhil, AWASTHI, Saurabh, MUKHERJEE, Sudipta

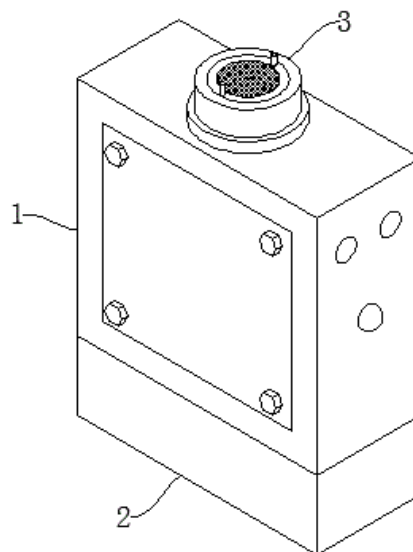
**54: SELF-SERVICE CHECK-IN SYSTEM FOR HOTELS BASED ON BIOMETRIC FEATURE RECOGNITION AND INTEGRATED FACE-IDENTITY CARD VALIDATION**

00: -

The present invention relates to a self-service check-in system for hotels based on biometric feature recognition and integrated face-identity card validation. Artificial Intelligence (AI) and Machine Learning (ML) techniques are used in big data management as well as data analysis recently. Therefore, hotel industry has witnessed a steep rise in the adoption of Artificial Intelligence (AI) and Machine Learning (ML) technology. Since there is a huge amount of data involved in a hotel check-in/check-out system, proper digitization of the data followed by applying appropriate artificial intelligence and machine learning techniques could help the hotel management in better record-keeping and improve the guest relationship. With an increase in number of hotel guests due to holiday making and business trips, an automated self-check-in/check-out system based on biometric feature recognition and integrated face-identity card validation could be employed for providing hospitality on time.



components inside the computer case will not be damaged by moisture.



21: 2022/07026. 22: 2022/06/24. 43: 2022/09/28  
 51: G06F  
 71: Zhengzhou Railway Vocational And Technical College  
 72: Jiling SHANG, Chaohui LIANG, Wenli HU, Xiangge YANG, Bo LIU, Ying SUN, Yang GAO, Bin CHEN

**54: NOVEL COMPUTER HOST DEVICE FOR INFORMATION TECHNOLOGY**

00: -  
 The disclosure provides a novel computer host device for information technology, which comprises a protection mechanism for protecting internal equipments and a heat dissipation mechanism installed under the protection mechanism to discharge heat inside a computer case, wherein the novel computer host device for information technology further comprises a dehumidification mechanism fixed above the protection mechanism to remove moisture in an air. In the disclosure, by providing the dehumidification mechanism, the ventilation net filters the large impurities in the gas entering the computer case, the desiccant adsorbs the moisture in the gas, the filter screen filters the small impurities in the gas, and the processed gas enters the computer case, which ensures that the

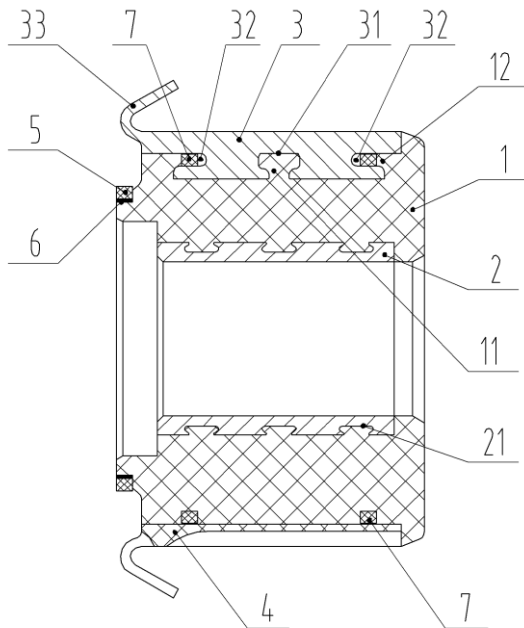
21: 2022/07106. 22: 2022/06/27. 43: 2022/09/28  
 51: H01R  
 71: TAICANG LIBIAO INTELLIGENT TECHNOLOGY CO., LTD  
 72: HAN, Jili

**54: HOOK TYPE COMMUTATOR HAVING BUSHING**

00: -  
 A hook type commutator having a bushing, comprising a base body (1), a bushing (2), commutator sheets (3), mica sheets (4), and a reinforcing ring (5). The inner wall of the base body (1) is provided with the bushing (2); the commutator sheets (3) are uniformly arranged along the circumference of the outer side of the base body (1); each of the mica sheets (4) is provided between adjacent commutator sheets (3); the reinforcing ring (5) is provided at an end, provided with a boss, of the base body (1); the outer wall of the bushing (2) is provided with multiple transverse grooves (21) and multiple longitudinal grooves (22); the transverse grooves (21) are in a dovetail shape and matched with the inner wall of the base body (1); and the longitudinal grooves (22) are uniformly arranged along the circumference of the outer side of the bushing (2). The hook type commutator having the bushing is simple in structure, and has all parts firmly combined, such that rotation of the bushing and cracking of the commutator are effectively



prevented; in addition, the reinforcing ring is provided, such that the overall structure is firmer, the mechanical performance of the commutator is improved, and the service life of the commutator is prolonged.

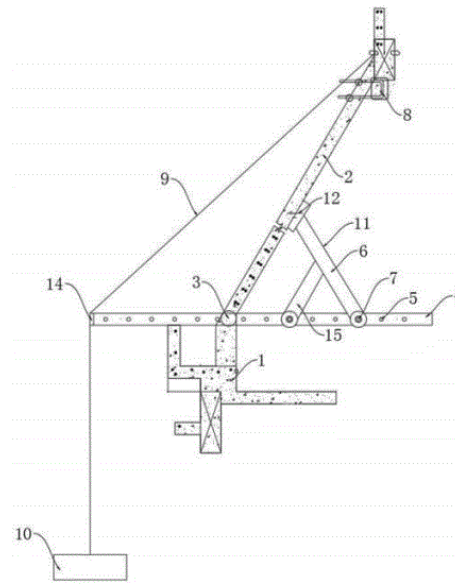


21: 2022/07253. 22: 2022/06/30. 43: 2022/11/02  
 51: E04G  
 71: CHINA STATE CONSTRUCTION ZHONGXIN CONSTRUCTION ENGINEERING CO.,LTD  
 72: ZHANG, Zeze, WANG, Qiwen, WANG, Yanqiang, XU, Zhihao, SUN, Pengfei, WANG, Peng  
 33: CN 31: 202110732218.6 32: 2021-06-30

**54: LARGE-ANGLE INCLINED ROOF HANGING BASKET AND MOUNTING METHOD THEREOF**

00: -  
 The present invention discloses a large-angle inclined roof hanging basket and a mounting method thereof. The large-angle inclined roof hanging basket includes a wall body, a hanging basket, and an inclined wall arranged on the wall body. A hole is formed in a joint between the wall body and the inclined wall. A suspension mechanism used for suspending the hanging basket is arranged in the hole. The suspension mechanism includes a cantilever beam arranged in the hole in a penetrating manner. A plurality of through holes are formed in a side wall of the cantilever beam. A positioning mechanism is arranged between the cantilever beam and the inclined wall. The hanging basket is

connected to a steel wire rope bypassing an end part of the cantilever beam and a top end of the inclined wall.



21: 2022/07275. 22: 2022/06/30. 43: 2022/09/22  
 51: B09B

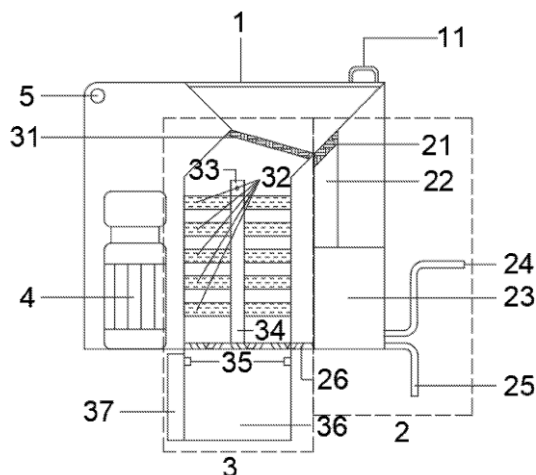
71: SUZHOU ZHILVE INTELLECTUAL PROPERTY OPERATION COMPANY LIMITED

72: HAN, Jili

**54: DOMESTIC KITCHEN WASTE DISPOSER CAPABLE OF SEPARATELY TREATING LIQUID WASTE AND SOLID WASTE AND OPERATION METHOD THEREOF**

00: -  
 The present disclosure relates to the field of domestic appliances, in particular to a domestic kitchen waste disposer capable of separately treating liquid waste and solid waste and an operation method thereof. The domestic kitchen waste disposer capable of separately treating liquid waste and solid waste includes a baffle (1), an area (2) for treating liquid waste, an area (3) for treating solid waste, a motor (4), and an infrared signal receiver (5), where treatment is performed for multiple times in both the area (2) for treating the liquid waste and the area (3) for treating the solid waste, which are homologous. In addition, waste flows to the area (2) for treating the liquid waste first by gravity to be filtered once, and the liquid waste flows into the area (2) for treating the liquid waste to be purified by means of a water purifier for reuse; solid waste cannot enter the area (2) for treating the

liquid waste. While the area (3) for treating the solid waste is controlled by a remote (6) to open, the solid waste enters the area (3) for treating the solid waste to be smashed by means of five blades, and dry solid waste is obtained and collected from the bottom. Therefore, the domestic kitchen waste disposer capable of separately treating liquid waste and solid waste is suitable for families who have demands for waste classification.

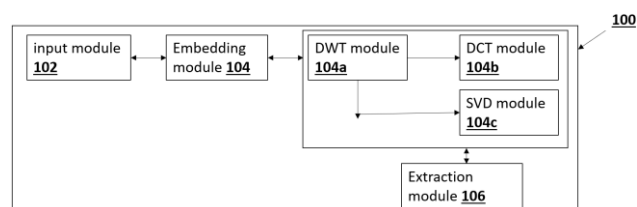


21: 2022/07405. 22: 2022/07/05. 43: 2022/09/16  
 51: H04N  
 71: EKTA THIRANI, DR. VAIBHAV NARAWADE, DR. JAYASHREE JAIN  
 72: Ekta Thirani, Dr. Vaibhav Narawade, Dr. Jayashree Jain

**54: A DIGITAL WATER MARKING SYSTEM AND A METHOD THEREOF**

00: -  
 A digital water marking system and a method, comprises of: an input module (102) for acquiring an image as input; an embedding module (104) for embedding a watermark into the image to produce an watermarked image, comprises of: a DWT module (104a) to deconstruct the image into four bands such as LL, HL, LH and HH, where L represents low pass band and H represents high pass band; a DCT module (104b) to acquire a coefficient matrix of average frequency band and scale factor by trigonometric functions and extracting remarkable standards; and a SVD module (104c) for adjusting image brightness and geometry from the obtained coefficient matrix, wherein an inverse DCT and inverse DWT technique on the coefficient matrix leads to formation of the water marked image; and

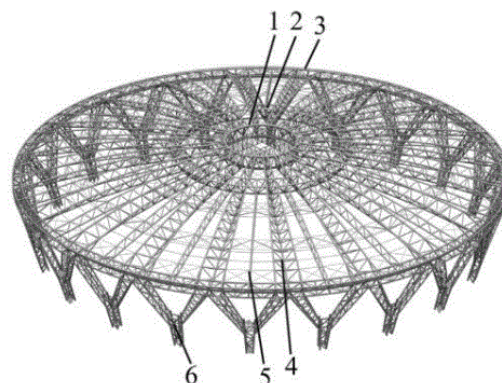
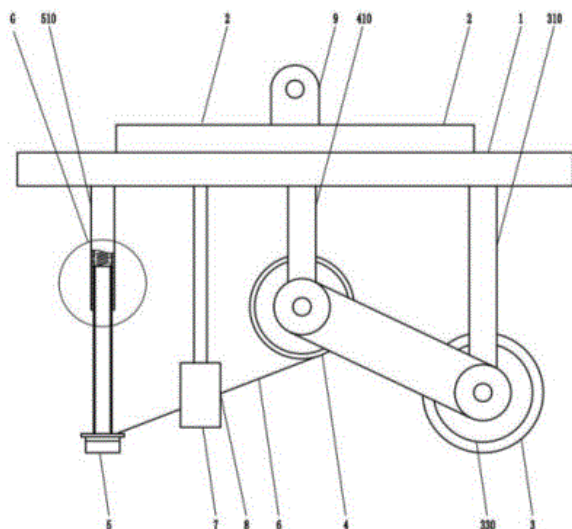
an extraction module (106) for extracting the watermark from the watermarked image



21: 2022/07687. 22: 2022/07/12. 43: 2022/10/12  
 51: A01C; A01G  
 71: Inner Mongolia Academy of Agricultural And Animal Husbandry Sciences  
 72: XIAN, Feng, LU, Zhanyuan, ZHANG, Jianzhong, CHEN, Liyu, CHENG, Yuchen, SU, He, WANG, Jianguo, ZHAO, Xiaoqing, CAO, Fenghai, JIANG, Xiaoping, YANG, Junxia, XU, Jianfang, SHANG, Xueyan, MENG, Wenhui, JIA, Junping

**54: SEEDER END DRIP TAPE CONVEYING DEVICE**

00: -  
 Disclosed is a seeder end drip tape conveying device including a support, a connecting frame, an opener, a drip tape releaser and a soil fixing mechanism. The soil fixing mechanism includes a first connector, a connecting plate, a first push plate, a second push plate and a compressed spring, where the first connector is connected to the connecting frame, the connecting plate is connected to the first connector, the first push plate is arranged on a left side of a drip tape, the second push plate is arranged on a right side of the drip tape, and the compressed spring is connected between the first push plate and the second push plate. The device can fix scattered soil on two sides of an earth ditch during drip tape pavement so as to prevent the scattered soil from blocking holes in the drip tape.



21: 2022/07688. 22: 2022/07/12. 43: 2022/10/12  
51: E04B  
71: Shaanxi Academy of Architectural Sciences Co., Ltd.

72: LI, Jiming, LIU, Mingliang, HAN, Dafu, JI, Zhiqiang, XING, Guohua, WU, Jinzhi, WEI, Chaoqi, ZHOU, Chunjuan, QIN, Jie, HUI, Cun, SUN, Yongmin, HU, Xiaobin, WU, Yan

**54: LARGE SPAN SPATIAL CHORD-SPOKE TRUSS STRUCTURE SYSTEM AND CONSTRUCTION METHOD**

00: -

The present invention discloses a large span spatial chord-spoke truss structure system and a construction method, relating to the technical field of civil engineering, comprising a dome portion, wherein the dome portion comprises an upper structure and a lower structure; the lower structure is provided below the upper structure; the upper structure comprises a central ring truss, a middle ring truss, an outer ring truss, an inverted triangular truss and a secondary truss; the substructure includes circumferential cables, radial cables, stabilizing cables and support rods. The stability and bearing capacity of the structure are enhanced, and the advantages of convenient construction, high bearing capacity and good stability of the structure can be realized while the span of the structure is increased.

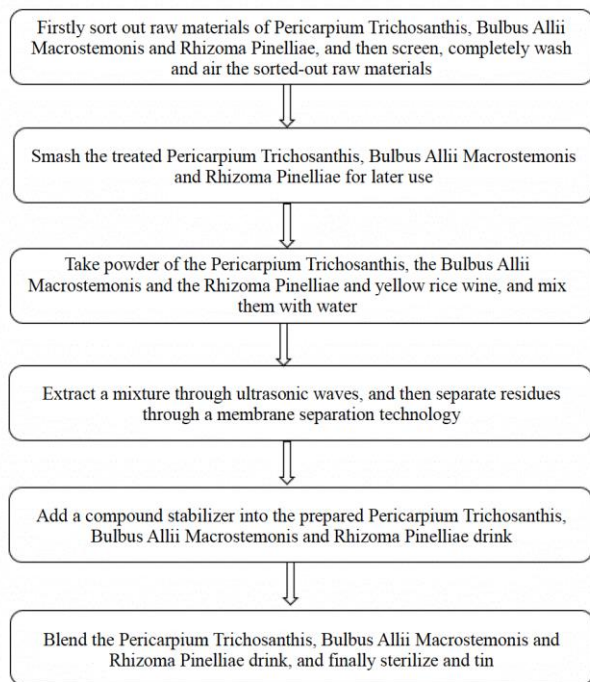
21: 2022/07690. 22: 2022/07/12. 43: 2022/10/12  
51: A61K

71: Anhui Science and Technology University  
72: PENG, Gang, GUO, Mengxue, HUANG, Yi, ZHENG, Shulin, ZHANG, Kaiwen, ZHANG, Xu, LIU, Yuting, HU, Haijun, ZHU, Yiwen, ZHANG, Mixue, LIU, Ruru

**54: PERICARPIUM TRICHOSANTHIS, BULBUS ALLII MACROSTEMONIS AND RHIZOMA PINELLIAE DRINK AND PREPARATION METHOD THEREOF**

00: -

The present disclosure discloses a preparation method of a Pericarpium Trichosanthis, Bulbus Allii Macrostemonis and Rhizoma Pinelliae drink. The preparation method includes following steps: (1) sorting out Pericarpium Trichosanthis, Bulbus Allii Macrostemonis and Rhizoma Pinelliae medicinal material decoction pieces and yellow rice wine qualified after being tested according to national standards; (2) mixing medicinal materials and the yellow rice wine: 12 g of Pericarpium Trichosanthis, 9 g of Bulbus Allii Macrostemonis, 9 g of Rhizoma Pinelliae and 70 mL of yellow rice wine, smashing the Pericarpium Trichosanthis, the Bulbus Allii Macrostemonis and the Rhizoma Pinelliae into powder, putting the powder and the yellow rice wine into ultrasonic extraction equipment together, adding water, at an ultrasonic temperature of 50-60 degrees Celsius; (3) removing impurities and macromolecular substances through ultrafiltration membranes to obtain a clear extracting solution; and (4) blending the extracting solution through a compound stabilizer, sterilizing and tinning.



21: 2022/07691. 22: 2022/07/12. 43: 2022/10/12  
51: B29C

71: GUIZHOU MINZU UNIVERSITY, Guizhou Ecological Agriculture and Resource Protection Station, Guizhou Academy of Tobacco Science  
72: LIU Bangyu, DAI Liangyu, WU Nandi, GAO Weichang, LIU Taoze, LIU Juncong, LI Liangliang, ZHANG Shuyi

#### 54: PREPARATION METHOD OF RED MUD/WASTE PLASTIC REGENERATED RESIN COMPOSITE WELL LID

00: -

The invention discloses a preparation method of a red mud/waste plastic regenerated resin composite well lid, and relates to the technical field of composite material manufacturing. The preparation method comprises the following steps: uniformly mixing modified red mud, waste plastics, impact modifier, lubricant and stabilizer, then mixing, and after the mixture forms a melt, pressing and forming to obtain the red mud/waste plastics regenerated resin composite well lid; the modified red mud is obtained by adding a coupling agent to the red mud and performing modification treatment. According to the invention, through the exploration of the synthesis process, the red mud is used as a filler to fill the high-molecular polymer, and at the same time, the red mud is consumed and modified, so that the mechanical properties and aging resistance of

the high-molecular polymer can be obviously improved, and then the performance of the high-molecular polymer can be effectively improved, and finally the well cover with high strength, aging resistance and toughness can be prepared.

21: 2022/07692. 22: 2022/07/12. 43: 2022/10/12  
51: B62B

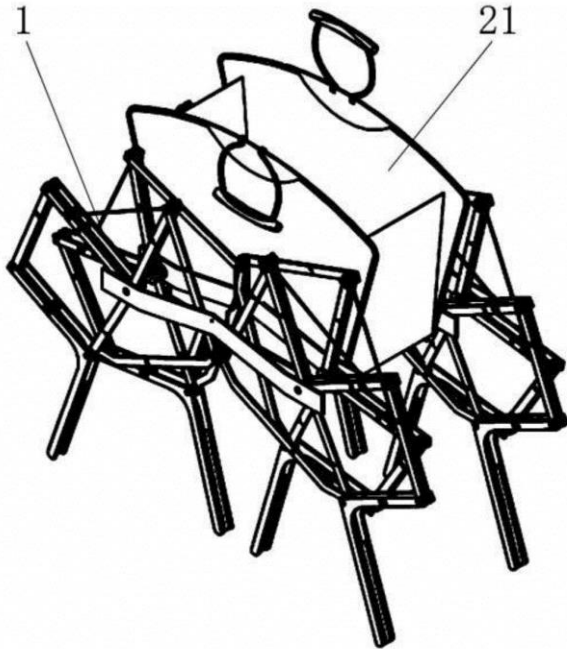
71: Beijing Normal University, Zhuhai

72: ZUO Jingwu, TAN Huien

#### 54: FOLDABLE SHOPPING CART WITH BIONIC MECHANICAL STRUCTURE INSTEAD OF WHEELS

00: -

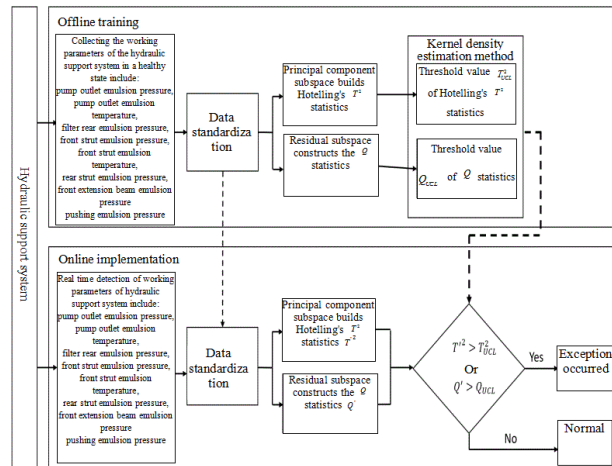
A foldable shopping cart with bionic mechanical structure instead of wheels comprises a bionic mechanical structure and shopping bags arranged on the bionic mechanical structure; the front mechanical leg and the rear mechanical leg of the bionic mechanical mechanism are connected by a fixed frame, and a crank is arranged between them, and the front mechanical leg and the rear mechanical leg are driven to take turns to move by the rotation of the crank. The mechanical leg of that invention are in point contact with the ground, thus reducing the dependence on the surround environment such as the ground, effectively crossing obstacles through the rugged road surface and the height and width of the stride, and the movement track of the robot will not change with the change of the terrain, which can reduce the shaking feeling of the hand on the rugged ground in the pushing process, make the movement more stable, reduce the wrist burden, and can place articles without bending over frequently; the shopping bag can be detached from the bionic mechanical structure, and the bionic mechanical structure can also be folded, so the whole robot can be folded.



21: 2022/07693. 22: 2022/07/12. 43: 2022/10/12  
 51: E21C; G05B  
 71: China University of Mining and Technology, Henan Xuchang Xinlong Mine Industry Co.,Ltd.  
 72: WANG Jinxin, WANG Feng, WEI Qilei, FENG Xiaojun, ZHAO Enlai, ZHANG Chaolin, LIU Yubing  
**54: METHOD FOR MONITORING STATE OF HYDRAULIC SUPPORT SYSTEM IN UNATTENDED WORKING FACE OF COAL MINE**  
 00: -

The invention discloses a method for monitoring state of hydraulic support system in unattended working face of coal mine. using principal component analysis method, the working parameters of hydraulic support system in healthy state are projected on principal component subspace and residual subspace, and then Hotelling's  $T^2$  and  $Q$  statistics are respectively constructed on these two subspaces as performance state evaluation indexes of hydraulic support system. The statistical law characteristics of working parameters of hydraulic support system in healthy state are estimated by using nuclear density, and the threshold values of Hotelling's  $T^2$  and  $Q$  statistics are determined. When any index exceeds its threshold value, it is judged that the hydraulic support system fails, which can find the early performance deterioration of the hydraulic support system in unattended working face and effectively prevent the

early failure from further developing into a major accident.

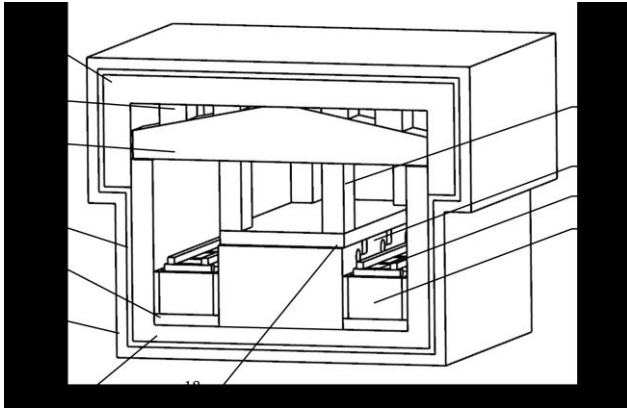


21: 2022/07694. 22: 2022/07/12. 43: 2022/10/18  
 51: E02D  
 71: LIAONING TECHNICAL UNIVERSITY, CHINA RAILWAY 18TH BUREA GROUP CORPORATION LIMITED  
 72: JIN Jiayu, ZHANG Xinlei, WU Pengfei, LI Lei, LIU Chenghua, ZHANG Xin, JIA Baoxin, XI Jufa, ZHANG Xiangping, XIAO Xiaochun, CAO Wenquan, LIU Jiashun

**54: WATERPROOF REINFORCEMENT STRUCTURE OF UNDERGROUND PASSAGE AND CONSTRUCTION TECHNOLOGY THEREOF**  
 00: -

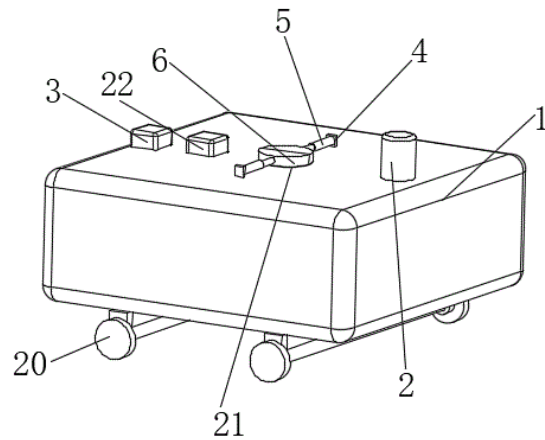
The invention discloses a waterproof reinforcement structure of underground passage and a construction technology thereof, which includes a reinforcement passage, a plurality of cross beams, two fixed seats and platform members; the reinforcement passage includes a cover plate and a bottom plate; the bottom surface of the cover plate and the top surface of the bottom plate are respectively provided with emptying grooves; the two sides of the top of the bottom plate are respectively attached to the opposite side walls of the emptying groove cavity of the cover plate, the top surface of the cross beam is in conflict with the top surface of the cover plate cavity, two connecting blocks are fixedly connected to the two ends of the cross beam respectively, and the two connecting blocks are embedded in the two side walls of the cover plate cavity; the bottom surface of the bottom plate cavity is fixedly connected with a platform member, two sides of the platform member are respectively

attached to the fixed seat, the bottom surface and one side surface of the fixed seat are respectively attached to the bottom plate cavity, and the top surface of the fixed seat is fixedly connected with a track. The invention improves the waterproof performance of the reinforcement passage, reduces the damage to the reinforcement passage during the running of the train, and reduces the impact of external flood on the reinforcement passage.



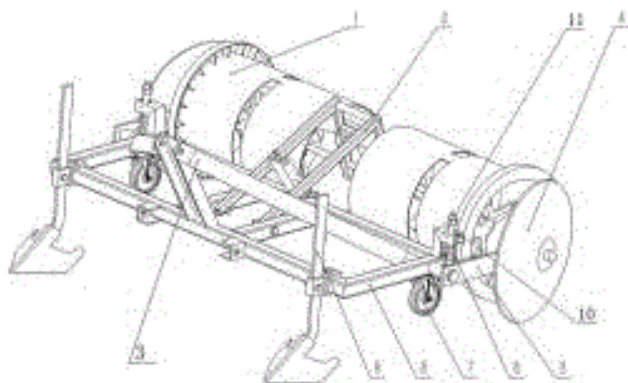
21: 2022/07695. 22: 2022/07/12. 43: 2022/10/12  
 51: G09F  
 71: Suqian University of China  
 72: Zhu Huibo, Shi Lusheng, Guo Yuxuan, Chen Jialong, He Yu  
**54: MONITORING CONTROL EQUIPMENT FOR EMERGENCY RESCUE SITE**  
 00: -  
 The invention discloses monitoring control equipment for an emergency rescue site, which comprises an equipment body, wherein the bottom of the equipment body is provided with a rotating wheel, one side of the top of the equipment body is connected with a temperature sensor, one side of the temperature sensor is provided with a controller, One side of the fixed block is connected with an electric telescopic rod, one end of the electric telescopic rod is connected with a sealing block, the axis at the top of the equipment body is provided with a lifting hole, the axis at the bottom of the equipment body is connected with a first support rod, and one side of the first support rod is provided with a second support rod. According to the invention, the problems that the existing monitoring equipment requires rescue workers to enter a fire scene by holding the gas monitoring equipment to carry out gas monitoring are solved, so that the risk factor of the rescue workers is greatly improved, the rescue

workers are easily injured, and serious casualties of the rescue workers may be caused are solved.



21: 2022/07696. 22: 2022/07/12. 43: 2022/10/12  
 51: A01B  
 71: Xin jiang nong ye ke xue yuan bai cheng nong ye shi yan zhan, Xin jiang nong ye ke xue yuan jing ji zuo wu yan jiu suo  
 72: Liu hua jun, Ku er ban-a bu dou ka di er, Pan jing hai, Wang zi ming, Bai xiao shan, Wei ya yuan, Dong xin jiu, Lin ming, Chen you qiang, Zhang heng, Cao yu  
**54: A SPECIAL WEEDING, SCARIFYING, DITCHING AND COVERING MACHINE FOR INTERTILLED CROPS**  
 00: -  
 The utility model provides a special weeding, scarifying, ditching and covering machine for intertilled crops, which comprises a body frame, a scarifying plough, a soil covering plate and a soil covering roller. The body frame has a rectangular frame structure, and the front two sides of the body frame are symmetrically provided with scarifying ploughs; the upper end face is provided with a suspension frame for connecting the rear suspension of the tractor; the middle part is hinged with a rotating beam connected with the soil covering roller through a rotating shaft; the rear two sides are provided with a rotating arm hinged with the soil covering plate and a pressing mechanism; the pressing mechanism acts on the rotating arm through a spring, and the soil covering rollers are symmetrically arranged on the rotating shaft of the rotating beam, and the soil covering plate is matched with the soil covering rollers. The utility model has

the advantages of high soil covering efficiency and uniform soil covering for intertilled crops, and can realize the functions of scarifying soil, ditching and weeding. The whole machine has simple structure, convenient operation and maintenance and low manufacturing cost.

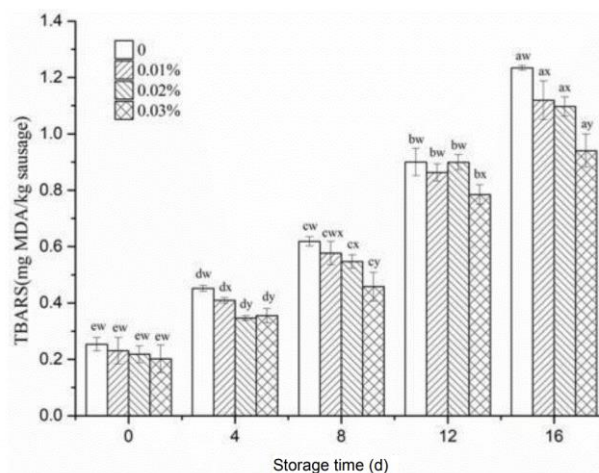


21: 2022/07697. 22: 2022/07/12. 43: 2022/10/21  
 51: A23L  
 71: Beijing Technology and Business University, Hubei zhouheiya Enterprise Development Co., Ltd, NINGBO UNIVERSITY  
 72: Pan Daodong, Tian Hongwei, Cao Jinxuan, Zhou Fuyu

**54: A PREPARATION METHOD OF SAUCED DUCK WITH LOW BIOGENIC AMINE AND NITRITE**

00: -  
 The invention discloses a preparation method of sauced duck with low biogenic amine and nitrite, which is characterized by the following steps: (1) Preparation of sauced duck: (1) Cleaning the surface of the slaughtered cherry valley duck with sterile water, completely immersing in 10% salt water by mass, pickling at 4 celsius degrees for 2h, blanching in boiling water for 10-20s, and marinating in marinade which is 3 times the weight of duck meat for 1-3h to obtain common sauced duck; 2) Soaking in fresh-keeping liquid: the grape seed extract is prepared into a grape seed extract solution with a concentration of 100-300mg/kg by using 10% salt water by mass, and the common sauced duck obtained in the step (1) is soaked in the grape seed extract solution, covered with a fresh-keeping film for 30-40s, left standing and drained, and the drained sauced duck is vacuum packed in a fresh-keeping bag to obtain the sauced duck with low biogenic amine and nitrite. Its advantages are inhibiting the generation of biogenic amine and the growth of

spoilage microorganisms in sauced duck's old brine, and prolonging the shelf life of food.



21: 2022/07698. 22: 2022/07/12. 43: 2022/10/12  
 51: C09D

71: Xinyu University  
 72: Xiao Zonghu, Wu Juanxiu, Zhong Wei

**54: PROCESS FOR COMBINING COMPONENTS OF A NOVEL SOLAR CELL**

00: -  
 The invention discloses a process for combining various components of a novel solar cell, which is characterized by comprising a combined layer of a perovskite solar cell PSC, FTO conductive glass, a TiO2 compact layer, TiO2 mesopores, a perovskite thin film layer, a hole transport layer and a metal electrode, The novel solar cell comprise PEDOT: PSS solution, SiO2, lead bromide, cesium bromide, phenylethylamine, formic acid derivative, TiO2, ethanol and metal The function of improving the light conversion efficiency of the perovskite thin film solar cell is realized and the safety and the reliability of the cell are improved by adjusting the preparation amount of each component thin film in the components of the perovskite thin film solar cell, and a coating printing technology is adopted in the combination process of each component of the perovskite thin-film solar cell, And that function of uniformly coat each component film of the perovskite film solar cell is realized.

21: 2022/07699. 22: 2022/07/12. 43: 2022/10/12  
 51: C25B  
 71: Hainan Normal University

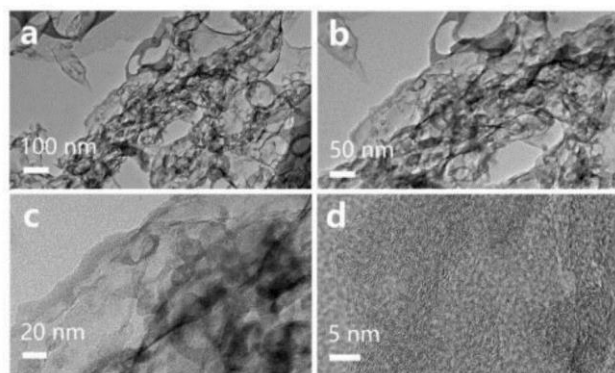
72: Sun Wei, Wang Baoli, Ai Yijing, Yao Yucen, Shi Fan, Xu Shiguan, Zhang Siyue

33: CN 31: 202210150405.8 32: 2022-02-18

**54: A PHOSPHORUS-DOPED MOLYBDENUM CARBIDE COMPOSITE CATALYST AND ITS PREPARATION METHOD AND ELECTROCATALYTIC HYDROGEN EVOLUTION APPLICATION**

00: -

The invention relates to a phosphorus-doped molybdenum carbide composite catalyst, and its preparation method and electrocatalytic hydrogen evolution application. According to the invention, waste biomass is used as a carbon source and molybdenum salt is used as a metal source, and a solid product is obtained through coordination crosslinking and curing, and then synchronous phosphorization-carbonization treatment. The specific preparation method is as follows: the treated biomass and molybdenum salt are firstly coordinated and crosslinked; Microwave-assisted curing treatment is carried out to obtain a metal-carbon source precursor; Simultaneous phosphorization-carbonization treatment to obtain composite material. The results of the embodiments show that the catalyst provided by the invention in alkaline medium, HER reach the current density of  $10\text{mA cm}^{-2}$  only by  $118\text{mV}$  overpotential; In acidic medium, an overpotential of  $172\text{mV}$  is needed to obtain a current density of  $10\text{mA cm}^{-2}$ .



21: 2022/07700. 22: 2022/07/12. 43: 2022/10/12

51: B65D

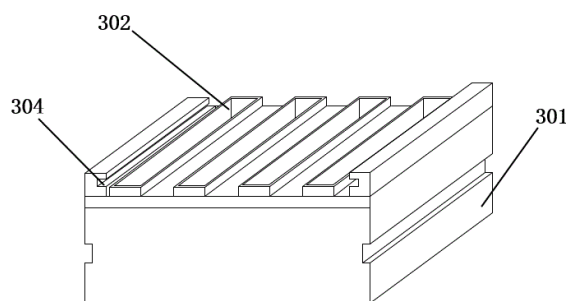
71: Shaanxi Institute of International Trade & Commerce

72: Wang Shan, Liu Feng, Peng Xiujuan, Xu Haiyan, Hou Minna, Wang Qing, Liu Yanhong

**54: PECIAL FRESH-KEEPING STORAGE DEVICE FOR FRESH REHMANNIA**

00: -

The invention relates to the field of fresh-keeping storage devices, in particular to a fresh-keeping storage device specially used for fresh rehmanna, which comprises a box body and a box door which is rotationally connected with the box body, wherein a plurality of fresh rehmanna storage frames are arranged in the box body, a sand containing frame is arranged below each fresh rehamnnia storage frame, each fresh rehamnnia storage frame comprises a frame body, the bottom of the frame body is provided with a plurality of sand leaking openings, And that bottom of the frame body is also provide with a sand blocking plate, and the sand bloc plate is detachably connected with the frame body and is closely attached to the sand leaking port. In the invention, the fresh rehmanna root is stored by the fresh rehmanna root storage frame, the sand containing frame, the sand leaking port and the sand blocking plate, and when the fresh Rehmannia Root needs to be taken out, sand in the fresh Rehmannia Root storage frame can enter into the sand containing frame through the sand leaking port only by drawing out the sand blocking plate, and then the fresh Radix Rehmanniae is taken out, The steps are simple, and a large amount of manpower and time are saved.



21: 2022/07752. 22: 2022/07/13. 43: 2022/10/12

51: E02D

71: ZHENGZHOU ENGINEERING CO.,LTD OF CHINA RAILWAY SEVENTH GROUP

72: LIAO, Jiaquan, WANG, Manchao, LU, Yaoping, WANG, Junpeng, SHAO, Hui, ZHANG, Pengyang, ZHANG, Kunpeng, LIU, Anyuan, WANG, Haowei, LIU, Shuo

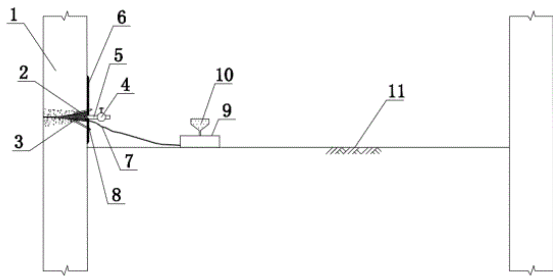
33: CN 31: 202210528666.9 32: 2022-05-16



**54: UNDERGROUND DIAPHRAGM WALL WATER LEAKAGE TREATMENT METHOD**

00: -

The present invention discloses an underground diaphragm wall water leakage treatment method, wherein cotton wool is used to plug the water leakage area of the underground diaphragm wall, a PPR draft tube with a valve is inserted into the water leakage area of the underground diaphragm wall, quick-setting cement is used to plug the water leakage area of the underground diaphragm wall and a flexible draft tube is pre-embedded; punching and inserting a water stop needle after the quick-setting cement is solidified, a hand-held high-pressure grouting machine is used to inject a water-soluble polyurethane through the flexible draft tube and the water stop needle. Finally, a steel plate is fixed on the underground diaphragm wall by expansion bolts, and grouting material is filled between the steel plate and the underground diaphragm wall to be compact.



21: 2022/07753. 22: 2022/07/13. 43: 2022/10/12  
51: E01C

71: CHINA RAILWAY SEVENTH GROUP CO., LTD., ZHENGZHOU ENGINEERING CO.,LTD OF CHINA RAILWAY SEVENTH GROUP

72: LIAO, Jiaquan, GUO, Jianqun, ZHANG, Zhanyong, SHI, Binbin, JIA, Jiangnan, WANG, Hang, XIAO, Gang, LI, Hao, WANG, Hao

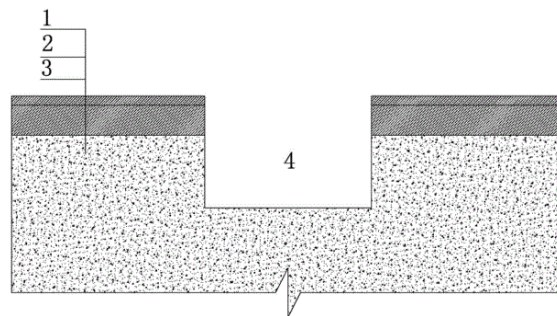
33: CN 31: 202210510156.9 32: 2022-05-11

**54: METHOD FOR RAPIDLY EXCAVATING FOUNDATION PIT WITHIN EXISTING MUNICIPAL ROAD SCOPE**

00: -

The present invention discloses a method for rapidly excavating a foundation pit within an existing municipal road scope, and relates to the technical field of road construction. The excavation is carried out when the existing municipal road traffic flow is low at night. Before the existing municipal road traffic

flow returns to normal, the excavated foundation pit is rapidly backfilled with sand in a 1.5-2.0 m<sup>3</sup> tonnage bag, and the excavated foundation pit is supported with the tonnage bag filled with sand so as to prevent the excavated foundation pit from collapsing. The 2.5 mm-3.0 mm thick steel plate (the steel plate size needs to be subjected to stress calculation according to the foundation pit size and the traveling load) is used to restore the traffic, which can realize rapid conversion between the existing municipal road traffic and construction, and improve the construction efficiency.



21: 2022/07754. 22: 2022/07/13. 43: 2022/10/12  
51: G01N

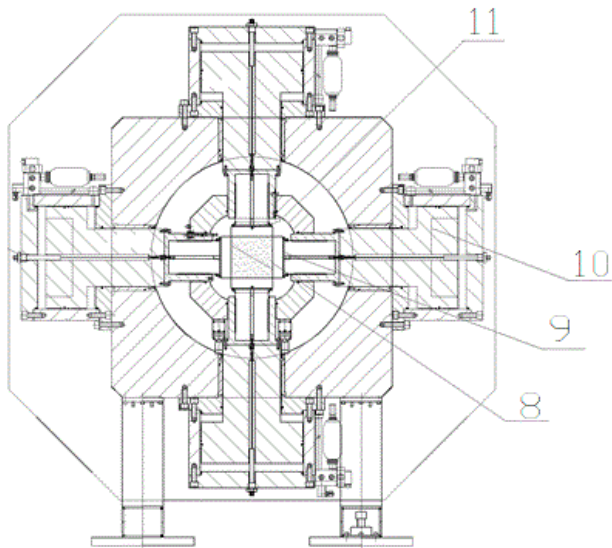
71: China University of Mining and Technology  
72: LIU Yubing, WANG Enyuan, LI Zhonghui, LIU Xiaofei, SHEN Rongxi, ZHANG Chaolin

**54: METHOD FOR TESTING ANISOTROPIC STRENGTH AND PERMEABILITY OF BROKEN COAL**

00: -

The invention relates to a method for testing that anisotropic strength and permeability of a broken coal, which comprise the following ten steps: preparing a complete sample, preparing a broken sample, characterizing internal cracks before loading, applying three-dimensional pressure, applying confining pressure, applying gas pressure, loading test, stopping loading test, characterizing internal cracks after loading, and replacing the sample. Compared with the lack of testing of anisotropic strength and permeability of fractured coal bodies in the prior art, which leads to less understanding of the destabilisation mechanism of fractured coal bodies in the field, the invention can prepare the broken coal sample based on the existing true triaxial test device, and test to obtain its anisotropic strength parameters and seepage parameters, which is helpful to understand the

dynamic disaster evolution process of on-site coal seam breaking area, and has practical guiding significance and important research value.



21: 2022/07755. 22: 2022/07/13. 43: 2022/10/12  
51: A47B; A63B

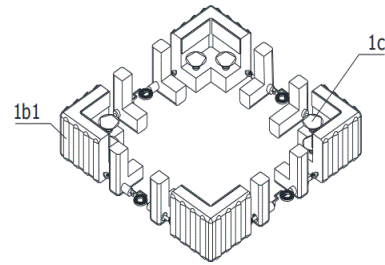
71: Wuhu Tingyou Electromechanical Technology Co., Ltd.

72: NI, Jinting

**54: EASY-TO-USE EDGE AND CORNER GUARD FOR TABLE TENNIS TABLES**

00: -

Disclosed is an easy-to-use edge and corner guard for table tennis tables. The guard includes a corner cushion, an edge cushion and an elastic connecting member; the corner cushion includes a bottom plate and two side plates, the two sides plates are perpendicular to each other and are both perpendicular to the bottom plate, and four corner cushions are provided and are arranged at the four corners of the table tennis table, respectively; the elastic connecting member includes the first connecting rod, the second connecting rod and a coil spring, the other ends of the first and second connecting rods are separately connected to an adjacent corner cushions, and two ends of the coil spring are fixedly connected to the first and second connecting rods, respectively; and several edge cushions are arranged on L-shape, and a mounting hole is formed along the thickness direction of the edge cushion.



21: 2022/07756. 22: 2022/07/13. 43: 2022/10/12  
51: A01C; A01G

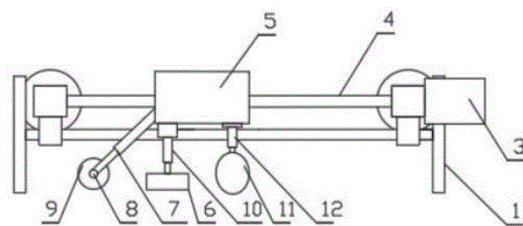
71: Inner Mongolia Academy of Agricultural and Animal Husbandry Sciences

72: XIAN, Feng, LU, Zhanyuan, ZHANG, Jianzhong, CHEN, Liyu, YANG, Jianqiang, ZHANG, Xiangqian, LIU, Zhi, JIA, Xiuting, XU, Jianfang, SHEN, Qiuyun, GAO, Wa, LI, Wencai, LIU, Yabin, MENG, Wenhui, JIA, Junping

**54: DEVICE FOR BURYING DRIP IRRIGATION TAPE BY MEANS OF SOWER TERMINAL**

00: -

Disclosed is a device for burying a drip irrigation tape by means of a sower terminal. The device includes a support detachably connected to a tail of a sower; a transverse displacement assembly arranged at one end of the support away from the sower; an excavation assembly used for forming a groove in a position in which the drip irrigation tape is buried; a soil covering assembly used for shifting soil to a position on the drip irrigation tape to bury the drip irrigation tape; and a compaction assembly used for compacting soil on the drip irrigation tape. The present invention has a simple and reliable structure, and can replace workers to complete excavation, soil covering and compaction operations at a time, thereby greatly improving working efficiency, reducing labor intensity of workers, having high practicability, and being worthy of popularization.



21: 2022/07757. 22: 2022/07/13. 43: 2022/10/12  
51: A61K; A61P

71: ChongQing Academy of Animal Science, Chongqing Fenglv Tongzhou Bee Industry Co., Ltd., Animal Quarantine Center of Bazhou District, Bazhong City, Sichuan Province (Animal Quarantine Station of Bazhou Urban area, Bazhou District, Bazhong City)

72: YANG, Jinlong, LUO, Wenhua, LONG, Xunming, XIANG, Yanli, ZENG, Junxin

**54: TRADITIONAL CHINESE MEDICINE COMPOSITION CAPABLE OF PREVENTING HIGH-TEMPERATURE STRESS RESPONSE OF APIS CERANA CERANA FABRICIUS IN SUMMER**  
00: -

The present disclosure belongs to the field of animal medicines, and particularly relates to veterinary drugs. A traditional Chinese medicine composition capable of preventing high-temperature stress response of *Apis cerana cerana* Fabricius in summer is prepared from the following components in parts by weight: 10-25 parts of *Astragalus membranaceus* (Fisch.) Bunge., 10-25 parts of *Mentha canadensis* Linnaeus, 1-5 parts of *Helianthus tuberosus* L., 5-10 parts of *Verbena officinalis* L., 20-30 parts of *Pericarpium Citri Reticulatae*, 10-40 parts of *Perilla frutescens* (L.) Britt. and 5-40 parts of *Agastache rugosa* (Fisch. et Mey.) O. Ktze.

21: 2022/07758. 22: 2022/07/13. 43: 2022/10/12  
51: A61K; A61P

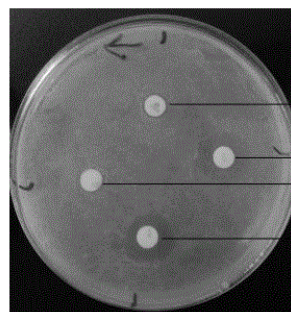
71: ChongQing Academy of Animal Science, Chongqing Fenglv Tongzhou Bee Industry Co., Ltd., Animal Quarantine Center of Bazhou District, Bazhong City, Sichuan Province (Animal Quarantine Station of Bazhou Urban area, Bazhou District, Bazhong City)

72: LUO, Wenhua, YANG, Jinlong, LONG, Xunming, XIANG, Yanli, ZENG, Junxin

**54: TRADITIONAL CHINESE MEDICINE COMPOSITION CAPABLE OF PREVENTING EUROPEAN FOULBROOD**  
00: -

The present disclosure belongs to the field of animal medicines, and particularly relates to veterinary drugs. A traditional Chinese medicine composition capable of preventing European foulbrood is composed of the following components in parts by weight: 10-25 parts of *Taraxacum mongolicum* Hand.-Mazz., 10-25 parts of *Sophora flavescens* Alt., 1-5 parts of *Helianthus tuberosus* L., 5-10 parts of *Armoracia rusticana* (Lam.) P. Gaertner et Schreb., 20-30 parts of *Allium sativum* L., 10-40

parts of *Isatis tinctoria* Linnaeus and 5-40 parts of *Houttuynia cordata* Thunb..



Penicillin  
Traditional Chinese medicine of the present disclosure  
Streptomycin  
Oxytetracycline

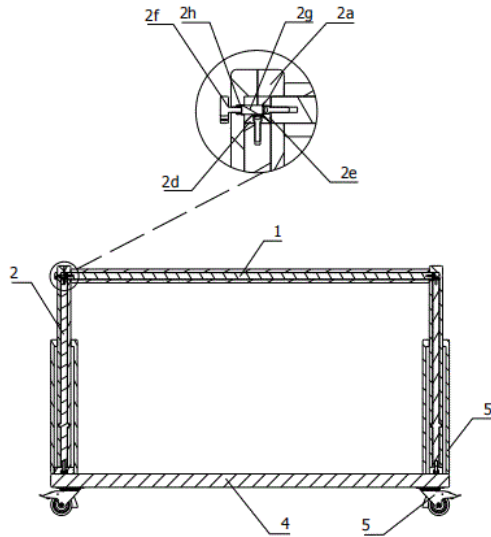
21: 2022/07759. 22: 2022/07/13. 43: 2022/10/12  
51: A63B

71: Anhui Technical College Of Mechanical and Electrical Engineering

72: NI, Jinting, LI, Cheng, LI, Min

**54: EASY-TO-USE APPARATUS FOR ARM STRENGTH TRAINING**  
00: -

Disclosed is an easy-to-use apparatus for arm strength training. The apparatus includes a holding rod, connection seats, fixed seats, a base and omnidirectional wheels, the connection seats include fixed housings, connection shafts, threaded shafts, first bevel gears, second bevel gears, threaded handles and limiting shafts, the fixed housings slidably match the fixed seats, the connection shafts movably match the fixed housings, each second bevel gear fixedly matches one end of the holding rod, the second bevel gears mesh with the first bevel gears, the threaded handles are connected to the fixed housings in a threaded manner, the limiting shafts slidably match the fixed housings, and limiting holes are provided on the second bevel gears. According to the present invention, a user can adjust a horizontal height of the holding rod by rotating the holding rod without influencing normal use of the holding rod.



21: 2022/07760. 22: 2022/07/13. 43: 2022/10/12  
51: A01G

71: GUANGXI ACADEMY OF AGRICULTURAL SCIENCES, GUANGXI UNIVERSITY, Guangxi Zhencheng Agriculture Co., Ltd  
72: BAI Xianjin, WANG Bo, CAO Xiongjun, HAN Jiayu, SHI Xiaofang, BAI Yang, MA Guangren, LIN Ling, ZHANG Ying, CHEN Aijun, XIE Taili, XIE Shuyu, PAN Fengping, HE Jianjun, LOU Binghai, ZHOU Sihong, CHENG Guo, WANG Shiping, YANG Shunlin

**54: HIGH-YIELD CULTIVATION METHOD OF TWO-CROP-A-YEAR GRAPES BY USING BASAL ACCESSORY SHOOTS**

00: -  
The invention provides a high-yield cultivation method of two-crop-a-year grapes by using basal accessory shoots, which relates to the technical field of grape cultivation. The high-yield cultivation method of two-crop-a-year grapes by using basal accessory shoots, which includes the following steps: (1) pruning in winter; (2) pruning in summer; (3) promoting accessory flowering; and (4) other management. Adopting this method to cultivate two-crop-a-year of grapes reduces the fruiting position of the second fruit, promotes the nutrient reflux, reduces the invalid growth, makes full use of light energy, facilitates management, increases the cutting mouth and increases the germination quantity of winter fruits, and further improves the yield and benefit of grape winter fruit.

21: 2022/07761. 22: 2022/07/13. 43: 2022/10/12  
51: H02J

71: Shandong Jianzhu University, SHANDONG UNIVERSITY

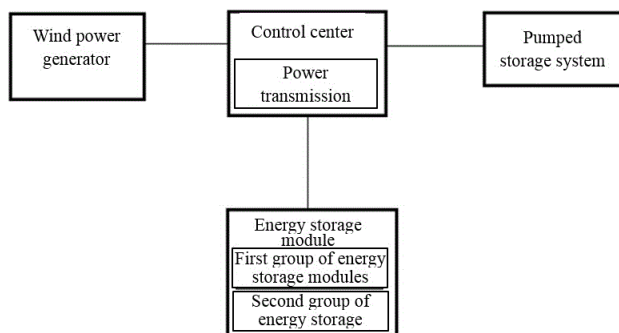
72: CHEN Lizheng

33: CN 31: 202210628427.0 32: 2022-06-06

**54: WIND POWER GENERATION CONTROL SYSTEM AND METHOD APPLIED TO MICROGRID**

00: -

The application discloses a wind power generation control system and method applied to microgrid. The system includes an energy storage module, a control center, a wind generator and a pumped storage system. The energy storage module is used for receiving the wind energy generated by the wind generator and providing the load power to the load end. The control center is used to generate a wind generator operation charging control instruction and a wind generator operation energy storage control instruction according to the power consumption speed of the energy storage module. Wind generators are used to generate wind energy. The control center is also used to transmit wind power to the energy storage module and/or pumped storage system. Pumped storage system is used for pumped storage operation and hydropower generation by using wind power to generate hydropower energy. According to the power consumption of the energy storage module, the application dispatches the electric energy generated by the wind generator to charge or use for pumped storage, which not only ensures the normal charging of the energy storage module, but also realizes pumped storage, and is convenient for emergency use when the power consumption is large.



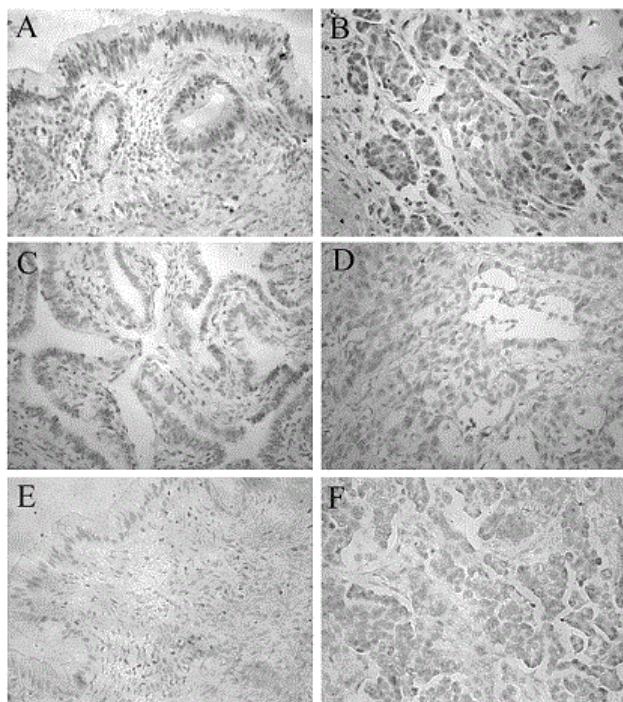
21: 2022/07762. 22: 2022/07/13. 43: 2022/11/02  
51: A61K

71: Wuxi Maternity and Child Health Care Hospital  
72: LU Mudan, CHEN Daozhen, SONG Yuexiao, ZHU Ruiying, WANG Yan, XIANG Xiang

#### 54: APPLICATION OF FOXO3A TRANSCRIPTION FACTOR IN PREPARATION OF DRUGS FOR DIAGNOSIS AND/OR TREATMENT OF OVARIAN CANCER

00: -

This invention discloses an application of Foxo3a transcription factor in preparation of drugs for diagnosis and/or treatment of ovarian cancer, and relates to the technical field of medicine. This invention discloses an application of Foxo3a transcription factor or phosphorylated Foxo3a transcription factor in preparation of drugs for diagnosis and/or treatment of ovarian cancer; the Foxo3a transcription factor or phosphorylated Foxo3a transcription factor in the ovarian cancer is used as a target for diagnosis or treatment of the ovarian cancer; the Foxo3a transcription factor or phosphorylated Foxo3a transcription factor in ovarian cancer cells is inhibited to realize the treatment of the ovarian cancer. The invention provides a new target for clinical diagnosis and treatment of ovarian cancer.



21: 2022/07763. 22: 2022/07/13. 43: 2022/10/12

51: G01N

71: Hainan Normal University

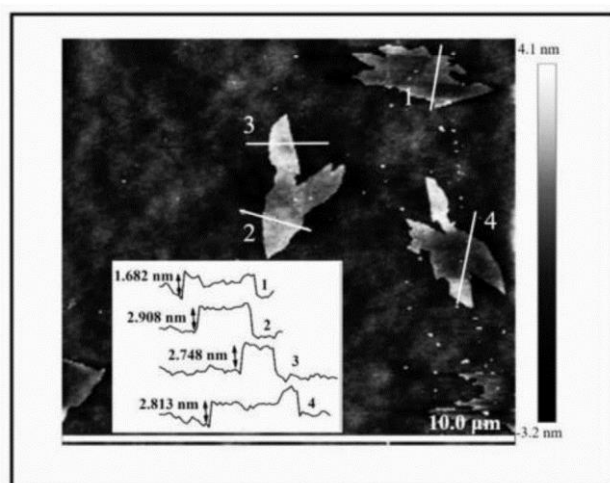
72: Sun Wei, Shi Fan, Wang Baoli, Yao Yucen, Xu Shiguan, Zhang Siyue, Ai Yijing

33: CN 31: 202210078568.X 32: 2022-01-24

#### 54: A METHOD FOR IN-SITU SYNTHESIZING CARBONIZED POLYMER DOTS@ FEW-LAYER BLACK PHOSPHORENE 0D-2D HETEROJUNCTION

00: -

The invention relates to a 0D? In situ synthesis of "poached egg like" carbonized polymer dot @ few layer black phosphorus nanosheets. Preparation method of 2D heterojunction, This method takes only one step, It includes the following steps: Combining massive black phosphorus with N? The mixture of methylpyrrolidone is heated in the microwave oven 10? Fourteen minutes later, Centrifugal collection of supernatant obtained "poached egg like" carbonized polymer dot @ few layer black phosphorus nanosheets. 2D heterojunction. The preparation method includes both "top-down" and "bottom-up" synthesis strategies. "Top-down" refers to the massive multilayer black phosphorus is stripped into a few layers of black phosphorus nanosheets; "Bottom-up" means N? Polymerization, dehydration, and carbonization of methyl pyrrolidone to form carbonized polymer points. Compared with the prior art, the invention has simple preparation process and high preparation efficiency. This FLBP defect repair technique provides a new idea for improving the stability of FLBP. And the N? The intelligent wireless portable electrochemical sensor constructed by CPDs@FLBP heterojunction has an ultra-low detection limit and a wide detection range for rutin.



21: 2022/07764. 22: 2022/07/13. 43: 2022/10/12

51: A23L

71: HEZHOU UNIVERSITY, Guangxi Agricultural Vocational University

72: KANG Chao, LIU Fengting, WEI Lu

**54: PREPARATION METHOD OF MANGO KERNEL TANNIC ACID**

00: -

The invention discloses a preparation method of mango kernel tannic acid, belonging to the field of food technology and biotechnology. The tannin extract of mango kernel is prepared from mango kernel as raw material through alcohol extraction, macroporous resin and silica gel column chromatography purification. The tannic acid extract of mango kernel prepared by the invention has obvious antibacterial and antioxidant effects, and can be used as antioxidant health products or medicines for further research and development.

21: 2022/07765. 22: 2022/07/13. 43: 2022/10/12

51: C04B

71: Fuzhou University

72: Wang Dehui, Luo Surong, Wang Xuefang, Wu Wenda

**54: METHOD FOR PREPARING HIGH-ELASTIC-MODULUS CONCRETE BY MIXING OYSTER SHELL POWDER AND METAKAOLIN**

00: -

The invention discloses a method for preparing high-elastic-modulus concrete by mixing oyster shell powder and metakaolin, which comprises the following steps: cleaning, crushing and grinding the recovered oyster shell, mixing the oyster shell powder and metakaolin, replacing cement according to a certain proportion, and mixing with silicon, water and river sand according to a certain proportion, with cement: silica fume: metakaolin: oyster shell powder: river sand: water: superplasticizer: steel fiber = 1: 0.29~0.53: 0.14~0.26: 0.21~0.84: 1.43~2.63: 0.26~0.47: 0.03~0.05: 0.34~0.62, so as to prepare the ultrahigh performance concrete meeting the requirements. The invention can improve the recycling rate of oyster shells, reduce the discharge of kitchen waste and protect the environment.

21: 2022/07766. 22: 2022/07/13. 43: 2022/10/12

51: G01N

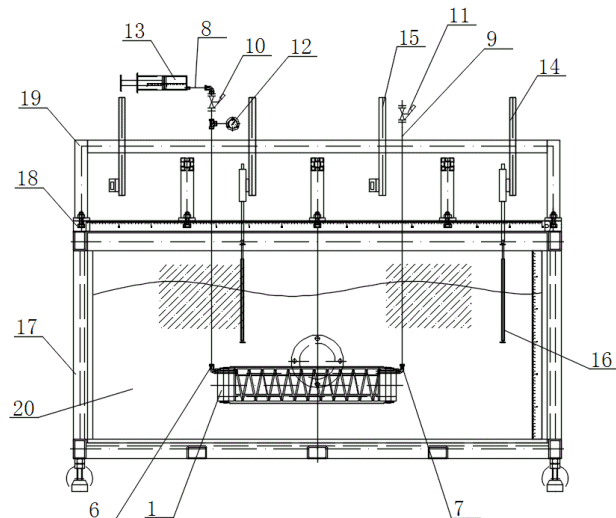
71: ANHUI JIANZHU UNIVERSITY

72: HAO Yingqi, CHEN Xudong

**54: EXPERIMENTAL METHOD FOR SIMULATING EXPANSION FORM OF COMPENSATED GROUTING IN SHIELD TUNNEL**

00: -

The invention discloses an experimental method for simulating expansion form of compensated grouting in shield tunnel, which comprises the following steps: S1, determining the experimental scheme and similar parameters, determining the experimental scheme according to the actual engineering situation and geological survey report, and determining the similar parameters according to the similarity theory; S2, preparing model materials similar to actual engineering geology; S3, assembling a model device, wherein the model device comprises a model test box, a tunnel simulation device, a compensation grouting simulation system, a stratum subsidence and uplift information acquisition system and a stratum stress information acquisition system; S4, simulating tunnel overbreak; S5, simulating compensation grouting; and S6, data analysis. The invention solves the problems of easy blockage of drainage holes, uneven distribution of grout injection and inaccurate expansion form of compensation grouting in the current tunnel test simulation system.



21: 2022/07767. 22: 2022/07/13. 43: 2022/10/12

51: A23K

71: Gansu Agricultural University

72: JI Peng, WU Fanlin, WEI Yanming, ZHANG Yong, HUA Yongli, HU Junjie, YAO Wanling, YUAN Ziwen, LI Hongya, REN Jianming

#### 54: PREPARATION METHOD OF SOLID MIXED FEED FOR CATTLE BREEDING

00: -

The invention discloses a preparation method of solid mixed feed for cattle breeding, which belongs to the technical field of feed preparation. The solid mixed feed for cattle breeding is composed of the following raw materials: apple residue, brewer's grains, soybean meal, grape residue, rhizoma atractylodis, bran, Bacillus powder, aspergillus niger powder, carrier, mineral compound and compound vitamin. The feed prepared by mixing agricultural wastes and mushroom powder, on the one hand, improves the utilization rate of wastes, on the other hand, the prepared feed has complete nutrients, enhances the resistance, and has a certain promoting effect on the fattening of cattle. The feed of the invention has good taste and strong digestion and absorption capacity, and can effectively improve the fertility of cattle. The digestibility of the feed of the invention in 6 ~ 12 h is significantly better than that of the conventional feed, and its digestibility range is 23.47percent ~ 30.22percent, which improves the digestibility of the feed in the stomach of cattle. At the same time, it still has a high digestibility in 24 ~ 48 h.

21: 2022/07768. 22: 2022/07/13. 43: 2022/10/12  
51: A61K

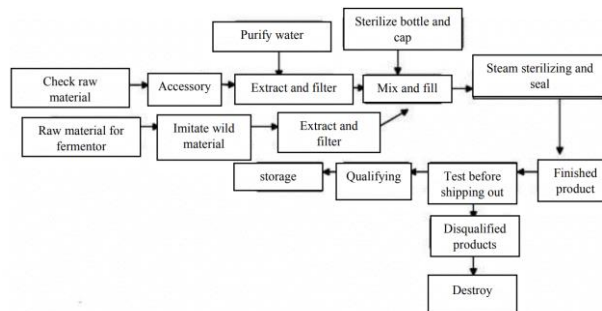
71: Qian Shiliang  
72: Qian Shiliang

#### 54: EDIBLE FUNGUS LIQUID MEDICINE FORMULA FOR RELIEVING PAIN OF TERMINAL CANCER AND PREPARATION METHOD THEREOF

00: -

This invention provides edible fungus liquid medicine formula for relieving pain of terminal cancer, comprising the raw material formula as follows: ganoderma lucidum 7-10%, Ganoderma lucidum 7-10%, Ganoderma lucidum pine 7-10%, Cordyceps sinensis 7-10%, Laminaria pine 7-10%, Boletus sticky cap 7- 10%, Ganoderma lucidum 6-8%, Lactis rutabaga 6-8%, Red Mushroom 5-7%, Grifola frondosa 5-7%, Bicyclic woodland mushroom 5-7%, Agaricus blazei 4-6%, fungus 4-6%, Mao Yunzhi 4-6%, red shank (foot) ox liver mushroom 4-6%, stout

mushroom 4-6%, purple red mushroom 4-6%. This invention can be used to relieve the pain of advanced cancer patients, and is suitable for advanced cancer patients with particularly severe pain



21: 2022/07769. 22: 2022/07/13. 43: 2022/10/12  
51: B22C

71: Shenyang University of Technology

72: Liu Weihua, Song Lai, Li Yingmin

#### 54: AN ADDITIVE AND ITS APPLICATION METHOD FOR SODIUM SILICATE SAND CORE HARDENED BY COMPOSITE BLOWING

00: -

The invention relates to an additive for making of composite air-hardening sodium silicate sand core and an application method thereof. The molding sand additive comprises the following components in percentage by mass: 10%-80% of dolomite powder, 5%-50% of talcum powder, 5%-30% of zinc oxide and 0%-40% of magnesium oxide. As described above, the application method of the additive for making of composite air-hardening sodium silicate sand core, its characterized in that: the method is used for preparing sodium silicate sand core which refers to a product obtained by taking sodium silicate as the main component of a binder, achieving composite air-hardening under the sequential action of carbon dioxide and compressed air; no toxic and harmful gases are released during production and use in the process, and the addition of sodium silicate binder is less and equals to 3.0%. The mixed molding sand has good fluidity, high core strength and good collapsibility.

21: 2022/07772. 22: 2022/07/13. 43: 2022/10/03  
51: A47B; B43L

71: North China University of Science and Technology

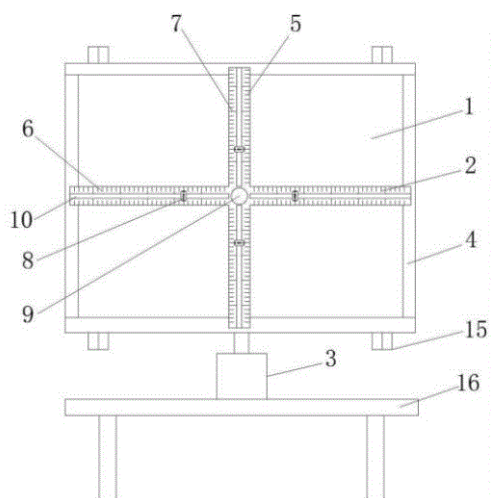
72: LI, Yemo, WANG, Danping, GUO, Yuanyuan

33: CN 31: 202111024344.2 32: 2021-09-02

**54: DRAWING DEVICE FOR HIGHER MATHEMATICS**

00: -

The disclosure discloses a drawing device for higher mathematics. The drawing device comprises a blackboard body, a cross drawing scale and a lifting device, clamping grooves are formed in the top, bottom and two sides of an outer frame of the blackboard body, the cross drawing scale consists of a vertically-arranged vertical coordinate rod and a transversely-arranged horizontal coordinate rod, the top and bottom of the vertical coordinate rod are clamped into the clamping grooves in the top and bottom of the blackboard body respectively, the two sides of the horizontal coordinate rod are clamped into the clamping grooves in the two sides of the blackboard body respectively, coordinate axis scale marks are set on the vertical coordinate rod and the horizontal coordinate rod; the lifting device is arranged at the bottom of the blackboard body and used for adjusting height of the blackboard body.



21: 2022/07810. 22: 2022/07/13. 43: 2023/10/03

51: H01M

71: GUILIN UNIVERSITY OF TECHNOLOGY

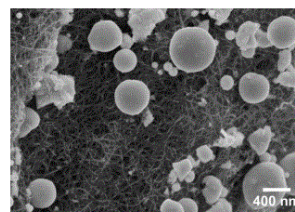
72: LUO, Zhihong, JI, Chenhao, LUO, Kun, YIN, Liankun, ZHU, Guangbin, LAN, Jiabin, MO, Jiaxuan, LI, Yibing

33: CN 31: 202011478988.4 32: 2020-12-14

**54: LIQUID METAL-IN-CARBON NANOTUBE LITHIUM AIR BATTERY POSITIVE ELECTRODE AND PREPARATION METHOD THEREFOR**

00: -

Disclosed in the present invention are a liquid metal-in-carbon nanotube lithium air battery positive electrode and a preparation method therefor. Liquid metal is one of selected from gallium-tin liquid metal and a gallium-indium liquid metal, and the size distribution of the liquid metal ranges from 100 nm to 800 nm. The compounding mode of the liquid metal and a carbon nanotube is one selected from a blending method and a dripping adding method; and the mass ratio of the liquid metal to the carbon nanotube is 1: 1 to 10: 1. The liquid metal-in-carbon nanotube lithium air battery positive electrode prepared by the present invention has good full discharge capacity, rate capability, cycling stability and passivation prevention capability



21: 2022/07833. 22: 2022/07/14. 43: 2022/09/21

51: G01N

71: Beihang University

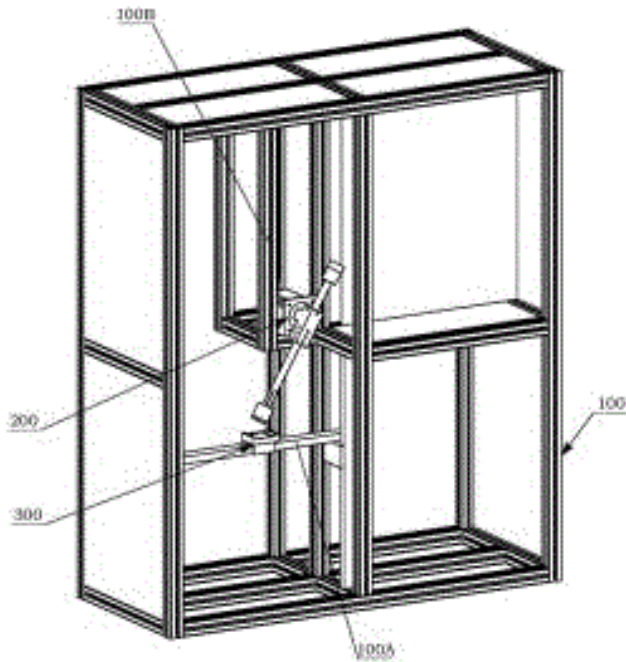
72: Bu Xueqin, Huang Ping, Lin Guiping, Yu Jia

**54: VERTICAL HIGH-SPEED EJECTION DEVICE FOR ICE CRYSTAL IMPACT TEST**

00: -

The invention discloses a vertical high-speed ejection device for ice crystal impact test, which comprises an jet pipe (1), an upper-end assembly (2), a lower-end assembly (3), a stepping motor (4) and an ejection angle adjusting piece (5); the jet pipe (1) is installed on the ejection angle adjusting member (5), the upper part of the jet pipe (1) is the upper-end assembly (2), and the lower part of the jet pipe (1) is the lower-end assembly (3). The vertical high-speed ejection device is a scientific research device that can observe the phenomenon of high-speed impact between ice crystal objects and the impact panel (300C). The vertical high-speed ejection device can realize the directional high-speed movement of ice crystals in the low-temperature environment of -30 Celsius degrees within the impact distance of less than or equal to 500mm, and finally impact with the impact panel (300C), and the impact angle is adjustable within the range of 10-90°

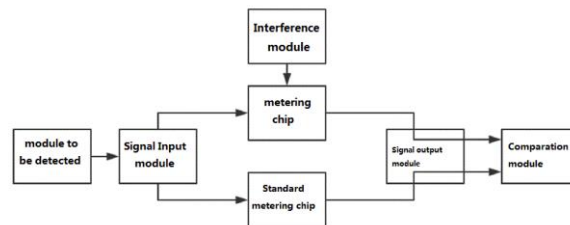




21: 2022/07869. 22: 2022/07/15. 43: 2022/09/21  
 51: G01R  
 71: Hunan Institute of Metrology and Test  
 72: Qingxian LI, Liangjiang LIU, Wenqi BAI, Ye YANG, De XIANG, Jinwei WANG, Xianyu ZHU, Qing LIU, Congrui ZUO  
 33: CN 31: 202110939875.8 32: 2021-08-17  
**54: ANTI-INTERFERENCE DETECTION SYSTEM OF METERING CHIP AND COMPUTER READABLE STORAGE MEDIUM**

00: -  
 The disclosure provides an anti-interference detection system of a metering chip and a computer readable storage medium, the anti-interference detection system of a metering chip comprise a module to be detected, a signal input module, an interference module, a signal output module, a standard metering module and a comparison module, wherein the module to be detected provides a signal to be detected, the input end of the signal input module is connected with the module to be detected, the output end of the signal input module are respectively connected with the metering chip and the standard metering module, the interference module is arranged outside the metering chip and used for providing interference factors, the input end of the signal output module is respectively connected with the metering chip and the standard metering module, the output end of the signal output module is connected with the comparison module, and the comparison module obtains the anti-

interference capability of the metering chip by analyzing the difference of the two received signals. The invention obtains the anti-interference capability by analyzing the relationship between the output value of the metering chip and the output value of the standard metering module under various interference conditions, and has wide coverage and strong applicability.

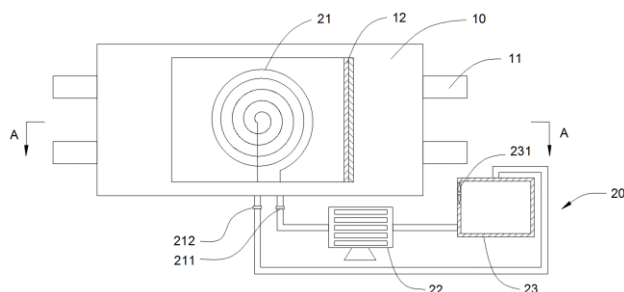


21: 2022/07874. 22: 2022/07/15. 43: 2022/09/21  
 51: A61F  
 71: Lan Hongming  
 72: Lan Hongming

**54: VARIABLE-TEMPERATURE ABDOMINAL BELT FOR THE REHABILITATION AFTER ABDOMINAL LIPOSUCTION**

00: -  
 The utility model discloses a variable-temperature abdominal belt for the rehabilitation after abdominal liposuction, which comprises an abdominal belt body, a cooling device, an electric heating device and a temperature-control device, wherein the abdominal belt body can be fixed on the abdomen of a human body and is provided with an openable interlayer; the cooling device comprises a water-cooling pipe, a water pump and a water tank which are sequentially communicated, wherein the water-cooling pipe is arranged in the interlayer, the water inlet end of the water-cooling pipe is communicated with the water pump, and the water outlet end of the water-cooling pipe is communicated with the water tank; the electric heating device comprises an electric heating sheet which is arranged in the interlayer; the temperature-control device comprises a temperature sensor and a controller, wherein the temperature sensor is installed on the abdominal belt body and used for monitoring the temperature of human abdomen, the input end of the controller is electrically connected with the temperature sensor, the output end of the controller is electrically connected with the water pump and the electric heating device respectively, and the controller is

used for controlling the temperature of human abdomen to a preset temperature. The utility model can heat and cool, and can automatically control the temperature



21: 2022/07876. 22: 2022/07/15. 43: 2022/09/21  
51: C22C

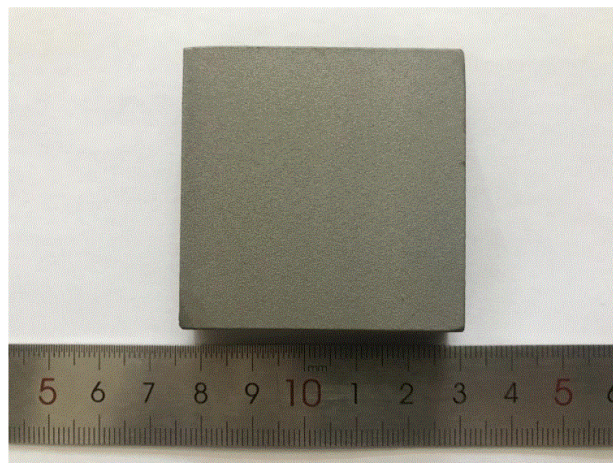
71: Anhui Science And Technology University

72: Guo Chun, Hu Ruizhang

**54: HIGH CORROSION-RESISTANT AND WEAR-RESISTANT IRON-BASED AMORPHOUS DAMAGE REPAIR COATING AND PREPARATION METHOD THEREOF**

00: -

A high corrosion-resistant and wear-resistant iron-based amorphous damage repair coating, which comprises the following components: 22-28 wt.% of Cr, 1-3 wt.% of Mo, 0.5-2.5 wt.% of B, 1.5-3.0 wt.% of C, 3-5 wt.% of Si, 2.5-4.5 wt.% of Ni, 2~3wt.% of W, 0.02~0.05wt.% of Y, 0.01~0.04 wt.% of Nb and the balance of Fe. Spraying steps: the raw materials are put into an intermediate frequency induction furnace according to the proportion for smelting, the molten metal is introduced into an atomizing area to be broken into metal droplets, and then rapidly cooled and solidified to obtain atomized powder, which is then dehydrated and dried in a vacuum dryer to obtain alloy powder. Cold spraying process is adopted for spraying; the coating can be used for repairing and protecting corroded and worn parts of weapons and equipment



21: 2022/07877. 22: 2022/07/15. 43: 2022/09/21  
51: C09D

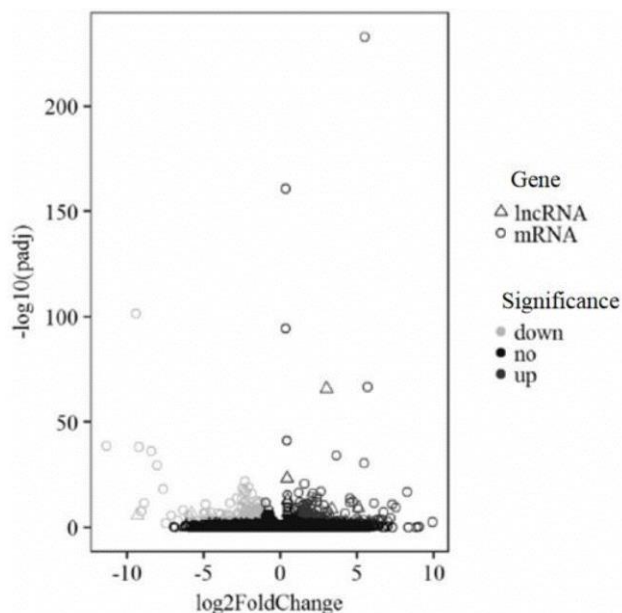
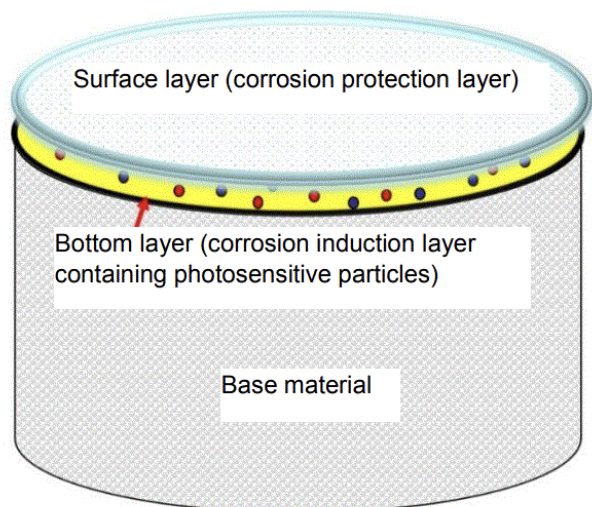
71: Anhui Science And Technology University

72: Guo Chun, Hu Ruizhang

**54: CORROSION-INDUCED COATING AND SPRAYING METHOD THEREOF**

00: -

A corrosion-induced coating, which comprises a bottom layer and a surface layer, wherein the bottom layer contains 12-16 wt.% of Al, 2-5 wt.% of WO<sub>3</sub>, 5-7 wt.% of ZnO and the balance of Zn, and the surface layer contains 13-17 wt.% of Al, 1-3 wt.% of Mg and the balance of Zn. The spraying steps are as follows: the raw materials are proportioned according to the alloy components, put into a vacuum induction furnace for smelting and melting, the melted metal liquid is crushed and atomized into metal droplets by high-pressure argon, and quickly cooled and solidified into powder, and then screened to obtain bottom-layer metal powder and surface-layer metal powder. The working gas and powder-carrying gas are N<sub>2</sub> gas, the barrel length is 4 inches, the Y-axis speed is 30-50 m/min, and the powder feeding rate is 40-60 g/min, and the spraying distance, kerosene quantity, oxygen quantity (1800~2200), combustion chamber pressure, oxygen pressure and fuel pressure vary from the the bottom layer and the surface layer.



21: 2022/07942. 22: 2022/07/18. 43: 2022/11/02  
51: C12N; C12Q

71: Institute of Animal Sciences, Chinese Academy of Agricultural Sciences

72: MIAO Xiangyang, HUANG Wanlong, ZHANG Xiuxiu, LI Ai, XIE Lingli

**54: INTRAMUSCULAR FAT-RELATED lncRNA AND APPLICATION THEREOF**

00: -

The invention discloses an intramuscular fat-related lncRNA and its application. The invention discovers XLOC\_004398 which is related to intramuscular fat of pork, and predicts and verifies target gene NAP1L3 of differentially expressed lncRNA by co-expression network analysis and trans regulation analysis. The invention provides a certain basis for breeding livestock and poultry breeds with high meat quality, and the researches on treatment and prevention of lipid metabolism related diseases, and explores new targets.

21: 2022/07949. 22: 2022/07/18. 43: 2022/11/02  
51: A01N; C09K; C12N; C12R; A01P

71: Yancheng Teachers University

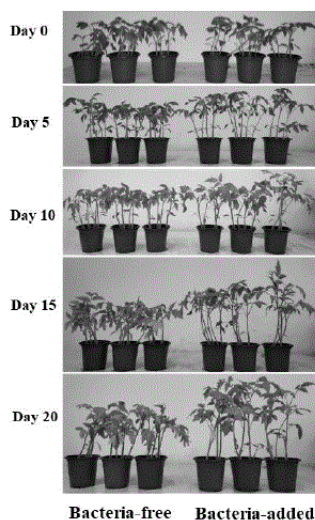
72: LIU, Fangfang, ZHANG, Yanzhou, HUANG, Lijie, HUANG, Jinchan, HU, Huaguang, KANG, Yijun, YAO, Li, SUN, Miao

33: CN 31: 202110827523.3 32: 2021-07-21

**54: BACILLUS CEREUS AND APPLICATION THEREOF IN ALLEVIATING SALT STRESS IN PLANTS**

00: -

Disclosed are a *Bacillus cereus* and an application thereof in alleviating salt stress in plants. In the present invention, a growth-promoting rhizobacteria is screened from the rhizosphere soil of halophyte *Suaeda salsa* on a coastal mud flat. Through physiological and biochemical characteristics and 16S rDNA sequence analysis, the strain is identified as a *Bacillus cereus* and named as SSR-7; and the strain has growth promoting characteristics of producing both IAA and siderophore. Medium compositions and fermentation conditions of SSR-7 are optimized, and the strain is inoculated into the rhizosphere of potted tomatoes, so that the growth state of tomatoes can be remarkably improved under salt stress.



21: 2022/07956. 22: 2022/07/18. 43: 2022/11/02  
51: C03B  
71: Quanzhou Longgen Refractory Insulation Material Co., Ltd.

72: Xuebo Yan, Haijun Huang, Wenda Wu, Yulei Zhuang, Shiwei Chen, Fubin Zhou

33: CN 31: 202111451692.8 32: 2021-12-01

#### 54: SUPERFINE CERAMIC FIBER COTTON AND PRODUCTION METHOD THEREOF

00: -

The invention discloses superfine ceramic fiber cotton and a production method thereof. The superfine ceramic fiber cotton comprises the following raw materials in parts by weight: 30-40 parts of clay clinker, 40-48 parts of alumina powder, 10-18 parts of silica sol, 12-20 parts of chromic oxide, 6-14 parts of magnesium chloride, 5-9 parts of a binding agent, 8-18 parts of a thickening agent and 3-5 parts of a refractory agent. Specifically, the superfine ceramic fiber cotton comprises the following raw materials in parts by weight: 30 parts of the clay clinker, 40 parts of the alumina powder, 10 parts of the silica sol, 12 parts of the chromic oxide, 6 parts of the magnesium chloride, 5 parts of the binding agent, 8 parts of the thickening agent and 3 parts of the refractory agent. According to the invention, chromium oxide is added into the preparation raw materials, high-temperature melting is performed, and then fusion is conducted, so the use temperature of ceramic fibers can be further increased; and the binding agent and the thickening agent are added in a wire drawing method, fibers with different diameters can be obtained by adjusting viscosity, the diameter of a bushing hole and a wire

drawing speed, so the situation that the thickness of a formed cotton blank is not uniform is avoided.

21: 2022/08064. 22: 2022/07/20. 43: 2022/11/02  
51: C02F

71: Shanghai Ocean University

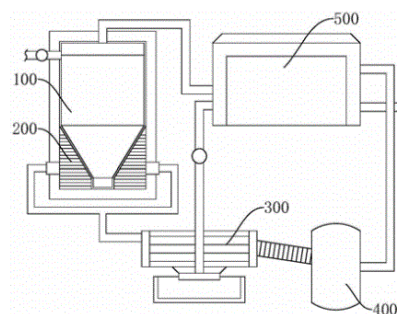
72: ZHANG, Jun, CAO, Shouqi, LIU, Aosheng, LI, Le, JIN, Shenxin

33: CN 31: 202111279354.0 32: 2021-11-01

#### 54: POND AQUACULTURE TAIL WATER FILTER DEVICE

00: -

The present disclosure relates to a pond aquaculture tail water filtration device, including a cyclone separator, a vibrating screen and a micro-strainer, wherein a water inlet and bottom flow outlet of the cyclone separator are respectively communicated with a water outlet of a tail water tank and a water inlet of the vibrating screen, and an overflow port of the cyclone separator is communicated with a first water inlet of the micro-strainer, a second water inlet of the micro-strainer is communicated with a drain outlet of the vibrating screen, and a sewage outlet of the vibrating screen and a sewage outlet of the micro-strainer are both communicated with a sewage collection tank. The pond aquaculture tail water filter device mentioned above improves the pond aquaculture tail water particle removal rate and filtration efficiency through the cooperation of three particle removal devices.



21: 2022/08065. 22: 2022/07/20. 43: 2022/11/02  
51: C10M; C10N

71: Shandong North Zite Special Oil Co., Ltd.

72: LUO, Gang, FENG, Kequan, YANG, Wenhuan, YANG, Naitang, SUN, Yuedong

33: CN 31: 202110924839.4 32: 2021-08-12

#### 54: LUBRICATING OIL FOR MARINE MEDIUM-SPEED TRUNK-PISTON DIESEL ENGINES

00: -

The present invention relates to the technical field of lubricating oils, and in particular to a lubricating oil for marine medium-speed trunk-piston diesel engines. The lubricating oil for marine medium-speed trunk-piston diesel engines includes the following raw materials: 80-88 percent of base oil, 5-9 percent of composite metal detergent, 0.2-1 percent of low-nitrogen polyisobutylene succinimide dispersant, 0.1-1 percent of pour point depressant, 0.5-2 percent of antioxidant, 3-5 percent of OCP viscosity index improver, 1-5 percent of phosphorus-nitrogen anti-wear and extreme-pressure additive, and 1-5 percent of zinc dialkyl dithiophosphate. This product is refined from a deeply hydrogenated base oil according to scientific formulas and advanced production processes, the oxidation resistance and stability of the oil product are dramatically improved, and the oil replacement period of the product can be extended greatly. This product can effectively decrease the consumption of resources and reduce the use cost, and has high cost efficiency.

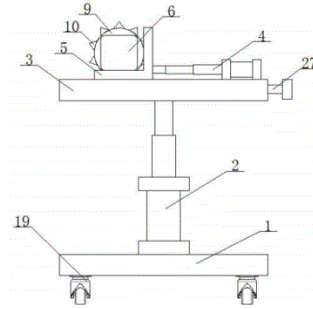
21: 2022/08066. 22: 2022/07/20. 43: 2022/11/02  
51: E21C

71: Changzhou Institute of Technology  
72: SHI, Jie

#### 54: COAL AND ROCK CUTTING TEST DEVICE AND USE METHOD THEREOF

00: -

Disclosed are a coal and rock cutting test device and a use method thereof. The device includes a bottom plate, a first cylinder is connected to the bottom plate, a piston end of the first cylinder is connected to a top plate, the top plate is connected to a second cylinder, the second cylinder is connected to an L-shaped support plate, the support plate is connected to a drive motor, the drive motor is connected to a speed reducer, the speed reducer is connected to the support plate and a transmission column, the transmission column is connected to a drum through a locking mechanism, and multiple picks are connected to the drum. According to the present invention, the problems that the picks will no longer be sharp over time, affecting normal cutting of a coal and rock area, and the drum is difficult to replace can be solved.



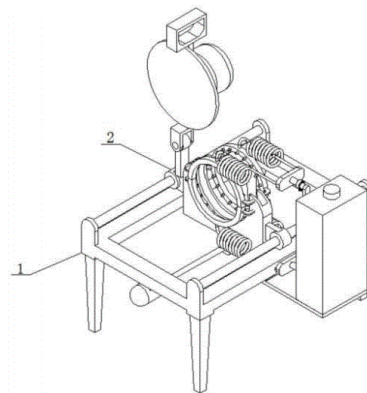
21: 2022/08067. 22: 2022/07/20. 43: 2022/11/02  
51: B23D; B23Q

71: Changzhou Institute of Technology  
72: LI, Shujin, LI, Jianfen

#### 54: ENERGY-SAVING PIPE PROCESSING APPARATUS FOR BUILDING CONSTRUCTION

00: -

Disclosed is an energy-saving pipe processing apparatus for building construction. The apparatus includes a frame and a cutting structure; the cutting structure includes a sliding table, a cutting apparatus, and a supply structure; a turret is welded to one side of the sliding table; the supply structure includes a coolant tank, control distribution boxes, conduits, spiral hoses, and spray racks;; a diversion pump is disposed on one side, close to the frame, of the coolant tank; a liquid inlet end of the diversion pump communicates with the coolant tank, and a liquid outlet end of the diversion pump communicates with a distribution plate; and the two control distribution boxes communicate with an end face of one side of the distribution plate. The present invention can adjust a spray position for cooling and achieve uniform spraying, thereby improving a cooling effect, reducing waste of coolant, and saving the coolant.



21: 2022/08068. 22: 2022/07/20. 43: 2022/11/02

51: A01G; A01H

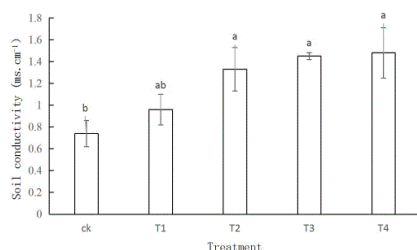
71: Coastal Agriculture Institute , Hebei Academy of Agriculture and Forestry Sciences

72: ZHANG, Guoxin, DING, Shoupeng, SUN, Yeshuo, MA, Ruiping

**54: ROTATIONAL IRRIGATION METHOD WITH SALT AND FRESH WATER FOR GREENHOUSE TOMATOES IN COASTAL SALINE-ALKALI LAND**

00: -

The present disclosure provides a rotational irrigation method with salt and fresh water for greenhouse tomatoes in coastal saline-alkali land. The method comprises the following steps: (1) planting tomatoes; (2) blending brackish water; (3) carrying out rotational irrigation with salt and fresh water. Through the rotational irrigation of the salt water and fresh water with proper concentration, the fresh water can be saved by 30% or above, and the quality of the tomatoes is improved without reducing yield so that the purposes of saving water and improving the quality of the greenhouse tomatoes in the saline-alkali land are achieved.



21: 2022/08069. 22: 2022/07/20. 43: 2022/11/02

51: G05D

71: SHANGHAI MARITIME UNIVIERSTY

72: HUANG Zhijian, YANG Guang, CAO Xinyu

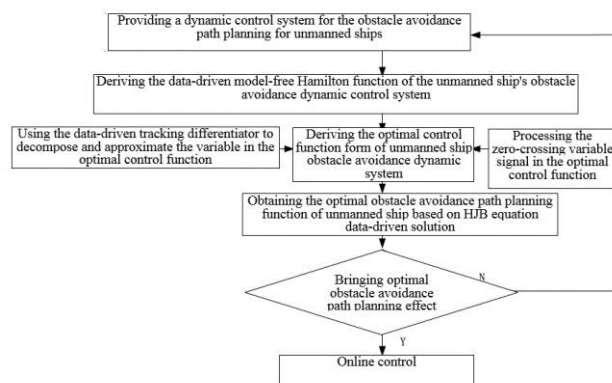
33: CN 31: 202210215828.3 32: 2022-03-07

**54: OPTIMAL OBSTACLE AVOIDANCE PATH PLANNING OF UNMANNED SHIP BASED ON DATA-DRIVEN SOLUTION OF HAMILTON-JACOBI-BELLMAN EQUATION**

00: -

The optimal obstacle avoidance path planning of unmanned ship based on data-driven solution of HJB equation belongs to the technical field of unmanned ship optimal control. The invention provides an optimal obstacle avoidance path planning for unmanned ships based on data-driven solution of Hamilton-Jacobi-Bellman (HJB) equation to realize the real-time online optimal obstacle avoidance path planning for unmanned ships, which

specifically comprises a dynamic control system for giving the obstacle avoidance path planning for unmanned ships; the data-driven model-free Hamilton function of the unmanned ship obstacle avoidance dynamic control system is derived. The optimal control function form of unmanned ship obstacle avoidance dynamic system is derived. Data-driven tracking differentiator is used to decompose and approximate the variables in the optimal control function. Processing the zero-crossing variable signal in the optimal control function; the optimal obstacle avoidance path planning function of unmanned ship based on data-driven solution of HJB equation is obtained. According to the invention, the problem of optimal control theory of unmanned ship based on approximate solution of data-driven HJB equation is solved, a control system model is not needed, and it can only be driven by the measured system state, and all other variables and derivatives are obtained from the proposed data-driven model-free Hamilton function and tracking differentiator. This method has a solid mathematical foundation, works like a Proportion Integration Differentiation (PID) controller, and has no training or convergence problems of neural networks or iterative methods. These characteristics make it a real-time online optimal obstacle avoidance path planning method for unmanned ships.



21: 2022/08070. 22: 2022/07/20. 43: 2022/11/02

51: G06Q

71: Hainan Electric Power School(Hainan Electric Power Technical School)

72: WU Qing, LI Zhiyong, ZHONG Zhun, FANG Lianhang, HE Guangyu, FAN Shuai, TIAN Jiyuan, GUO Zhiyuan

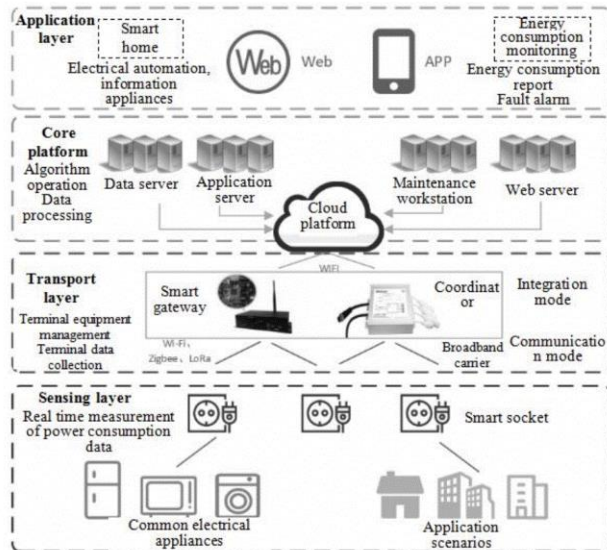
33: CN 31: 202210317202.3 32: 2022-03-29

**54: ENERGY-SAVING AND SAFETY TECHNOLOGY BASED ON ACTIVE SENSING OF POWER CONSUMPTION INFORMATION**

00: -

The invention discloses an energy-saving and safety technology based on active sensing of power consumption information in the technical field of electrical engineering and automation, which comprises a sensing layer, a transmission layer, a platform layer and an application layer, wherein the application layer interacts with the platform layer, the platform layer interacts with the transmission layer, and the transmission layer interacts with the sensing layer. For energy-saving applications, the invention combines the definitions of electricity consumption utility in related documents, takes energy saving in unmanned scenes as the goal, and puts forward the expected utility of electricity consumption defined from the perspective of user return probability.

Compared with the utility of the electric appliance state, the strategy of controlling the electric appliance can be obtained. For the safety control strategy, the invention proposes to conduct safety real-time analysis on unattended electric appliances and abnormal electric appliances. For unattended electrical appliances, when the user leaves for a long time and judges that the return probability is low, the electrical appliances can be turned off; for the abnormal electrical appliances, diagnose the self-abnormality and transfer abnormality of the operating state of the electrical appliances.



21: 2022/08071. 22: 2022/07/20. 43: 2022/11/02  
51: G06Q

71: Hainan Electric Power School(Hainan Electric Power Technical School)  
72: WU Qing, LI Zhiyong, REN Tianhong, GUO Song, HE Guangyu, FAN Shuai, SHAO Yunfei, WU Chengxin

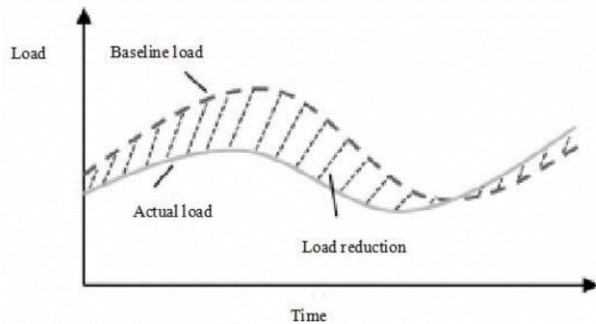
33: CN 31: 202210315444.9 32: 2022-03-29

**54: OPTIMIZATION MODEL AND METHOD OF DEMAND RESPONSE OF INVERTER AIR CONDITIONING GROUP BASED ON VIRTUAL ENERGY STORAGE**

00: -

The invention discloses a demand response optimization model and method of variable frequency air conditioning group based on virtual energy storage in the technical field of electrical engineering and automation, which comprises the following steps: demand response evaluation index based on customer directrix load; Optimization model of virtual energy storage demand response of variable frequency air conditioning group: Demand response control strategy of inverter air conditioning group based on virtual energy storage: The invention relates to a demand response method based on research on virtual energy storage of variable frequency air conditioners. In order to fully absorb a high proportion of new energy in a power grid, demand response research is carried out based on customer directrix load. The park containing a large number of variable frequency air conditioners is taken as the research object, and the fluctuation of new energy output in the park and the time-varying

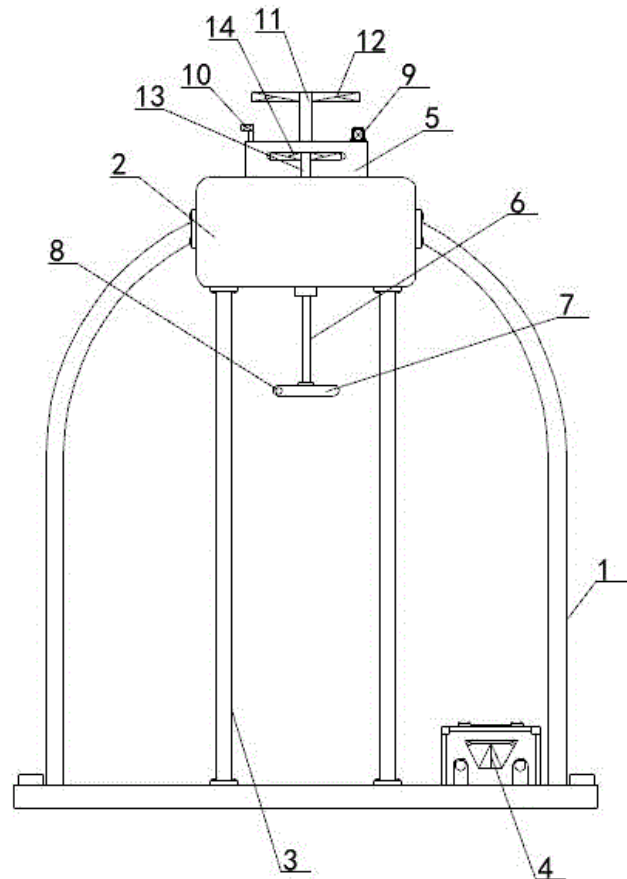
of air conditioning load model parameters are fully considered, so that an intra-day rolling optimization model of demand response is constructed, the new energy output is predicted within a day, the parameters of the air conditioning load model are identified online, and the virtual energy storage suppresses the fluctuation of new energy output while responding to customer directrix.



21: 2022/08072. 22: 2022/07/20. 43: 2022/11/02  
 51: A01G; F24S  
 71: Anhui Science and Technology University  
 72: LU Xiaomin, YANG Dekun  
 33: CN 31: 202210354324.X 32: 2022-04-06  
**54: ENERGY RECOVERY GREENHOUSE BASED ON VEGETABLE PLANTING**

00: -  
 The invention discloses an energy recovery greenhouse based on vegetable planting, which comprises a greenhouse body, a main outer frame and an installation structure for vegetable planting, wherein a storage battery is arranged at the bottom of the greenhouse body, and a support frame is installed inside the greenhouse body; A water storage frame located at the top of the greenhouse body, the top surface of the water storage frame is provided with a filter screen, and a stirring tank is arranged inside the water storage frame; the mounts are located at the front and rear ends of the water storage frame, and a first ventilation window and a second ventilation window are respectively arranged in the mounts; the stepping motor is positioned on that top surface of the mount frame, the output end of the stepping motor is connected with a driving gear, and the outer surface of the driving gear is connected with a gear ring. The energy recovery greenhouse based on vegetable planting makes the stirring shaft spin under the action of wind force, and drives the stirring rod and the transmission block to

rotate, which not only intermittently feeds the fertilizer by extrusion, but also can carry out mixed reaction, thus increasing the overall versatility.



21: 2022/08073. 22: 2022/07/20. 43: 2022/11/02  
 51: C05F  
 71: Liupanshui Normal University  
 72: YAN Kai  
**54: A SPECIAL BIO-ORGANIC FERTILIZER FOR ACTINIDIA CHINENSIS PLANCH IS PREPARED FROM UNDERGROWTH PLANT RESIDUES AS MAIN RAW MATERIALS.**

00: -  
 The invention relates to a special bio-organic fertilizer for Actinidia chinensis Planch, which is prepared by taking undergrowth plant residues as main raw materials, including undergrowth plant residues, animal feces, buckwheat hulls, waste fungus sticks of edible fungi and nutritional elements, and is prepared by adding humic acid and fermenting EM beneficial microorganisms, comprising the following specific step: (1) the composition of raw materials in parts by weight; (2) adding water to the nutrient elements, stirring to



completely dissolve them, and then uniformly dispersing them in the raw materials of the above components; (3) crushing raw materials; (4) mixing; (5) expanding strains; (6) mixing materials; (7) fermentation; (8) drying; (9) Packaging. The bio-organic fertilizer produced by the invention has the advantages of high content of beneficial bacteria, no root burning and no seedling burning, and has the properties of increasing soil organic matter, improving soil structure, promoting soil microbial activities, enhancing soil water and fertilizer conservation, supplying fertilizer, etc., and also obviously increasing crop yield and improving agricultural product quality; the product can reduce the input of chemical fertilizer, thus reducing the production cost.

21: 2022/08074. 22: 2022/07/20. 43: 2022/11/02  
51: G06N

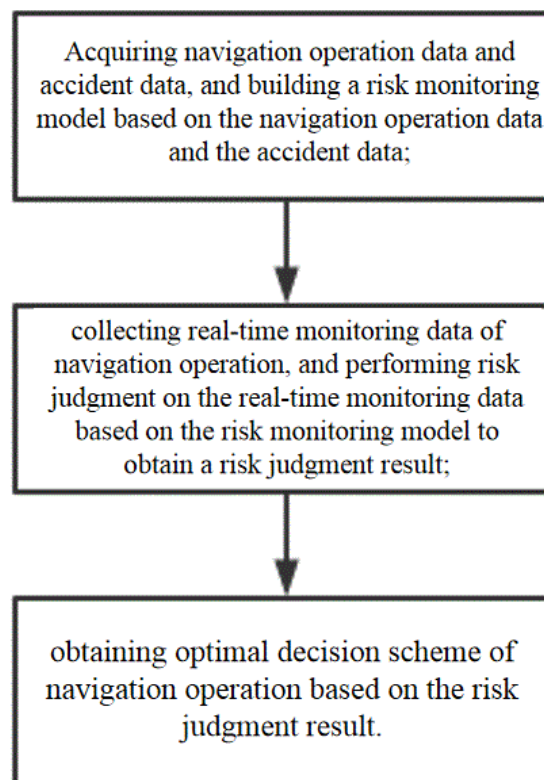
71: Civil Aviation Flight University of China

72: CHEN Nongtian, MAN Yongzheng, MA Ting, NING Weifeng, HAN Yiyang, CHEN Kai, YUAN Hao

**54: METHOD AND SYSTEM FOR GENERAL AVIATION RISK MONITORING BASED ON MULTIMODAL DATA**

00: -

This invention discloses a method and a system for general aviation risk monitoring based on multimodal data, wherein the method includes the following steps: acquiring multimodal data of general aviation, and building a risk monitoring model based on the multimodal data; collecting real-time monitoring data of navigation operation, and performing risk judgment on the real-time monitoring data based on the risk monitoring model to obtain a risk judgment result; and obtaining optimal decision scheme of navigation operation based on the risk judgment result; the system includes: a model construction module, a risk judgment module and a decision scheme acquisition module; wherein the model construction module, the risk judgment module and the decision scheme acquisition module are connected in sequence. According to the technical scheme, navigation real-time tracking and monitoring can be realized, and an auxiliary decision system for navigation safe operation can be established according to the risk judgment result.



21: 2022/08075. 22: 2022/07/20. 43: 2022/11/02  
51: G06F

71: Shanghai Maritime University

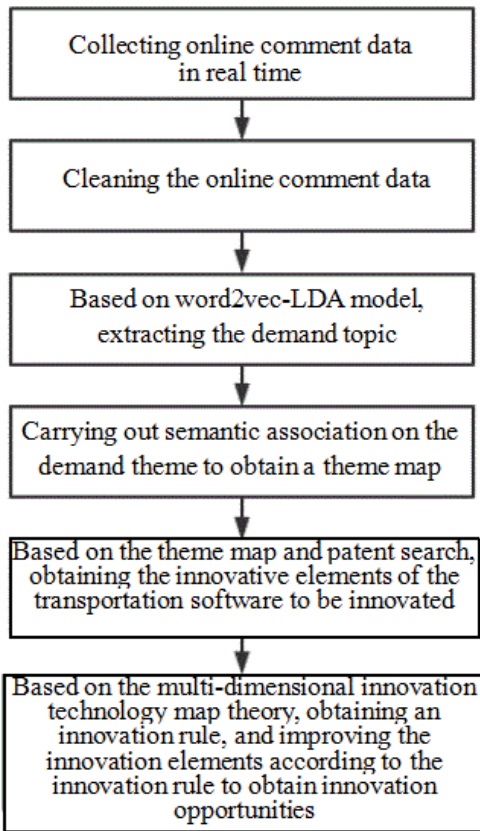
72: XIAO Guangnian, CUI Qing'an, XIAO Yu, LU Qiongwen, OU Yuanshuai, CHEN Liu, WANG Tian  
33: CN 31: 202210734365.1 32: 2022-06-27

**54: METHOD FOR IDENTIFYING INNOVATION OPPORTUNITIES OF TRAFFIC TRAVEL SOFTWARE BASED ON USER COMMENTS**

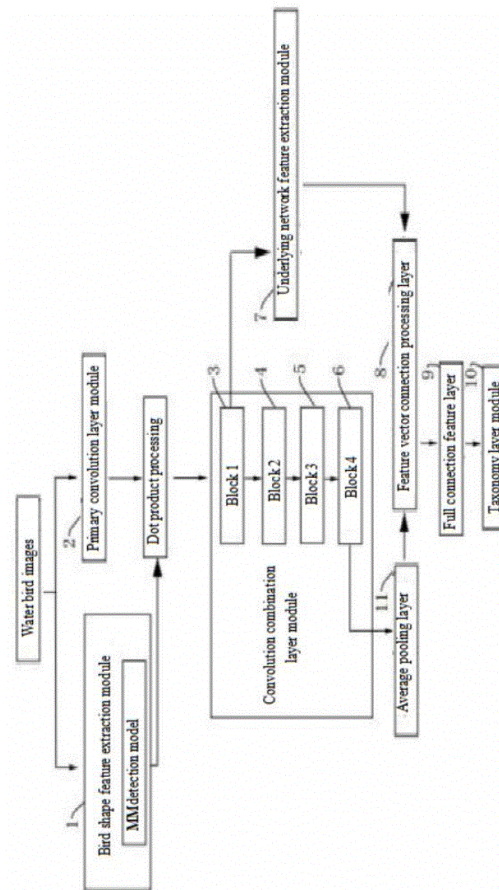
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The invention discloses a method for identifying innovation opportunity of traffic travel software based on user comments, which comprises the following steps: collecting online comment data in real time, and cleaning the data to obtain target data; based on word2vec-LDA model, extracting the demand topic of target data; carrying out semantic association on the demand theme to obtain a theme map; based on the theme map and patent search, obtaining the innovative elements of the transportation software to be innovated; and based on the multidimensional innovation technology map theory, obtaining an innovation rule, and improving the innovation elements according to the innovation rule to obtain innovation opportunities. With the aid of the multidimensional innovation technology map theory,

the invention obtains the innovation rules and selects the corresponding innovation rules to improve the innovation elements, thus systematically generating the innovation opportunities based on user needs, enriching the innovation opportunity identification theory system and the application research of user needs.



connection feature layer and a taxonomy layer module; the bird shape feature extraction module is connected with the primary convolution layer module; the primary convolution layer module is connected with the convolution combination layer module; the underlying network feature extraction module is connected with the convolution combination layer module; the underlying network feature extraction module is also connected with the feature vector connection processing layer; the full connection feature layer is connected with the feature vector connection processing layer, and the taxonomy layer module is connected with the full connection feature layer. The invention relates to the technical field of water bird image identification, in particular to a fusion feature modeling for identifying global water bird images by deep convolution network and a method thereof, which can accurately identify major water bird species in the world.



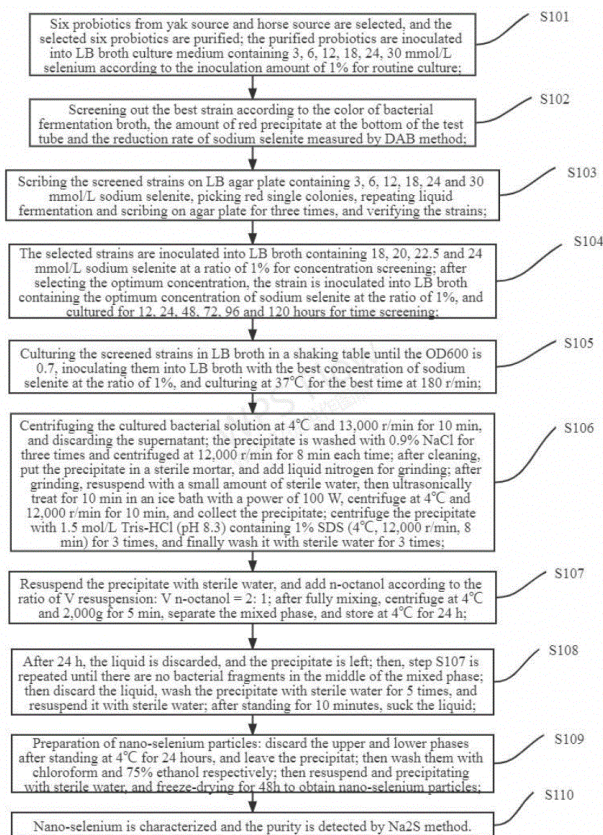
21: 2022/08076. 22: 2022/07/20. 43: 2022/11/02  
 51: G06K  
 71: Huaiyin Normal University  
 72: ZHOU Jiaogen, ZHANG Caiyun, ZHANG Han, ZHANG Haowen  
**54: FUSION FEATURE MODELING FOR IDENTIFYING GLOBAL WATER BIRD IMAGES BY DEEP CONVOLUTION NETWORK**

00: -  
 The invention discloses a fusion feature modeling for identifying global water bird images by deep convolution network, including a bird shape feature extraction module, a primary convolution layer module, a convolution combination layer module, a underlying network feature extraction module, a feature vector connection processing layer, a full

21: 2022/08077. 22: 2022/07/20. 43: 2022/11/02  
 51: A61K

71: HUAZHONG AGRICULTURAL UNIVERSITY  
 72: ZHOU Donghai, YANG Xiaoqi, ZHANG Jiabin,  
 FU Yang, LIU Jiaqi, KYEIN SAN LOON  
 33: CN 31: 202210620708.1 32: 2022-06-02  
**54: PREPARATION METHOD AND MEDICINE OF  
 BIO-SOURCE NANO-SELENIUM FOR INHIBITING  
 MYOCARDIAL HYPERTROPHY**  
 00: -

The invention belongs to the technical field of nano-selenium preparation, and conveypreparation method and medicine of bio-source nano-selenium for inhibiting myocardial hypertrophy, which comprises the following steps: selecting four probiotics from yak and two probiotics from horse and purifying them; inoculating the purified probiotics into LB broth containing sodium selenite, and culturing in shaking incubator; screening strains with high reduction rate of sodium selenite and high production of red substances in fermentation broth; inoculating the screened strains with high reduction rate into LB broth for routine culture; the screened strains with high reduction rate are streaked on LB agar plate containing sodium sulfite, red single colony is picked, liquid fermentation and streaking on agar plate are repeated for three times, and the best strain, *Bacillus cereus* A3 (preservation number: CCTCC M202060), is verified; set the gradient of selenium concentration and culture time in LB broth containing sodium selenite, select the highest tolerance concentration and the best culture time to extract nano-selenium spheres, characterize and test purity of them. The nano-selenium of the invention is coated with protein with small particle size, high purity and better stability.

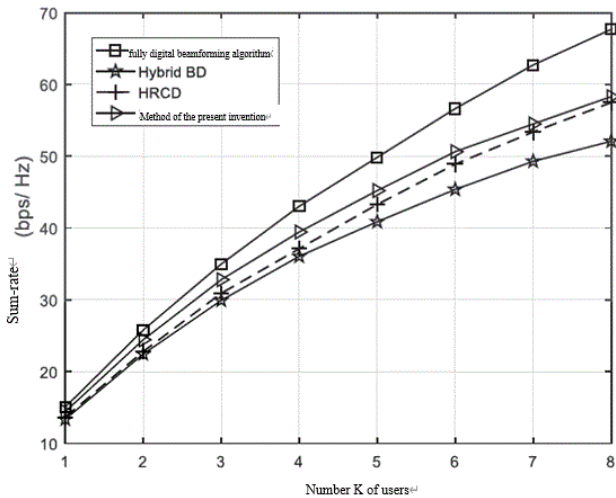


21: 2022/08078. 22: 2022/07/20. 43: 2022/11/02  
 51: G01V

71: Anhui Normal University  
 72: Ran Zhang, Ye Wang, Xiaoming Liu, Lu Gan  
**54: A HYBRID BEAMFORMING METHOD BASED  
 ON SIGNAL-TO-LEAKAGE-PLUS-NOISE RATIO  
 IN MILLIMETER-WAVE MIMO SYSTEMS**  
 00: -

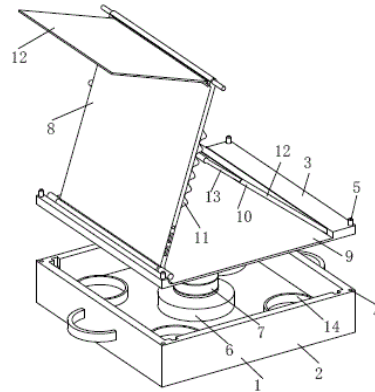
The invention discloses a hybrid beamforming method based on signal-to-leakage-plus-noise ratio in millimeter-wave MIMO systems, which relates to the technical field of wireless communication. The method comprises the following steps: According to the signal-to-leakage-plus-noise ratio criterion, a multi-user hybrid beamforming problem model is established; The two-stage idea is adopted to design the digital-analog hybrid beamforming; Assuming that the optimal analog beamforming matrix is known, the digital beamforming matrix is designed to suppress inter-user signal interference and noise at the same time; Using orthogonal matching pursuit method and array response vector codebook, the analog beamforming matrix is solved to maximize the gain of equivalent baseband channel; Outputting

digital beamforming matrix and analog beamforming matrix. The hybrid beamforming method provided by the embodiment of the invention improves the sum rate of a multi-user millimeter wave MIMO system, while reducing the computational complexity of designing hybrid beamforming.



21: 2022/08092. 22: 2022/07/20. 43: 2022/11/02  
 51: G09F  
 71: XI'AN HUA YUN TIAN  
 CHENGGCOMMUNICATION TECHNOLOGY CO.  
 LTD  
 72: ZHAO, Xukai  
**54: INFORMATION TECHNOLOGY MULTIMEDIA  
 DISPLAY DEVICE**

00: -  
 An information technology multimedia display device, comprising an accommodating box (1) comprising a box body (2) and a cover plate (3); fixing holes (4) are provided at the box body (2); fixing pins (5) are provided at the cover plate (3) and in the fixing holes (4); a motor (6), counterweight blocks (7) and a display panel (8) are provided in the box body (2); connecting holes are provided at the counterweight blocks (7), and the plurality of counterweight blocks (7) are stacked together vertically; a recess portion (9) is provided on the cover plate (3), and a support plate (10) is provided in the recess portion (9); holding grooves (11) are provided on the display panel (8), and the other end of the support plate (10) are held in the holding grooves (11); and a solar panel (12) is provided on the support plate (10).



21: 2022/08121. 22: 2022/07/21. 43: 2022/11/02  
 51: G05B  
 71: ANHUI SCIENCE AND TECHNOLOGY  
 UNIVERSITY  
 72: QUAN, Yue, GUO, Hai, HUANG, Yourui, HU,  
 Fuzhi, ZHANG, Di, ZHOU, Xiaojie  
 33: CN 31: 202111154589.7 32: 2021-09-29  
**54: MULTI-AGENT SYSTEM FAULT DETECTION  
 METHOD AIMING AT TIME DELAY OF A DATA  
 PACKET LOSS**

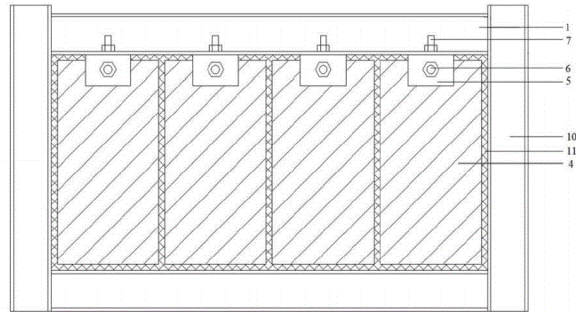
00: -  
 Provided is a multi-agent system fault detection method aiming at a time delay of a data packet loss. The method includes: creating a system model describing features of fault information, a network time delay, and a data packet loss; creating, on the basis of the system model in combination with information propagated by each node of multiple agents on a network, an auxiliary state vector; creating state observers on nodes of the agents, and estimating state information of the system and information of the auxiliary state vector in real time; and utilizing output information of the state observers, to create a fault indication state vector, and comparing thresholds of all elements in the fault indication state vector, to determine a fault point. The method can monitor fault states of nodes of an entire system by comparing the thresholds of all the elements in the fault indication state vector.

Step 1, create, according to an information topological structure of a multi-agent system, a system model describing features of fault information, a network time delay, and a data packet loss

Step 2, create, on the basis of the system model in combination with information propagated by each node of multiple agents on a network, an auxiliary state vector

Step 3, create state observers on nodes of the agents, and estimate state information of the system and information of the auxiliary state vector in real time

Step 4, utilize output information of the state observers, to create a fault indication state vector, and compare thresholds of all elements in the fault indication state vector with one another, to determine a fault point



21: 2022/08122. 22: 2022/07/21. 43: 2022/11/02  
51: E04B; E04G

71: Shanxi Erjian Group Co., Ltd., Taiyuan University of Technology  
72: ZHANG, Zhi, LIU, Yuanzhen, CHEN, Zhenhai, ZHANG, Jiaguang, ZHENG, Zhi, ZHANG, Jinping, WANG, Tao, CHENG, Junxin, WANG, Mingqing, XIE, Minjie, ZHANG, Hao, ZHANG, Fan, ZHENG, Hongfei, PEI, Min, ZHANG, Lei, WANG, Shutong, TIAN, Xiaowei

33: CN 31: 202111018083.3 32: 2021-09-01  
**54: FLEXIBLE CONNECTION STRUCTURE SUITABLE FOR FABRICATED STEEL STRUCTURE AND ENCLOSURE WALL PLATE AND INSTALLATION METHOD THEREOF**

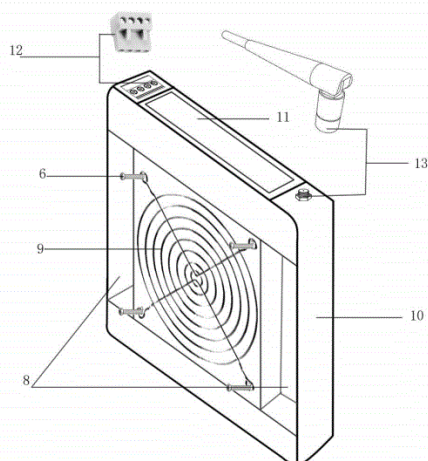
00: -  
The present invention discloses a flexible connection structure and an mounting method suitable for an fabricated steel structure and an enclosure wall plate, which relates to the field of an enclosure wall plate connection node, wherein the structure comprises an H-shaped steel beam, an H-shaped steel column, an enclosure wall plate, and multiple enclosure wall plates assembled in parallel in a steel structure frame composed of the H-shaped steel beam and the H-shaped steel column, wherein the H-shaped steel beam comprises an upper flange, a web and a lower flange, and the top of each enclosure wall plate is connected to the lower flange of the H-shaped steel beam located above via at least one U-shaped connection plate; extruded polystyrene foam plates are filled between adjacent enclosure panels, between enclosure panels and H-shaped steel beams and H-shaped steel columns.

21: 2022/08123. 22: 2022/07/21. 43: 2022/11/02  
51: F24F

71: Zibo Heating Group Company Limited, ZIBO DISTRICT HEATING LIMITED COMPANY, ZIBO CARBON ECOLOGY DEVELOPMENT GROUP CO., LTD.  
72: NIE, Xin, LIU, Na, HOU, Chenchen, LI, Zhenlin, WANG, Yun, LI, Fuhua, GAO, Yuechen, XU, Yi, ZHU, Feng, LI, Wenjie, ZHENG, Jianzhao, YIN, Zhe, ZHANG, Jian, CHE, Xinhua, YANG, Liu

**54: AIR CIRCULATING BACKFLOW SEMICONDUCTOR DEHUMIDIFIER**

00: -  
The present invention discloses an air circulating backflow semiconductor dehumidifier, which comprises radiators, a housing, a DC fan, a front end cover, an electronic control box and a microcontroller; the DC fan is arranged at the middle position of the housing, and air channels are formed by the DC fan and gaps at two sides of the housing; two groups of radiators are arranged in the air channels; and the front end cover is fixed on the outer side of the housing, the electronic control box is arranged on the front end cover, and the microcontroller is arranged in the electronic control box. The present invention has the characteristics of small volume, low cost, less fault, low power consumption, real-time monitoring and intelligent control.

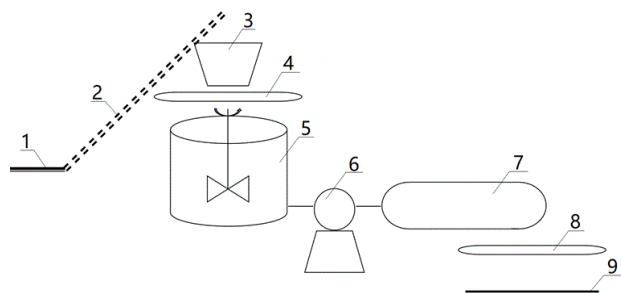


21: 2022/08131. 22: 2022/07/21. 43: 2022/11/07  
 51: C02F  
 71: ZAOZHUANG UNIVERSITY, Jiangsu Lianyanggang Environmental Protection Technology Co.,Ltd., SHANDONG ACADEMY OF ENVIRONMENTAL SCIENCES CO.,LTD.  
 72: WANG Changwen, XU Mei, CAO Wenping, JIANG Yunpeng, WANG Chao  
 33: CN 31: 202111508227.3 32: 2021-12-10  
**54: METHOD AND DEVICE FOR PREPARING MODIFIED COAGULANT BY USING ARTIFICIAL QUARTZ TAIL SLUDGE**

00: -

The invention relates to a method and a device for preparing a modified coagulant by using artificial quartz tail sludge. The method comprises crushing, screening, modification, curing, drying and re-screening. The device comprises a tail sludge collecting device and a screw conveyor, where a pulverizer is arranged below the discharge port of the screw conveyor, a vibrating screen I is arranged below the pulverizer, a modified reaction tank with a stirring device is arranged just below the vibrating screen I, the bottom of the modified reaction tank is communicated with the inlet of a conveying pump through a conveying pipe, the outlet of the conveying pump is communicated with the inlet of a rotary dryer, a vibrating screen II is arranged below the discharge port of the rotary dryer, and a coagulant collecting device is arranged just below the vibrating screen II. The invention can realize the resource utilization of the artificial quartz tail sludge, and at the same time, the prepared coagulant can be used in the coagulation unit in the sewage treatment process, and has a good removal effect on

suspended matter, colloid and phosphorus; In addition, the invention can reduce the modification cost, and the used device has simple structure and low assembly cost.



21: 2022/08132. 22: 2022/07/21. 43: 2022/11/07  
 51: G06F

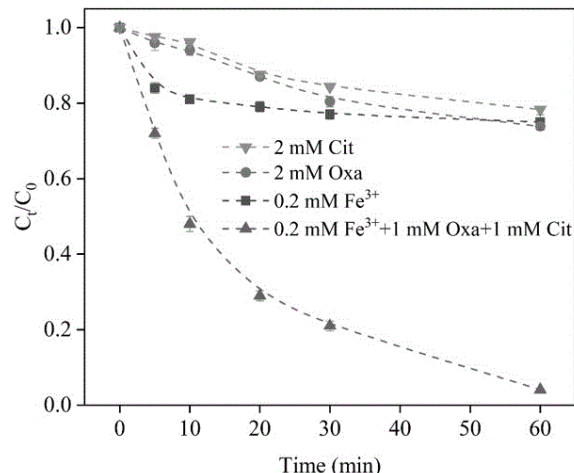
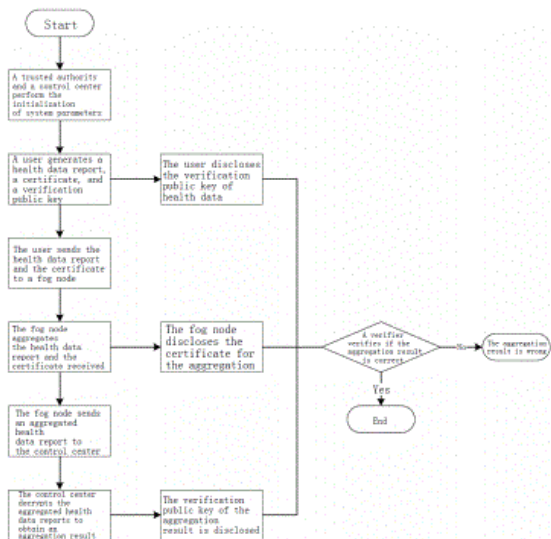
71: Zhejiang Gongshang University, Zhejiang Titi Education Technology Co., Ltd.

72: HAN, Song, REN, Siqi, CHEN, Xiaoli, LIN, Jianhong, JIN, Shudan

**54: VERIFIABLE AND PRIVACY-PRESERVING MULTI-SUBSET DATA AGGREGATION METHOD BASED ON HOMOMORPHIC ENCRYPTION**

00: -

A verifiable and privacy-preserving multi-subset data aggregation method based on homomorphic encryption, wherein an aggregation result obtained by the fog node is decrypted on the basis of the homomorphic encryption private key received by the control center, and an aggregation result of each subset and the number of people of each subset are obtained through Honer's parameters, which solves the problem in the prior art of the privacy-preserving data aggregation method that the control center cannot obtain the aggregation result of each subset and the number of people of each subset. Moreover, any entity can verify the aggregation result without having to know the aggregation result of the control center, which solves the problem that a random entity does not trust the aggregation result while preserving the privacy, and the aggregation result obtained by the control center can be verified through public information.



21: 2022/08133. 22: 2022/07/21. 43: 2022/11/02  
 51: C09K  
 71: China University of Geosciences, Beijing  
 72: YAO Jun, CAO Ying, PANG Wancheng, ZHU Junjie, LI Miaomiao, LIU Bang, LI Hao, ZHAO Chenchen, ZHU Xiaozhe, MA Bo, LIU Jianli, HUANG Peng  
**54: METHOD FOR PHOTOCATALYTIC DEGRADATION OF BENEFICIATION COLLECTORS BY FERRIC CARBOXYLATE**  
 00: -

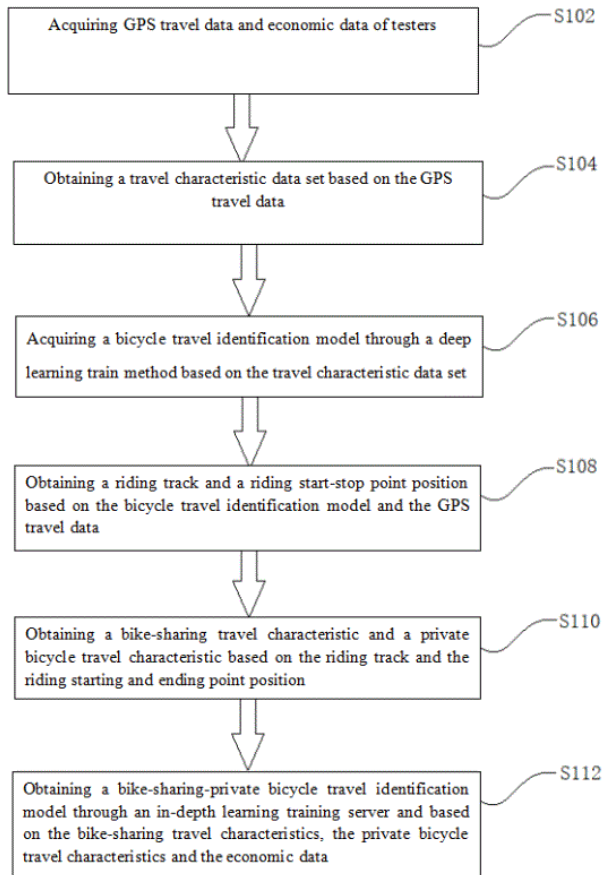
The invention discloses a method for photocatalytic degradation of beneficiation collectors by ferric carboxylate, which relates to the technical field of mine organic wastewater treatment, and comprises the following steps: adding Fe<sup>3+</sup> into a solution containing beneficiation collectors under ultraviolet irradiation, and standing; adding oxalic acid and citric acid, and standing. According to the invention, Fe<sup>3+</sup>, oxalic acid (Oxa) and citric acid (Cit) are combined to form a UV-Fenton system with the participation of UV (ultra violet), so as to achieve the purpose of efficiently degrading collector-like floatation reagents. The method has the advantages of simple operation process, high target removal efficiency, wide pH application range, cheap and easily available materials, which can greatly reduce the treatment cost of mine organic wastewater in practical engineering, and has a good prospect in the degradation of organic floatation reagents of mine chelated collector-like.

21: 2022/08134. 22: 2022/07/21. 43: 2022/11/02  
 51: G01C; G06Q  
 71: Shanghai Maritime University  
 72: XIAO Guangnian, XIAO Yu, OU Yuanshuai, CUI Qing'an, GU Bangping, WANG Tian, CHEN Liu, WANG Chunyu  
 33: CN 31: 202210698919.7 32: 2022-06-20

**54: METHOD AND SYSTEM FOR IDENTIFYING TRAVEL MODES OF BIKE-SHARING AND PRIVATE BICYCLES**

00: -  
 The application discloses a method and a system for identifying travel modes of bike-sharing and private bicycles, where the method includes the following steps: Acquiring GPS travel data and economic data of testers; obtaining a travel characteristic data set based on the GPS travel data; acquiring a bicycle travel identification model through a deep learning train method based on the travel characteristic data set; obtaining a riding track and a riding start-stop point position based on the bicycle travel identification model and the GPS travel data; obtaining a bike-sharing travel characteristic and a private bicycle travel characteristic based on the riding track and the riding starting and ending point position; obtaining a bike-sharing-private bicycle travel identification model through an in-depth learning training server and based on the bike-sharing travel characteristics, the private bicycle travel characteristics and the economic data; the bike-sharing-private bicycle travel identification model is used for travel mode identification. According to the technical scheme, the travel mode of residents can be accurately judged by GPS data, which greatly simplifies the travel investigation work,

and at the same time, the travel mode is combined with personal economic data to realize the effect of reflecting the travel mode by economic data.

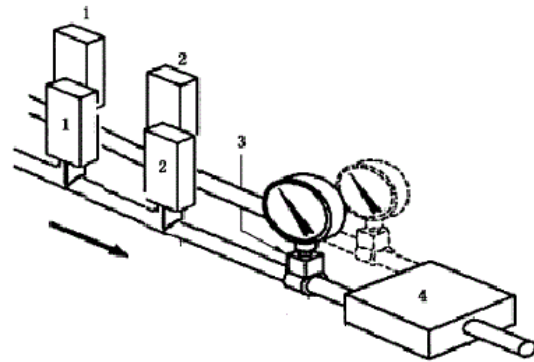


21: 2022/08135. 22: 2022/07/21. 43: 2022/11/07  
 51: F16K  
 71: China National Institute of Standardization  
 72: BAI, Xue, SHAO, Jijia, BAI, Yan, HU, Mengting, ZHAO, Xuezhi

**54: FAUCET FLOW RATE UNIFORMITY TEST METHOD AND SYSTEM**

00: -  
 The present invention relates to the technical field of faucet flow tests, and in particular to a faucet flow rate uniformity test method and system. The method includes: adjusting a dynamic pressure to  $0.3\pm 0.01\text{MPa}$ ,  $0.2\pm 0.01\text{MPa}$  and  $0.1\pm 0.01\text{MPa}$ , respectively performing the test for three times, respectively calculating average values, and calculating the difference between the highest average flow rate and the lowest average flow rate, so as to obtain flow rate uniformity data. Compared with the prior art, by means of simulating a water consumption environment of a faucet in daily life,

including a faucet pressure, a test water temperature and the like, and by means of a scientific uniformity flow rate calculation method and real-time observation equipment, the present invention can effectively obtain faucet uniformity flow rate data, and the degree of standardization is high.



21: 2022/08136. 22: 2022/07/21. 43: 2022/10/02  
 51: B05B

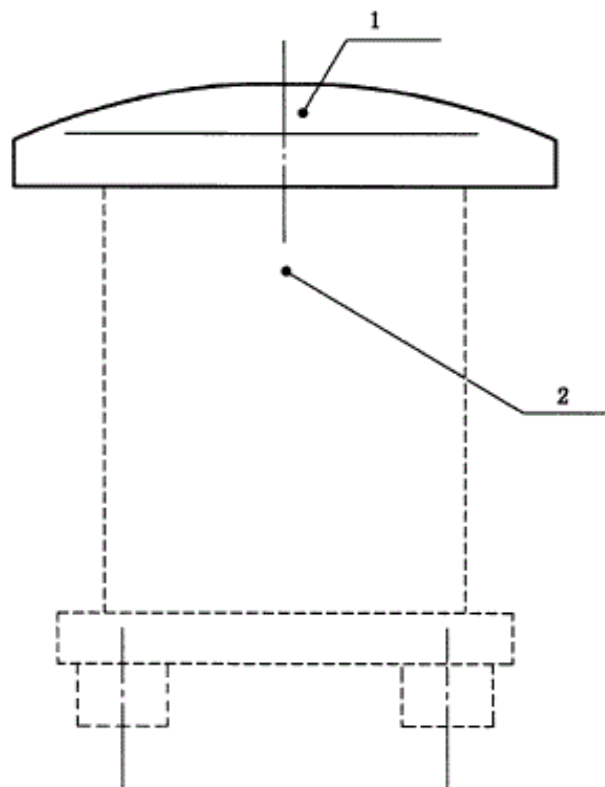
71: China National Institute of Standardization  
 72: SHAO, Jijia, BAI, Xue, ZHANG, Yubo, LIU, Jing, HOU, Shan

**54: SHOWER HEAD JET FORCE TEST METHOD AND DEVICE**

00: -  
 The present invention relates to the technical field of shower head jet force tests, and in particular to a shower head jet force test method and device. The method includes: gradually adjusting a dynamic pressure to  $0.5\pm 0.01\text{MPa}$  through a pressure adjustment device, jetting water toward a disc collector, maintaining the dynamic pressure to be stable for at least 60s, closing the water flow, then opening the water flow to adjust the pressure to  $0.3\pm 0.01\text{MPa}$ , after maintaining the stability, collecting data through a force sensor, reading the reading P1 of a jet force test device, repeating step S6, reducing the pressure to  $0.2\pm 0.01\text{MPa}$  and  $0.1\pm 0.01\text{MPa}$ , collecting data through the force sensor, recording the readings as P2 and P3, and calculating an average value of P1, P2 and P3 as an average jet force. Compared with the prior art, the present invention can accurately and quickly measure the jet force of the shower head, the data is directly collected by a collector without being manually read, thereby reducing manual errors, and



a peak value and a stable value of the jet force can be collected.

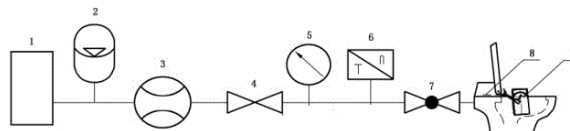


21: 2022/08137. 22: 2022/07/21. 43: 2022/11/02  
51: E03D  
71: China National Institute of Standardization  
72: BAI, Xue, ZHANG, Rui, SHAO, Jijia, CAI, Rong, ZHANG, Lan

#### 54: METHOD AND SYSTEM FOR TESTING CLEANING WATER VOLUME OF INTELLIGENT TOILET

00: -  
The present invention relates to the technical field of intelligent toilets, and in particular to a method and system for testing the cleaning water volume of an intelligent toilet. The method includes: mounting a test sample to a normal use state according to the instructions in a specification, running a buttock cleaning mode for 2 weeks, placing the test sample at a test temperature for 1 hour to reach a stable state, adjusting buttock cleaning and vaginal cleaning to the maximum cleaning mode, performing a test after once normal operation, measuring water consumption including that of a cleaning nozzle and a water spray rod, performing the buttock cleaning and vaginal cleaning test for three times in a contact

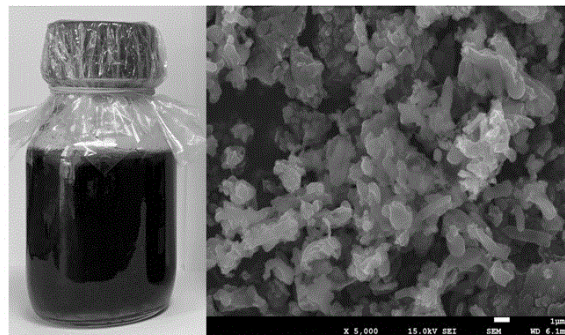
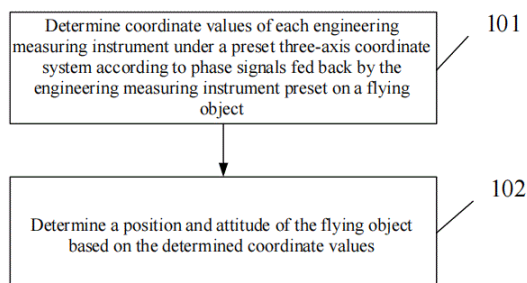
stage according to the processes of S1-S4, that is, 6 times in total, and taking an average value of the 6 times as a water consumption test result of the cleaning process. Compared with the prior art, the present invention has the advantages of providing a scientific standard for product test data, not only satisfying the intuitive feeling of consumers on water consumption, but also providing test standards that conform to product improvement by manufacturers.



21: 2022/08138. 22: 2022/07/21. 43: 2022/11/02  
51: A63F; G05D  
71: China Aero Geophysical Survey and Remote Sensing Center for Natural Resources  
72: ZHOU, Wenyue, XIONG, Shengqing, WANG, Linfei, ZHOU, Xihua, LI, Zhaoliang

#### 54: METHOD AND DEVICE FOR DETERMINING FLIGHT ATTITUDE

00: -  
Disclosed are a method and device for determining a flight attitude. A flight position and attitude of an airplane during flight can be obtained only by arranging engineering measuring instruments on a flying object. That is, coordinate information of the engineering measuring instruments is determined by analyzing phase signals fed back by the engineering measuring instruments, and the flight position and attitude of the airplane can be determined according to the coordinate information of the engineering measuring instruments. However, in correlation techniques, attitude instruments for detecting the flight attitude are installed on the flying object, and as the manufacturing cost of the attitude instruments is far higher than that of the engineering measuring instruments, the present application can obtain the flight attitude of the flying object at low cost.



21: 2022/08139. 22: 2022/07/21. 43: 2022/11/02

51: B09B

71: China University of Geosciences, Beijing

72: YAO Jun, LI Miaomiao, LIU Bang, LIU Houquan, JIANG Shun, MA Bo, ZHAO Chenchen, ZHU Xiaozhe, CAO Ying, PANG Wancheng, LI Hao, SUN Yuanyuan, LIU Boren, ZHU Junjie, LIU Jianli, HUANG Peng, LIU Xingyu

**54: MICROBIAL GEOCHEMICAL IN-SITU MINERALIZATION METHOD FOR SIMULTANEOUS IMMOBILIZATION OF MULTI-METAL(LOID)S IN NON-FERROUS METAL(LOID)S CONTAMINATED MINES**

00: -

The invention discloses a microbial geochemical in-situ mineralization method for simultaneous immobilization of multi-metal(loid)s in non-ferrous metal(loid)s contaminated mines, belonging to the technical field of applied microbial geochemistry.

The method comprises the following steps: inoculating microbial bacteria liquid into an expanded culture medium containing heavy metal mixed solution, and culturing in an incubator at 30 degree of Celsius in an aerobic or anaerobic atmosphere. The microbial bacterial liquid is prepared by mixing sulfate-reducing bacteria, iron-reducing bacteria, phosphate-solubilizing bacteria, silicon-solubilizing bacteria and nitrogen-fixing bacteria according to the volume ratio of 3: 2: 1: 1: 1; the heavy metal mixed solution contains Pb, Zn, Cu, Cr, Sb, Cd and As solutions. The microbial flora can transform free heavy metals into insoluble sulfide deposits, etc., forming a multi-double salt effect, thus reducing the environmental pollution of heavy metals and improving the function of solidifying heavy metals.

21: 2022/08140. 22: 2022/07/21. 43: 2022/11/02

51: B01D

71: Hwa Mei Hospital, University of Chinese Academy of Sciences

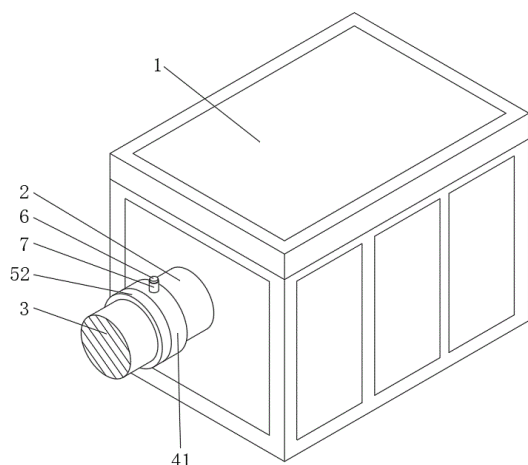
72: Wanquan Qu

33: CN 31: 202220050204.6 32: 2022-01-10

**54: A GAS PURIFICATION DEVICE DESIGNED FOR ANESTHESIOLOGY DEPARTMENT**

00: -

The utility model discloses a gas purification device designed for the department of anesthesiology, which comprises a purification device body, a fixed tube and a connecting tube. The outer side of the purification device body is connected with the inner side of the fixed tube, and the left side of the fixed tube is connected with the right side of the connecting tube. The left side of the fixed tube surface is fixedly connected with a limit connecting component, and the left side of the top and bottom of the fixed tube are fixedly connected with a limit fixed component. The utility model connects the connecting tube and the fixed tube by setting a limit connecting component, and then drives the connecting tube and the fixed tube to be installed and fixed together by the limit fixed component. It solves the problem that the existing purification equipment is more complicated when connecting with the tube, and it is usually fixed by welding, which is not convenient for the subsequent disassembly and maintenance of the tube. It solves the problem of convenient use of purification device and achieves the effect of convenient connection.



21: 2022/08142. 22: 2022/07/21. 43: 2022/11/02  
51: A61M

71: Hwa Mei Hospital, University of Chinese  
Academy of Sciences

72: Wanquan Qu

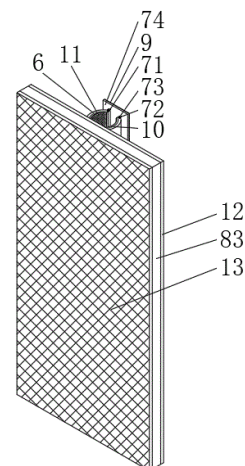
33: CN 31: 202220126105.1 32: 2022-01-18

**54: AN OXYGEN THERAPY CATHETER  
DESIGNED FOR ANESTHESIOLOGY  
DEPARTMENT**

00: -

The utility model discloses an oxygen therapy catheter designed for the department of anesthesiology, which comprises a nasal plug, a separating tube, a separating head, a pipe and a connecting head. The top of the connecting head is connected with one end of the pipe, the other end of the pipe is connected with one end of the separating head, the other end of the separating head is connected with one end of the separating pipe, and the other end of the separating pipe is connected with both sides of the nose plug. The utility model is clamped and fixed on the outer side of the separating pipe by setting a clamped block, and the clamped block drives the connection protection component and the clamped fixed component to protect both sides of the separating pipe against pressure, and the clamped fixed component can protect the outer side of the separating pipe. Most existing oxygen tubes can only be used when a person is lying flat. Because the oxygen tube should be wrapped around the back of the ear, it is easy to squeeze the oxygen tube at one end when the user lies on his or her side, it will result in insufficient oxygen supply. The invention solve the above-mentioned problems. The problem of using oxygen

suction pipe is reduced, and the effect of anti-pressure pipe is achieved.



21: 2022/08143. 22: 2022/07/21. 43: 2022/11/02  
51: G06K; G06N

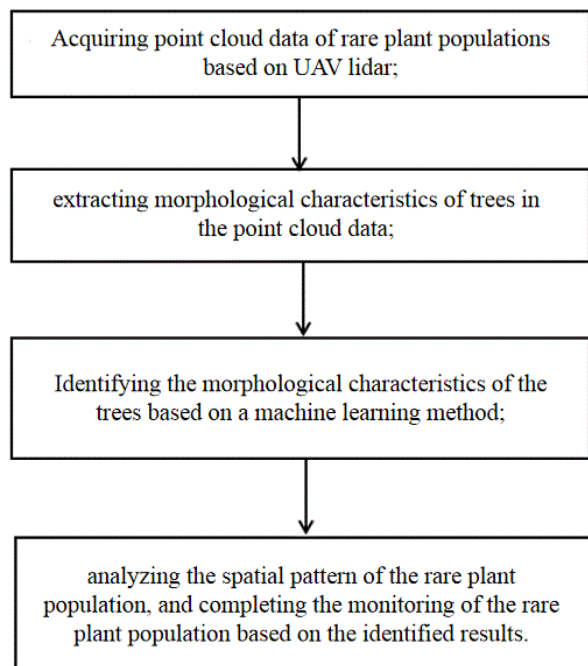
71: Jiangxi Agricultural University

72: HUANG Chao

**54: MONITORING METHOD AND SYSTEM OF  
RARE PLANT POPULATION BASED ON  
UNMANNED AERIAL VEHICLE LIDAR**

00: -

The invention provides a monitoring method and system of rare plant population based on unmanned aerial vehicle lidar, which includes: acquiring point cloud data of rare plant populations based on UAV lidar; extracting morphological characteristics of trees in the point cloud data; identifying the morphological characteristics of the trees based on a machine learning method; and analyzing the spatial pattern of the rare plant population, and completing the monitoring of the rare plant population based on the identified morphological characteristics of the trees. In the invention, the distribution pattern, population renewal and dynamic changes of habitats of rare plants are monitored by combining ground fixed sample plots and unmanned aerial vehicle lidar, and accurate and efficient classification of tree species is realized, thus providing a scientific basis for rare and endangered plant protection and biodiversity monitoring.



21: 2022/08144. 22: 2022/07/21. 43: 2022/11/02  
51: A61L

71: Hwa Mei Hospital, University of Chinese Academy of Sciences

72: Wanquan Qu

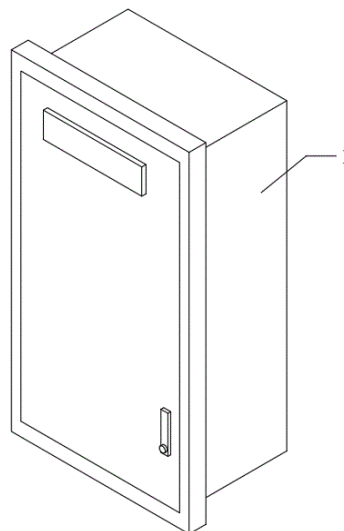
33: CN 31: 202220124633.3 32: 2022-01-18

#### **54: A DISINFECTION CABINET FOR ANESTHESIOLOGY DEPARTMENT**

00: -

The utility model discloses a disinfection cabinet designed for anesthesiology department, which comprises a disinfection cabinet body, an ozone tube and an air nozzle. The bottom of the inner wall of the disinfection cabinet body is fixedly connected with the bottom of the ozone tube. The utility model by setting the block board, make the medical lead garment with block anesthesia apparatus by blocking board, then use hangers will lead medical clothes neatly on the slider, and then place the anesthesia equipment on board on the left, Then, the lead medical clothing is neatly hung on the slide rod using a hanger, and the anesthetic instrument is placed on the left side of the placement board. Then open the air nozzle, so that the ozone in the ozone tube is discharged into the interior of the disinfection cabinet body, and at the same time, the placing plate is set in a mesh, so that the ozone is evenly distributed on the surface and interior of anesthesia instruments and medical lead clothing through the

mesh placing plate. It solves the problem that when the medical lead clothing and anesthesia equipment need to be disinfected at the same time, the medical lead clothing and anesthesia equipment will accumulate in the disinfection cabinet, resulting in the uneven distribution of ozone generated by the disinfection cabinet, resulting in the comprehensive disinfection of the medical lead clothing and anesthesia equipment.



21: 2022/08145. 22: 2022/07/21. 43: 2022/11/02  
51: C12Q

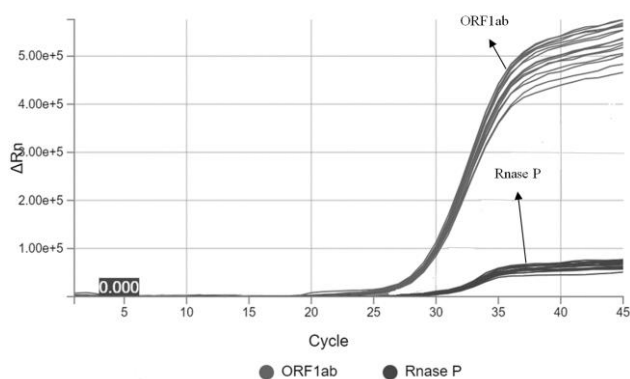
71: Yao Yongchao, Wu Zhengzhi, Shenzhen Jintai Biomed-Pharmaceutical Technology Partnership (Limited Partnership)

72: Yao Yongchao, Wu Zhengzhi, Liu Guangjie

#### **54: NOVEL CORONAVIRUS (ORF1AB GENE) DETECTION PRIMER PAIR AND APPLICATION THEREOF**

00: -

The invention belongs to the technical field of virus detection reagents, and particularly relates to a novel coronavirus detection primer pair and application thereof. The primer pair comprises the sequence shown in SEQ ID NO.1 and SEQ ID NO.2. It can perform PCR specific amplification on ORF1ab gene of COVID-19, and the amplification specificity is strong; moreover, when COVID-19 is detected based on the primer, the detection sensitivity and accuracy are high, the false negative is few, and the detection speed is fast.



21: 2022/08146. 22: 2022/07/21. 43: 2022/11/02  
51: A01G

71: Sanya Institute, Hainan Academy of Agricultural Sciences(Hainan Laboratory Animal Research Centre), Cereal Crop Institute, Hainan Academy of Agricultural Sciences

72: Chen Jianxiao, Cao Bing, Wang Xiaoning, Lin Chaoshang, Tang Feng, Shao Junwei, Cen Xinjie

#### 54: HIGH-YIELD CULTIVATION METHOD OF HYBRID RICE

00: -

The invention discloses a high-yield cultivation method of hybrid rice, which includes the following steps: Step 1, arranging the seedling field: one day before sowing, the seedling bed should be arranged first, and early rice should be raised in water with plastic floppy trays: the seed consumption in field is 15.0kg per hectare, and 561-hole floppy trays are used, with 750 floppy trays per hectare; Step 2, sowing rice seeds and raising seedlings: when sowing, sow thinly to make every hole have 2 seeds as much as possible; after sowing, gently press the seeds with a broom or palm to make the seeds closely fit with the mud, so that the seeds are just completely immersed in the mud; don't press the seeds into the mud too deep, or it will cause uneven emergence and partial rotten seedlings; apply 75 kg of urea per hectare when the seedling has 3 leaves and 1 heart, and 105 kg urea per hectare is applied 5 days before transplanting. The hybrid rice cultivation method provided by the invention has wide adaptability, can greatly improve the unit yield and total yield of hybrid rice, improve the economic benefits of farmers in growing grain, and ensure national food security.

Step 1, arranging the seedling field: one day before sowing, the seedling bed should be arranged first, and early rice should be raised in water with plastic floppy trays: the seed consumption in field is 15.0kg per hectare, and 561-hole floppy trays are used, with 750 floppy trays per hectare.

Step 2, sowing rice seeds and raising seedlings: when sowing, sow thinly to make every hole have 2 seeds as much as possible, after sowing, gently press the seeds with a broom or palm to make the seeds closely fit with the mud, so that the seeds are just completely immersed in the mud; don't press the seeds into the mud too deep, or it will cause uneven emergence and partial rotten seedlings; apply 75 kg of urea per hectare when the seedling has 3 leaves and 1 heart, and 105 kg urea per hectare is applied 5 days before transplanting, water management is mainly exposing mud, and there is no water on the compartment surface, fertilization is mainly based on the application of liquid manure, and before transplanting, cooperate with pesticides to prevent diseases, pests and weeds; seedling raising method of late rice is similar to that of early rice, with the field seed consumption of 22.5 kg per hectare, and the seedling field management technology is basically the same as that of early rice.

Step 3, transplanting seedlings: transplanting the rice seedling with 5 leaves and one heart; the transplanting method is artificial cable planting method, with plant spacing of 20 cm and row spacing of 30 cm; inserting 2 seedlings in each hole; when transplanting, the seedlings must be inserted shallowly, that is, the seedlings should be placed upright and lightly in the mud with soil, which is conducive to the early growth and rapid growth of seedlings, strengthening the low position tillering, improving the percentage of earbearing tiller, and laying the foundation for high yield;

Step 4, field management: in terms of water, keep shallow water after transplanting and turning green, irrigating to promote tillering, start draining and field-drying when the seedlings reach the highest level, and keep wet after drying the fields until feet can't sink into the mud, and then lightly drying by stages until the end of jointing; keep shallow water from booting stage to filling stage, irrigate deep water during high temperature stage, keep the field moist until mature after filling stage, and harvest in time when mature, as for the prevention and control of pests and diseases, the principle of prevention first and comprehensive prevention and control is adopted, mainly to prevent "three diseases and three pests", namely rice blast, sheath blight, bacterial blight, Chilo suppressalis, Cnaphalocrocis medinalis and rice planthoppe; as for the control of weeds, weeding with weevil and bensulfuron-methyl herbicides 5 days before transplanting of early and late rice, and keeping water layer spraying, and manually weeding for 1-2 times in the later period.

21: 2022/08147. 22: 2022/07/21. 43: 2022/11/02  
51: C12Q

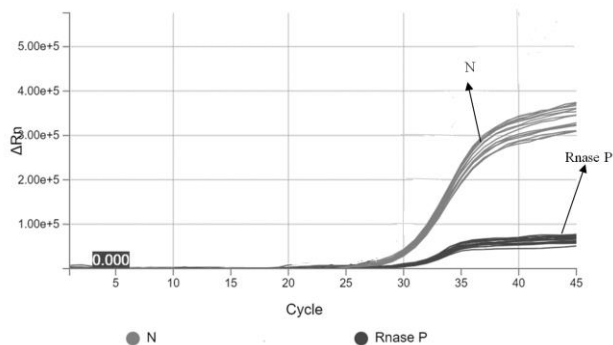
71: Yao Yongchao, Wu Zhengzhi, Shenzhen Jintai Biomed-Pharmaceutical Technology Partnership (Limited Partnership)

72: Yao Yongchao, Wu Zhengzhi, Liu Guangjie

#### 54: NOVEL CORONAVIRUS (N GENE) DETECTION PRIMER PAIR AND APPLICATION THEREOF

00: -

The invention belongs to the technical field of virus detection reagents, and particularly relates to a novel coronavirus detection primer pair and application thereof. The primer pair comprises the sequence shown in SEQIDNO.1 and SEQIDNO.2. It can perform PCR specific amplification on N gene of COVID-19, and the amplification specificity is strong; moreover, when COVID-19 is detected based on the primer, the detection sensitivity and accuracy are high, the false negative is few, and the detection speed is fast.



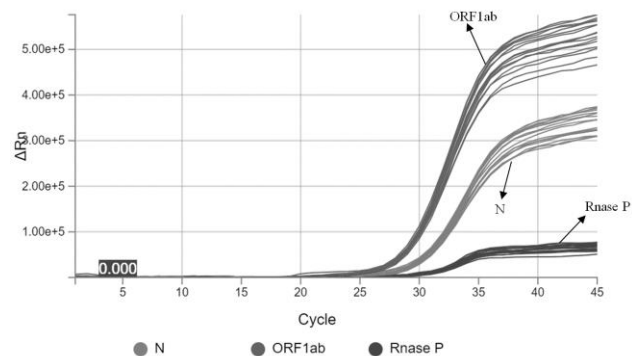
21: 2022/08148. 22: 2022/07/21. 43: 2022/11/02  
51: C05G  
71: Hebei Agricultural University  
72: Wang Hongxia, Zhao Shugang, An Xiuhong,  
Tian Yi, Zhang Zhihua, Zhang Junpei, Zhang Qiang  
**54: SPECIAL ANTI-SHRIVELLING LIQUID FOR  
WALNUT SHOOT**

00: -

The invention discloses a special anti-shrivelling liquid for walnut shoot, which comprises the following components by weight ratio: 3 percent-8 percent of polyvinyl alcohol, 3 percent-5 percent of methylthio-naphthaleneacetic acid, 2 percent-4 percent of nitrogen, phosphorus and potassium, and the balance is water; taking white solid powdered polyvinyl alcohol and adding it to water, heating the solution to above 95 degree Celsius, until the polyvinyl alcohol is completely dissolved in the water, letting the solution stand to room temperature, then adding methylthio-naphthalene acetic acid, ammonium nitrate, calcium superphosphate, potassium nitrate and stirring evenly, to obtain the anti-shrivelling liquid of the present invention, the pH value of the solution is 5-7, and the solution is weakly acidic. The objective of the invention is to provide a special anti-shrivelling liquid for walnut shoot, which can effectively reduce the shoot shrivelling rate of walnut trees.

21: 2022/08149. 22: 2022/07/21. 43: 2022/11/02  
51: C12Q  
71: Yao Yongchao, Wu Zhengzhi, Shenzhen Jintai Biomed-Pharmaceutical Technology Partnership (Limited Partnership)  
72: Yao Yongchao, Wu Zhengzhi, Liu Guangjie  
**54: REFERENCE GENE RP DETECTION PRIMER PAIR AND APPLICATION THEREOF**  
00: -

The invention belongs to the technical field of virus detection reagents, and particularly relates to a reference gene RP detection primer pair and application thereof. The reference gene RP primer pair comprises the sequences shown in SEQIDNO.1 and SEQIDNO.2. It can carry out specific recognition on reference gene RP for the PCR amplification detection of COVID-19 to improve the detection accuracy greatly.



21: 2022/08150. 22: 2022/07/21. 43: 2022/11/02  
51: C12N  
71: Ningbo University, Hangzhou New Hope Shuangfeng Dairy Co., Ltd, Nanjing WeGang Dairy Co.,Ltd  
72: Pan Daodong, Wu Zhen, Liu Qing, Zeng Xiaoqun, Zhao Guangsheng  
**54: A STRAIN OF LACTIC ACID BACTERIA PRODUCING BETA-GLUCOSIDASE AND ITS SCREENING METHOD AND THE PREPARATION METHOD OF YOGURT ENRICHED WITH ACTIVE FLAVONOID AGLYCONES.**

00: -

The present invention discloses a strain of Lactic acid bacteria producing beta-glucosidase and its screening method and the preparation method of yogurt enriched with active flavonoid aglycones elements, characterized by the classification of lactobacillus named the Lactobacillus plantarum subsp. plantarum PDD-1 strain, was conserved in the General Microbiology Center of China Microbial Strains Conservation Management Committee on June 19, 2018, with the conservation number CGMCC No. 15953. The preparation method is to add the plant extract of soybean-soybean isoflavone powder and sucrose to pure milk in a certain proportion, sterilize, inoculate with Lactobacillus bulgaricus, Streptococcus thermophilus fermenters, and Lactobacillus plantarum fermenters that can

produce beta-glucosidase, mix, ferment and culture, cool, and then a special flavor yogurt product enriched in the functional factor of active flavonoid aglycones could be produced. The advantage is that it is enriched in the functional factor of active flavonoid aglycones, which has the functions of antioxidant, anti-fatigue, and enhancing the immune regulation ability of the body.

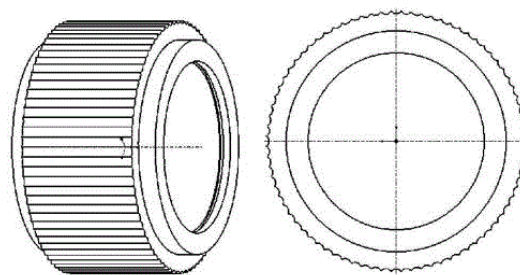
21: 2022/08174. 22: 2022/07/21. 43: 2022/11/02  
51: B01J

71: Jiangsu Academy of Agricultural Sciences  
72: DING, Chenglong, LIU, Beiyi, GAO, Xiang, TIAN, Jipeng, CHENG, Yunhui, XU, Nengxiang, ZHANG, Wenjie, WANG, Zishuo, GAO, Feng  
33: CN 31: 202110004453.1 32: 2021-01-04

#### 54: COMPRESSION ROLLER-TYPE PARTICLE EXTRUSION COMPACT FORMING SYSTEM WITH CUTTING FUNCTION

00: -

A compression roller-type particle extrusion compact forming system with a cutting function. The system comprises two compression rollers (1) mounted in a machine body and driven by a power transmission system to move and act oppositely and a circular mold or flat mold (2), wherein grooves (3) are evenly provided in cylindrical surfaces of the compression rollers (1), cutting ridges (4) are formed on portions, between adjacent grooves (3), on the cylindrical surfaces of the compression rollers (1), the compression rollers (1) and the circular mold or flat mold (2) form the compression roller-type particle extrusion compact forming system, the cutting ridges (4) on the cylindrical surfaces of the compression rollers (1) and an extrusion acting surface of the circular mold or flat mold (2) can respectively form cutting pairs (5), and the compression rollers (1) and the circular mold or flat mold (2) interact with each other.



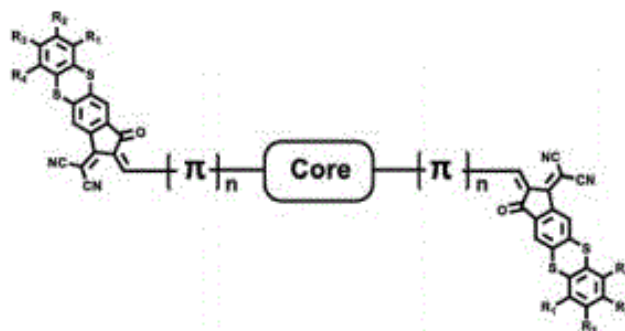
21: 2022/08201. 22: 2022/07/22. 43: 2022/09/20  
51: C07D

71: Guangdong Polytechnic Normal University  
72: Xie Ruihao, Zeng Junhao, Wu Sichao, Gan Shiwen, Lin Jinlong, Chen Jinfan, Xiong Liangbin, Jia Tao, Zhang Shaoan, Lv Yang

#### 54: ORGANIC CONJUGATED SMALL-MOLECULE MATERIAL CONTAINING THIANTHRENE TERMINAL GROUP AND PREPARATION METHOD THEREOF

00: -

The invention relates to an organic conjugated small-molecule material containing thianthrene terminal group and the preparation method thereof. For the organic conjugated small-molecule material, it contains thianthrene terminal group and it has a larger conjugated area and sulfur atom group, which is beneficial to the self-assembly and accumulation of molecules, thus improving the photovoltaic performance of this kind of small-molecule material. It has good thermal stability, good light absorption and appropriate energy level, and can be dissolved in organic solvents such as chloroform, dichloromethane, tetrahydrofuran and chlorobenzene; it is suitable for preparing organic solar cell devices by solution processing. As an electron acceptor material, this type of material can be applied to organic solar cell devices, and good device effects can be obtained.



21: 2022/08304. 22: 2022/07/26. 43: 2022/10/12

51: E21C

71: Northeastern University

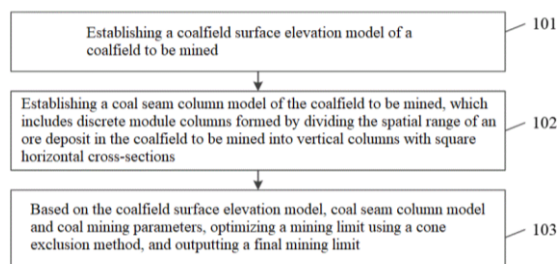
72: XU, Xiaochuan, GU, Xiaowei, WANG, Qing, WANG, Hao

33: CN 31: 202210470101.X 32: 2022-04-28

**54: MINING LIMIT DETERMINING METHOD AND SYSTEM FOR OPEN-PIT COAL MINE**

00: -

The present invention relates to a mining limit determining method and system for an open-pit coal mining, and relates to the technical field of coal mining. The method includes the following steps: establishing a coalfield surface elevation model of a coalfield to be mined; establishing a coal seam column model of the coalfield to be mined, which includes discrete module columns formed by dividing the spatial range of an ore deposit in the coalfield to be mined into vertical columns with square horizontal cross-sections; and optimizing a mining limit using a cone exclusion method based on the coalfield surface elevation model, coal seam column model and coal mining parameters, and outputting a final mining limit. The present invention improves the accuracy of calculating the coal-rock amount, thereby improving the reliability and practicability of the final mining limit.



21: 2022/08305. 22: 2022/07/26. 43: 2022/10/12

51: E21C

71: Northeastern University

72: GU, Xiaowei, XU, Xiaochuan, WANG, Qing, WANG, Hao

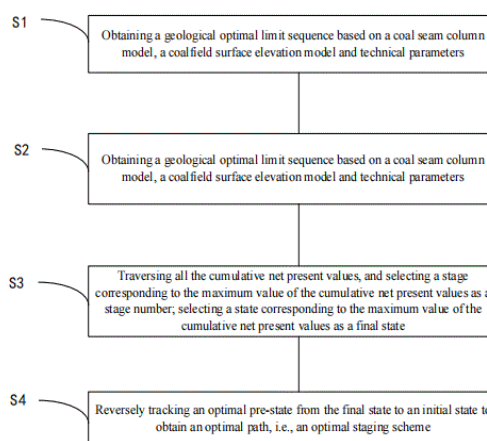
33: CN 31: 202210491532.4 32: 2022-05-07

**54: GLOBAL OPTIMIZATION METHOD AND SYSTEM FOR STAGING SCHEME OF OPEN-PIT COAL MINE**

00: -

Disclosed is a global optimization method and system for a staging scheme of an open-pit coal mine. The method includes the following steps: S1, obtaining a geological optimal limit sequence based on a coal seam column model, coalfield surface

elevation model and technical parameters; S2, obtaining a value of each state in each stage, and performing calculation to obtain a cumulative net present value (NPV) of each state in each stage; S3, traversing all the cumulative NPVs, and selecting a stage corresponding to the maximum value of the cumulative NPVs as a stage number; selecting a state as a final state; and S4, reversely tracking an optimal pre-state from the final state to an initial state to obtain an optimal path, i.e., optimal staging scheme. The optimization domain is reduced to a finite domain to find a solution, so that the difficulty of finding a solution is greatly reduced.



21: 2022/08306. 22: 2022/07/26. 43: 2022/10/12

51: A01C; A01G

71: Sericulture Research Institute, Sichuan Academy of Agricultural Sciences

72: LIU, Gang, ZENG, Yichun, TONG, Wanhong, HUANG, Gaiqun, WEI, Ling, DAI, Jie, LIU, Jiang, ZHENG, Jichuan, YAO, Yongquan, LI, Yongyuan, PU, Jun, ZHANG, Haoren, GUO, Junying, MO, Xi

**54: METHOD FOR TIMELY DELAYING HEAVY PRUNING OF MULBERRY TREES IN WINTER AND MASS-PRODUCING RAW MATERIALS OF MULBERRY BUD TEA**

00: -

Disclosed is a method for timely delaying heavy pruning of mulberry trees in winter and mass-producing raw materials of mulberry bud tea, including the following steps: selection of mulberry species; mulberry orchard planting management; picking of mulberry buds: delaying pruning in the winter of the current year; after mulberry branches sprout in the next year, first picking mulberry buds for preparation into mulberry bud tea, and then perform pruning; pruning: reserving a straight trunk



and cutting at 30 cm, reserving 2-3 primary branches at a top of the trunk and cutting at 25 cm, reserving 2-3 secondary branches at a top of each primary branch and cutting at 20 cm, selecting and reserving 2-3 apical buds at a top of each secondary branch and cultivating the apical buds into growing branches; and field management. According to the method, the yield and quality of mulberry leaves for silkworm breeding are ensured.

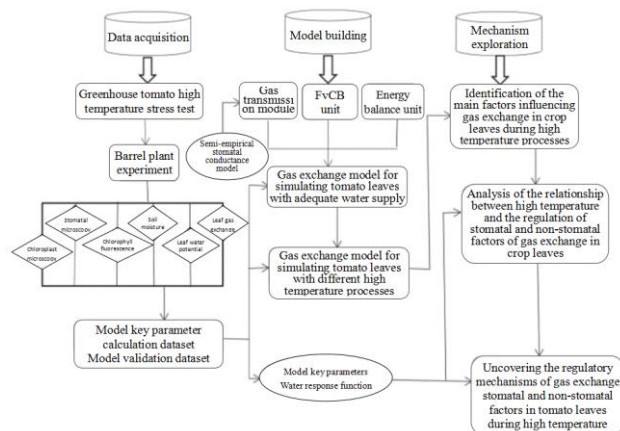
21: 2022/08308. 22: 2022/07/26. 43: 2022/10/12  
51: A01G

71: Nanjing University of Information Science & Technology, WEST ANHUI UNIVERSITY  
72: LI Chunying, YANG Zaiqiang, ZHANG Chunlong, LUO Jing, ZHANG Fengyin, ZHOU Xiaodong  
33: CN 31: 202210712914.5 32: 2022-06-22

#### 54: METHOD FOR DETECTING FACTORS AFFECTING TOMATO GROWTH AND QUALITY UNDER HIGH TEMPERATURE STRESS

00: -

The invention discloses a method and a system for detecting factors influencing tomato growth and quality under high temperature stress, which comprise the follow steps: acquiring the ultrastructural characteristics of tomato leaves under high temperature stress; based on the ultrastructural characteristics, a gas exchange model of tomato leaves is established; based on the gas exchange model of tomato leaves, a water response function is obtained; based on the water response function, an improved gas exchange model of tomato leaves is obtained; based on the improved gas exchange model of tomato leaves, a regulation mechanism of influencing factors is obtained. It can not only improve the simulation accuracy of tomato leaf gas exchange model, but also reveal the regulation mechanism of stomatal and non-stomatal factors of tomato leaf gas exchange in different stages of high temperature stress, and improve the accuracy of detection results.



21: 2022/08309. 22: 2022/07/26. 43: 2022/10/12  
51: G01L

71: Lanzhou University  
72: Wang Huaping, Wu Yibin, Chen Cong, LV Qingfeng, Zhang Huyuan

#### 54: LONG-DISTANCE PAVEMENT STRUCTURAL SETTLEMENT MONITORING METHOD COMBINING DISTRIBUTED OPTICAL FIBER SENSING TECHNOLOGY AND PARAMETER INVERSE ANALYSIS

00: -

The invention provides a long-distance pavement structural settlement monitoring method combining distributed optical fiber sensing technology and parameter inverse analysis, and belongs to the technical field of intelligent structure health monitoring. According to the rigid or flexible characteristics of each layer of pavement structures, the rigid or flexible-encapsulated distributed optical fiber sensors which match their collaborative deformation are designed respectively, and the temperature self-compensation in a single sensor is realized by embedding free distributed optical fiber in the encapsulating layer; the designed encapsulated distributed optical fibers are arranged in each layer of the pavement in a crisscross plane mesh way, and the optical fiber sensing network monitoring system is constructed. When the local position of the pavement deflects, the embedded optical fiber sensing network can be used to monitor the information, and the elastic foundation beam theory can be combined to realize the settlement parameter inverse. At the same time, the curve reconstruction algorithm can be used to realize the continuous monitoring of settlement in the whole scale. The device and the analysis method proposed by the invention provide a method with high measurement

stability and accuracy for pavement settlement monitoring.



21: 2022/08310. 22: 2022/07/26. 43: 2022/10/12  
51: C22C

71: Hebei Hengtong Pipe Fittings Group Co.,Ltd  
72: Lianxin HAN, Lizhu JI, Yanqing JI

**54: MACHINING PROCESS FOR LARGE-DIAMETER THICK-WALLED STAINLESS STEEL PIPE FITTINGS UNDER HIGH PRESSURE WITH HYDROGEN PRESENT**

00: -  
The present invention discloses a machining process for large-diameter thick-walled stainless steel pipe fittings under high pressure with hydrogen present. The machining process includes the following steps: successively subjecting the steel pipe to cutting, hot-press forming, cold cutting, shaping, heat treatment, inspection and tests, finished product detection and identification, and packaging and protection. According to the present invention, machining process parameters are optimized so that the grain size of the structure of the pipe fittings can be fined and the precipitation of the detrimental phase and the formation of the non-normal structure can be prevented. Thus, the quality indicators such as grain size number, mechanical properties and corrosion resistance of products can meet the requirements of corresponding engineering regulations and standards.

21: 2022/08311. 22: 2022/07/26. 43: 2022/10/12  
51: B29B

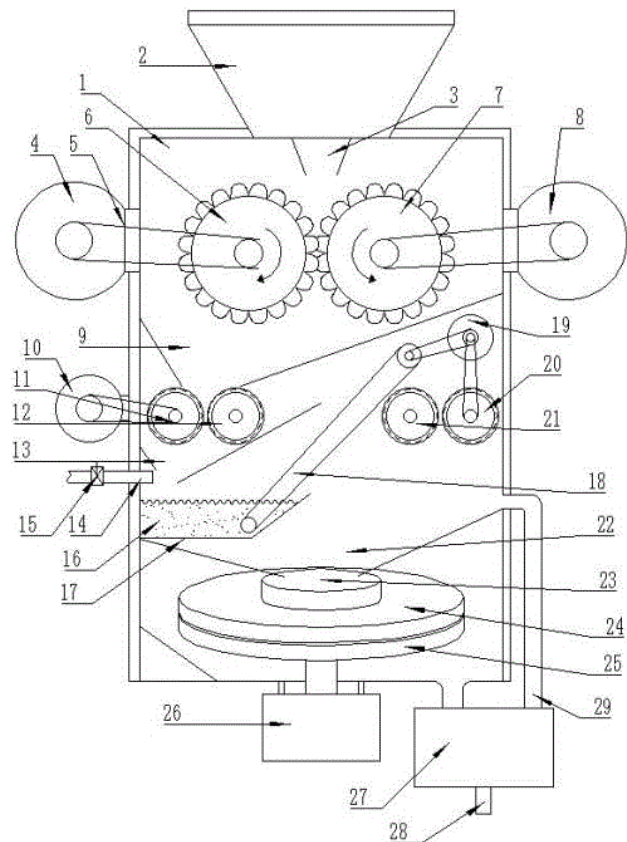
71: Mianyang Ruiyang New Material Technology Development Co., Ltd.

72: Wang Duoxiao

**54: MULTISTAGE RUBBER POWDER CRUSHING METHOD AND DEVICE**

00: -  
The invention discloses a multistage rubber powder crushing device which comprises a machine body, wherein the upper part of the machine body is provided with a rubber rough machining mechanism, the lower part of the rubber rough machining mechanism is connected with a rubber semi-finish

machining device, the lower part of the rubber semi-finish machining device is provided with a rubber freezing device, The rubber finishing mechanism is connected with a fine grinding mechanism, and the output end of the fine grinding mechanism is connected with a screening device A feedback pipeline is arranged on the screening device. And the screening device is communicated with the input end of the fine grinding mechanism through a feedback pipeline. The rubber roughing mechanism can cut large rubber waste into fine rubber particles of 40-50 meshes, and then enter the rubber semi-finish machining device, which will process the rubber into particles with a diameter of 80-100 mesh rubber particles. The rubber freezing device freezes the rubber particles to below minus 80 deg C, and the rubber particles are converted into a glass state for further processing.



21: 2022/08312. 22: 2022/07/26. 43: 2022/10/12  
51: A23K

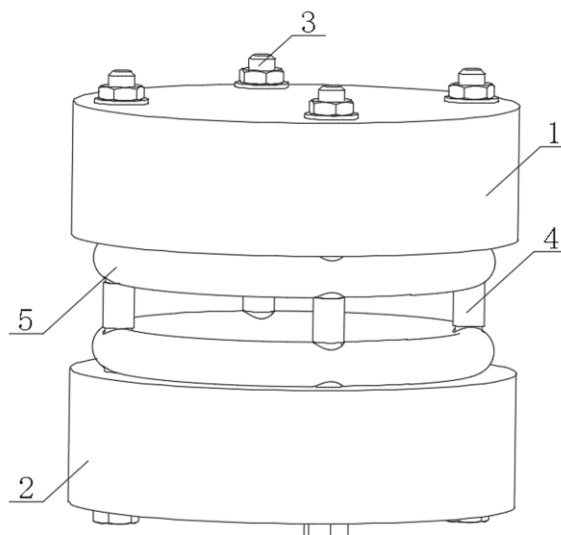
71: Xichang College, Zhaojue County Tianyuan Agricultural Technology Co., Ltd.

72: Yan Lang, Lai Xianjun, Yan Junfeng

#### 54: PENNISETUM HYDRIDUM MIX FEED AND PREPARATION METHOD THEREOF

00: -

The invention discloses Pennisetum hybridum mixed feed and a preparation method thereof. The Pennisetum hybridum mixed feed consists of the following raw materials in percentage by mass: 40%-60% of pennisetum hybridum, 10% of ryegrass, 10% of feed oat and 20%-40% of alfalfa. In the invention, through the reasonable allocation of Pennisetum hybridum and gramineous and leguminous forage, the pH value of the silage is obviously reduced, the lactic acid content is improved, and the problem of nutrition loss in the silage process is reduced.



21: 2022/08368. 22: 2022/07/27. 43: 2022/11/02  
51: F16F

71: No. 719 Research Institute of China State Shipbuilding Corporation Limited  
72: ZHANG, Zhenli, ZHANG, Miao, WANG, Qiangyong, LIU, Haijian, GUO, Hanbei, TAN, Haitao, SHANG, Chao, QIANG, Lei, ZHANG, Shengye, YANG, Xuesong, DAI, Chengming, DING, Ding, DU, Saipeng, DAI, Ruijie

#### 54: A NON-LINEAR STIFFNESS VIBRATION ABSORBER

00: -

The disclosure relates to the technology field of vibration absorber, in particular to a non-linear stiffness vibration absorber, including: a first mass component and a second mass component, which are same in structure and size, and the first mass component and the second mass component are penetrated by screws on outer sides thereof; two elastic components, which are fitted on the screws and penetrated by the screws, and which are located below the first mass component and above the second mass component, respectively; anti-contact sleeves, which are movably fitted over the screws and located between the two elastic components. With the overall structure of the device, the structure of the vibration absorber has a non-linear stiffness, which can easily and quickly adjust the inherent frequency of the vibration absorber in a wide range, and the structure is compact and easy to disassemble and assemble.

21: 2022/08369. 22: 2022/07/27. 43: 2022/10/12  
51: A01G

71: Institute of Fruit Tree Research Guangdong Academy of Agricultural Sciences  
72: LI, Jianguang, WANG, Jing, GUO, Dongliang, HAN, Dongmei, HUANG, Shilian  
33: CN 31: 202110923994.4 32: 2021-08-12

#### 54: MECHANICAL PRUNING METHOD OF LYCHEE TREE AND ITS TECHNICAL APPLICATION FIELD

00: -

Disclosed are a mechanical pruning method of lychee tree and its application. Particularly, the lychee tree is subjected to half-hedge wall-shaped pruning in a flowering period or top flat-end-shaped pruning after fruit picking. Mechanical pruning is carried out on the Guiwei lychee tree for the first time; and meanwhile, the whip-back pruning is carried out in the flowering period for the first time, which breaks the traditional concept that the whip-back pruning is not suitable for the Guiwei lychee tree in the flowering and fruit bearing period. In addition, the top flat-head pruning is applied in picked lychees; an implementation method is simple, by which only the cutting diameter and length of pruned branches need to be controlled approximately, which lowers the height of a crown effectively; and the crown of the Guiwei lychee tree is basically controlled to be maintained within a certain size range every year.



21: 2022/08370. 22: 2022/07/27. 43: 2022/10/12  
51: F16L

71: THE SECOND CONSTRUCTION  
ENGINEERING COMPANY LTD. OF CHINA  
CONSTRUCTION SECOND ENGINEERING  
BUREAU

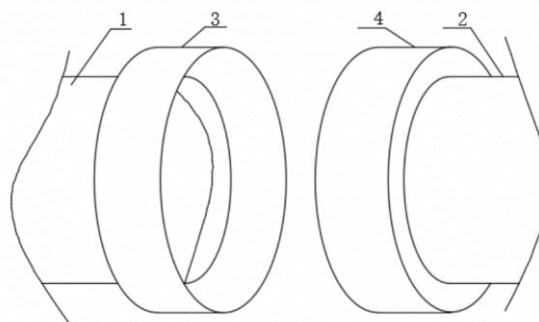
72: XIONG, Yueping, SONG, Hongpeng, FENG,  
Lilei, FU, Jun, GUO, Guangbin, CUI, Qi, WU,  
Chuanhai, ZHAO, Peng

**54: PIPELINE VALVE AUTOMATICALLY  
COMPENSATING FOR WEARING GAP FOR  
CONCRETE CONVEYING PUMP FOR BUILDING**

00: -

The present invention discloses a pipeline valve capable of automatically compensating for a wearing gap for a concrete conveying pump for a building, including a first connecting valve pipe, a second connecting valve pipe, a first compensation cavity, and a second compensation cavity, where both ends of the first connecting valve pipe and the second connecting valve pipe are fixedly sleeved with the first compensation cavity and the second compensation cavity, respectively. The first connecting valve pipe and the second connecting valve pipe are disposed to be interconnected, and a connecting main rod, a resisting plate, a first force-bearing plate, a second force-bearing plate, and a buffer plate play auxiliary roles. Therefore, the present invention can better complete concrete transportation during work. Therefore, a connection gap between pipeline valves due to long service life, wearing or another reason, a safety hazard caused to concrete transportation, concrete loss and waste, and the like can be prevented, work efficiency can be improved, an assembly error can be reduced,

labor intensity can be reduced, and labor costs can be saved.



21: 2022/08371. 22: 2022/07/27. 43: 2022/10/17  
51: G01N

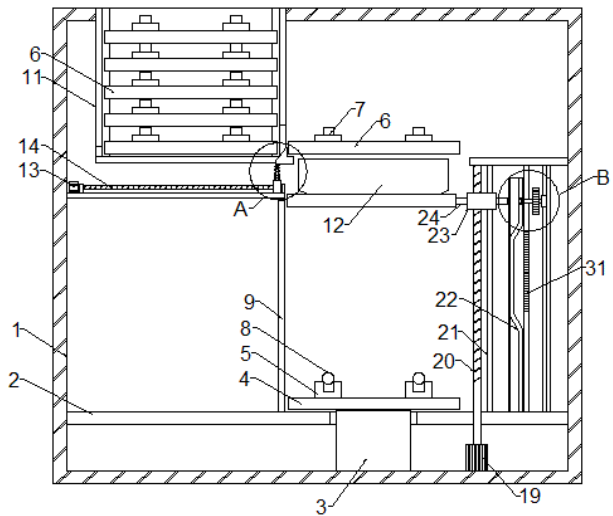
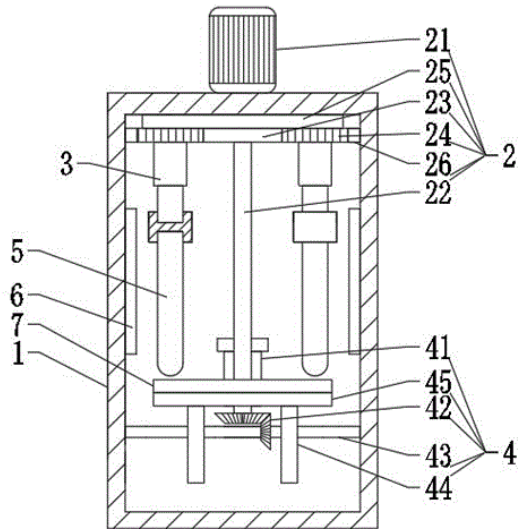
71: Wuhu Jiaming Agricultural Machinery  
Technology Co., Ltd.

72: HAN, changyang

**54: PRETREATMENT DEVICE FOR DETECTING  
MICROORGANISM IN MILK POWDER**

00: -

The present invention is suitable for the technical field of milk powder detection pretreatment, and provides a pretreatment device for detecting microorganisms in milk powder, which comprises a main body, wherein a driving assembly is arranged in the main body, and a plurality of telescopic rods are fixedly connected with the driving assembly; the telescopic rods are assembled and connected with test tube covers, and the test tube covers are assembled and connected with test tubes; the lifting assembly is movably connected with a driving assembly; the test tube cover is installed on the telescopic rod, and the driving component drives the telescopic rod to revolve and rotate to drive the test tube to move synchronously, so that the raw materials in the test tube are uniformly mixed, and the driving component drives the lifting component to reciprocate, and the lifting component resists the test tube and cooperates with the telescopic rod to drive the test tube to reciprocate, thus further improving the uniform mixing of the raw materials in the test tube, and having good homogenization advantages.



21: 2022/08372. 22: 2022/07/27. 43: 2022/10/12  
 51: H01L  
 71: Wuhu Teyou Machinery R&D Technology Co., Ltd.

72: LIU, Shirong  
**54: FLIP-CHIP SOLDERING DEVICE FOR SOLDERING CHIP TO CARRIER**

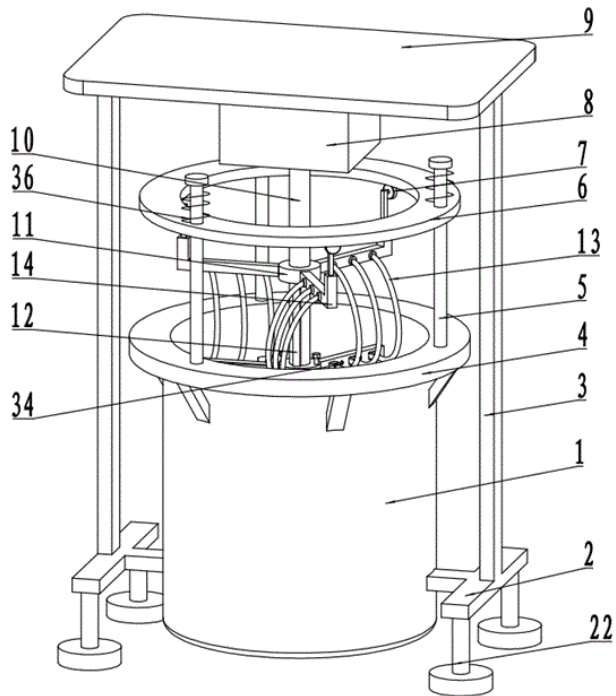
00: -  
 The present invention discloses a flip-chip soldering device for soldering a chip to a carrier, belonging to the technical field of chip soldering. The flip-chip soldering device comprises a supporting box, a partition board, a base plate and a chip, wherein one side of the base plate is fixedly provided with a lower pad, and one side of the chip is fixedly provided with an upper pad, and the lower pad is opposite to the upper pad, and further comprises a heater, a feeding mechanism, a lifting rotating component and a metal bump; with the feeding mechanism, the chip to be welded can be automatically pushed out, and the chip does not need to be taken manually. The lifting rotating assembly can drive the sucker to move upwards and turn upwards, so that the sucker can adsorb the pushed chip, and then the lifting rotating assembly can drive the adsorbed chip to move downwards and turn downwards, so that the upper bonding pad and the lower bonding pad are attached and fixed, and the working efficiency is high.

21: 2022/08373. 22: 2022/07/27. 43: 2022/10/12  
 51: B01D  
 71: Wuhu Jiaming Agricultural Machinery Technology Co., Ltd.

72: HAN, changyang  
**54: SEPARATION DEVICE FOR MILK POWDER PRODUCTION**

00: -  
 The invention discloses a separation device for milk powder production, which relates to the technical field of milk powder production, and comprises a stirring barrel, brackets fixedly arranged at two sides of the stirring barrel, and a discharge valve arranged at the bottom of the stirring barrel; A separation mechanism is arranged between the stirring barrel and the top plate, a filter screen is connected with a separation shell in a sliding way, the outer wall of the separation shell is fixedly connected with an air cylinder, the piston assembly extends into the air cylinder, one end of the driving column is fixedly sleeved with a fixing sleeve, one end of the conduit is provided with an indicating assembly, and one end of the driving column is fixedly connected with a stirring blade, wherein the driving column rotates to drive the stirring blade to rotate, and the generated floating impurities are adsorbed on one side of the filter screen under the action of the rotating separation shell. With the increase of filter materials, the greater the pressure exerted on the piston assembly when the filter screen rotates along with the separation shell, the indicator assembly will be driven to move through the telescopic tube and conduit under the action of the gas cylinder, and the

operator can judge the separation degree according to the position change of the indicator assembly.



21: 2022/08374. 22: 2022/07/27. 43: 2022/10/12  
51: H01L  
71: Wuhu Teyou Machinery R&D Technology Co., Ltd.

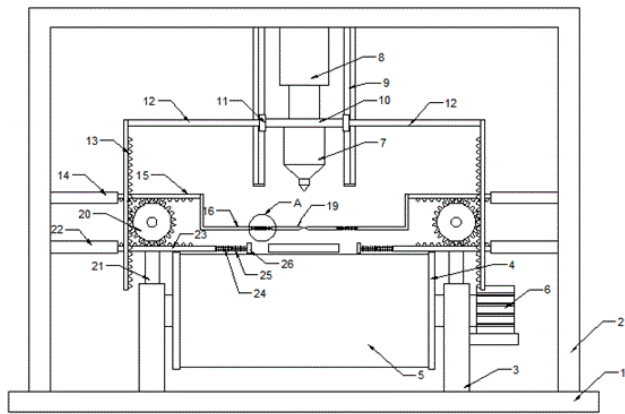
72: LIU, Shirong

**54: GLUE DISPENSING DEVICE FOR CHIP PACKAGING**

00: -

The invention discloses a dispensing device for chip packaging, which belongs to the technical field of chip packaging. The dispensing device comprises a base, a fixing frame and a dispensing cavity, wherein the fixing frame is fixedly arranged on the base, and also comprises an air cylinder, a conveying assembly, a cutting assembly and a positioning assembly. The invention realizes that the air cylinder drives the dispensing cavity to move downwards, and at the same time, the transmission assembly drives the cutting assembly to open a gap, and the transmission assembly drives the positioning assembly to clamp and fix the chip. By fixing the chip during dispensing, the accuracy of dispensing position is ensured, and the product quality is improved. When the air cylinder drives the dispensing cavity to move upwards, the transmission assembly drives the cutting assembly to cut off the

glue after dispensing, so as to prevent the glue from contaminating other positions.



21: 2022/08375. 22: 2022/07/27. 43: 2022/10/13  
51: A23C

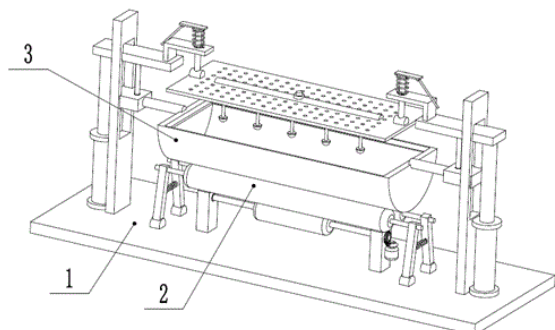
71: Wuhu Dengding Machinery Equipment Co., Ltd.  
72: MA, Ding

**54: DRYING DEVICE FOR MILK POWDER PRODUCTION**

00: -

The invention relates to the technical field of milk powder drying, and discloses a drying device for milk powder production, which comprises a bottom plate, a heating mechanism and a holding mechanism; The heating mechanism is arranged in the middle of the bottom plate and comprises two heating rollers which are parallel to each other, the two ends of the heating rollers are rotationally connected with one end of a rotating plate, the other end of the rotating plate is rotationally connected with the bottom plate, and a tension spring is arranged between two adjacent rotating plates; The holding mechanism comprises second supporting plates arranged at both ends of the bottom plate, one side of the second supporting plate far away from the bottom plate is provided with a chute, one side of the chute close to the bottom plate is connected with a first slider in a sliding way, one end of the first slider close to the center of the device is rotationally connected with a spindle, and one end of the spindle close to the center of the device is fixedly connected with a semicircular holding groove. The invention is suitable for a drying device for milk powder production. Because of the continuous swing of the semi-circular holding tank and the relative sliding of the air nozzle, the milk powder in the semi-circular

holding tank will not contact with the semi-circular holding tank for a long time, thus preventing the milk powder from being burnt due to excessive heating.



21: 2022/08376. 22: 2022/07/27. 43: 2022/10/13  
51: A01G

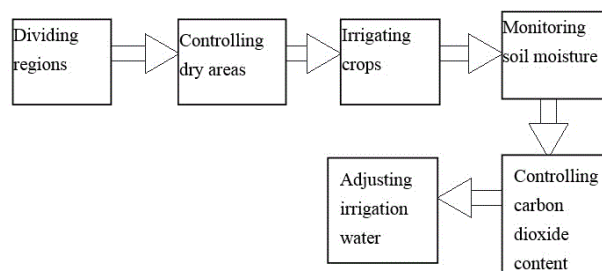
71: Dryland Farming Institute, Hebei Academy of Agricultural and Forestry Science

72: ZHANG Wenyong, WANG Bianyin, LIU Binhui, CHEN Chaoyang, LU Guanli, WANG Guangcai, LI Lei

#### 54: WATER-SAVING IRRIGATION METHOD FOR CROPS BASED ON ROOT SIGNAL CHARACTERISTICS

00: -

The invention discloses a crop water-saving irrigation method based on root signal characteristics, which comprises dividing regions, controlling dry areas, irrigating crops, monitoring soil moisture, controlling carbon dioxide content, and adjusting irrigation water quantity, and also dividing each mu ( 1 mu is about 666.67 m<sup>2</sup> ) of land into at least four regions. After crops are planted in the four regions, each region is matched with corresponding irrigation equipment and humidity sensors, so that while limiting the water consumption of crops, the irrigation water quantity can be flexibly adjusted according to different growth conditions of each patch of crop. Compared with the prior art, the method designed by the invention also includes building a greenhouse in the field, creating a closed environment, controlling the content of carbon dioxide, controlling the content of carbon dioxide at the optimal value, and reducing ineffective excess photosynthesis time while ensuring the normal photosynthesis beneficial to the growth of crops, thereby indirectly reducing the water consumption of crops.



21: 2022/08377. 22: 2022/07/27. 43: 2022/10/13  
51: C22B

71: Zhengzhou Institute of Multipurpose Utilization of Mineral Resources, CAGS

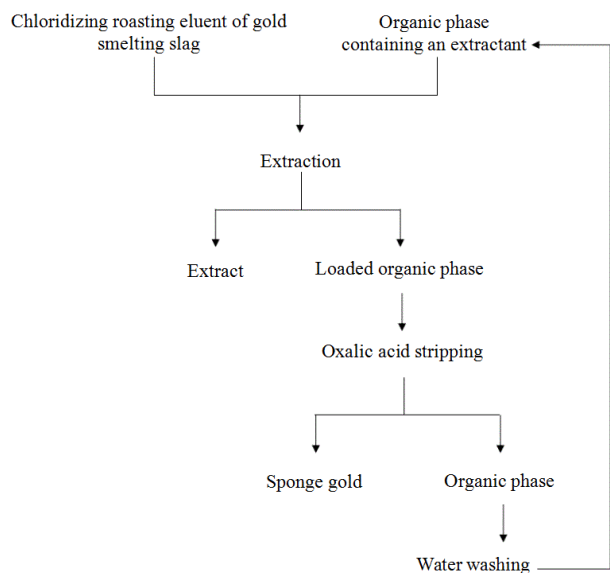
72: WANG Wei, LIU Lin, LIU Hongzhao, CAO Yaohua, WANG Hongliang

33: CN 31: 202210706060.X 32: 2022-06-21

#### 54: METHOD FOR RECOVERING GOLD FROM GOLD SMELTING SLAG CHLORIDIZING ROASTING ELUENT

00: -

The invention discloses a method for recovering gold from gold smelting slag chloridizing roasting eluent, which relates to the technical field of comprehensive utilization of secondary resources and metallurgy. The method comprise that following step: mixing and extracting the chloridizing roasting eluent of gold smelting slag with an organic phase containing an extractant, and separating a loaded organic phase; mixing the loaded organic phase with oxalic acid solution for stripping to obtain sponge gold; the organic phase contain extractant consists of ether amide acid functional ionic liquid and imidazole ionic liquid. The method of the invention has excellent selectivity and extraction ability for gold under the condition of high acid, and the ionic liquid is not volatile and flammable, so that the safety of the operating space can be improved. It has the advantages of high efficiency, environmental protection, simple operation, low comprehensive cost, etc., and can realize high-efficiency and green recovery of gold in gold smelting slag chloridizing roasting eluent, which has a wide application prospect.



21: 2022/08378. 22: 2022/07/27. 43: 2022/10/13  
51: G06Q

71: China Institute of Water Resources and Hydropower Research

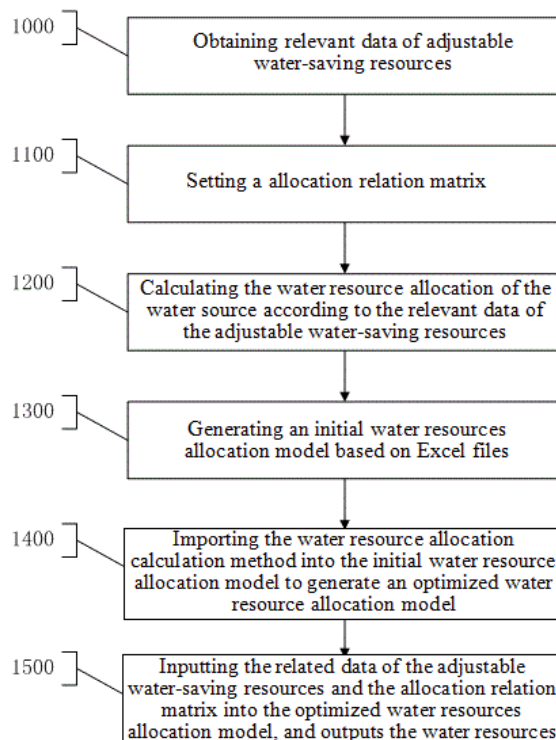
72: LI Kuang, CAI Zhenhua, LIU Jie, JIANG Xiaoming, LIANG Lili, LIU Yesen, LIU Shu, CHAI Fuxin

**54: ADJUSTABLE WATER RESOURCES ALLOCATION METHOD AND SYSTEM BASED ON ALLOCATION MATRIX**

00: -

The invention provides an adjustable water resources allocation method and system based on allocation matrix, wherein the method comprises the following steps: acquiring relevant data of the adjustable water-saving resource; setting a allocation relation matrix; calculating the water resources allocation of the water source according to the relevant data of the adjustable water resources; generating an initial water resources allocation model based on Excel files; importing the water resources allocation calculation method into the initial water resources allocation model to generate an optimized water resources allocation model; inputting the related data of the adjustable water resources and the allocation relation matrix into the optimized water resources allocation model, and outputs the water resources allocation result. The invention provides an adjustable water resources allocation method and system based on allocation matrix, which is used for water resources allocation based on allocation matrix, and a water resources

allocation model is built to quickly output water resources allocation results.



21: 2022/08379. 22: 2022/07/27. 43: 2022/10/13  
51: A01G

71: GUANGXI UNIVERSITY, Guangxi Zhencheng Agriculture Co., Ltd, GUANGXI ACADEMY OF AGRICULTURAL SCIENCES

72: WANG Bo, BAI Yang, BAI Xianjin, HE Jieping, LIN Ling, MA Guangren, CAO Xiongjun, HAN Jiayu, ZHANG Yanhui, LIAO Yongfeng, SHI Xiaofang, PAN Fengping, LI Hongyan, HUANG Xiaoyun

**54: GRAPE SEEDLING METHOD OF YOUNG-SHOOT GRAFTING**

00: -

The invention discloses a grape seedling method of young-shoot grafting, which includes the following steps: (1) cultivation of rootstock: coring new shoots of the parent tree of the growing rootstock when they grow to 7 leaves, collecting the new shoots one week after they are cored, every two buds being a branch, cutting into a seedling tray, putting the seedling tray on the seedbed, reducing the air humidity to 70% at intervals of sealed seedbeds and greenhouses for hardening seedlings, transferring the cuttage seedlings to a nutrition cup and taking out of the bed after 5 days; moving the nutrition cup seedlings to a rain shelter for cultivation, and



carrying out grafting after 1 month; (2) cultivation of scion: collecting 2-3 leaf buds on the new shoots of 5-6 leaves and their lower single bud branches from the parent tree of scion as scion; (3) grafting: using splitting method for grafting, and fixing the graft union with a small clip; (4) management after grafting: moving the grafted seedlings to a nursery bed for moisture preservation, transferring them to a rain shelter for 1-month management, and the scion becoming seedling when it grows to 5-6 leaves. The invention has the advantages of high grafting survival rate and short seedling period.



21: 2022/08380. 22: 2022/07/27. 43: 2022/10/13  
51: C04B  
71: Zhengzhou University of Aeronautics  
72: CHEN Dongxia, WANG Xianli, FU Linjie, YU Zhanjun, LI Mingyu, TIAN Shuo, HOU Haixing  
**54: NEGATIVE THERMAL EXPANSION CERAMIC MATERIAL AND PREPARATION METHOD THEREOF**

00: -  
The invention discloses a negative thermal expansion ceramic material and a preparation method thereof, and relates to the technical field of inorganic functional ceramic materials. The

preparation process of the negative thermal expansion ceramic material includes the following steps: (1) uniformly mixing  $\text{Sc}_2\text{O}_3$ ,  $\text{ZrO}_2$ ,  $\text{MoO}_3$  and  $\text{V}_2\text{O}_5$ , adding alcohol for grinding, and then drying and sintering the mixture to obtain pre-sintered powder; (2) adding polyvinyl alcohol into the pre-sintered powder obtained in step (1), grinding, and then tableting; and (3) sintering the sample after tableting in step (2) at normal pressure and high temperature, and then cooling with the furnace to obtain the negative thermal expansion ceramic material. According to the invention, a novel negative thermal expansion ceramic material is prepared by a simple sintering synthesis method, which has stable negative thermal expansion performance in the range of -130-600 degree Celsius; and meanwhile, the preparation process is simple, the sintering temperature is low, the cost is low, the environment is friendly and pollution-free, and the ceramic material has the characteristics of high application value and wide application range.

21: 2022/08381. 22: 2022/07/27. 43: 2022/10/13  
51: B21C

71: Hebei Hengtong Pipe Fittings Group Co.,Ltd  
72: Lianxin HAN, lizhu JI, Yanqing JI

**54: MACHINING PROCESS FOR LARGE-DIAMETER THICK-WALLED NICKEL ALLOY PIPE FITTINGS UNDER HIGH PRESSURE WITH HYDROGEN PRESENT**

00: -  
The present invention discloses a machining process for large-diameter thick-walled nickel alloy pipe fittings under high pressure with hydrogen present. The machining process includes the following steps: successively subjecting the steel pipe to cutting, hot-press forming, cold cutting, shaping, heat treatment, inspection and tests, finished product detection and identification, and packaging and protection. According to the present invention, machining process parameters are optimized so that the grain size of the structure of the pipe fittings can be fined and the precipitation of the detrimental phase and the formation of the non-normal structure can be prevented. Thus, the quality indicators such as grain size number, mechanical properties and corrosion resistance of products can meet the requirements of corresponding engineering regulations and standards.

21: 2022/08382. 22: 2022/07/27. 43: 2022/10/13  
51: C12N

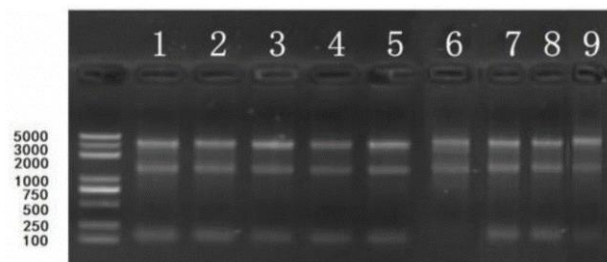
71: Institute of Animal Sciences, Chinese Academy of Agricultural Sciences

72: MIAO Xiangyang, XIE Lingli, LIU Tianyi, FENG Hui, HUANG Wanlong, LI Ai

#### 54: APPLICATION OF LNCRNA AND ITS TARGET GENE IN SHEEP OVARIAN DEVELOPMENT

00: -

The invention relates to an application of lncRNA and its target gene in sheep ovarian development, in particular to the application of MSTRG.12709 and its target gene FSHR in preparing reagents for detecting ovarian development level. An Ovary is an important reproductive organ of mammals, and its healthy development plays an important role in animal reproduction. This application studies the genes related to ovarian development by high-throughput sequencing technique, explores the molecular mechanism affecting ovarian development and maturation, and explores the regulatory mechanism of lncRNA affecting ovarian development, which provides a basis for animal husbandry breeding.



21: 2022/08383. 22: 2022/07/27. 43: 2022/10/13  
51: A62C

71: Wang Jingcai

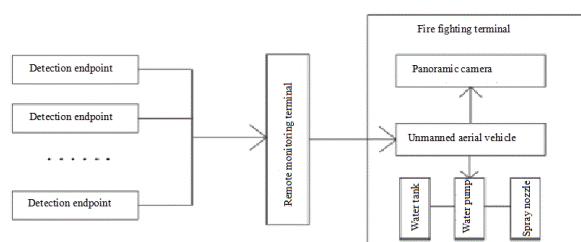
72: Wang Jingcai, Jiang Xinrui, Tang Xingkun, Zhou Chuanqing, Li Ming, Yang Peitong, Wang Yanhua, Ren Hongkun, Zhao Lei

#### 54: MULTI-POINT MONITORING SYSTEM FOR AUTOMATIC ALARM AND FIRE FIGHTING FOR FOREST FIRE PREVENTION

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The invention discloses a multi-point monitoring system for automatic alarm and fire fighting for forest fire prevention, which includes a plurality of detection endpoints, a remote monitoring terminal and a fire fighting end; each detection endpoint includes a bottom plate; the upper side of each bottom plate is

provided with a groove; the groove is connected with a mounting box through a traction-winding device; the upper side of the mounting box is connected with helium balloons through a plurality of connecting ropes; the bottom side wall of the mounting box is fixedly connected with a thermal imaging camera, and a locator, a central controller and a wireless transmission module are arranged inside the thermal imaging camera. The invention is reasonable in design and ingenious in conception, and forest fire hazards can be obtained through each detection endpoint in a wider range and more conveniently by detecting the thermal imaging of the forest at high altitude, which is convenient to carry out targeted fire fighting measures for the fire hazards; meanwhile, each detection endpoint uses solar panels to provide power, which is energy-saving and environment-friendly.



21: 2022/08384. 22: 2022/07/27. 43: 2022/10/13  
51: C12N

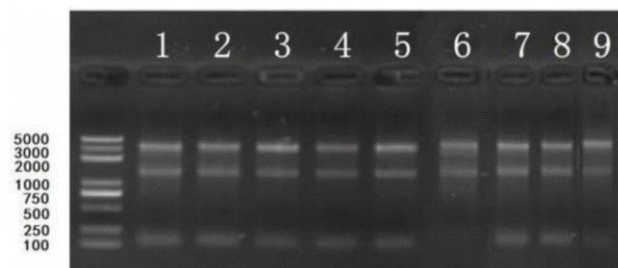
71: Institute of Animal Sciences, Chinese Academy of Agricultural Sciences

72: MIAO Xiangyang, XIE Lingli, LIU Tianyi, FENG Hui, HUANG Wanlong, LI Ai

#### 54: APPLICATION OF STAR AND ITS REGULATORY GENE

00: -

The invention relates to the application of STAR and its regulatory gene, in particular to the application of STAR and its regulatory gene MSTRG.9543 in preparing a reagent for detecting ovarian development and maturity. The development and maturation of sheep ovary is an important factor affecting the economy of sheep farm. This application studies the genes related to ovarian development and maturation by high-throughput sequencing technology, and explores the molecular mechanism that affects ovarian development and maturation, so as to provide a research foundation for animal husbandry breeding.



21: 2022/08385. 22: 2022/07/27. 43: 2022/10/13  
51: C12G

71: Henan University of Technology  
72: Liu Na, Wu Tiantian, Li Xiaoya, Ge Wenpei,  
Wang Hongling, Huang Liang

**54: DOUBLE-WHEAT KERNEL FLOWER-SCENTED BLUEBERRY WINE AND PREPARATION METHOD THEREOF**

00: -

The invention discloses a double-wheat kernel fragrant blueberry wine and a preparation method thereof. The blueberry wine comprises the following main ingredients in parts by weight: 100-150 parts of fresh blueberry, 50-100 parts of starch, 50-100 parts of rice wine, 5-10 parts of rose, 5-10 parts of sweet osmanthus flower, 15-30 parts of oat kernel, 15-30 parts of buckwheat kernel, 2-5 parts of orange peel, 1-5 parts of Chinese angelica, 1-5 parts of dwarf lilyturf tuber and 40-60 parts of rock candy; Auxiliary materials 5 to 10 parts of pectinase, 5 to 10 parts of dry yeast, 10 to 20 parts of distiller's yeast and 15 to 20 parts of honey. The blueberry wine has the beneficial effects that the blueberry wine is generally brewed by a plurality of working procedures such as crushing, squeezing, filtering, constant-temperature fermentation and the like. Aft that blueberries are ferment into wine, not only are nutrients not lost, but also anthocyanins, selenium, amino acids, vitamin, calcium, phosphorus, iron, zinc and various nutrient elements are more abundant and more easily absorbed by the human body, and the taste is more attractive than that of common blueberries and blueberry juice.

21: 2022/08386. 22: 2022/07/27. 43: 2022/11/03  
51: E21B

71: Xi'an Shiyou University, Shaanxi Yanchang Petroleum (Group) Co., Ltd  
72: Kang Zhengming, Hou Binbin

33: CN 31: 202210853105.6 32: 2022-07-20

**54: METHOD AND SYSTEM FOR MEASURING GEOMETRIC PARAMETERS OF HYDRAULIC FRACTURE**

00: -

The invention discloses a method and a system for measuring geometric parameters of hydraulic fracture, which comprises the following steps of: establishing a formation model containing the hydraulic fracture by using a three-dimensional finite element method; A plurality of multi-component induction log coil systems is longitudinally arrange, and an induction electric field calculation model is constructed. Calculating and determining the relationship between the geometric parameters of different hydraulic fractures and the induced electromotive force of the coil systems in different receiving directions in each multi-component induction logging coil system; According to the coil system sensitive to the geometric parameters of the fracture , measuring that geometric parameters of the fracture to be measured by adopting multi-component induction logging to obtain different induction electromotive force, and determining the geometric parameters of the fractures to be measured according to the induction electromotive force. The measurement result of the geometric parameters of the hydraulic fracture obtained by the method has important significance for the designing of a hydraulic fracture monitoring instrument and a calculation model of fracture parameters.

Using three-dimensional finite element method to establish hydraulic fracture formation model.

In the borehole of the formation model with hydraulic fractures, a number of multi-component induction logging coil systems are set longitudinally, and the induced electric field calculation model is constructed.

Through the induced electric field calculation model, the relationship between the geometric parameters of different hydraulic fractures and the induced electromotive force of the coil system in different receiving directions in each multicomponent induction logging coil system is calculated and determined.

According to the relationship between the geometric parameters of different hydraulic fractures and the induced electromotive force of the coil system in different receiving directions in the multi-component induction logging coil system, the coil system sensitive to the geometric parameters of fractures in the multi-component induction logging coil system and the applicable scope of each sensitive coil system in the measurement of geometric parameters of fractures are determined.

According to the coil system sensitive to the geometric parameters of hydraulic fractures and the applicable range of each sensitive coil system when measuring the geometric parameters of fractures, the geometric parameters of fractures are measured by multi-component induction logging to obtain the induced electromotive force of different sensitive coil systems.

The geometric parameters of the fracture to be measured are determined according to the induced electromotive force of different sensitive coil systems.

21: 2022/08387. 22: 2022/07/27. 43: 2022/10/13

51: A23K

71: Tianshui animal husbandry technology popularizing station, Tianshui animal health technology workstation, Tianshui maiji district animal husbandry veterinarian affairs service center, Tianshui maiji district forestry and grassland bureau, Tianshui animal epidemic disease prevention control center

72: Zhang Wenhao, HuKaijun, LinMengmeng, YuChengjiao, BaiWenjuan, ZhaoXiaoxue, LiHaiyuan, ChenLingling, HouFengqing

#### **54: PREPARATION METHOD OF LIVESTOCK AND POULTRY ANTI-STRESS FEED**

00: -

The present invention provides a preparation method of livestock and poultry anti-stress feed, which includes the following components in parts by weight: 60-80 parts of fermented *Broussonetia papyrifera* powder, 10-15 parts of glossy privet-*akebia caulis* extract powder, 4-5 parts of yeast selenium, 3-5 parts of vitamin C, 80-120 parts of soybean meal, 150-200 parts of corn flour and 20-30 parts of wheat bran. The feed of the invention has excellent anti-stress effect for livestock and poultry, can effectively cope with heat stress and weaning

stress of pups, so it can promote the healthy development of livestock and poultry culturing industry, and improve the economic benefits of livestock and poultry culturing industry.

21: 2022/08389. 22: 2022/07/27. 43: 2022/10/13

51: E21B

71: CHINA COAL TECHNOLOGY ENGINEERING GROUP CHONGQING RESEARCH INSTITUTE

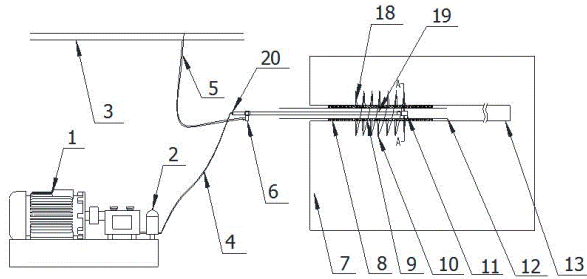
72: Quanbin Ba, Kai Shen, Yanbao Liu, Zhen Wang, Yin Liao, Wei Xiong, Xusheng Zhao, Houquan Zhou, Daihui Ma, Xianghui Meng, Qianqian Ma, Shitao Zhang, Guangsheng Hao, Mingming Zhang, Yongtao Shi, Zhengxing Fan, Kai Ma, Jun He, Huijie Liu, Shudong He

33: CN 31: 202111447594.7 32: 2021-11-26

#### **54: A SECONDARY GROUTING REPAIR METHOD FOR SEALING GAS FAILURE-SEALING BOREHOLE SECTION**

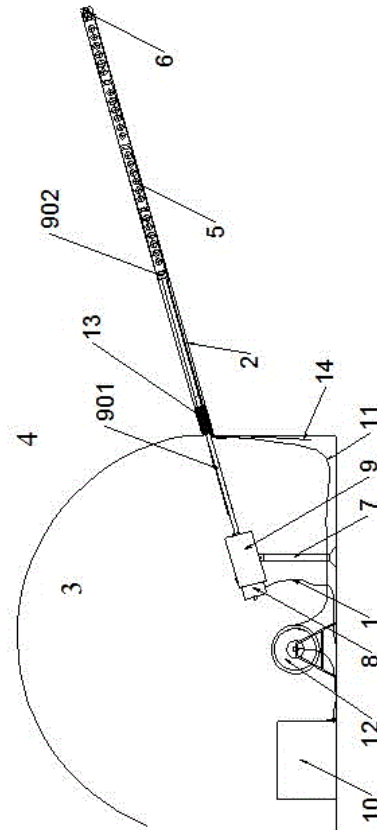
00: -

The invention belongs to the technical field of gas extraction. The invention relates to a secondary grouting repair method for sealing gas failure-sealing borehole section. Annular and spiral grooves were cut for the failure-sealing borehole section by using the grooving system of the failure-sealing borehole section of gas extraction. After grooving, the bag hole sealing device was used to seal the hole twice with pressure grouting. The invention uses an adaptive groove-cutting device to cut grooves and create seams in the deformed drainage pipe of the failed borehole sealing section of underground gas drainage. Annular and spiral grooves are made in the middle of the original hole sealing section by grouting. Then the integrated hole sealing device with embedded grouting pipe is used to re-seal the hole with pressure grouting. Thus, the cracks and air leakage channels around the borehole are blocked. It solves the problem that the current drilling repair technology can not carry out secondary grouting repair in the sealing hole section, so as to completely solve the problem of sealing failure in the sealing hole section of the extraction drilling.



21: 2022/08390. 22: 2022/07/27. 43: 2022/10/12  
 51: E21C  
 71: CHINA COAL TECHNOLOGY ENGINEERING GROUP CHONGQING RESEARCH INSTITUTE  
 72: Quanbin Ba, Yanbao Liu, Kai Shen, Wei Xiong, Haitao Sun, Yin Liao, Houquan Zhou, Daihui Ma, Yongtao Shi, Huijie Liu, Mingming Zhang, Guangsheng Hao, Dequan Yuan, Shitao Zhang, Qianqian Ma, Enbing Yi, Wen Liu, Xin'gang Niu, Song Wang, Zhengxing Fan  
**54: A DIRECTIONAL HYDRAULIC FRACTURING AND WEAKENING DEVICE FOR HARD ROOF OF COAL MINE**

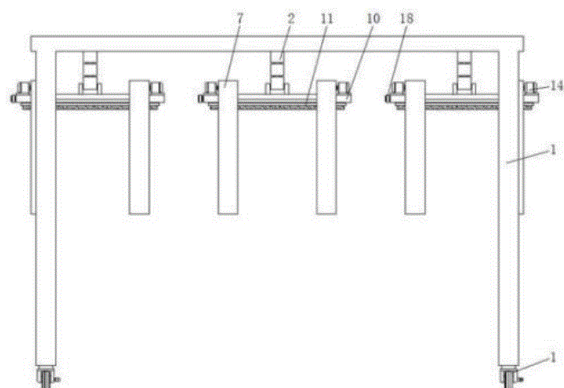
00: -  
 The invention discloses a directional hydraulic fracturing and weakening device for hard roof of coal mine. It includes the hydraulic splitting device for cracking the hard roof borehole section, the hydraulic power device for powering the hydraulic splitting device, the pneumatic push device that used to drive the hydraulic splitting mechanism to reciprocate axially along the drilling borehole and the pressure ventilation pipe that used to connect the pneumatic push device with the pressure air pipe in the underground coal mine. The invention provides hydraulic directional cracking and weakening equipment for hard roof of coal mine, which can reduce the weight of part of the device, so as to facilitate the handling of the equipment. In the process of pushing, the hydraulic splitting device only has a single degree of freedom to move along the drilling axis, reducing the wear degree of the hydraulic splitting device.



21: 2022/08424. 22: 2022/07/27. 43: 2022/10/18  
 51: A61L  
 71: MENG, Zili  
 72: MENG, Jiatian, MENG, Zili, ZHANG, Zihua, LI, Xiaoyu  
 33: CN 31: 202110381583.7 32: 2021-04-09  
**54: MULTI-ARM, MOVABLE ULTRAVIOLET DISINFECTION LAMP FOR CT AND MR ROOMS**  
 00: -

Disclosed is a multi-arm, movable ultraviolet disinfection lamp for CT and MR rooms. Hinged folding arms are provided between movable frames by a cross beam. Electric telescopic rods are provided between the hinged folding arms and the cross beam by a hinge connection base. A semi-circular bracket is symmetrically provided below the hinged folding arms by connection rods. The inner side of the semi-circular bracket is provided with a sliding block and a moving panel by a semi-circular groove. The two ends of the moving panel are provided with a driving mechanism. Ultraviolet disinfection lamps are provided below the moving panel by a moving mechanism. The provision of the hinged folding arms enables a movable sterilization

lamp structure positioned below to adjust the height thereof according to needs and to allow for folded storage that reduces the space occupied during storage.



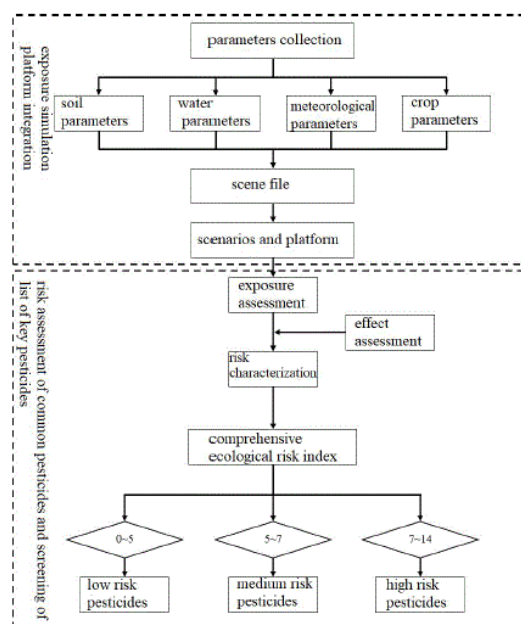
21: 2022/08438. 22: 2022/07/28. 43: 2022/11/02  
51: G06Q

71: Nanjing Institute of Environmental Sciences,  
Ministry of Ecology and Environment  
72: JIANG, Jinlin, LIU, Renbin, SUN, Kewen, CHEN,  
Qiang, LI, Xuzhi, YIN, Aijing, CAO, Shaohua  
33: CN 31: 202210157749.1 32: 2022-02-21

#### 54: WATERSHED-SCALE COMPREHENSIVE RISK ASSESSMENT METHOD FOR PESTICIDE APPLICATION IN DRYLAND CROPS

00: -

The present disclosure discloses a watershed-scale comprehensive risk assessment method for pesticide application in dryland crops, including the following steps: integration of a exposure scenario and a exposure simulation platform; integration of the exposure scenarios, an exposure assessment model and a simulation platform; pesticide exposure risk assessment; effect assessment; risk characterization; pesticide variety screening method , etc. The assessment method specifically collects multiple parameters such as crops and soils in the test scene, and applies the PRAESS exposure simulation platform to construct a dryland crop-surface water model, and selects registered and commonly used pesticides on different crops grown in the scene for comprehensive risk assessment of water ecology, predicts the risk of these pesticides to aquatic organisms after used on crops, and applies the comprehensive ecological risk index to obtain a list of key pesticide varieties in the watershed.



21: 2022/08439. 22: 2022/07/28. 43: 2022/11/02  
51: A01N

71: Jiangsu Xuhuai Huaiyin Agricultural Science  
Research Institute, Jiangsu Academy of Agricultural  
Sciences, Nanjing Agricultural University  
72: CHEN, Xianghua, CAO, Kaige, SUN, Haiyan,  
HOU, Yiping, DUAN, Yabing, MA, Yan, LI, Meixia,  
CHEN, Yali, QIAN, Xin, ZHOU, Mingguo, CHEN,  
Changjun, CHEN, Huaigu, LI, Wei, ZHANG, Xin

#### 54: FUNGICIDAL COMPOSITION CONTAINING BENZOVINDIFLUPYR AND APPLICATION THEREOF

00: -

The present invention relates to a fungicidal composition containing benzovindiflupyr, characterized in that, the weight ratio of metconazole, benzovindiflupyr and pyraclostrobin is: 1-64: 1-64: 1-32, used for controlling wheat scab, wheat rust, wheat powdery mildew, rice sheath blight, rice blast and rice bakanae disease, with obvious synergistic effect, less usage, and easy promotion.

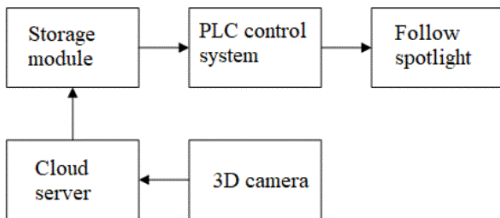
21: 2022/08440. 22: 2022/07/28. 43: 2022/11/02  
51: H05B

71: Xi'an University of Finance and Economics  
72: WANG, Yujie, ZHONG, Yonghong, GU, Qi,  
ZHOU, Haochen, LU, Xiaoyan, SHI, Siqi

**54: CLOUD CONTROL SYSTEM AND METHOD FOR STAGE LIGHTING**

00: -

The present invention relates to a cloud control system and method for stage lighting, and belongs to the field of stage lighting control. A cloud server presets a follow spotlight adjustment and control instruction, and a programmable logic controller (PLC) control system controls a follow spotlight to irradiate a performer according to the preset follow spotlight adjustment and control instruction. When the performer performs on a stage, a three-dimensional (3D) camera photographs an image of the performer on the stage in real time, and the cloud server recognizes a real-time position of the performer in the image so as to adjust the follow spotlight adjustment and control instruction, such that the follow spotlight follows the performer in real time, and real-time remote adjustment and control of the follow spotlight is achieved.



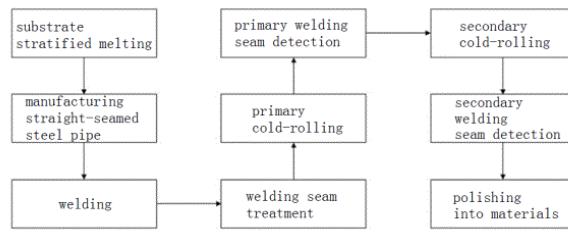
21: 2022/08441. 22: 2022/07/28. 43: 2022/11/02  
 51: B21C; B23K; C21D; C22C; F16L  
 71: LI, Xinzhong  
 72: LI, Xinzhong, HUANG, Haoran, LIANG, Xiao, WANG, Shumin, LI, Xinhua, ZENG, Meilan, ZHANG, Yun  
 33: CN 31: 202110985674.1 32: 2021-08-26

**54: MANUFACTURING METHOD FOR HIGH-STRENGTH COLD-ROLLED PIPE**

00: -

The present invention relates to a manufacturing method for a high-strength cold-rolled pipe. The high-strength cold-rolled pipe is obtained by curling forming using three layers of i.e. inner, middle and outer layers of different steels, and then cold-rolling. Compared with the material using only low-carbon cold-rolled steel pipe, the axial compression resistance of the cold-rolled pipe is increased by 20%, and the radial compression resistance is increased by more than 15%. When the materials are stacked, the medium-carbon steel is stacked in a plurality of arrangements, so that axial fracture

defects are not easily generated inside the low carbon steel when the cold-rolling is performed.



21: 2022/08442. 22: 2022/07/28. 43: 2022/11/02  
 51: E04B

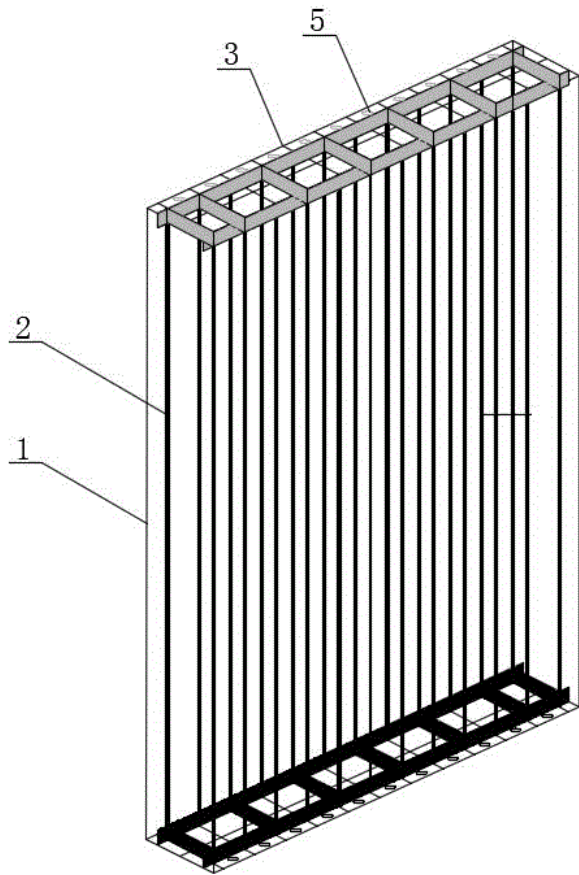
71: Zhengzhou University of Aeronautics, Henan Technical College of Construction

72: ZHANG Daying, WANG Shuming, XUE Ru, LI Liang, ZHAO Xiaoyan, YANG Qinghe, ZHANG Shuaifeng, YE Yifan

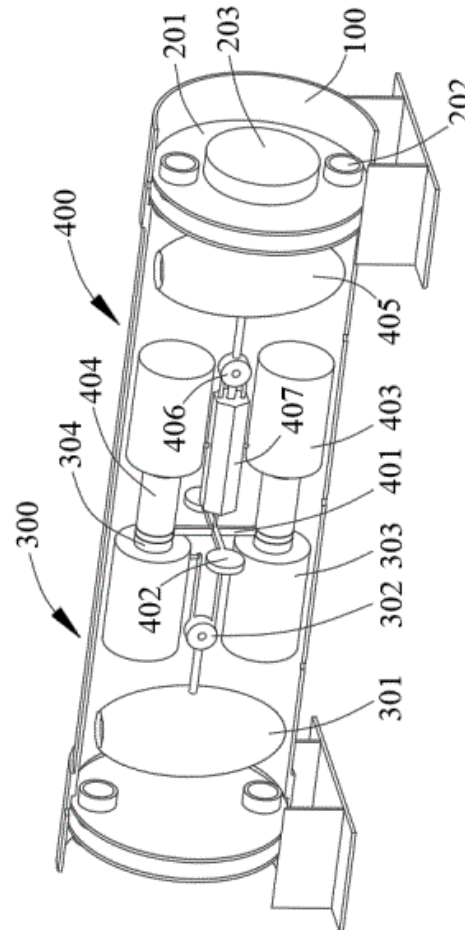
**54: ASSEMBLY TYPE CONCRETE SHEAR WALL AND DUCTILITY CONNECTION METHOD OF VERTICAL STEEL STRUCTURE THEREOF**

00: -

The invention discloses an assembly type concrete shear wall and a ductile connection method of its vertical steel structure, which mainly relates to the field of fabricated building structures, which comprises a concrete shear wall body, wherein two layers of steel bars are arranged in the concrete shear wall body, steel structure ductile connectors are arranged at the upper and lower ends of the concrete shear wall body, the top ends of the two layers of steel bars are fixedly connected with the top steel structure ductile connectors, the bottom ends of the two layers of steel bars are fixedly connected with the bottom steel structure ductile connectors, and a plurality of bolt mounting holes for mounting bolts are arranged on the steel structure ductile connectors; the invention solves the technical problems that the vertical connection of the assembled concrete shear wall structure is difficult, the strength of the joint is insufficient, and the construction quality cannot be guaranteed.



portions disposed within the purification shield, the purification portions being rotatable to the storage outlet. The purification shield can irradiate the ventilation portion, the storage portion and the purification portion, which can effectively protect various components and improve the service life of the device in the case. It is possible to exchange the air in the purification shield via the ventilation portion.



21: 2022/08443. 22: 2022/07/28. 43: 2022/11/02  
51: C01B

71: Wuhu Medium Hydrogen New Energy Technology Co., Ltd.

72: LI, Xinzhong, LIU, Dongmei, ZENG, Meilan, WANG, Shumin, LI, Xinhua, ZHANG, Yun, WANG, Weifeng

33: CN 31: 202210416881.X 32: 2022-04-20

**54: HYDROGEN PURIFICATION AND CARBON DIOXIDE RECYCLING DEVICE IN PRODUCTION SYSTEM OF HYDROGEN FROM METHANOL**

00: -

The invention provides a hydrogen purification and carbon dioxide recycling device in a production system of hydrogen from methanol, comprising: a purification shield; a ventilation portion mirrored in the purification shield, the ventilation portion being adapted to exchange air inside and outside the purification shield; a storage portion disposed between the ventilation portions, the purification portion being disposed within the purification shield, an end of the purification portion being provided with a storage outlet; and a plurality of purification

21: 2022/08444. 22: 2022/07/28. 43: 2022/11/02  
51: B07C

71: Anhui University of Science and Technology

72: HUANG, Yourui, GUO, Yongcun, XU, Shanyong, ZHOU, Yujie, JIA, Xiaofen

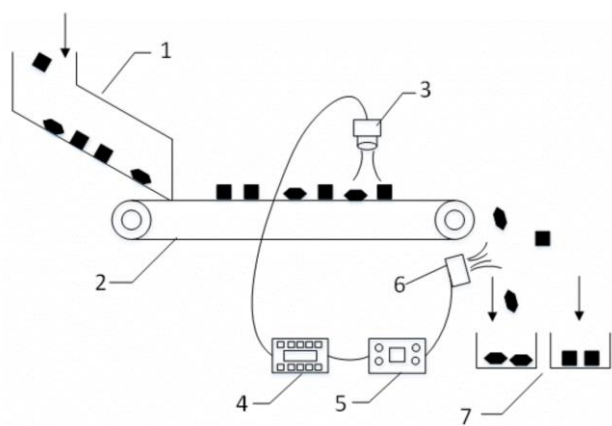
**54: IMAGE PROCESSING AND FPGA-BASED DEVICE AND METHOD FOR IDENTIFICATION AND SEPARATION OF COAL AND GANGUE**

00: -

The present invention belongs to the technical field of coal and gangue distinguishment, and discloses an image processing and field programmable gate



array (FPGA)-based device and method for identification and separation of coal and gangue. The device includes a feeding apparatus, a conveyor belt, an image acquisition camera, an FPGA system baseboard, a spray valve driving board, a spray valve, and a material basket; the feeding apparatus is connected to the conveyor belt; the image acquisition camera is connected to the FPGA system baseboard, and is configured to collect coal and gangue image data and transmit the coal and gangue image data to the FPGA system baseboard; the FPGA system baseboard is configured to perform identification and classification on coal and gangue by means of a deep learning algorithm MobileNet to generate a classification result; and the spray valve driving board is respectively connected to the FPGA system baseboard and the spray valve, and is configured to control the spray valve to blow out gangue. An image processing and FPGA-based for identification and separation of coal and gangue provided by the present invention is capable of accurately performing identification and separation on coal and gangue in real time.



21: 2022/08445. 22: 2022/07/28. 43: 2022/11/02  
51: A01K

71: Institute of Animal Husbandry and Veterinary Science, Henan Academy of Agricultural Sciences  
72: ZHANG Jiaqing, WANG Xianwei, LIU Hongbo, LU Qingxia, LV Lingyan, SHEN Ming, SUN Shaochen, REN Qiaoling, XING Baosong  
33: CN 31: 202111030041.1 32: 2021-09-03

#### **54: METHOD FOR IMPROVING REPRODUCTIVE EFFICIENCY OF SURROGATE SOWS**

00: -

(8)The present invention discloses a method for improving reproductive efficiency of surrogate sows,

in relates to the field of livestock breeding, which comprises the following feeding management: (1) feeding management of surrogate sows before selection; (2) selection of surrogate sow; (3) embryo transplantation; (4) feeding management of surrogate sows during pregnancy; (5) feeding management of surrogate sows before and after delivery; (6) conservation of cloned piglets; and (7) nursing care of surrogate sows during lactation. The invention provides a set of scientific and effective methods for surrogate sow selection, feeding management and conservation, and effectively improves the pregnancy rate of surrogate sows, the birth rate and survival rate of cloned pigs.

21: 2022/08446. 22: 2022/07/28. 43: 2022/11/07  
51: E21B

71: China Coal Science and Industry Group Shenyang Research Institute Co., Ltd., Anhui University of Science and Technology

72: LIU Xiao, CHANG Guanfeng, HUA Xinzhu, FANG Yingji, SUN Zhenping, LI Chen, YANG Sen, GAO Hong, QIAN Zhiliang, GAO Wei

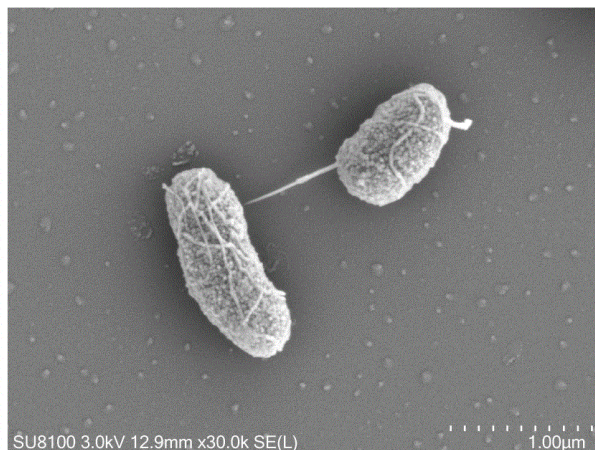
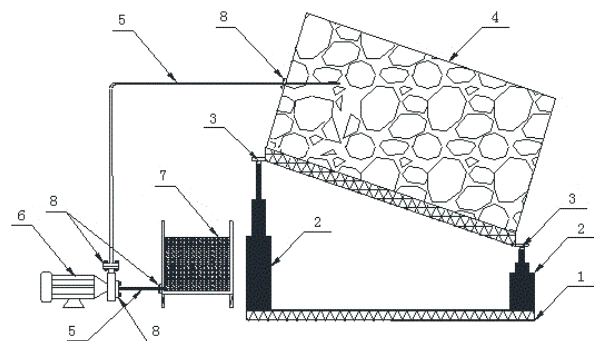
33: CN 31: 202111629875.4 32: 2021-12-28

#### **54: INDOOR EXPERIMENT SYSTEM AND METHOD FOR SIMULATING STOPE FILLING**

00: -

The invention relates to the technical field of simulated stope filling, in particular to an indoor experiment system and method for simulated stope filling, which comprises a base, wherein the four corners of the upper end of the base are respectively provided with hydraulic jacks, the top ends of the hydraulic jacks are all provided with ball hinges, and the upper ends of the ball hinges are provided with gangue chute; A filling pump is arranged at the outer side of the base, and the output end of the filling pump is connected with two filling pipelines, wherein the tail end of one filling pipeline is connected with a material slurry tank, and the tail end of the other filling pipeline is connected with a waste rock tank. According to the system, the filling pump, the filling pipeline and the lifting device are constructed, the filling pump is connected with the gangue chute through the filling pipeline, and then the gangue chute is connected with the lifting device through the ball hinge, and the change of the three-dimensional angle of the gangue chute is controlled by different power sources, so that three-dimensional simulation experiments of stope filling with different inclination

angles are realized, and the application range is wide.



21: 2022/08447. 22: 2022/07/28. 43: 2022/11/02  
 51: C02F; C12N  
 71: China University of Geosciences, Beijing  
 72: LIU Jianli, YAO Jun, ZHOU Deliang, LIU Houquan, ZHU Xiaozhe, LIU Xiangfang, LI Xinyuan, MENG Hang

**54: PSEUDOMONAS\_PUTIDA CUGB-JL11 FOR DEGRADATION OF TYPICAL FLOTATION REAGENTS IN MINES AND ITS APPLICATION**

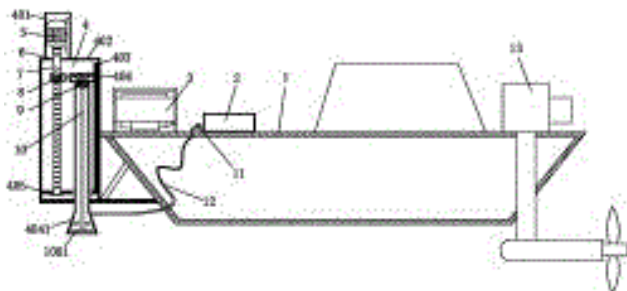
00: -  
 The invention discloses a *Pseudomonas\_putida* A11 for the degradation of organic matters in nonferrous metal mines. The preservation name of the strain is *Pseudomonas\_putida* A11(*P. putida* CUGB-JL11), the preservation unit is China University of Geosciences (Beijing), the address is Yifu Building, China University of Geosciences (Beijing), No.29 Xueyuan Road, Haidian District, Beijing, and the preservation date is August 20, 2021, with the preservation number of A11. The NCBI number of the strain is SUB10505279. The strain has high-efficiency organic matter degradation ability, and can quickly degrade 1-nitroso-2-naphthol, a representative new flotation reagent in the slag field of nonferrous metal mines. The method has the characteristics of safety, economy, high efficiency, environmental protection, no need of large equipment and the like for degrading high-concentration organic pollutants in the environment of non-ferrous metal mine slag yard, and has great market development prospect.

21: 2022/08449. 22: 2022/07/28. 43: 2022/11/02  
 51: B63B  
 71: Hunan Vocational and Technical College of water resources and hydropower  
 72: Liu Lihuan, Huang Xin, Zhang Jie, Xiao Dan, Hu Hongliang, Li Jiajun, Xia Yongyou, Zhuwuyan, Sun Baizhi

**54: ECOLOGICAL RESTORATION SHIP FOR LAKE WATER**

00: -  
 The invention discloses an ecological restoration ship for lake water, which consists of a hull, an accommodating box and a generator, wherein the front end of the hull is provided with a stirring device, and the stirring device consists of a supporting frame, a shell and a lifting seat; the side wall of the supporting frame is fixedly provided with a lifting motor through bolts; the output shaft end of the lifting motor is connected with a screw rod, which vertically extends downward into the shell; matching screw nuts are arranged on the screw rod; one end of the screw nut is connected with the lifting seat; the lifting seat has a cavity structure and the lower end passes through the supporting plate and the bottom of shell; the inner wall of the top of the lifting seat is fixedly provided with a stirring motor through bolts; the output shaft end of the stirring motor is connected with a rotating shaft; the lower end of the rotating shaft is provided with stirring blades. The purpose of the invention patent is to provide an ecological restoration ship for lake water, which can quickly and effectively clean the sludge at the bottom of the lake and restore the water quality of the water body, is suitable for various water environments, is simple to operate and convenient to use, has low labor

intensity for ecological restoration, and can also save the treatment cost.



21: 2022/08450. 22: 2022/07/28. 43: 2022/11/03  
51: C05G  
71: Xinjiang Meili kukodala Agricultural Technology Co., Ltd

72: Akbar Illahoon

**54: THE PREPARATION METHOD OF THE SPECIAL BIO-ORGANIC FERTILIZER FOR GRAPES AND THE SPECIAL BIO-ORGANIC FERTILIZER FOR GRAPES**

00: -

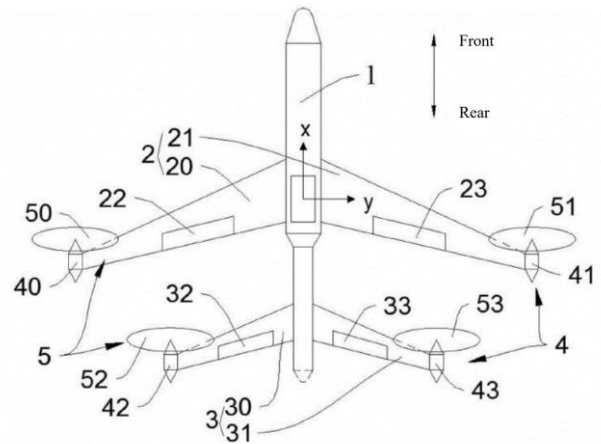
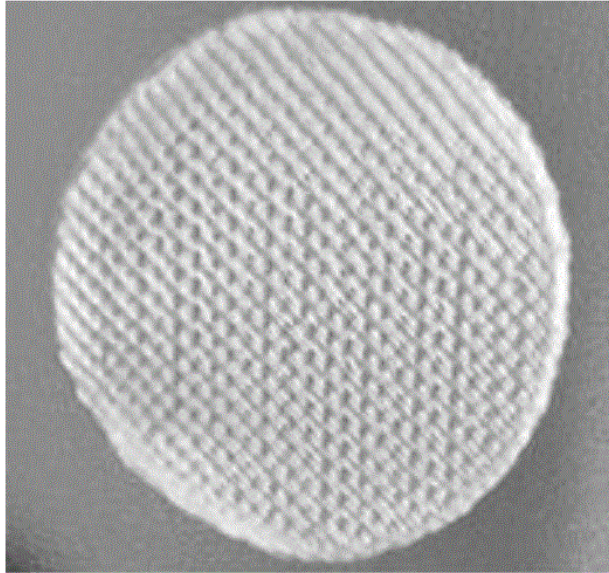
The invention provides a preparation method of the special bio-organic fertilizer for grapes the bio-organic fertilizer special for grapes, belonging to the technical field of bio-organic fertilizer preparation. The preparation method of the special bio-organic fertilizer for grapes provided by the invention comprises the following steps: S1, waste raisins are used as raw materials, and the carbon-nitrogen ratio is adjusted to obtain the adjusted raisins; S2, microbial agent is added into the adjusted raisins to ferment; Among them, microbial agent includes Photosynthetic bacteria group, Lactic acid bacteria group, Microzyme group, Gram-positive cilia bacteria group, Filamentous bacteria group of fermentation system and Bacillus subtilis. According to the invention, waste raisins are used as raw materials, microbial agent is added, and the special bio-organic fertilizer for grapes is obtained after fermentation.

21: 2022/08451. 22: 2022/07/28. 43: 2022/11/02  
51: C02F  
71: Qingdao University  
72: Meng Li, Wenhua Xu, Yiming Liu, Mengyuan Wang

**54: PREPARATION METHOD OF 4D-HYDROXYETHYL CHITOSAN THERMOSENSITIVE GEL**

00: -

The present disclosure belongs to the technical field of production and preparation of medical materials, and particularly relates to a preparation method of 4D-hydroxyethyl chitosan thermosensitive gel. Firstly, sodium periodate powder is dissolved in deionized water to prepare a sodium periodate aqueous solution, then a sodium alginate aqueous solution and the sodium periodate aqueous solution are stirred to obtain a mixed solution for oxidation reaction, ethylene glycol is added to cease the oxidation reaction, and the mixed solution is subjected to suction filtration, dehydrated and precipitated with absolute ethyl alcohol, and then vacuum-dried at low temperature to obtain crude oxidized sodium alginates; the crude oxidized sodium alginates are dissolved with distilled water to obtain a crude oxidized sodium alginate aqueous solution, the crude oxidized sodium alginate aqueous solution is dialyzed completely, and then supernatant is extracted by centrifugation, and freeze-dried to obtain the oxidized sodium alginates; finally the hydroxyethyl chitosan and the oxidized sodium alginates are mixed, and squeezed into a tube by a duplex injector after cross-linking reaction, to obtain hydroxyethyl chitosan in-situ hydrogel; and the hydroxyethyl chitosan in-situ hydrogel is printed by a 4D bioprinter, and freeze-dried after solvents are removed, to obtain freeze-dried 4D-hydroxyethyl chitosan thermosensitive gel. The 4D-hydroxyethyl chitosan thermosensitive gel is used for fast entrapment and transplantation of adipose-derived mesenchymal stem cells; the principle thereof is scientific and reliable, and the 4D-hydroxyethyl chitosan thermosensitive gel solves the problem that the pore sizes of traditional hydroxyethyl chitosan thermosensitive gel are different, effectively improves the entrapping efficiency and capacity of the adipose-derived mesenchymal stem cells, has important theoretical significance and broad application prospects in the field of DFU repair, and provides assistance to DFU patients clinically to improve the life quality of the patients. The 4D-hydroxyethyl chitosan thermosensitive gel in the present disclosure is also applied to repair of corneal alkali burns, cervical erosion, skin burns and the like, yielding the significant effect.



21: 2022/08452. 22: 2022/07/28. 43: 2022/11/02  
 51: B64C  
 71: Central South University  
 72: Yuxin Liao, Jian Dai, Caisheng Wei, Zhongsen Wang, Zeyang Yin, Xiaodong Li, Chengyu Cao  
**54: VERTICAL TAKE-OFF AND LANDING TAIL-SITTER UNMANNED AERIAL VEHICLE AS WELL AS ITS CONTROL SYSTEM AND CONTROL METHOD**

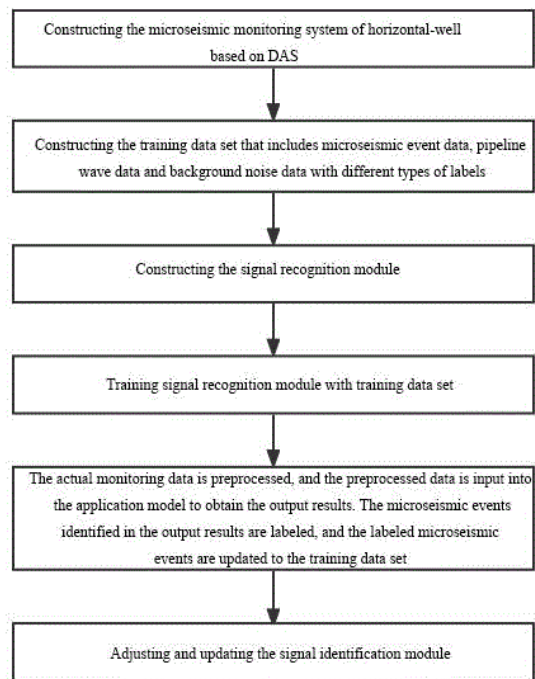
00: -  
 The invention provides a VTOL tail-sitter UAV. The UAV comprises fuselage (1), wings (2), tail wings (3), motors (4) and propellers (5), wherein the wings (2) and the tail wings (3) are disposed on the outer surface of the fuselage (1); the wings (2) are disposed in dihedral manner, and the tail wings (3) are disposed in cathedral manner; flight modes of the UAV comprise a vertical flight mode, a vertical-to-flat transition mode, a flat flight mode and a flat-to-vertical transition mode, and the UAV combines both flight characteristics of a rotary-wing UAV and a fixed-wing UAV, so that an area for takeoff and landing is reduced. The speed in the flat flight mode is high. The UAV has the characteristics of VTOL, can be deployed in various restricted environments such as mountainous and hilly lands and narrow urban streets, and has a horizontal high-speed cruising function, so that the hovering time is increased and the navigation distance is expanded. The invention also provides a control system and a control method of the VTOL tail-sitter UAV.

21: 2022/08453. 22: 2022/07/28. 43: 2022/11/02  
 51: G01V

71: Institute of Geology and Geophysics, Chinese Academy of Sciences  
 72: Yikang Zheng, Yibo Wang, Shaojiang Wu, Yi Yao  
 33: CN 31: 202210807860.0 32: 2022-07-11  
**54: A DAS IDENTIFICATION METHOD FOR MONITORING INTER-WELL REAL-TIME MICROSEISMIC VALID EVENTS BASED ON DEEP LEARNING**

00: -  
 The invention provides a DAS identification method for monitoring inter-well real-time microseismic valid events based on deep learning, which includes: constructing a horizontal-well microseismic monitoring system based on DAS; The training data set includes microseismic event data, pipeline wave data and background noise data with different types of labels; Construct signal recognition module; Training signal recognition module with training data set; The actual monitoring data is preprocessed, and the preprocessed data is input into the signal identification module to obtain the output results. The microseismic events identified in the output results are labeled, and the labeled microseismic events are updated to the training data set. And the signal recognition module is adjusted and updated. The recognition method of the invention can recognize microseismic events in DAS inter-well monitoring data in real time and efficiently, and the identified microseismic events can supplement the training data set, further update the signal

recognition module, and improve the adaptability of the module.



21: 2022/08455. 22: 2022/07/28. 43: 2022/11/03  
51: G06Q

71: University of Electronic Science and Technology of China

72: Zhu Jiajing, Deng Haohan, Liu Yongguo, Zhang Yun, Li Qiaoqin

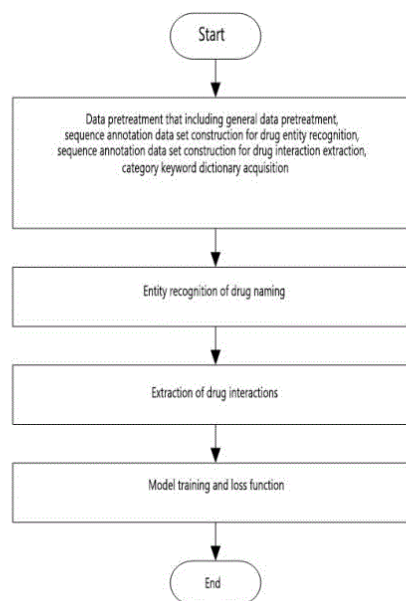
33: CN 31: 202210628078.2 32: 2022-06-06

**54: A COMBINED EXTRACTION METHOD OF DRUG ENTITIES AND INTERACTIONS WITH MULTI-TASK SEQUENTIAL LABELING**

00: -

The invention discloses a combined extraction method of drug entities and interactions with multi-task sequential labeling, it includes the following steps: S1. Data pretreatment, it includes generic data pretreatment, drugs entity recognition sequence annotation data set build, drug interaction extraction sequence annotation data set build, class keyword dictionary acquisition; S2. Entity recognition of drug naming; S3. Extraction of drug interactions; S4. Model training and loss functions. The invention transforms the extraction problem of drug entity recognition and interaction into a two-stage sequence labeling task. The relationship between the two tasks and the prior knowledge of the data set are reasonably utilized. The prior knowledge of

category keywords was integrated into drug interaction extraction tasks. It rapidly and efficiently extracts drug entities and interactions from a large number of biomedical literature. This is a simple, universal and efficient annotation mode.



21: 2022/08476. 22: 2022/07/28. 43: 2022/11/02  
51: G06K; G06N

71: ANHUI ZHONGKE INTELLIGENT PERCEPTION TECHNOLOGY CO., LTD.

72: ZHANG Wei

**54: METHOD AND PLATFORM FOR DYNAMICALLY MONITORING TYPICAL GROUND FEATURES IN MINING ON THE BASIS OF MULTI-SOURCE REMOTE SENSING DATA FUSION AND DEEP NEURAL NETWORK**

00: -

A method and a platform for dynamically monitoring typical ground features in mining on the basis of multi-source remote sensing data fusion and a deep neural network. Said method comprises the following steps: step 1, acquiring time-series multi-source remote sensing data and basic data of a mine; step 2, processing the remote sensing data and fusing multi-source heterogeneous data, to obtain an enhanced remote sensing image of a high-resolution multi-spectral image; step 3, constructing a deep neural network model, and intelligently extracting typical ground features by using a method combining a deep neural network and artificial visual interpretation; and step 4, performing on-line

dynamic monitoring and data analysis and management on the extracted typical ground features. Said method can increase the spatial resolution of a remote sensing data image, and after the image is enhanced, typical ground features are identified more easily; moreover, the machine interpretation method used can efficiently and accurately identify typical ground features, so as to perform on-line monitoring on typical ground features of a mine in real time.

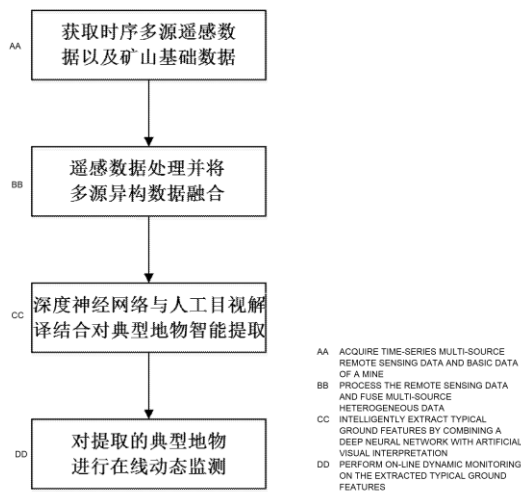
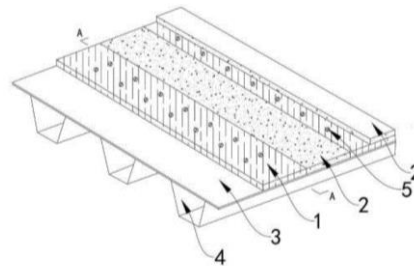


图 1

21: 2022/08486. 22: 2022/07/29. 43: 2022/11/02  
 51: E01C; E01D  
 71: China Railway Construction Bridge Engineering Bureau Group Co., Ltd., China Railway Construction Bridge Engineering Bureau Group Southern Engineering Co., Ltd., Shenyang University of Technology  
 72: LIU, Peng, CHEN, Yixuan, ZHAO, Jian, AN, Luming, WANG, Yuanqing, FAN, Lilong, REN, Yanlong, ZHANG, Pengzhi, LIU, Yintao, CHEN, Gang  
 33: CN 31: 202111266307.2 32: 2021-10-28  
**54: STEEL-WOOD COMPOSITE BRIDGE DECK STRUCTURE AND LAYING METHOD THEREOF**  
 00: -

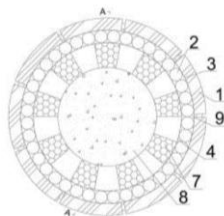
The present disclosure belongs to the technical field of bridge engineering, and relates to a steel-wood composite bridge deck structure and a laying method thereof. The steel-wood composite bridge deck structure comprises a steel bridge panel, a plurality of U ribs are evenly distributed and fixed at the bottom end of the steel bridge panel, the

adjacent U ribs are arranged at an interval, a plurality of wood laths are further evenly distributed and fixed on the upper surface of the steel bridge panel, the adjacent wood laths are arranged at an interval, and asphalt concrete is laid at both the positions between the adjacent wood laths and the upper sides of the wood laths. By means of structural design, fatigue damage borne by the steel bridge panel is reduced and interlayer separation can be prevented and bridge deck shear deformation can be effectively reduced.



21: 2022/08487. 22: 2022/07/29. 43: 2022/11/02  
 51: E01D; F16F  
 71: China Railway Construction Bridge Engineering Bureau Group Co., Ltd., China Railway Construction Bridge Engineering Bureau Group Southern Engineering Co., Ltd., Shenyang University of Technology  
 72: LIU, Peng, LU, Hongping, ZHAO, Jian, AN, Luming, WANG, Yuanqing, FAN, Lilong, REN, Yanlong, LI, Hongwei, ZHANG, Pengzhi, LIU, Yintao  
 33: CN 31: 202111266301.5 32: 2021-10-28  
**54: ROTATABLE PIER ANTI-COLLISION FLOATING DEVICE**

00: -  
 The present disclosure belongs to the technical field of pier collision prevention, and relates to a rotatable pier anti-collision floating device, comprising an annular ball box mechanism for protecting a pier, a plurality of outer-layer protective parts are mounted on the outer periphery of the annular ball box mechanism, and a plurality of inner-layer protective parts are mounted on the inner periphery of the annular ball box mechanism. The present disclosure has multiple buffer structures, can be easily and rapidly assembled and mounted in site construction, and is convenient to maintain and good in impact resistance.



21: 2022/08488. 22: 2022/07/29. 43: 2022/11/02  
51: G01M

71: China Institute of Water Resources and  
Hydropower Research

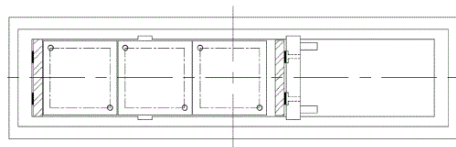
72: ZHANG, Yanhong, HU, Xiao, GAO, Jianyong,  
ZHU, Hongdong, YANG, Chen, XING, Guoliang,  
ZENG, Di, ZHANG, Lihong, ZENG, Xinxiang, LV,  
Wei

33: CN 31: 202110960174.2 32: 2021-08-20

#### 54: SEISMIC TEST METHOD FOR FULL-SCALE FUEL ASSEMBLY

00: -

The disclosure provides a seismic test method of a full-scale fuel assembly, relating to the technical field of nuclear test equipment, and solves the technical problem that there is no corresponding support platform for testing the seismic performance of the full-scale fuel assemblies. The seismic test method comprises the steps of fixing the fuel assemblies on an earthquake simulation shaking table by a seismic support platform, injecting water and carrying out the test. The seismic support platform comprises a water tank filled with water, an internal frame placed in the water tank, a pre-tightening mechanism arranged at the top of the water tank, and a frame-stabilizing assembly arranged on the water tank; the water tank is mounted on the earthquake simulation shaking table; the seismic support platform further comprises sensors placed on the fuel assemblies, the water tank and/or the internal frame.



21: 2022/08489. 22: 2022/07/29. 43: 2022/11/02  
51: G01N

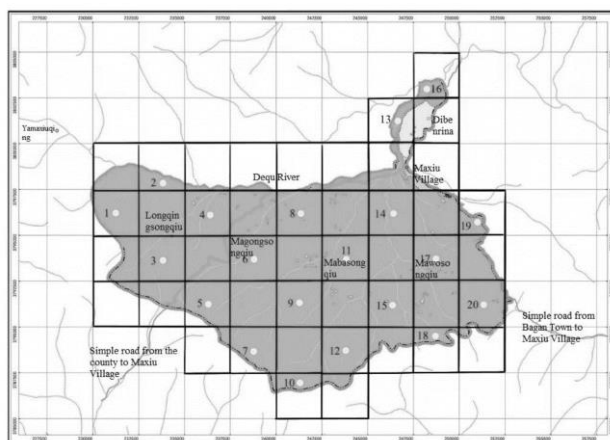
71: Northwest Institute of Plateau Biology, Chinese  
Academy of Sciences

72: LUO, Caiyun, ZHAO, Liang, CHEN, Kelong,  
ZUO, Chao, ZHAO, Xinquan, WANG, Shiping

#### 54: METHOD FOR MONITORING HEAVY METALS IN SOIL OF WETLAND PARK

00: -

The present invention provides a method for monitoring heavy metals in soil of a wetland park, including the following steps: selection of sample plots, determination of environmental monitoring contents, sampling methods, determination of a soil bulk density, determination of a soil organic carbon content and a plant sample content. By using the above method, the heavy metals in soil of a wetland park can be monitored accurately. Besides, the analysis has also found the correlation between various parameters in the soil and the soil depth, as well as the correlation between the heavy metal contents in the soil and the altitude.



21: 2022/08490. 22: 2022/07/29. 43: 2022/11/02  
51: A23F

71: CHONGQING ACADEMY OF AGRICULTURAL  
SCIENCES

72: ZHANG Ying, XU Ze, WANG Jie, WU Xiuhong,  
DENG Min, ZHONG Yingfu, YUAN Linying, LUO  
Hongyu, WU Quan

#### 54: PROCESSING METHOD OF ANCIENT TEA TREE BLACK TEA

00: -

The invention relates to the technical field of black tea processing, and discloses a processing method of ancient tea tree black tea, which comprises the following steps: S1, picking tea leaves; S2, spreading and drying in the shade; S3, withering; putting the spread and dried tea leaves in a withering tank; stopping heating 15 minutes before the lower leaves are wilted and only blowing cold air; S4, rolling the rolled tea leaves in an alternating way of air pressure and light pressure, making twisted

tea leaves slightly striped; and S5, fermenting: sprinkling 100g/m<sup>2</sup> of stachyose on the spread leaves of each layer; S6, drying; S7, packaging: package that dried black tea in a packaging machine. According to the invention, 100g/m<sup>2</sup> of stachyose is sprinkled on the spreading leaves of each layer in the fermentation process, and stachyose is fermented and immersed in tea leaves; when people brew black tea in the later stage, it not only has a little sweet taste, but also has the effect of balancing intestinal flora after drinking the black tea for a long time, and has wide market value.

21: 2022/08491. 22: 2022/07/29. 43: 2022/11/03  
51: A01G

71: BINZHOU UNIVERSITY

72: Jun ZHANG, Siming GUO, Jiangbao XIA, Xiuping SONG, Ke JI, Lucheng WANG, Yongliang LUO, Ruiqing CHEN, Kedi ZHAO, Meiyan WEI

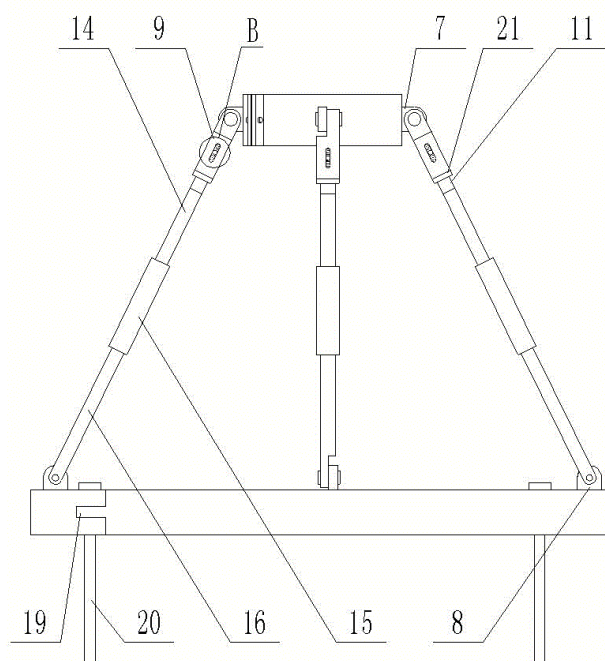
33: CN 31: 202210581451.3 32: 2022-05-26

**54: WIND-RESISTANT PROTECTION DEVICE FOR VEGETATION RESTORATION TREES IN OPEN LIMESTONE MINING AREA**

00: -

The invention discloses a wind-resistant protection device for vegetation restoration trees in an open-air limestone mining area, which comprises a trunk fixing unit for fixing the trunk, a ground fixing unit for fixing the ground, and an elastic pulling unit for connecting the trunk fixing unit and the ground fixing unit. The trunk fixing unit comprises a flexible protective layer wound on the surface of the trunk, a connecting ring is sleeved on the outer side of the flexible protective layer, an elastic straightening assembly is arranged between the flexible protective layer and the connecting ring, and a plurality of elastic pulling and connecting units are arranged with adjustable lengths. When a strong wind blows, the elastic straightening assembly will generate a certain displacement along with the trees, and the elastic pulling unit will expand and contract to a certain extent, thus providing a buffer for the swaying of the upper end of the trees in the strong wind, preventing the upper end of the trees from being rigidly blocked by the connecting ring in the strong wind environment, and causing the trees to windbreak or windfall under the reverse action of the strong wind and the connecting ring, and thus

effectively improving the wind-resistant breaking and wind-resistant falling ability of the trees.



21: 2022/08492. 22: 2022/07/29. 43: 2022/11/03  
51: A01G

71: BINZHOU UNIVERSITY

72: Jun ZHANG, Jiangbao XIA, Yongkai LUO, Wanli ZHAO, Fanglei GAO, Ximei ZHAO, Yinping CHEN, Jidun FANG, Hongjun YANG, Qiqi CAO

33: CN 31: 202210580654.0 32: 2022-05-26

**54: METHOD FOR ARTIFICIALLY PROMOTING VEGETATION RESTORATION IN ROCKY MINES**

00: -

The invention discloses a method for artificially promoting vegetation restoration in rocky mines, and relates to the technical field of ecological restoration. The method comprises the following steps: Spraying guest soil to the surface of a rocky mine, spraying a soil reinforcing agent to the surface of the guest soil layer every time the guest soil with a thickness of 10-20 cm is sprayed, and repeating the steps for 3-5 times, so that the total thickness of the guest soil layer (including covering clay mixture layer and spraying guest soil layer) is 50-70 cm; The raw materials of the soil enhancer include sodium alginate, soy protein isolate, ethanol, sodium carboxymethyl cellulose, surfactant, and deionized water. The method of the invention can improve the corrosion resistance of the soil itself and the bonding



strength between the soil and the mountain, reduce the soil erosion in the early stage of mine greening, improve the recovery speed of mine vegetation, especially improve the survival rate of transplanted plants in rocky mines with thin and barren soil, and artificially promote the recovery speed of vegetation in rocky mines with poor site conditions.

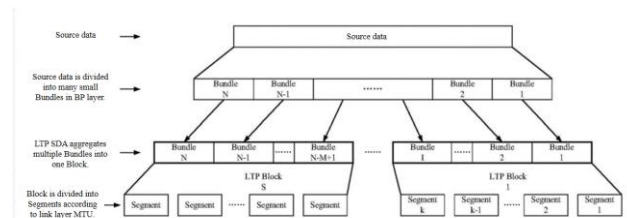
21: 2022/08493. 22: 2022/07/29. 43: 2022/11/03  
51: H04B

71: Zhaoqing University  
72: WU Haitao, LIANG Yingchun

**54: DEEP SPACE FILE TRANSMISSION METHOD BASED ON LTP MULTI-SESSION AGGREGATION STRATEGY**

00: -

This invention relates to the technical field of deep space information dissemination, and in particular to a deep space file transmission method based on LTP multi-session aggregation strategy; the deep space file transmission method based on LTP multi-session aggregation strategy provided by this scheme creatively adopts multi-session method for deep space communication, and this improves the transmission efficiency of deep space information, shortens the transmission time, and provides a method for information transmission with larger data volume.



21: 2022/08494. 22: 2022/07/29. 43: 2022/11/02  
51: C05F

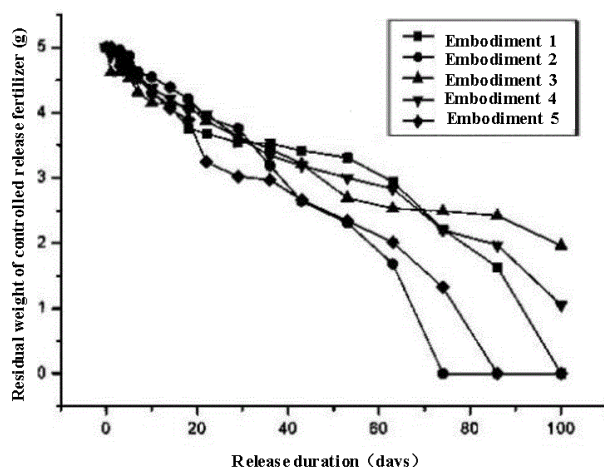
71: Shanxi Agricultural University  
72: Liang Xiuzhi, Zheng Minna, Han Zhishun, Kang Jiahui, Chen Yanni, Li Xiaofeng, Guo Fang, Wang Hui, Yang Fu

**54: CONTROLLED RELEASE FERTILIZER SPECIAL FOR ALFALFA AND PREPARATION METHOD THEREOF**

00: -

The invention discloses a controlled release fertilizer special for alfalfa and a preparation method thereof. The controlled release fertilizer includes the following raw materials: cow dung, sheep dung, tea

cake, brown algae, urea, potassium dihydrogen phosphate, maltodextrin, corncob super absorbent resin, Sophora flavescens, Zanthoxylum bungeanum, Cortex Phellodendri, alfalfa rhizobium agent, organic fertilizer fermentation agent, zinc sulfate, manganese sulfate and a proper amount of sodium hyaluronate. The controlled release fertilizer of the invention combines organic fertilizer with inorganic fertilizer, and adopts double-layer coating technology, which greatly prolongs the release duration of fertilizer, reduces the times of fertilization, not only reduces the labor cost, but also effectively promotes the improvement of alfalfa yield and quality, and also has the effect of reducing the occurrence of diseases and pests.



21: 2022/08495. 22: 2022/07/29. 43: 2022/11/02  
51: A01G

71: BINZHOU UNIVERSITY  
72: Jiangbao XIA, Jun ZHANG, Chengrong BAI, Yongkai LUO, Wanli ZHAO, Dandan ZHAO, Hongyan HAN, Hongjun YANG, Qiqi CAO, Fanglei GAO

33: CN 31: 202210582712.3 32: 2022-05-26

**54: METHOD FOR IMPROVING PLANTING SURVIVAL RATE OF SEEDLINGS IN ROCKY MOUNTAIN AREAS**

00: -

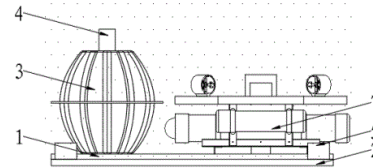
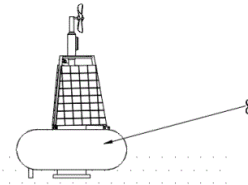
The invention discloses a method for improving the planting survival rate of seedlings in rocky mountain areas, belonging to the technical field of forestry afforestation. The method for improving the survival rate of seedlings planted in rocky mountain areas includes the following steps: (1) Making a fish scale pit at the planting point, spraying microbial mixed bacteria solution in the fish scale pit, and backfilling

mixed nutrient soil; (2) Pretreating the seedlings; (3) Digging out the mixed nutrient soil, transplanting pre-treated seedlings, and backfilling the mixed nutrient soil; (4) Management after transplanting. According to the seedling planting method, the survival rate of *Platycladus orientalis* seedlings can reach more than 95%, the problem of low seedling transplanting survival rate in rocky mountain areas with thin soil layers is overcome, and new technology for improving afforestation survival rate is provided for greening rocky mountain areas.

21: 2022/08496. 22: 2022/07/29. 43: 2022/11/02  
 51: G01V  
 71: First Institute of Oceanography, Ministry of Natural Resources  
 72: Lei SUN, Qingfeng HUA, Kai LIU, Yanliang PEI, Chenguang LIU

33: CN 31: 202210610633.9 32: 2022-06-01  
**54: SELF-SINKING OCEAN BOTTOM SEISMIC ACQUISITION DEVICE AND WORKING METHOD THEREOF**

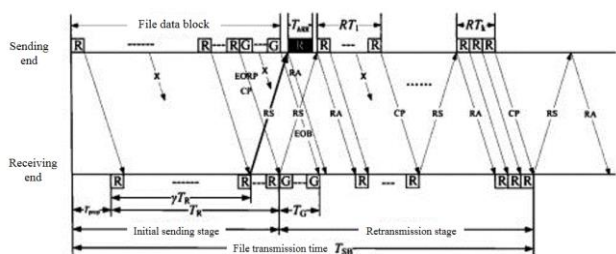
00: -  
 A self-sinking ocean bottom seismic acquisition device and working method thereof, involving the field of ocean bottom seismic data acquisition technology, comprises a base, counterweight, ocean bottom seismometer (OBS), the first hydroacoustic transducer, the first propulsion device, the first power switching device, energy transducer and energy storage device. By adding energy transducer and energy storage device, the solar panel converts light energy into electrical energy for storage, while the energy transducer obtains the electrical energy stored in the energy storage device and replenishes it to the OBS to realize the effect of long-term operation of the marine seismograph on the ocean bottom.



21: 2022/08497. 22: 2022/07/29. 43: 2022/11/02  
 51: H04B

71: Zhaoqing University  
 72: WU Haitao, LIANG Yingchun  
**54: DEEP SPACE FILE TRANSMISSION METHOD BASED ON LTP ASYNCHRONOUS ACCELERATED RETRANSMISSION STRATEGY**

00: -  
 This invention relates to the technical field of data transmission, and in particular to a deep space file transmission method based on LTP asynchronous accelerated retransmission strategy. The deep space file transmission method based on LTP asynchronous accelerated retransmission strategy provided in this scheme is based on LTP single session transmission mode, and the early accelerated retransmission strategy is actively triggered by the receiving end. That is, in the initial transmission stage of the red data, the receiving end generates a receiving report according to the actual receiving situation, and starts the retransmission process in advance. Asynchronous accelerated retransmission not only recovers the lost data as soon as possible and improves the file transmission efficiency, but also reduces the dependence of retransmission start on EORP data segment and shortens the file transmission time. This strategy is very suitable for scenarios with short connection time, long distance and high bit error rate.



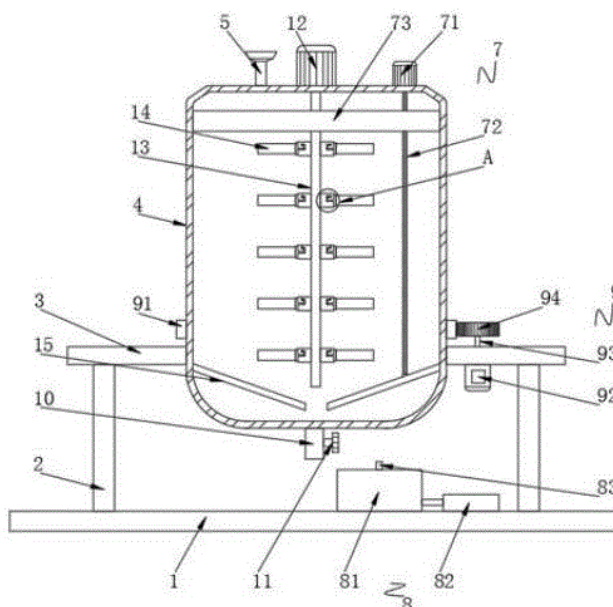
21: 2022/08498. 22: 2022/07/29. 43: 2022/11/02  
51: B01F

71: Tianjin Hengren Biotech Co., Ltd.  
72: PENG Bo, ZHANG Xiaoni, JIA Wei

**54: RAW MATERIAL STIRRING DEVICE FOR PRODUCTION OF DIAGNOSTIC REAGENTS**

00: -

The invention discloses a raw material stirring device for the production of diagnostic reagents, which comprises a base, wherein four corners of the top of the base are fixedly connected with supporting rods; a processing table is fixedly connected between the tops of four supporting rods; a stirring drum is arranged on the processing table; the surface of the stirring drum is rotationally connected with the inner wall of the processing table; the top of the stirring drum is communicated with a feed hopper; the bottom of the stirring drum is communicated with a discharge pipe; the surface of the discharge pipe is fixedly connected with a discharge valve; and the top of the stirring drum is fixedly connected with a stirring motor. According to the raw material stirring device for the production of diagnostic reagents, the rotary detachable mechanism is arranged, so that a single stirring paddle can be disassembled and replaced conveniently, the normal stirring work is not affected, and the use is convenient; and the movable scraping mechanism is arranged, so that the residual attached raw materials on the inner wall of the stirring drum can be scraped conveniently, manual treatment is not needed, and the treatment is convenient, and the subsequent use of the stirring drum is not affected.



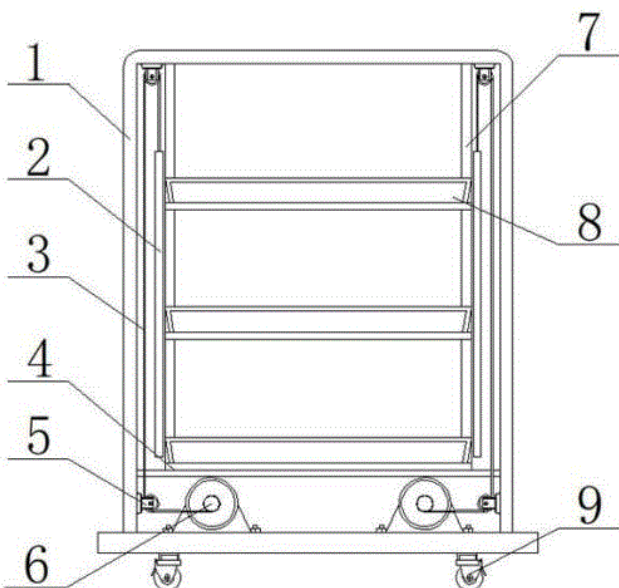
21: 2022/08499. 22: 2022/07/29. 43: 2022/11/03  
51: A01G

71: Shanxi Agricultural University  
72: Liang Xiuzhi, Zheng Minna, Kang Jiahui, Han Zhishun, Chen Yanni, Qi Haiying, Wang Liqin

**54: METHOD FOR PLANTING POTATOES WITH HIGH YIELD AND POTATO CULTURE RACK**

00: -

The invention discloses a method for planting potatoes with high yield, which includes the following steps: selecting high-yield and high-quality seed potatoes suitable for local cultivation without diseases and insect pests and mechanical damage, airing for 1-2 days, and cutting the seed potatoes with a cutter sterilized by alcohol, wherein each potato cutting has 1-2 bud eyes and weighs 20-25 g; completely soaking the potato cuttings in the prepared seed-soaking agent prepared with biological bactericide Serenadesoil solution and alpha-pimacol solution, taking out after soaking for 20-25 min, after drying in the shade, spreading the potato cuttings in a pulling groove, spraying the calonyctin solution, covered with the gauze bag with wet sand, and accelerating the germination until the bud grows to 1-2 cm, then sowing in the field. The invention can obviously improve the budding rate of potato cuttings, and at the same time, the transplanting survival rate is high, which is close to 100 percent, and can well reduce the incidence of diseases in the potato planting process, thus obviously improving the potato yield.

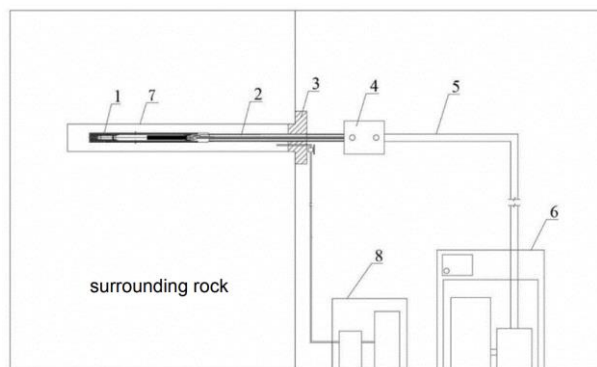


21: 2022/08500. 22: 2022/07/29. 43: 2022/11/03  
 51: F42D  
 71: Northeastern University, China  
 72: Liu Zaobao, Wang Houyu, Li Yongping, Wang Fei, Yao Zhibin, Qiao Pengyang, Zha Wenhua, Chen Guoqing

**54: AN INTEGRATED CONDUIT AND A PREVENTION DEVICE & ITS METHOD THEREOF OF TUNNEL ROCKBURST**

00: -  
 The invention belongs to the technical field of deep buried tunnel rockburst prevention, and an integrated conduit and a prevention device & its method thereof of tunnel rockburst. The tunnel rockburst prevention device comprises a liquid carbon dioxide cracking device, a liquid carbon dioxide providing mold block and a control drive module; It also includes an integrated conduit, in which the liquid carbon dioxide cracking device is connected to the integrated conduit, and the integrated conduit is connected to the liquid carbon dioxide supply module; The integrated conduit is connected to a control drive module to control the delivery or release of liquid carbon dioxide from the integrated conduit. The invention can achieve the effect of releasing the surrounding rock stress and reducing the temperature of surrounding rock, so as to realize the purpose of preventing and controlling the rockburst disaster of tunnel with high geothermal temperature. The main material required by the

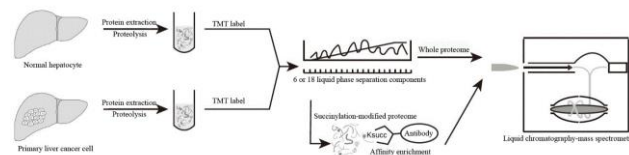
device and method is liquid carbon dioxide, which is not explosive material. It has high safety in transportation and using, less time consumption, high efficiency and no pollution to the environment.



21: 2022/08501. 22: 2022/07/29. 43: 2022/11/03  
 51: A61K  
 71: Bo Tang

72: Bo Tang, Liang Zhao  
**54: APPLICATION OF PROTEIN SUCCINYLAION MODIFICATION TO PREPARATION OF TUMOR CELL METABOLISM REGULATOR**

00: -  
 The present application discloses application of protein succinylation modification to preparation of a tumor cell metabolism regulator, belonging to the technical field of metabolic engineering. By identifying the succinylation modification of a hepatocyte proteome, it is found that the succinylation modification is closely related to activity regulation of various kinds of metabolic enzymes in tumor cells, and metabolism regulation networks cooperate with each other, thereby adapting to an acidic low-oxygen tumor microenvironment without sufficient nutrients. Therefore, the succinylation modification of protein can be used for preparing the tumor cell metabolism regulator, that is, a novel application field of the protein succinylation modification is developed, a novel drug target of the tumor cell metabolism regulator is also provided, and the application space is wide.



21: 2022/08548. 22: 2022/08/01. 43: 2022/09/07

51: B21D; B21C

71: XUANCHENG VOCATIONAL &amp; TECHNICAL COLLEGE

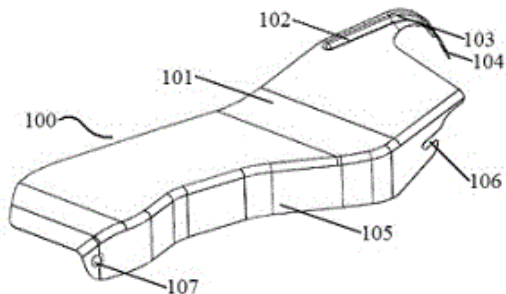
72: WANG, LI, LU, QINGSONG, HUANG, ZHAOMING, YAN, TINGTING, HU, LIYONG, DING, CHUNMEI

33: CN 31: 2022108258618 32: 2022-07-14

**54: METHOD FOR MANUFACTURING SHEET METAL PART WITH S-SHAPED SECTION**

00: -

The present invention discloses a method for manufacturing a sheet metal part with an S-shaped section, and relates to the field of metal stamping technologies. The manufacturing process according to the present invention includes a punching step, a step-by-step blanking step, a forming process, an idling step, a shaping and forming step, a bending step, a punching and trimming step, an idling step, side punching, and a cut-off step. In the present invention, through the reasonable arrangement of the sequence of the blanking step, the forming step, the idling step, the shaping step, and the bending step, and through coordination with designed double-sided carriers, ties for connecting the carriers to a workpiece, and a formed waste material on a plane blank, stamping machining of the workpiece is well completed, which not only ensures precision of a resilient surface of the workpiece, but also ensures position precision of holes in the workpiece and trimming quality of an outer edge of the workpiece, reduces die debugging costs, improves production efficiency and a product qualification ratio, and shortens a development cycle of a multi-position progressive die for a complex and resilient sheet metal part with an S-shaped section.



72: LEI, Chengyou, WANG, Li, MA, Xunjun, CUI, Haijian

**54: ACTIVE NOISE REDUCTION HEADREST**

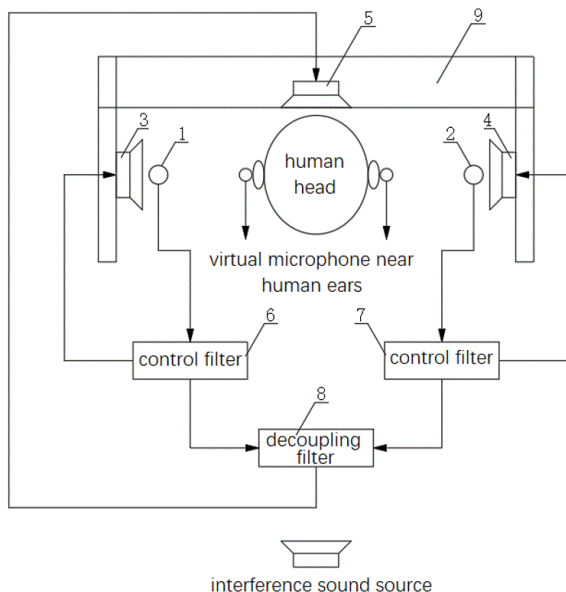
00: -

The present disclosure relates to technical field of noise reduction, and in particular to an active noise reduction headrest, which comprises: a headrest body, a middle portion of an upper side of which is fixedly connected to a decoupling sound source, and middle portions of a left side and right side of which are fixedly connected to a left secondary sound source and a right secondary sound source, respectively; the decoupling sound source, the left secondary sound source and the right secondary sound source are respectively connected to a decoupling filter a left control filter and a right control filter through wires; a left microphone and a right microphone are respectively provided on opposite sides of the left secondary sound source and the right secondary sound source. With the active noise reduction headrest, a decoupling mechanism is established for eliminating sound waves generated by the left secondary sound source at the right ear and sound waves generated by the right secondary sound source at the left ear, by adding a decoupling sound source on the basis of a traditional active headrest system. Further a traditional multi-channel control mode is replaced by a single-channel control mode, thereby a control convergence speed of the active headrest system is improved, and the convergence speed, the stability and the control effect of the system are improved, and the control effect is improved.

21: 2022/08549. 22: 2022/08/01. 43: 2022/10/18

51: B60N; G10K

71: No. 719 Research Institute of China State Shipbuilding Corporation Limited



21: 2022/08550. 22: 2022/08/01. 43: 2022/10/13  
 51: G06K  
 71: Zhuhai City Polytechnic  
 72: ZHU, Shaoping, MA, Weimin, ZHU, Leping, QIU, Xiaoqun, YANG, Yu, YAN, Yupei, LIU, Yujie  
**54: MULTI-TARGET TRACKING DEVICE BASED ON MOBILE ROBOT PLATFORM**

00: -  
 Disclosed is a multi-target tracking device based on a mobile robot platform. The tracking device includes a visual sensing system, a mobile robot platform and an intelligent monitoring system, where the mobile robot platform is composed of a base and a mounting platform, and a lower surface of the base is provided with a driving assembly capable of achieving full-circle movement of the mobile robot platform. The present invention is a comprehensive technology integrating multiple disciplines such as machine vision, image processing and mode recognition, conducts correction processing and analysis on an obtained target image on the basis of a computer technology, extracts effective feature information from the target image, and conducts mode recognition and determination on target features on the basis of the effective feature information, thereby achieving detection and tracking of multiple moving targets.

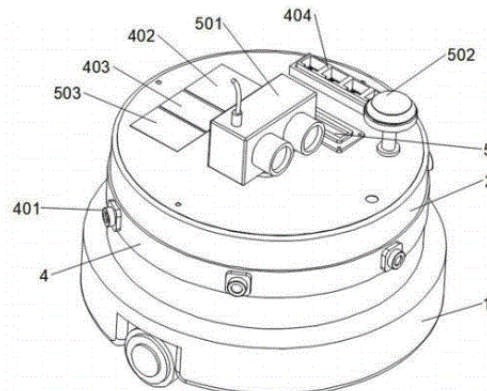


FIG. 1

21: 2022/08551. 22: 2022/08/01. 43: 2022/10/18  
 51: G01N

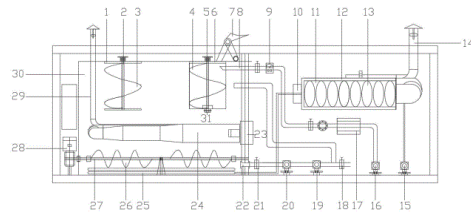
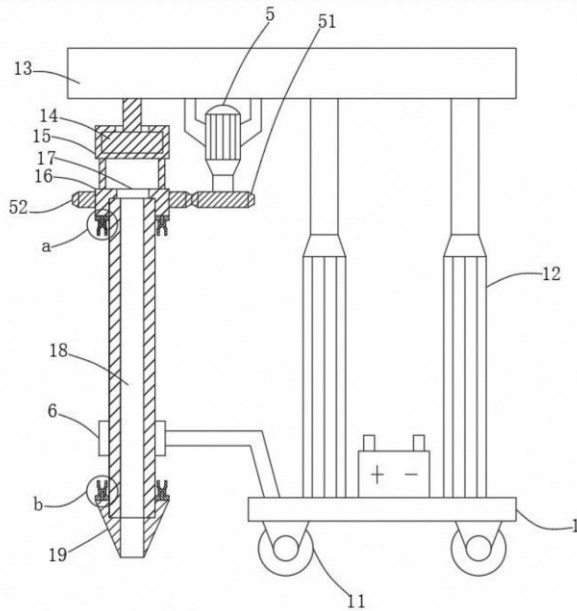
71: Institute of Resources and Environment, Tibet Academy of Agricultural and Animal Husbandry Sciences

72: XIEYongchun

**54: STRATIFIED SAMPLING DEVICE FOR POLLUTION CONTROL OF CULTIVATED LANDS BASED ON GREEN AGRICULTURE**

00: -

The invention discloses a stratified sampling device for pollution control of cultivated lands based on green agriculture. The device includes a base. A lower end of the base is fixed with wheels, and a cylinder is fixed on the base. A piston rod of the cylinder is fixed with a support plate, and a turntable is fixed on the support plate. The turntable is rotatably provided with a rotating seat, and a cover body is fixed on the rotating seat. The cover body is provided with a built-in hole, and a sampling pipe is slidably inserted into the cover body. A lower end of the sampling pipe is slidably sleeved with a butt end. In the invention, through the combination of the sampling pipe and the rotation of the butt end as well as the contraction of the piston rod of the cylinder, the sampling pipe can be inserted vertically into the soil to obtain stratified patterns; through the butt joint of threaded caps at both ends and threaded rods, the sampling pipe can be separated from the whole device; through the sampling pipe formed by splicing in half, it is convenient to reclaim the stratified patterns.

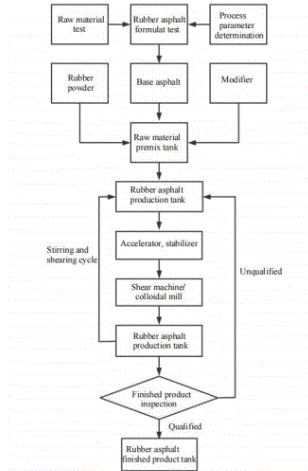


21: 2022/08552. 22: 2022/08/01. 43: 2022/10/18  
 51: C08L  
 71: GUANGXI TRANSPORTATION SCIENCE AND TECHNOLOGY GROUP CO., LTD, Guangxi Jiaoke New Materials Technology Co.,Ltd.  
 72: YUAN, Haitao, ZHANG, Honggang, ZHANG, Hongbo, LIN, Jiasheng, TAN, Jizong, LIU, Ping, XIONG, Baolin, YIN, Yehao, WANG, Xiaolei, PAN, Zhiqiong, ZHANG, Chenxi  
**54: HIGH-PERFORMANCE RUBBER-MODIFIED ASPHALT FACTORY PRODUCTION EQUIPMENT**  
 00: -

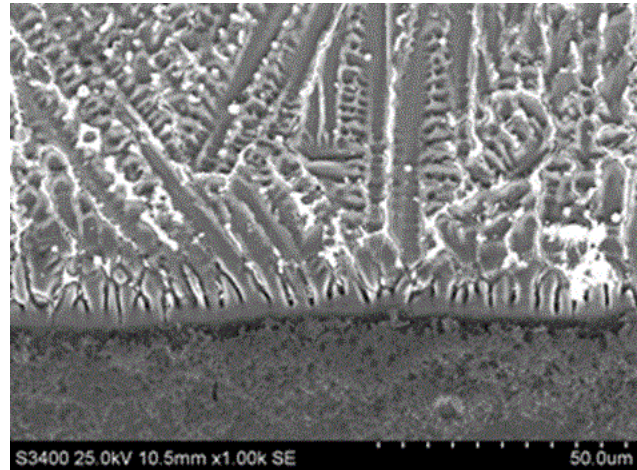
The present disclosure discloses a high-performance rubber-modified asphalt factory production equipment, including a rubber-modified asphalt reaction kettle, wherein a premixing tank is set in the reaction kettle, and there are stirring shafts and stirring blades inside the premixing tank. A top of the premixing tank has a rubber powder inlet and an asphalt inlet, a bottom of the premixing tank has a premixing tank outlet, and the premixing tank outlet is connected to the rubber-modified asphalt reaction kettle. The upper part of the kettle is provided with a vertical stirrer, and a lower part of the rubber-modified asphalt reaction kettle is provided with a horizontal stirring device and a fire tube heating part. A lower side of the rubber-modified asphalt reaction kettle has a reaction kettle outlet.

21: 2022/08553. 22: 2022/08/01. 43: 2022/10/18  
 51: C08L  
 71: GUANGXI TRANSPORTATION SCIENCE AND TECHNOLOGY GROUP CO., LTD, Guangxi Jiaoke New Materials Technology Co.,Ltd.  
 72: ZHANG, Hongbo, ZHANG, Honggang, TAN, Jizong, YUAN, Haitao, XIONG, Baolin, LIU, Ping, YIN, Yehao, WANG, Xiaolei, PAN, Zhiqiong  
**54: NEW TYPE OF RUBBER-MODIFIED ASPHALT PRODUCTION PROCESS METHOD**  
 00: -

The present disclosure discloses a new type of rubber-modified asphalt production process method. The method includes obtaining the initial formula of rubber-modified asphalt through the preliminary raw material test and process parameter determination; adding base asphalt, rubber powder and modifier in sequence for rubber-modified asphalt production according to the initial formula; putting the base asphalt, the rubber powders and the modifier into the production tank after premixing, and proceeding shearing and grinding after adding the stabilizer, and rubber-modified asphalt is sent out after it is qualified, if the rubber-modified asphalt is unqualified, fine-tuning the formula to continue production. The present disclosure has high production efficiency and stable quality.



the field of hot rolls prepared by laser manufacturing or repaired by laser remanufacturing.



21: 2022/08554. 22: 2022/08/01. 43: 2022/10/18  
51: C23C

71: Shenyang University of Technology  
72: Xu Tongzhou, Zhang Song, Huang Yichi, Wu Chenliang, Zhang Chunhua

**54: THE POWDER AND TECHNICAL METHOD USED IN LASER CLADDING OF SELF-LUBRICATING WEAR-RESISTANT CO-BASED ALLOY**

00: -  
This invention provides the powder used in laser cladding of self-lubricating wear-resistant Co-based alloy and the technical method of the laser cladding technology, aiming at fabricating wear-resistant Co-based alloy cladding coating on low-alloy steel rolls. The mixing powder includes Co-based alloy powder and Ti3SiC2 powder. The chemical composition of Co-based alloy powder in wt% is 0.2-0.25% C, 23.0-25.0% Cr, 2.0-2.5% Ni, 0.50-1.0% Si, 4-5.5% Mo, 0.55-0.65% Mn, and Co balance. The Co-based alloy powder is in the range of 85-95%, and Ti3SiC2 powder is in the range of 5.00-15.00% in wt.% in the mixing powders. The CO2 laser machining system is used to carry out laser cladding of self-lubricating Co-based alloy powder on Fe-based alloy substrate. The fabricated self-lubricating Co-based alloy cladding coating has no defects such as cracks or holes, and exhibits uniform microstructure and good metallurgical bonding to the substrate. The microhardness, wear resistance, high-temperature oxidation resistance and high-temperature properties of the low alloy steel surface are greatly enhanced. This invention provides the powder and technical method used in laser cladding of self-lubricating wear-resistant Co-based alloy, which can be used in

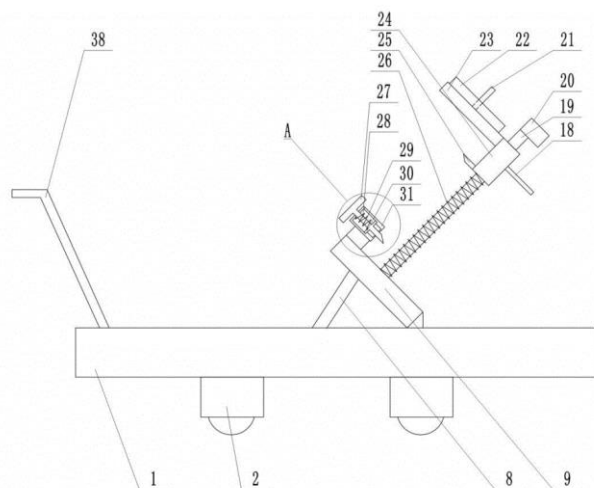
21: 2022/08555. 22: 2022/08/01. 43: 2022/10/18  
51: A01G

71: BINZHOU UNIVERSITY  
72: Jun ZHANG, Siming GUO, Jiangbao XIA, Hongjun YANG, Wanli ZHAO, Ximei ZHAO, Yinping CHEN, Chengrong BAI, Fanglei GAO, Qiqi CAO  
33: CN 31: 202210580862.0 32: 2022-05-26

**54: DRIP IRRIGATION DEVICE FOR ARTIFICIAL ECOLOGICAL RESTORATION IN OPEN-PIT LIMESTONE MINES**

00: -  
The invention relates to the technical field of irrigation, in particular to a drip irrigation device for artificial ecological restoration in open-pit limestone mines, which comprises a car body component and a water pipe component. The car body assembly is used for the transportation of the whole equipment, and the ejection assembly is fixedly installed on the car body assembly; The water pipe assembly comprises a coil and a branch water pipe assembly, wherein the ejection assembly is used for ejecting the coil, the branch water pipe is used for drip irrigation, the coil is detachably connected with the ejection assembly, and the side wall of the coil is detachably connected with the branch water pipe assembly. The invention can achieve the purposes of shortening pipeline laying time and preventing the water outlet of drip irrigation equipment from being blocked.





21: 2022/08556. 22: 2022/08/01. 43: 2022/10/18  
51: A01G  
71: Yanbian University  
72: LI, Xiangguo, HAN, Lianhua, FU, Minjie, ZHOU, Peihua, FANG, Xue

#### **54: SUBSTRATE FOR SOILLESS CULTURE OF GINSENG AND METHOD FOR SOILLESS CULTURE OF GINSENG**

00: -  
Disclosed is a substrate for soilless culture of ginseng and a method for soilless culture of ginseng, including the following raw materials in percentage by volume: 50% of turfy soil, 40% of perlite and 10% of vermiculite, and further includes phosphate ore (0.3 g/L), szaibelyite (0.2 g/L), dolomite (3 g/L) and castor bean meal (1 g/L). Compared with the prior art, the substrate for soilless culture of ginseng in the present invention can be obtained by simply and proportionally combining the turfy soil, the perlite, the vermiculite, the phosphate ore, the szaibelyite, the dolomite and the castor bean meal; particularly, an overground part fresh weight, a root thickness and a root fresh weight are the highest respectively; and the root fresh weight is improved by 7.7% compared with that of the control group, so that a yield of ginseng can be improved.

21: 2022/08557. 22: 2022/08/01. 43: 2022/10/18  
51: A23K  
71: Qingdao Agricultural University, Qingdao Huihe Biotechnology Co., Ltd, Animal Husbandry and Veterinary Station, Longshan Street, Haiyang City  
72: WANG Baowei, JING Lizhen, ZHANG Ming'ai, WANG Binghan, YUE Bin

#### **54: METHOD FOR PREPARING PECTINASE BY FERMENTING PENICILLIUM OXALICUM CURRIE & THOM FROM GOOSE**

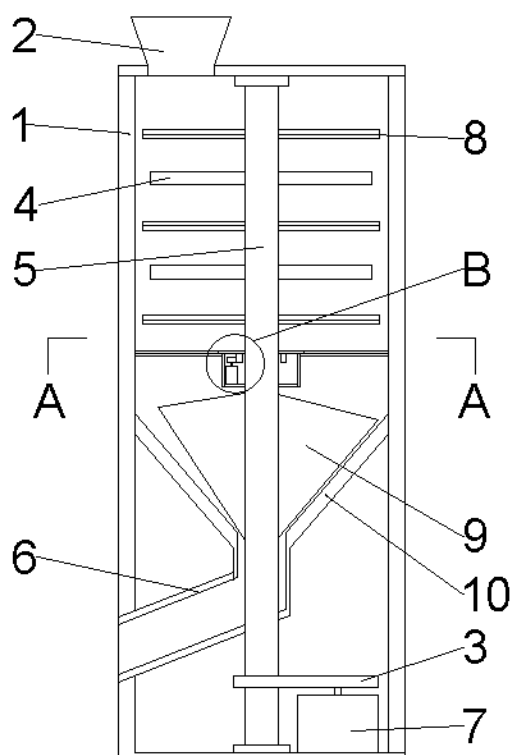
00: -  
The invention relates to a method for producing feed-grade pectinase by fermenting *Penicillium oxalicum* curry & thom isolated from geese, belonging to the field of microbial fermentation. Through solid-state fermentation, an enzyme preparation with high enzyme activity, long shelf life, good storability, stable percentage of each component and high purity was produced. The total enzyme activity of pectinase was 10,123.22 U.g<sup>-1</sup>. The activity of polygalacturonase is 5,101.23U.g<sup>-1</sup>, which is 50% of the total activity. Pectin esterase is 6,986.52 U.g<sup>-1</sup>, which is 69% of the total enzyme activity. Pectin lyase is 0.56 U.g<sup>-1</sup>, which is 0.005% of the total enzyme activity. When pectinase was added to animal diet at 0.2%, the digestibility of crude fiber (CF) increased by 17.04%, neutral detergent fiber (NDF) increased by 12.15% and acid detergent fiber (ADF) increased by 13.95%. The net protein utilization rate (NPU) increased by 9.53%; the apparent digestibility of Ca and P increased by 7.04% and 8.38% respectively compared with the control group. The invention of the method solves the key production technical problem of uncertain enzyme components and contents of enzyme preparations for feed fermented by compound bacteria in production, and provides a new technology for rational compatibility and application of enzyme preparations with different components of pectinase.

21: 2022/08558. 22: 2022/08/01. 43: 2022/10/18  
51: B02C  
71: Bozhou University  
72: PU Shunchang, DONG Shujia, XING Shuang, LIU Lu

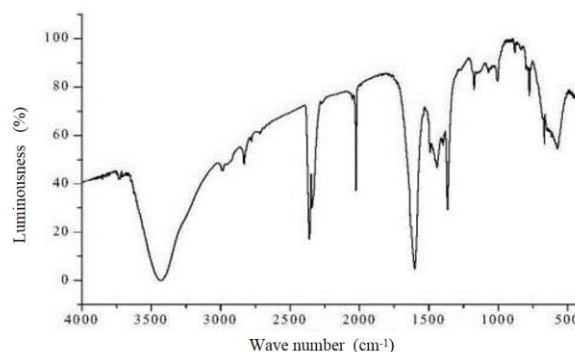
#### **54: ULTRAFINE GRINDING DEVICE FOR FOOD RAW MATERIALS**

00: -  
This invention discloses an ultrafine grinding device for food raw materials, which includes a shell, wherein a rotating shaft is rotatably connected in the shell, and the rotating shaft is drivingly connected with a motor; a crushing component and a grinding component are arranged on the rotating shaft; the crushing component is positioned above the grinding component; a barrier is arranged between the

crushing component and the grinding component, and the barrier is fixedly connected to the inner side wall of the shell; the bottom end of the grinding component is provided with a discharge pipe, and the other end of the discharge pipe extends out of the shell; the grinding component includes a tapered roller, the outer side of the tapered roller is provided with a tapered extrusion plate, the tapered extrusion plate is fixedly connected to the inner side wall of the shell, a gap is left between the outer side wall of the tapered roller and the inner side wall of the tapered extrusion plate, and the gap is gradually reduced from top to bottom. The invention has good crushing effect on food raw materials, and prevents food raw materials from being deposited in the equipment.



The invention provides a preparation method of a high-activity cellulose decomposition composite enzyme magnetic microsphere, which includes a preparation method of magnetic composite microspheres and an immobilization method of pectinase and cellulase. In the invention, various method parameters in the preparation of magnetic composite microspheres are optimized, and a carrier with superparamagnetism and a large number of functional groups such as hydroxyl and carboxyl on the surface is prepared; response surface methodology is used to optimize and improve the enzyme immobilization parameters; pectinase and cellulase cross-linked by Genipin are firmly combined with the carrier, with good operability and significantly improved enzymatic properties. The magnetic composite microsphere immobilization method of the invention makes pectinase and cellulase be repeatedly used, reduces consumption of raw materials and energy, improves input-output ratio, improves economic benefits, and achieves sustainable development. Moreover, pectinase and cellulase play a synergistic role, and may be applied to the fields of fruit juice and vegetable juice, etc., and improve the yield of fruit and vegetable juice and the extraction rate of active substances. It is a new technology with great development value.



21: 2022/08559. 22: 2022/08/01. 43: 2022/10/18  
51: C12N  
71: Qingdao Agricultural University, Qingdao Huihe Biotechnology Co., Ltd  
72: WANG Baowei, ZOU Yi, WANG Binghan, ZHANG Ming'ai, FAN Wenlei, YUE Bin  
54: **PREPARATION METHOD OF HIGH-ACTIVITY CELLULOSE DECOMPOSITION COMPOSITE ENZYME MAGNETIC MICROSPHERE**  
00: -

21: 2022/08560. 22: 2022/08/01. 43: 2022/10/18  
51: C12G  
71: Institute of Cereal and Oil Crops, Hebei Academy of agriculture and forestry Sciences, Guantao County Huayezhuangyuan Black Wheat Industry Co Ltd  
72: ZHANG Yelun, MENG Yanning, LAN Suque, LI Xingpu, NIU Zhenhua  
54: **PURPLE WHEAT-INFUSED LIQUOR AND PREPARATION METHOD THEREOF**  
00: -

The present invention discloses a method of preparing health care purple wheat-infused liquor: the method ensures the nutritional composition of purple wheat base liquor through the selection of the variety of materials for making purple wheat's distiller's yeast, the ratio of grain lees materials for brewing the base liquor, and the limitation of the cellar maturation time of the base liquor. The purple wheat seeds are then steeped in the base liquor, and combined with the limited material of the steeping jar and the steeping time in the steeping jar, the nutrients of purple wheat are activated to synergize with the base liquor in the process of cellar maturation, in order to obtain the purple wheat-infused liquor with health benefits. It is soft and mellow for taste and rich in nutrients, including protein, 18 amino acids, anthocyan, inositol, and organic chromium, selenium, zinc, and magnesium. The purple wheat-infused liquor has functional effects in cancer prevention, anti-cancer, regulation of human lipid metabolism, and prevention and control of diabetes.

21: 2022/08561. 22: 2022/08/01. 43: 2022/10/18  
51: B64C

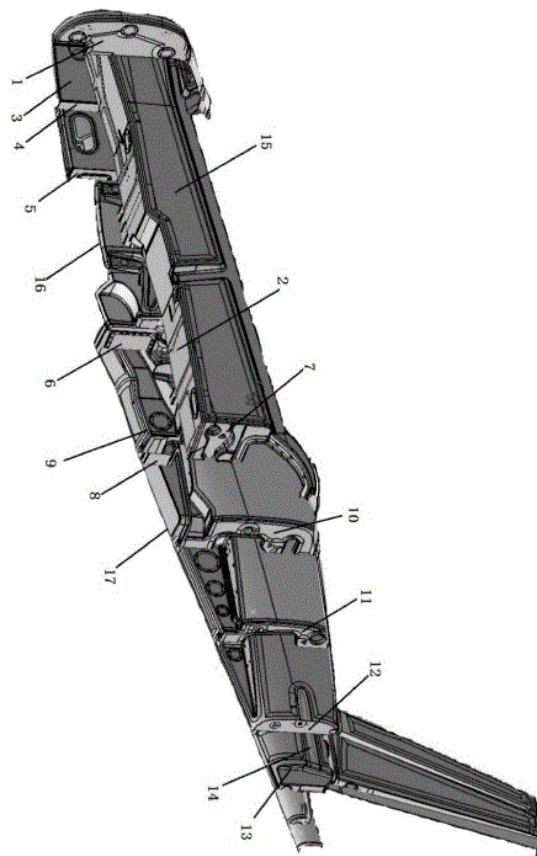
71: Wuhu Zhongke Aircraft Manufacturing Co., Ltd.  
72: Liu Yang, Zhijun Li, Zhaoyun Sun, Chao Wang, Hailu Wang

#### **54: HIGH-PERFORMANCE AND HIGH-STRENGTH TANDEM SEAT TYPE COMPOSITE MATERIAL FUSELAGE STRUCTURE**

00: -

The invention relates to the technical field of light aircraft fuselage, in particular to a high-performance and high-strength tandem seat type composite fuselage structure which comprises fuselage keels, fuselage skin for sealing the fuselage keels and a plurality of partition frames, and floors for partitioning the inner side space of the front half sections of the keels are arranged in the fuselage keels. The floor is in a long strip shape and extends from the head of the fuselage to the tail of the fuselage, all the partition frames are distributed in the fuselage keels at intervals in the length direction of the fuselage keels, and the fuselage skin is a full-carbon-fiber epoxy resin matrix composite laminated plate. The fuselage of the structure is totally manufactured by a carbon fiber composite material and has advantages of low structure weight and long air staying time. The

operation cost is reduced, the structural weight of the aircraft body is reduced to the maximum extent, so that the aircraft has a higher effective load proportion, the upper part of the aircraft body forms a slender and flat cockpit, the streamline appearance is kept, and meanwhile, the aircraft has a higher space utilization rate.



21: 2022/08562. 22: 2022/08/01. 43: 2022/10/18  
51: C23C

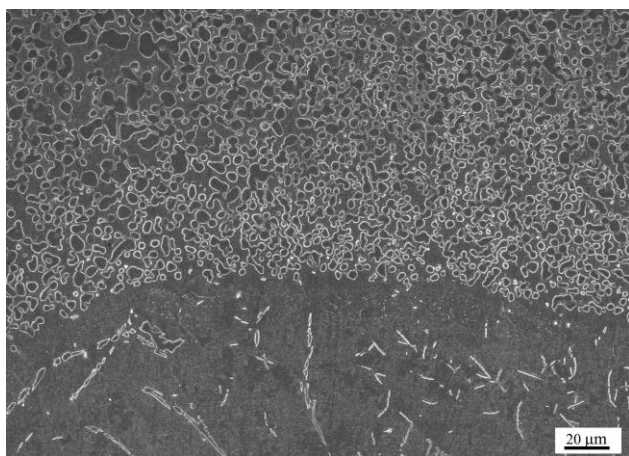
71: Shenyang University of Technology  
72: Zhao Te, Zhang Song, Zhang Hanfang, Wu Chenliang, Zhang Chunhua

#### **54: A POWDER AND METHOD FOR PREPARING A WEAR-CORROSION-RESISTANT CLADDING LAYER ON THE SURFACE OF Ti6Al4V**

00: -

The invention relates to a powder used for plasma transfer arc welding titanium-based cladding layer and a preparation method. The raw material powder is composed of pure titanium powder and Cr<sub>3</sub>C<sub>2</sub> powder in a mass ratio of 4:1. The titanium-based cladding layer prepared on the surface of Ti6Al4V by the method of synchronous powder feeding in the

plasma transfer arc welding process is mainly composed of the hard TiC ceramic phase generated by in-situ reaction, which provides higher hardness, better cavitation resistance and wear resistance to the cladding layer. In addition, Ti in the cladding layer provide good corrosion resistance. The invention adopts a method with both economic value and practical value, compared with the Ti6Al4V substrate, the cladding layer has better comprehensive properties, which can protect the Ti6Al4V substrate under the dual-phase flow service conditions in the marine environment and effectively prolong the service life of the components.



21: 2022/08563. 22: 2022/08/01. 43: 2022/10/18  
51: G06F

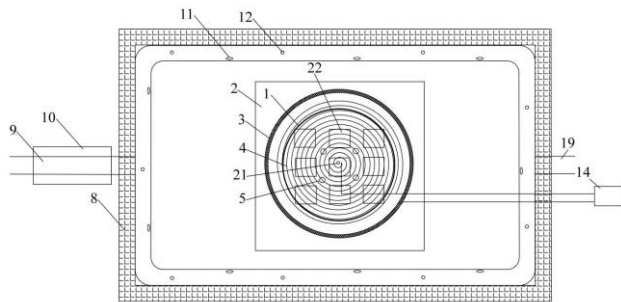
71: Shenyang University of Technology  
72: Cui Xue, Zhang Song, Zhang Hanfang, Wu Chenliang, Zhang Chunhua

**54: A CONTROL METHOD OF RESIDUAL STRESS FOR LOW ALLOY STEEL PREPARED BY SELECTIVE LASER MELTING FOR HIGH-SPEED RAIL**

00: -

The invention relates to a control method of residual stress for low alloy steel prepared by selective laser melting for high-speed rail, including the following steps: dry 24CrNiMo low alloy steel powder; make the substrate, and the substrate material is E235B or 24CrNiMo alloy steel; the substrate is integrally formed including an upper substrate and a lower substrate; clean the upper surface of the upper substrate; fix the substrate on the workbench of the laser selective melting equipment; spread the circumference of the upper substrate to the same height as the upper substrate with 24CrNiMo low alloy steel powder; start the thermostatic electric

heating mantle, and feed the heated protective gas into the laser selective melting equipment in all directions; run the laser selective melting equipment. The invention lays a technical foundation for the fabrication of large-scale complex metal structural parts.



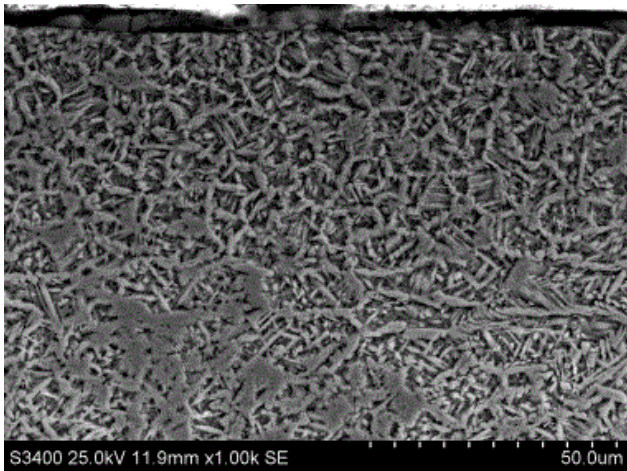
21: 2022/08564. 22: 2022/08/01. 43: 2022/10/18  
51: C23C

71: Shenyang University of Technology  
72: Jin Feng, Zhang Song, Zhao Te, Yin Tingyu, Zhang Chunhua

**54: A POWDER AND TECHNICAL METHOD USED IN LASER CLADDING OF ALUMINUM BRONZE ALLOY GRADIENT COATING**

00: -

This invention provides the powder used in laser cladding of aluminum bronze alloy gradient coating and the technical method of the laser cladding technology. The mixing powder is composed of nine elements: Al, Cu, Fe, Ni, Mn, Si, Cr, B, and Mo, among which the Al element is 5-8%wt, Fe and Ni are the same mass fraction, the total amount of Fe and Ni elements are 1-12%wt, the total amount of Mn, Si, Cr, B, Mo elements is 0.5-2%wt, and the balance is Cu. Laser cladding of an aluminum bronze gradient alloy coating on an austenitic stainless steel substrate using a coaxial powder feeding method with a semiconductor laser processing system. The microhardness, wear resistance, corrosion resistance, high-temperature oxidation resistance and high-temperature properties of the austenitic stainless steel surface are greatly enhanced after surface modification. This invention provides the powder and technical method used in laser cladding of aluminum bronze alloy gradient coating, which can be used in metallurgy, electric power, marine transportation, and other fields for laser manufacturing preparation or repaired by laser remanufacturing.



21: 2022/08565. 22: 2022/08/01. 43: 2022/10/18  
51: C22C

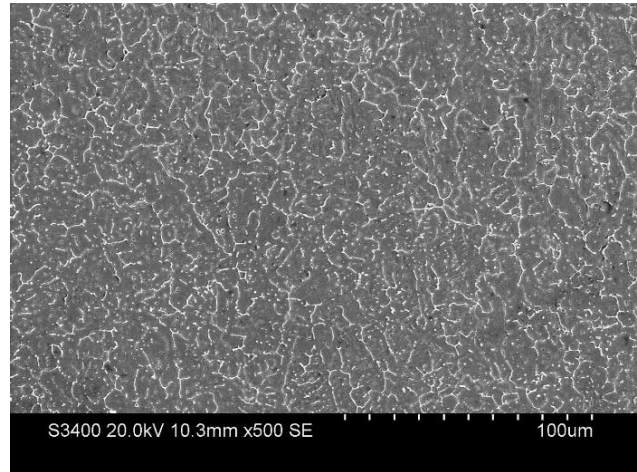
71: Shenyang University of Technology  
72: Liang Xudong, Zhang Song, Cui Xue, Wu Chenliang, Zhang Chunhua

**54: A POWDER AND METHOD FOR LASER ADDITIVE MANUFACTURING OF Nb-CONTAINING CORROSION-RESISTANT STAINLESS STEEL**

00: -

This invention provides a powder used in laser additive manufacturing of Nb-containing corrosion-resistant stainless steel and a technical method of laser additive manufacturing technology, aiming at fabricating a high hardness and excellent corrosion-resistant stainless steel. The nominal chemical composition of Nb-containing corrosion-resistant stainless steel powder is in wt.%: 0.10-0.15 C, 26.50-27.50 Cr, 2.40-2.60 Ni, 0.80-1.20 B, 1.10-1.40 Si, 1.00-1.50 Mo, 0.40-0.60 Mn, 0.30-0.50 La, 0.25-1.25 Nb and balance Fe. The particle size of the powder is 5-180 microns. The CO<sub>2</sub> laser machining system is used to carry out laser additive manufacturing of Nb-containing corrosion-resistant stainless steel powder on Fe-based alloy substrate. With the increase of Nb content in the alloy powder, the microstructure of stainless steel is obviously refined, and it has high hardness and excellent corrosion resistance. The prepared Nb-containing corrosion-resistant stainless steel can prolong the service life of stainless steel and has remarkable economic and social benefits. This invention provides a powder and a technical method used in laser additive manufacturing of Nb-containing

corrosion-resistant stainless steel, which can be used in the field of machinery and equipment such as automobiles, ships, electric power and water conservancy by laser manufacturing.



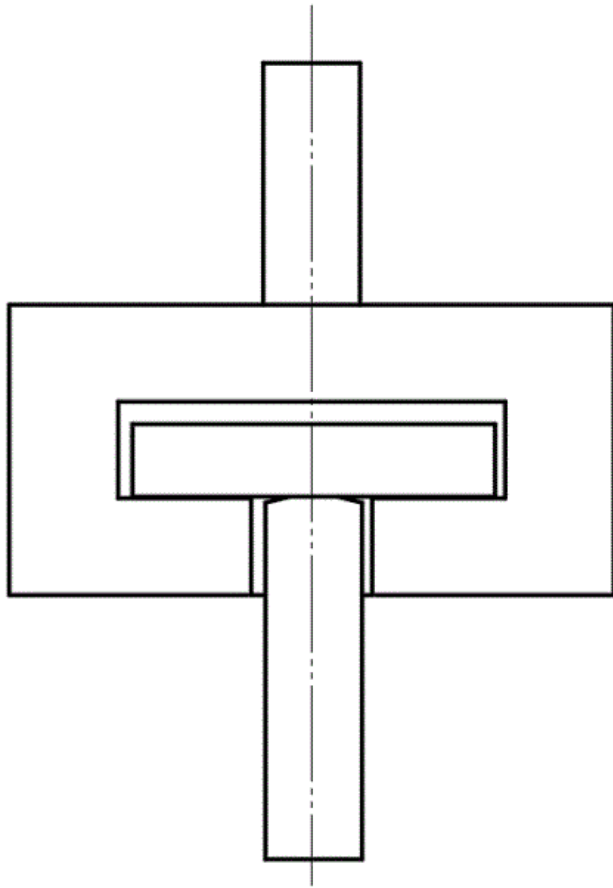
21: 2022/08566. 22: 2022/08/01. 43: 2022/10/18  
51: C25D

71: Shenyang University of Technology  
72: Nie Minghao, Zhang Song, Xu Tongzhou, Wu Chenliang, Zhang Chunhua

**54: A METHOD FOR TESTING THE INTERFACE BONDING STRENGTH OF LASER CLADDING STAINLESS STEEL CLADDING LAYERS**

00: -

The invention belongs to the technical field of material surface modification, and relates to a method for testing the interface bonding strength of a laser cladding stainless steel cladding layer. The material is clad with four to six layers of cladding layers on the base material using a single-pass lap joint and layer-by-layer method, so that the total thickness of the cladding layers is 7-9 mm; step 2, cut the cladding sample into the T-shaped, a sharp corner notch is prepared at the interface; the third step is to make a fixture that matches the horizontal structure of the T-shaped sample; the fourth step is to perform a tensile test on a universal tensile testing machine. The invention mainly solves the problems of inaccurate measurement of the interface bonding strength of the laser cladding layer in the prior art and large fluctuation of the numerical value of the measurement of the interface bonding strength of different laser cladding layers, and can realize the measurement of the interface bonding strength of the laser cladding stainless steel cladding layer in engineering.



21: 2022/08567. 22: 2022/08/01. 43: 2022/10/18  
51: C23C

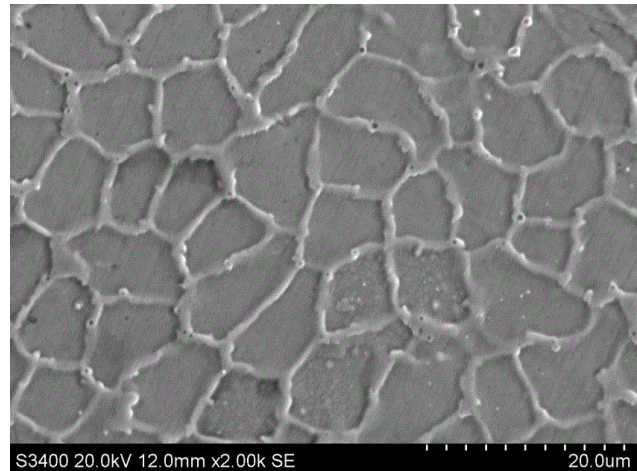
71: Shenyang University of Technology  
72: Wu Hao, Zhang Song, Wang Dingchen, Wu Chenliang, Zhang Chunhua

**54: A POWDER AND METHOD FOR LASER CLADDING WEAR-RESISTANT AND CORROSION-RESISTANT HIGH ENTROPY ALLOY COATING ON THE SURFACE OF STAINLESS STEEL**

00: -

The invention provides a powder and a preparing method for laser cladding wear-resistant and corrosion-resistant high entropy alloy coating, including FeNiCoCr based high entropy alloy powder and Mo powder. The high entropy alloy material is composed of Fe, Ni, Co, Cr and Mo elements, and the expression is FeNiCoCrMox, the value range of x is 0-0.25. The specific composition of the alloy coating is Fe: 24.93wt.%-25wt.%, Ni: 24.93wt.%-25wt.%, Co: 24.93wt.%-25wt.%, Cr: 24.93wt.%-25wt.%, and the rest is Mo. By using laser cladding technology and fiber laser, a wear-resistant and corrosion-resistant FeNiCoCr based high entropy

alloy coating is prepared. The prepared FeNiCoCr based high entropy alloy coating has uniform microstructure and good wear resistance and corrosion resistance on the surface, which significantly improves the wear resistance, corrosion resistance and other surface properties of the substrate.



21: 2022/08568. 22: 2022/08/01. 43: 2022/10/18  
51: B23K

71: Shandong Fanglin Aluminum Technology Co., Ltd

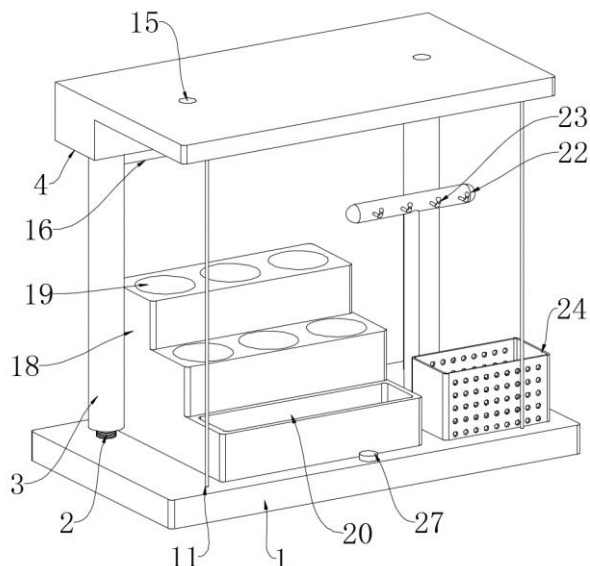
72: Wang Qi

**54: ALL-ALUMINUM AUTO-INDUCTION SPICE LIFTING PLATFORM FOR SMART HOME**

00: -

The invention discloses an all-aluminum auto-induction spice lifting platform for smart home, specifically relating to the technical field of kitchen supplies, which comprises a bottom plate, wherein the back side of the top of the bottom plate is provided with two threaded rods, the bottom ends of the threaded rods are fixedly connected with the top of the bottom plate, the outer ends of the threaded rods are screwed with hollow rods, the top ends of the hollow rods are movably connected with a top plate through bearings, a transmission mechanism for driving the two hollow rods to rotate synchronously is arranged between the two hollow rods, a worm wheel is fixedly arranged at the outer end of one of the hollow rods, one side of the worm wheel is engaged with a worm, both ends of the worm are movably connected with the top plate through bearings, and the front end of the worm is provided with a forward and reverse motor which drive the worm to rotate. According to the invention,

the bottom plate is fixed in the cabinet or on the wall to save the space on the cooking bench, thus facilitating the activities of people in the kitchen; when in use, the hollow rod and the threaded rod are used to drive the bottom plate to fall, so that people can conveniently take spices and utensils placed on the bottom plate.



21: 2022/08569. 22: 2022/08/01. 43: 2022/10/18  
51: A61K

71: Sichuan Agricultural University  
72: Ma Xiaoping, Liu Jie, Liu Zhen, Gu Yu, Zuo Zhicai, Cai Dongjie

33: CN 31: 202111359256.8 32: 2021-11-17

**54: TRADITIONAL CHINESE MEDICINE FORMULA FOR RESISTING ANIMALS DERMATOMYCOSIS AND PREPARATION METHOD THEREOF**

00: -

The invention relates to the technical field of medicines for treating animals dermatomycosis, and discloses a traditional Chinese medicine formula for resisting animals dermatomycosis, which comprises the following components: Sophora flavescens Alt., Cortex dictamni, Phellodendri Chinensis Cortex, Cortex Pseudolaricis and Cnidii Fructus; it also discloses a preparation method. The formula of the invention has obvious effects on animals Trichosporon, Microsporum gypsum, Candida albicans and the like, can achieve the therapeutic purpose, basically has no toxic or side effects and can reduce medicine resistance.

21: 2022/08570. 22: 2022/08/01. 43: 2022/10/18  
51: A63B

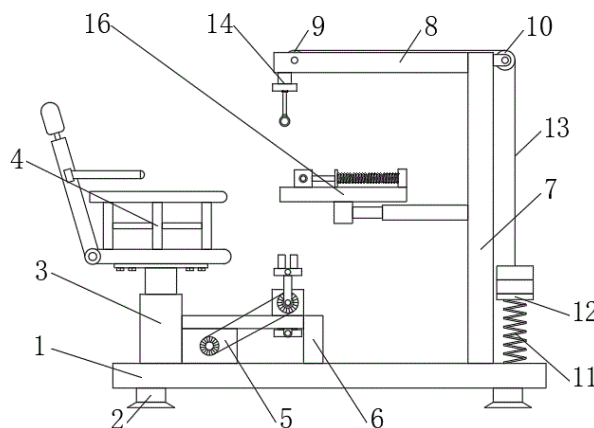
71: Anhui Medical College

72: Xu Hui

**54: COMBINE TRAINING SPORT EQUIPMENT**

00: -

The invention relates to the technical field of sports training equipment, and discloses a combined training sports equipment, which comprises a base, wherein one side of the upper end of the base is fixedly provided with an electric telescopic support, the upper end of the electric telescopic support is fixedly provided with an exercise seat, The upper ends of the two sides of the seat plate are fixedly connected with side stop frames, a fixing frame is fixedly arranged near the middle part at the upper end of the base, a leg exerciser is fixedly arranged on the fixing frame, the leg exerciser comprises a leg exercise seat, a driven chain wheel is rotatably arranged near the outer end of one side of the leg exercise seat, and a resistance device is fixedly arranged at the lower part of one end of the fixing frame close to the electric telescopic strut. In the invention, by setting a plurality of sports training modes, the defect of training equipment with a single function is avoided, the trainer can be effectively exercised better, and the invention is very suitable for indoor exercise.



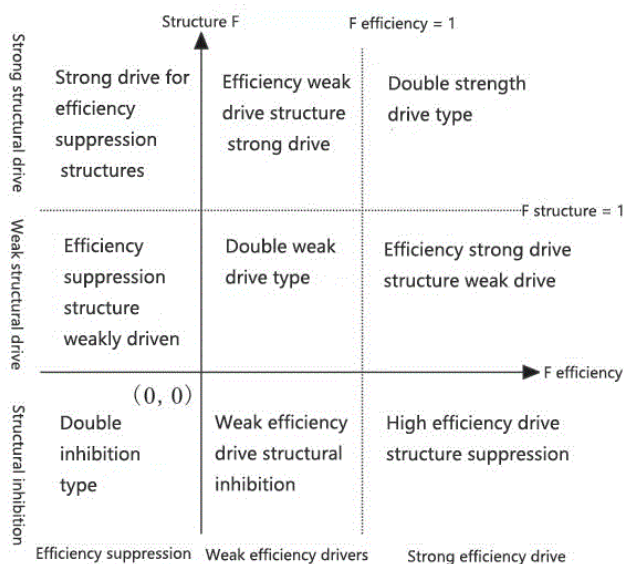
21: 2022/08571. 22: 2022/08/01. 43: 2022/10/18  
51: B63B

71: Suzhou University

72: Han Yafen, Li Qi, Dong Chuanbing, Xu Guowei

**54: A DECOUPLING DRIVING FORCE CLASSIFICATION MODEL FOR INDUSTRIAL CARBON EMISSION**

00: -  
 The invention provides a decoupling driving force classification model for industrial carbon emission, and relates to the technical field of industrial carbon emission. The decoupling driving force classification model of industrial carbon emissions is proposed in this paper. Based on the industrial decoupling index, the model mainly considers the influence of energy efficiency factor and structure factor on carbon emissions decoupling, and constructs the calculation model of carbon emissions decoupling efficiency driving factor F<sub>Efficiency</sub> and structure driving factor F<sub>Structure</sub>. The invention provides a decoupling driving force classification model of industrial carbon emission. A decoupling relationship of industrial carbon emission and economic development is measured by using the decoupling model, and driving forces of various industries are measured, calculated and classified by using the decoupling driving force classification model. It also shows that the change of energy utilization efficiency is the main factor to inhibit carbon emissions, and the inhibitory effect is increasing, while the emission reduction effect of carbon emission reduction technology and energy structure adjustment within the industry is not obvious.



71: North China University of science and technology, Jiangsu hengyichuang Intelligent Technology Co., Ltd, Foshan Saiyu extreme sports goods Co., Ltd

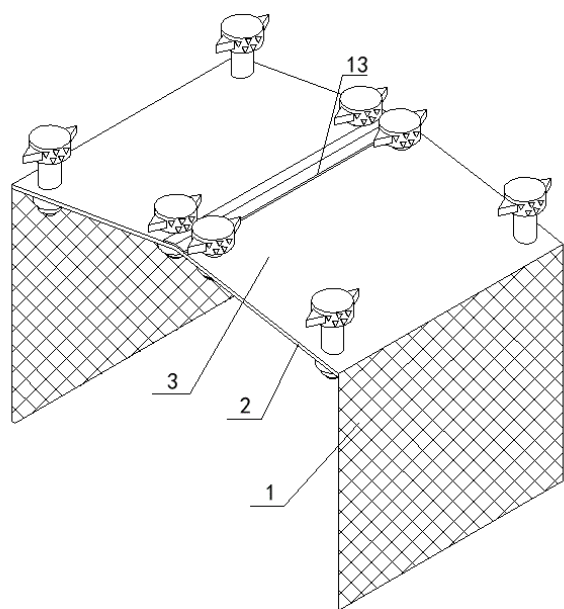
72: Cheng Zhiheng, Gao Haobin, Zhang Jingui, Chen Liang, Zhang Pu, Hou Jianjun, Guo Kai, Li Meichen, Xue Ao, Huang Zhiting

**54: COAL MINE SAFETY PROTECTION DEVICE**

00: -  
 The invention discloses a safety protection device used in coal mining, which comprises a protective net, wherein the upper end of the protective net is connected with a steel wire mesh, the upper end of the steel wire mesh is connected with a top plate, the upper ends of the steel wire meshes are connected with plug columns, the bottom ends of the plug columns are connected with snap rings, pin holes are formed in the bottom ends of the plug columns, push rods are connected inside the plug columns, and top blocks are connected at the upper ends of push rods. The upper end of the plug column is connected with a clamping head, a sliding cavity is arranged inside the clamping head, an extruding block is connected inside the sliding cavity, the outer side of the clamping head is connected with a barb, and the upper end of a top plate is connected with an edge retaining strip. The top of the mine is supported by a steel wire mesh and a top plate, and the steel wire mesh and the top plate are fixed by a plug column to prevent gravel from falling and water drops from dripping, thereby playing a role in safety protection, improving the dryness of the ground, and facilitating the operation of mining personnel in the mine.

21: 2022/08572. 22: 2022/08/01. 43: 2022/10/18  
 51: B02C





21: 2022/08573. 22: 2022/08/01. 43: 2022/10/18  
51: C10L

71: North China University of science and technology, Chongqing university, CCTEG Chongqing Research Institute Co., Ltd, CCTEG Coal Mining Research Institute Co., Ltd

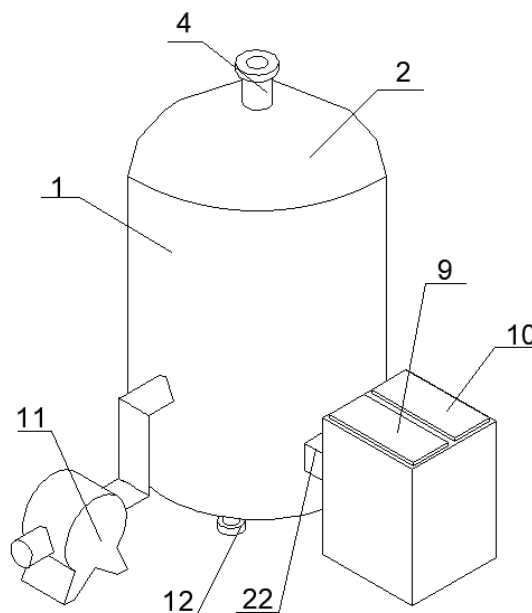
72: Cheng Zhiheng, Gao Haobin, Chen Liang, Li Zhenhua, Zou Quanle, Zhang Yongjiang, Chen Guangjin, Zhang Jinhu, Wang Hongbing, Zhao Zhiyan, Xue Ao, Chen Haoyi, Xu Zhenwei

**54: COAL MINE UNDERGROUND GAS PURIFY DEVICE**

00: -

The invention discloses an underground gas purification device for a coal mine, which comprises a purification tank, wherein the upper end of the purification tank is connected with a tank cover, the upper end of the tank cover is connected with a gas outlet flange, one side of the purification tank is connected with an air inlet flange, one side of the purifying tank is connecting with a liquid inlet flange, and one side thereof is connecting with a water inlet flange and a sewage discharge flange. One side of an air inlet flange is connected with a pipe fitting, the bottom end of a purification tank is connected with a leg column, one side of the pipe fitting is connected with the liquid storage tank, one side of the liquid storage tank is connected with the water storage tank, one side of the pipe fitting is connected to the fan, The gas is sucked into the purification tank by the fan, and under the action of the water pump, the purification liquid in the liquid storage tank is

extracted and sprayed from the nozzle, which can effectively decompose the impurities in the gas to achieve the effect of gas, and finally discharged from the gas outlet flange, which can effectively purify the gas in the coal mine and improve the safety of the operation in the mine.



21: 2022/08574. 22: 2022/08/01. 43: 2022/10/18  
51: G06Q

71: University of Electronic Science and Technology of China

72: Zhang Yun, Zheng Hengjie, Liu Yongguo, Zhu Jiajing, Li Qiaoqin, Fu Chong

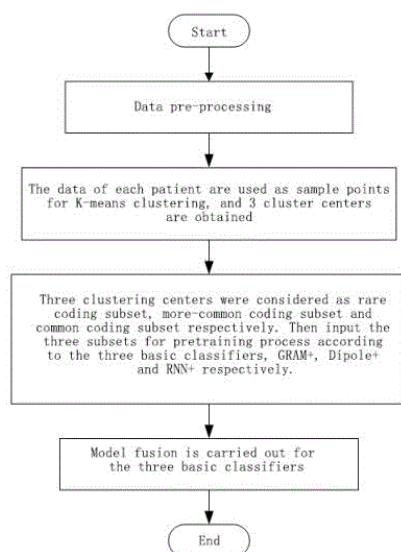
33: CN 31: 202210322129.9 32: 2022-03-30

**54: AN ADVERSE EVENT RISK PREDICTION METHOD BASED ON PATIENTS' ELECTRONIC HEALTH RECORDS**

00: -

The invention discloses an adverse event risk prediction method based on patients' electronic health records, it includes the following steps: S1. Data pre-processing; S2. Perform K-means clustering sampling processing, divide the data into 3 clusters, and obtain 3 clustering centers; S3. The 3 clustering centers are sorted from small to large according to the maximum value in  $P^*$ , respectively as rare coding subset, more common coding subset and common coding subset, and then the three subsets are pre-trained corresponding to the three basic classifiers GRAM+, Dipole+ and RNN+ respectively. Then model fusion is performed. The

present invention samples suitable training samples for the basic learner through clustering algorithm and designs an adaptive combination strategy. According to the distance between training samples and pre-training center, the ensemble weights of different basic classifiers are generated adaptively. It makes the model more adaptable. In addition, by sampling after clustering, the amount of computation can be significantly reduced when training is embedding basically.

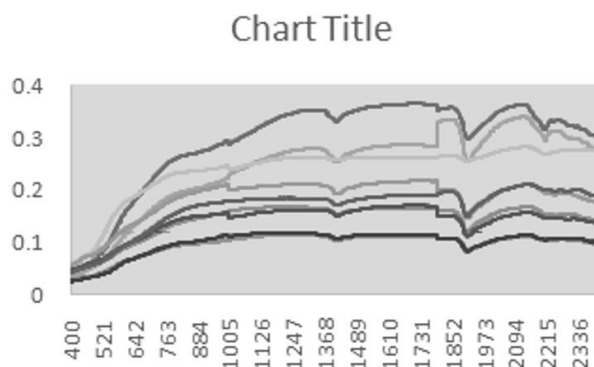


21: 2022/08617. 22: 2022/08/02. 43: 2022/11/09  
 51: G01N  
 71: GAIKWAD, CHITRA MADHUSUDAN, GHULE, Anjana Narayanrao, KAKARWAL, Sangeeta N., DESHMUKH, Ratnadeep R.  
 72: GAIKWAD, Chitra Madhusudan, GHULE, Anjana Narayanrao, KAKARWAL, Sangeeta N., DESHMUKH, Ratnadeep R.

#### 54: SYSTEM FOR DETERMINATION OF SOIL ATTRIBUTES USING MACHINE LEARNING TECHNIQUES FOR NON-IMAGERY SPECTROSCOPIC DATA

00: -  
 The present study aims to assess soil properties organic matter, nitrogen, and pH using spectral signatures of soil in visible near infra-red spectrum in 400 nm to 1300 nm wavelengths. Correlation analysis and Chi squared test are used for attribute selection. Multiple linear regression is used to develop model. The results show SOM R<sup>2</sup> 0.76, RMSE 0.58, pH R<sup>2</sup> 0.95, RMSE 0.15, Nitrogen R<sup>2</sup> 0.78, RMSE 0.007 with correlated attributes. With

Chi square-based attributes SOM R<sup>2</sup> 0.84, RMSE 0.50, pH R<sup>2</sup> 0.93, RMSE 0.20, Nitrogen R<sup>2</sup> 0.92, RMSE 0.36. VNIR can be an effective tool for prediction of soil attributes.



21: 2022/08622. 22: 2022/08/02. 43: 2022/11/03  
 51: C08G; C09J  
 71: China Institute of Water Resources and Hydropower Research  
 72: ZHAO, Weiquan, WANG, Wenzhao, ZHANG, Jinjie, ZHOU, Jianhua, WANG, Lijuan, LU, Wei, REN, Zengzeng

#### 54: ELASTIC EPOXY GROUTING MATERIAL AND PREPARATION METHOD THEREOF

00: -  
 The present disclosure belongs to the technical field of building materials, and provides an elastic epoxy grouting material, which is prepared by the following raw materials in parts by weight: 100 parts of epoxy resin, 10-30 parts of reactive diluent, 30-100 parts of curing agent, 5-15 parts of accelerant; the curing agent is formed by compounding polyamide, polyetheramine and 2, 4, 6-tris phenol. In the present disclosure, the reactive diluent, the curing agent and the accelerant are added to the epoxy resin, so that the elasticity of the material is improved while guaranteeing the cohesiveness and strength of the material, the epoxy grouting material with excellent elasticity can be prepared, and the shortcomings of brittleness of the epoxy grouting material consolidated body is overcome.

21: 2022/08623. 22: 2022/08/02. 43: 2022/11/02  
 51: E04G  
 71: Beijing Shunxin Tianyu Construction Engineering Co., Ltd.  
 72: LIU, Ruihai, GONG, Jinjing, ZHU, Xiaolin, LU, Tianxiang, ZHANG, Bo

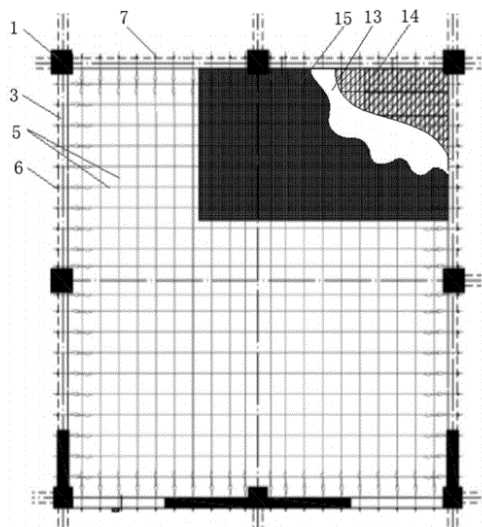
33: CN 31: 202110948546.X 32: 2021-08-18

33: CN 31: 202111029580.3 32: 2021-09-03

**54: STEEL CABLE NET CONSTRUCTION PLATFORM FOR SIGHTSEEING PATIO IN SUPER HIGH-RISE BUILDING AND CONSTRUCTION METHOD THEREOF**

00: -

A steel cable net construction platform for sightseeing patio in super high-rise building and construction method thereof, including a plurality of equally spaced, horizontally oriented beam penetration holes drilled on a frame beam of one circle of the patio at a lower periphery of the to-be-constructed position of the patio with a rectangular cross-sectional shape, wherein the beam penetration holes of the frame beam on an opposite side corresponds to each other; a steel noose is tensioned and fixed between every two corresponding beam penetration holes of the frame beams on the opposite side, and the intersections of the longitudinal and transverse steel nooses are connected to each other to form a mesh-like supporting plane; a small-hole steel wire mesh is laid on the supporting plane, and a foot board is laid on the small-hole steel wire mesh.



21: 2022/08625. 22: 2022/08/02. 43: 2022/11/03

51: G06Q

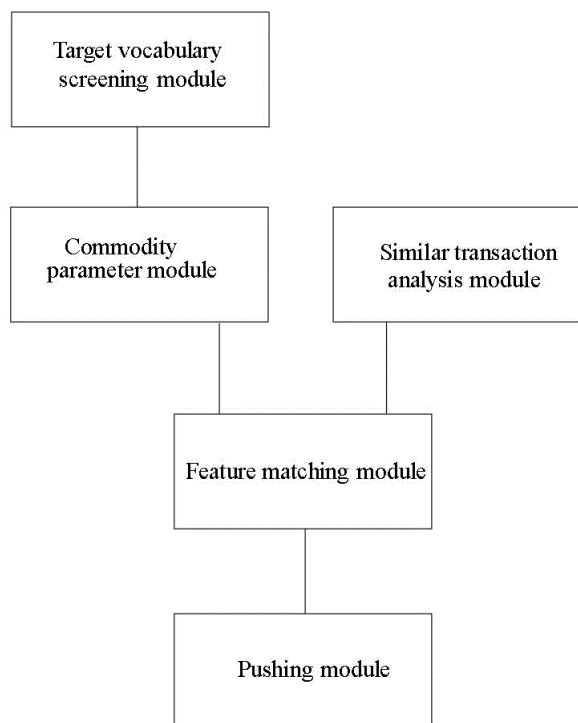
71: LUOYANG NORMAL UNIVERSITY

72: ZHANG Rongguang

**54: E-COMMERCE COMMODITY PUSHING SYSTEM AND METHOD BASED ON BIG DATA**

00: -

The invention provides an e-commerce commodity push system and method based on big data, which comprises a target vocabulary screening module, a commodity parameter module, a similar transaction analysis module, a feature matching module and a push module. The invention provides targeted and accurate product image recommendation for users.



21: 2022/08626. 22: 2022/08/02. 43: 2022/11/03

51: C12N

71: Qinghai Academy of Agriculture and Forestry Sciences

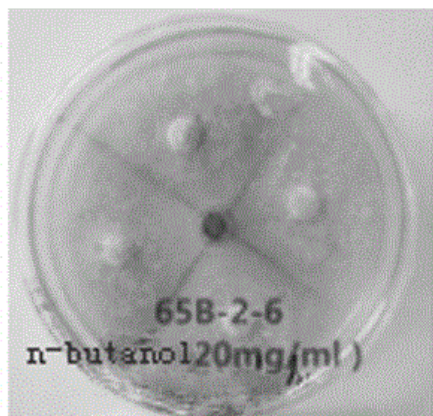
72: SHEN Shuo, LI Wei

**54: BACILLUS SIMPLEX S62 AND ITS APPLICATION**

00: -

The invention discloses a Bacillus simplex S62 and its application. The strain has been preserved in Guangdong Microbial Culture Collection Center of Guangdong Institute of Microbiology, 5th Floor, Building 59, Compound 100, Xianlie Middle Road, Guangzhou City on September 12th, 2016, and the preservation number is GDMCC NO: 60079. The strain and its bacterial suspension or secondary metabolites have obvious antagonistic effect on diseases caused by Fusarium, and the material

sources are wide, the cost is low, and it is safe to the environment.



21: 2022/08627. 22: 2022/08/02. 43: 2022/11/03  
51: C02F

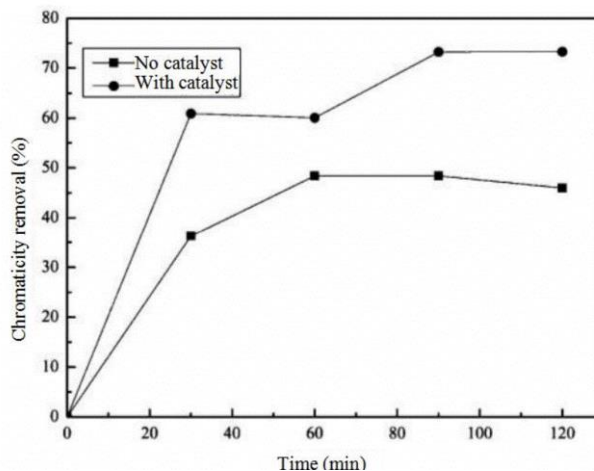
71: Renmin University of China

72: LIU Guohua, QI Lu, LI Qiangang, Xu Xianglong

**54: POLYMETALLIC CATALYST FOR THE CATALYTIC OXIDATION OF OZONE FOR THE REMOVAL OF COD AND CHROMATICITY FROM WASTEWATER AND A PREPARATION METHOD THEREOF**

00: -

The invention discloses a catalyst for catalytic oxidation of ozone, its preparation method and application. The preparation method of the catalyst for ozone catalytic oxidation is as follows: coating ceramsite raw material core with catalyst; then sintering to obtain the product, where the ceramsite raw material core is made of the following raw materials in percentage by mass: 50% of fly ash, 30% of kaolin and 20% of bulking agent; the mixed catalyst is prepared from the following raw materials in percentage by mass: 10-15% manganese dioxide, 3-8% titanium dioxide, 5-10% of aluminium trioxide, 5-10% of ferric oxide, 1-5% of cobaltic oxide and 70% of loess. The loading of various metal oxides in the catalyst prepared by the invention can greatly increase the activity of the ozone catalyst, and they have a synergistic effect with each other, and the finally prepared catalyst has the advantages of high catalytic efficiency, high stability, reusability and the like.



21: 2022/08628. 22: 2022/08/02. 43: 2022/11/03  
51: G01N; G05B; G06F

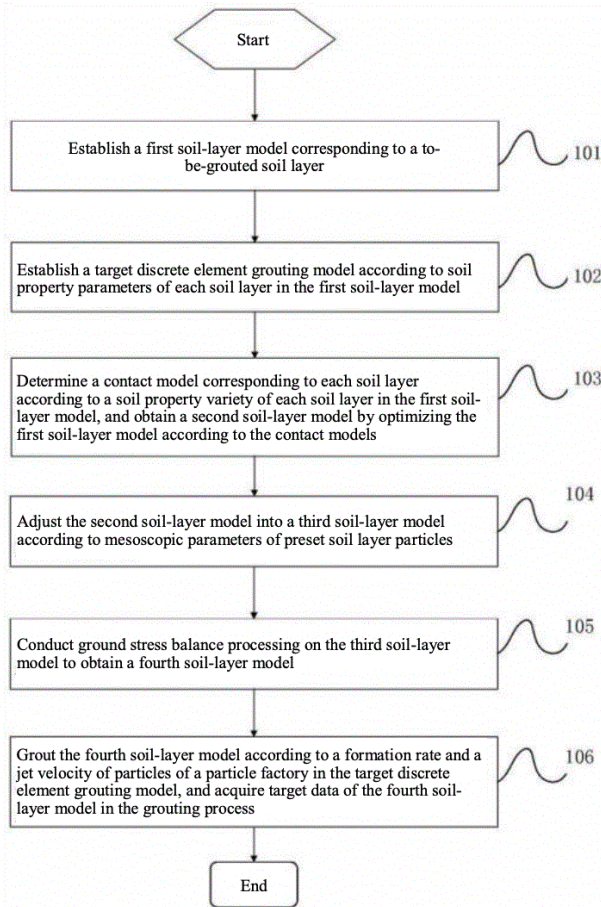
71: Hunan Agricultural University, Hunan Xiangyuan Zhenxing Information Technology Service Co., Ltd.

72: FU, Jianjun, LI, Zhe, CHEN, Cheng, ZHANG, Hao

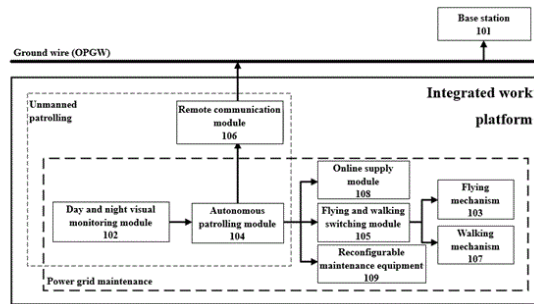
**54: NUMERICAL SIMULATION CALCULATION METHOD AND SYSTEM FOR CONTROLLING GROUTING**

00: -

Disclosed are method and system for simulating grouting process and readable storage medium, relating to the technical field of computer simulation. The method includes: establishing first soil-layer model corresponding to to-be-grouted soil layer; establishing target discrete element grouting model according to soil property parameters of each soil layer in first soil-layer model; determining contact model corresponding to each soil layer according to soil property variety of each soil layer in first soil-layer model, and obtaining second soil-layer model by optimizing first soil-layer model according to contact models; adjusting second soil-layer model into third soil-layer model according to mesoscopic parameters of preset soil layer particles; conducting ground stress balance processing on third soil-layer model to obtain fourth soil-layer model; and grouting fourth soil-layer model according to particle-forming rate and jet velocity of particle factory in target discrete element grouting model, acquiring target data of fourth soil-layer model during grouting.



be achieved; the operation platform takes a ground wire (OPGW) as an operation path, the inspection path of the operation platform is wide in coverage area, wide in visual field and standardized in working condition, a plurality of operation platforms of the same type communicate with a base station to construct an inspection network, a power grid system is covered, power grid self-inspection and surrounding ecological monitoring and border patrol are performed, and finally acquired data are summarized for big data analysis. The operation platform can achieve the functions of inspection, high-altitude maintenance, ecological monitoring, border patrol and the like, datamation of the power grid state and the surrounding ecological environment is achieved, and data visualization of the power grid is completed.



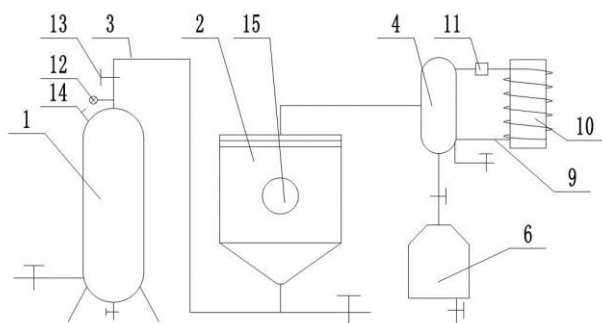
21: 2022/08629. 22: 2022/08/02. 43: 2022/11/02  
 51: H02G  
 71: Shihezi University  
 72: Jin Lei, Jie Zhang, Xinyan Qin, Bo Jia, Huidong Li, Bo Li, Zhaojun Li, Tianming Feng, Yanqi Wang, Jie Song, Dexin Wang  
**54: POWER GRID MAINTENANCE AND UNMANNED PATROL INTEGRATED OPERATION PLATFORM**

00: -  
 The invention provides a power grid maintenance and unmanned patrol integrated operation platform. The operation platform comprises a flying mechanism, a walking mechanism, reconfigurable maintenance equipment, a fly away switching module, an online supply module, a remote communication module, a day and night visual monitoring module and an autonomous patrol module. The operation platform can fly and walk, obstacle crossing and cruising ability is high, and long-time and long-distance inspection and maintenance on an overhead transmission line can

21: 2022/08661. 22: 2022/08/03. 43: 2022/11/02  
 51: B01D  
 71: Zhengzhou University of Industrial Technology  
 72: YIN Weiping, FENG Yali, LI Wenyuan, CAI Wei, JIANG Yaling  
**54: EQUIPMENT AND METHOD FOR EXTRACTING PLANT VOLATILE OIL**

00: -  
 The invention discloses a plant volatile oil extraction device, which comprises a water vapor generator for generating steam, a still, a condenser and a liquid storage tank; the bottom end of the distillation kettle is communicated with a water vapor generator through a steam pipe; the inner cavity of the distillation kettle is provided with a material rack for placing materials; the side wall of the distillation kettle is provided with a heating mechanism; Comprise a condenser communicate with that top of a distillation kettle, and a condensing component is arranged in the condenser; the lower part of the inner cavity of the condenser is provided with a separation component, and the position where the

condenser is connected with the distillation kettle located above the separation component; the liquid storage tank is communicated with the bottom end of the condenser. The invention has simple structure, is convenient for modular production, can be conveniently use for extracting that volatile oil of plants and Chinese herbal medicines, accelerates the extraction speed and efficiency, and improve the quality of the volatile oil.



21: 2022/08662. 22: 2022/08/03. 43: 2022/11/03  
51: C02F

71: Renmin University of China

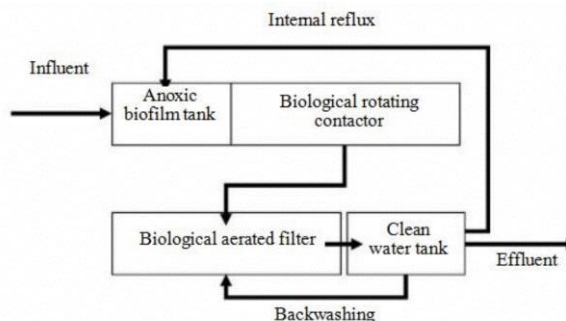
72: LIU Guohua, QI Lu, LI Qiangang, WANG Jian, XU Xianglong

#### 54: EFFICIENT COUPLED TYPE RECYCLABLE RURAL SEWAGE TREATMENT DEVICE

00: -

The invention discloses an efficient coupled type recyclable rural sewage treatment device, which comprises a biological rotating contactor tank, a biological aerated filter tank and a clean water tank. Firstly, sewage enters the biological rotating contactor tank (anoxic biofilm tank+biological rotating contactor tank), and the effluent of anoxic biofilm tank enters the biological rotating contactor tank through overflow weir. The outlet of biological rotating contactor is connected with the inlet of biological aerated filter, and the outlet of biological aerated filter is connected with clean water tank. The backwashing water is extracted from the clean water tank and enters the biological aerated filter, which is provided with a backwashing water outlet. The bottom of the clean water tank is provided with reflux equipment, which flows back to the anoxic tank for recycling treatment again, and the clean water is discharged from the overflow port at the upper part

of the clean water tank. The bottom of the biological aerated filter is provided with an aeration head. The device is provided with an upper layer and a lower layer, which can be coupled into a box body. The device is simple, saves space, can realize integration, has low investment, good purification effect, can efficiently remove organic matter and nitrogen from sewage, and is suitable for rural sewage treatment.



21: 2022/08663. 22: 2022/08/03. 43: 2022/11/03  
51: A61K

71: Zhengzhou University of Industrial Technology  
72: FENG Yali, LI Ke, YAO Huina, ZHENG Yujing, LIAN Chuang, YIN Weiping, SUN Shuaihao, CONG Yang

#### 54: ORAL PREPARATION OF SYRINGA PUBESCENS TURCZ. FOR CLEARING THROAT AND BENEFITING LUNG, PREPARATION METHOD AND APPLICATION THEREOF

00: -

The invention discloses an oral preparation of *Syringa pubescens* Turcz. for clearing throat and benefiting lung, its preparation method and application, and belongs to the technical field of pharmaceutical preparations. The preparation method of the oral preparation comprises the following steps: drying *Syringa pubescens* Turcz. at a low temperature, distilling to obtain distillate, and uniformly mixing the distillate to obtain the *Syringa pubescens* Turcz. oral preparation for clearing throat and benefiting lung. The oral preparation of *Syringa pubescens* Turcz. for clearing throat and benefiting lung provided by the invention contains more than 60% of aromatic medicinal ingredients and more than 15% of sesquiterpene compounds, and these medicinal ingredients have obvious anti-inflammatory, antibacterial and antiviral effects, so it has obvious effects in preventing and treating

respiratory diseases caused by common cold, such as fever, sore throat, cough, wheezing and phlegm, and has simple preparation process, low cost, high content of effective ingredients and convenient administration. In addition, the product is pure natural, safe and effective, without any flavoring agent, preservative and other additives. Therefore, it is suitable for all people and easy to popularize and apply.

21: 2022/08664. 22: 2022/08/03. 43: 2022/11/03  
51: G09B

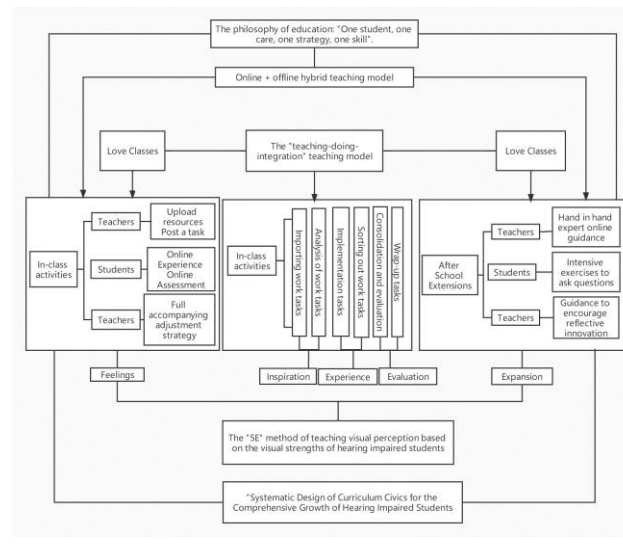
71: Chen GuiLin, Song PanTao

72: Chen GuiLin, Song PanTao

**54: 5E TEACH SYSTEM AND METHOD FOR VISUAL PERCEPTION OF HEARING-IMPAIRED STUDENT**

00: -

The invention relates to the technical field of teaching for hearing-impaired students, and discloses a 5e teaching system and a method for visual experience of the hearing-impaired students, Inspiration module, experience module, evaluation module and expansion module. Through experience and participation, the application and innovation of knowledge are realized, which is conducive to cultivating students'scientific inquiry literacy, creating five-step progressive teaching links in line with the cognitive law of hearing-impaired students, such as "feeling", "inspiration", "experience", "evaluation" and "expansion", so that hearing-impaired students can better feel the real task flow of project-based teaching and give full play to their visual potential. Develop multi-dimensional evaluation of learning quality, encourage exploratory expansion of knowledge learning, and meet the special needs of the learning field.



21: 2022/08665. 22: 2022/08/03. 43: 2022/11/03  
51: A01C

71: Jiangxi Red Soil Research Institute

72: Xiao Guobin, Yechuan, Li Yazhen, Zheng Wei, Xiao Xiaojun, Huang Tianbao, Lv Weisheng, Wu Yan, Hu Wenting, Liu Xiaosan

**54: LIGHT-SIMPLIFIED FERTILIZATION METHOD FOR HIGH YIELD-TRIPLE CROPPING-DIRECT SEEDING RAPE IN RED-SOIL RICE FIELD**

00: -

The invention discloses a light-simplified fertilization method for high yield-triple cropping-direct seeding rape in red-soil rice field, which is characterized in that the fertilization amount is as follows: accurately applying 10-12 kg of N, 4-5 kg of P<sub>2</sub>O<sub>5</sub>, 5-6 kg of K<sub>2</sub>O, 1.0 kg of borax per mu; and applying the fertilizer twice. Compared with the prior art, the invention has the advantages that: firstly, it can ensure the double-cropping rice production; meanwhile, it can ensure the high yield of the triple-cropping direct-seeding rape in the winter leisure field, which can promote the income increase and effectively restore the triple-cropping rape production; secondly, this fertilization technology integrates the annual nutrient demand of early rice-late rice-rape production mode, accurately applies fertilizer, simplifies the number of fertilization time, improves the fertilizer utilization rate of rape, reduces labor, saves the production cost of rape, reduces the labor intensity, meets the demand of light-simplified rape production, and enables the triple cropping rape in red-soil rice field to quickly resume production.

21: 2022/08666. 22: 2022/08/03. 43: 2022/11/02  
51: A01G

71: Environment and Plant Protection Institute,  
Chinese Academy of Tropical Agricultural Sciences  
72: GONG Deqiang, HU Meijiao, LI Min, GAO  
Zhaoyin

**54: PRE-HARVEST APPLICATION METHOD FOR  
IMPROVING PRESERVATIVE AND FRESH-  
KEEPING EFFECT OF CHERRY TOMATOES**

00: -

The invention discloses a pre-harvest application method for improving the anti-corrosion and fresh-keeping effect of cherry tomatoes, which comprises the following steps: (1) before cherry tomatoes are raised and sown, dry seeds are soaked in water, and then soaked in mixed agent A; the mixed agent A includes gamma-aminobutyric acid, salicylic acid and harpin protein; (2) spraying mixed agent B on cherry tomato fruit in small fruit period and color-changing period; the mixed agent B includes gamma-aminobutyric acid, salicylic acid, compound sodium nitrophenolate and emulsifier. The cherry tomatoes treated by this pre-harvest method are harvested when the fruit surface is all red, and stored in a foam box at normal temperature, which can effectively reduce the fruit decay during storage and has good preservative and fresh-keeping effects. This pre-harvest technology is easy to apply, simple to operate, green, safe and efficient, eco-friendly and has good economic and social benefits.

21: 2022/08667. 22: 2022/08/03. 43: 2022/11/02  
51: A01G

71: Jiangxi Red Soil Research Institute  
72: Xiao Guobin, Li Yazhen, Xiao Fuliang, Xiao  
Xiaojun, Lv Weisheng, Zheng Wei, Huang Tianbao,  
Ye Chuan, Liu Xiaosan, Li Zhongping, Chen Guojun,  
Hu Wenting, Wu Yan, Ye Deping

**54: PLANTING METHOD OF ANNUAL TWO-  
PLANTING AND FOUR-HARVESTING IN RED-  
SOIL RICE FIELD**

00: -

The invention discloses a planting method of annual two-planting and four-harvesting in red-soil rice field, comprising the following steps: Step 1, sowing rape in late October, and base fertilizer is applied in combination with sowing; top dressing is applied for the first time in late December or early January of the following year; tender stems of rapes are picked in late January of the following year, and nitrogen

fertilizer is applied for the second time immediately after picking the tender stems; in mid-May, rapeseeds are harvested mechanically; Step 2, throwing middle-season rice in the field in mid-May, and base fertilizer is applied in combination with mechanical field preparation, topdressing is applied for the first time to the whole field at tillering stage; the topdressing is applied for the second time at heading stage, and finally the topdressing is applied for the third time 5-7 days before harvest; mechanically harvesting middle-season rice in late August, wherein the rice straws are crushed and directly returned to the field; mechanically harvesting the ratooning rice in late October. In the invention, the annual rice-rape rotation mode is used for planting twice and harvesting four times; water-drought rotation has been realized, and the variety, quantity and quality of agricultural products have been increased, thus improving the guarantee of grain and oil self-sufficiency and enriching and optimizing the supply of agricultural products.

21: 2022/08668. 22: 2022/08/03. 43: 2022/11/02  
51: C04B

71: SANMING UNIVERSITY, FUJIAN NO.1  
CONSTRUCTION GROUP CO.,LTD.  
72: ZHANG Huizhi, LIU Jifeng, ZHANG Changtao,  
LIN Zhongdong, WU Panlong

**54: GEOPOLYMER CONCRETE AND  
PREPARATION METHOD THEREOF**

00: -

The invention discloses geopolymer concrete and a preparation method thereof, relating to the technical field of civil engineering. The concrete comprises 40-60 parts of monocomponent geopolymer in parts by weight; 35-40 parts of water; 90-110 parts of recycled coarse aggregate of construction waste; 40-60 parts of recycled fine aggregate of construction waste; 0.75-1.0 part of thixotropic accelerator; 0.5-1.5 part of retarder. Compared with the prior art, the geopolymer material has the advantages of simple preparation method and low cost; moreover, the geopolymer concrete can be used in 3D printing materials, keeping enough interlayer adhesion and having enough strength to support the moldability of the printed layer.

21: 2022/08669. 22: 2022/08/03. 43: 2022/11/04  
51: E04C



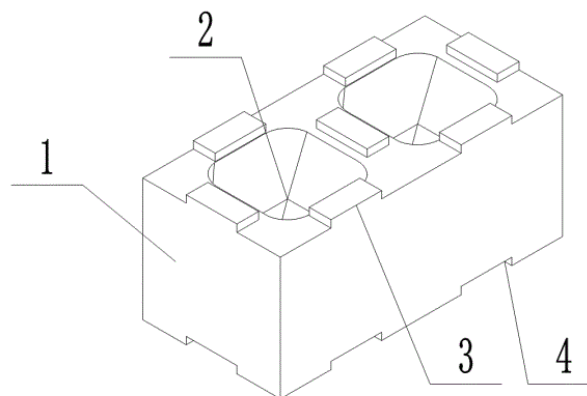
71: FUJIAN NO.1 CONSTRUCTION GROUP CO.,LTD., SANMING UNIVERSITY

72: ZHANG Changtao, LIN Zhongdong, WU Panlong, ZHANG Huizhi, LIU Jifeng

**54: ONE-PART GEOPOLYMER FULLY RECYCLED AGGREGATE SELF-INSULATION CONCRETE BLOCK**

00: -

The application discloses a one-part geopolymer fully recycled aggregate self-insulation concrete block, which comprises a body, the top end of the body is provided with a through hole; the top end of the body is fixedly connected with an insert block component, the bottom end of the body is provided with a lower groove component, and the insertion block component is correspondingly arranged with the lower groove component; the insert block component is inserted into the lower groove component of the upper body; the material of the body comprises a one-part geopolymer, a graded regenerated fine aggregate, a graded regenerated coarse aggregate and a heat insulation material; the one-part geopolymer comprises a plurality of wastes with the main components of SiO<sub>2</sub> and Al<sub>2</sub>O<sub>3</sub>, which are mixed after calculation. According to the application, industrial waste residue and tailings are used to prepare one-part geopolymer instead of cement, and graded recycled fine aggregate, graded recycled coarse aggregate and thermal insulation material are used as main components to prepare the body, so that the carbon emission caused by cement production can be significantly reduced, and the coordinated utilization of various solid wastes can be realized, which is beneficial to the implementation of sustainable development.



Schematic diagram of main block

1, body; 2, through holes; 3, bumps; 4, grooves

21: 2022/08670. 22: 2022/08/03. 43: 2022/11/03  
51: A01C

71: Shandong Institute of Pomology

72: WANG Laiping, XUE Xiaomin, NIE Peixian, DONG Fang, LU Ninglin, CHEN Hongfei

**54: ANTI-STRESS ENHANCING REAGENT FOR FRUIT TREES, APPLICATION METHOD AND APPLICATION THEREOF**

00: -

An anti-stress enhancing reagent for fruit trees, its application method and application, contains silicone, betaine, sorbitol, ABA and amino acid calcium. Silicone is used as spreading agent, which can increase leaf surface wetting, ABA can improve the stress resistance of fruit trees, ABA, sorbitol, betaine and amino acid calcium can synergistically enhance leaf photosynthesis, sorbitol can supplement carbohydrate in leaves and fruits, and increase fruit sugar accumulation. The amino acid calcium, polymeric sodium borate, K<sub>2</sub>O and P<sub>2</sub>O<sub>5</sub> provide nutrition for the leaves, so that the natural growth of fruit trees in the reverse state is no longer reversed, thus improving the growth effect of fruit trees in the reverse state.



21: 2022/08671. 22: 2022/08/03. 43: 2022/11/03  
51: C08L

71: Beihua University

72: YANG Xujiao, CHANG Guangli, ZHAO Huan

**54: HIGH-TEMPERATURE RESISTANT POLYMER ASPHALT AND PREPARATION METHOD THEREOF**

00: -

This invention discloses a high-temperature resistant polymer asphalt and a preparation method thereof, and the invention relates to the technical field of modified asphalt. 1. The high-temperature resistant polymer asphalt is prepared from the following raw materials in parts by weight: 140-160 parts of asphalt, 2-3 parts of isotactic polypropylene, 3-7 parts of dioctyl phthalate, 1-3 parts of sugar alcohol, 2-5 parts of stearamide, 0.5-1.2 parts of alumina, 14-16 parts of silicone oil, 3-6 parts of silane coupling agent, 1-5 parts of antioxidant and 2-6 parts of high-temperature resistant additive. The high-temperature resistant polymer asphalt prepared by the invention has the advantages of low temperature sensitivity, high temperature resistance, high stability, high

elasticity and the like, and improves the service performance of the asphalt pavement under high temperature conditions.

21: 2022/08686. 22: 2022/08/03. 43: 2022/09/16

51: C07D; A01N; A01P

71: QINGDAO KINGAGROOT CHEMICAL COMPOUND CO., LTD.

72: LIAN, LEI, PENG, XUEGANG, HUA, RONGBAO, ZHAO, DE, CUI, QI

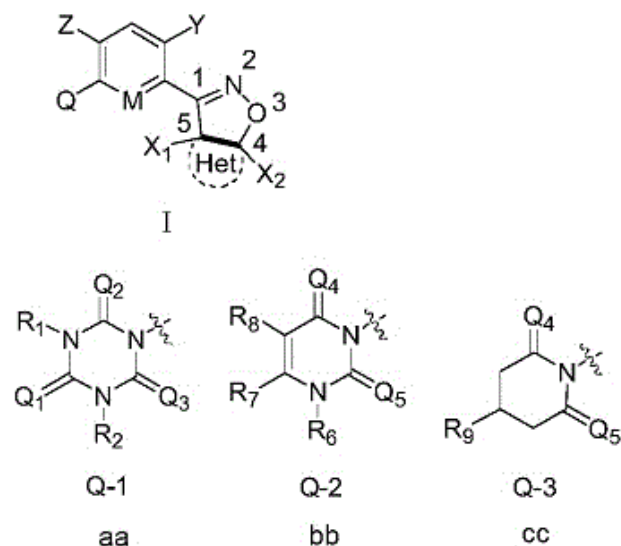
33: CN 31: 202010056836.9 32: 2020-01-16

33: CN 31: 202010131605.X 32: 2020-02-28

**54: FUSED RING SUBSTITUTED AROMATIC COMPOUND AND PREPARATION METHOD THEREFOR, HERBICIDAL COMPOSITION, AND USE THEREOF**

00: -

The invention belongs to the technical field of pesticides, and specifically relates to a fused ring substituted aromatic compound and a preparation method therefor, a herbicidal composition, and the use thereof. The fused ring substituted aromatic compound is as represented by general formula I, wherein Q represents aa, bb or cc, etc.; Y represents a halogen, a haloalkyl, cyano, nitro or amino; Z represents hydrogen, a halogen or hydroxyl; M represents CH or N; Het represents a cyclic structure that shares two carbon atoms at the 4- and 5-positions with an isoxazoline ring to form a fused ring; and X<sub>1</sub> and X<sub>2</sub> each independently represents hydrogen, a halogen, or nitro, etc. The compound has an excellent herbicidal activity against grassy weeds, broadleaf weeds, etc. even at a low application rate, and has a high selectivity to crops.



21: 2022/08726. 22: 2022/08/04. 43: 2022/09/21  
51: A61B

71: Guang 'an People's Hospital

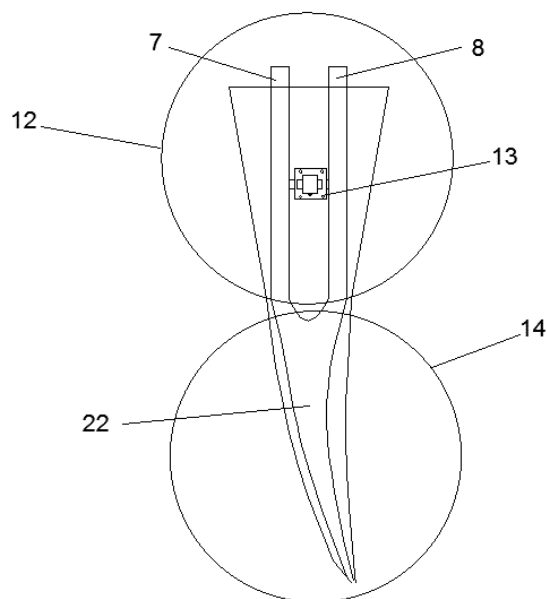
72: He Jiahong, Dong Bin, Yu Yinghong, Mao Huanhuan, Liu Huan, Yang Ning, Peng Chuan, Chen Qinmei

**54: CONTROLLABLE AIR-BLOWING AND LIQUID-FLUSHING DEVICE FOR SURGICAL FIELD IN CARDIAC SURGERY**

00: -

The invention disclose a controllable air-blowing and liquid-flushing device for surgical field in cardiac surgery, comprising comprising a pressure and air supply component, a liquid supply component, a liquid-flushing and air-blowing component and a change-over switch, wherein the liquid supply component is used for supplying flushing liquid to the liquid-flushing and air-blowing component; the air and pressure supply component is used for supplying air to the liquid-flushing and air-blowing component and supplying pressure to the liquid supply component; the liquid-flushing and air-blowing component comprises a liquid inlet pipe, an air inlet pipe, a handle and a blowing nozzle, wherein the liquid inlet pipe and the air inlet pipe are arranged in the handle, one end of the blowing nozzle is connected with one end of the handle, and the blowing nozzle is internally provided with a catheter changing from wide to narrow for making the liquid under pressure enter through the wide mouth end and flow out from the narrow mouth end

to form the trickle with strong impulsion; the wide mouth end of the catheter is connected with one end of the liquid inlet pipe and the air inlet pipe near the blowing nozzle, and the change-over switch is arranged on the handle and is used for controlling the opening/closing of the liquid inlet pipe and the air inlet pipe so that liquid or air can enter the catheter. The invention can clean blood with high-pressure trickle, and has the advantages of two modes of liquid flushing and air blowing as well as less use of flushing liquid.



21: 2022/08759. 22: 2022/08/04. 43: 2022/11/03  
51: C03B

71: ANHUI SCIENCE AND TECHNOLOGY UNIVERSITY

72: CHEN, Junhua, CHEN, Chen, KE, Xiang, GUO, Yu, YAN, Haoran, ZHOU, Yongsheng, DING, Zhijie, ZHANG, Dapeng, ZHAO, Wei, CHU, Jianqiang, ZHANG, Keyun, CHENG, Zhanqiang

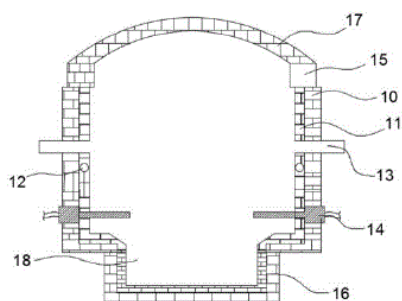
33: CN 31: 202111256612.3 32: 2021-10-27

**54: ENVIRONMENT-FRIENDLY CORROSION-RESISTANT GLASS ELECTRIC MELTING FURNACE**

00: -

The present disclosure discloses an environment-friendly corrosion-resistant glass electric melting furnace, comprising: a furnace body, wherein the furnace body comprises tank wall bricks, tank bottom bricks and outer wall bricks, the tank wall bricks and the tank bottom bricks are both zircon-corundum

bricks, the outer wall bricks are built on the outer sides of the tank wall bricks and the tank bottom bricks, the outer wall bricks are corundum bricks, a plurality of groups of heating electrodes are transversely inserted around the lower middle portion of the furnace body at equal intervals, and the heating electrodes penetrate through the outer wall bricks and the tank wall bricks and extend into a melting tank. The disclosure can melt raw materials in the melting tank into glass liquid through the heating electrodes, and the circle-shaped annular holes are formed in the zircon-corundum bricks, so air can cool the zircon-corundum bricks.



composite material, increase the bonding strength and electrical contact performance between the carbon material and the substrate, and modify the electron, ion and atom transmission and chemical structure characteristics of the material surface. Therefore, the carbon-based composite materials prepared by this disclosure have excellent physical and chemical properties, which can be used for various battery electrodes, capacitor electrodes, various sensors, solar cell electrodes, electrolytic water hydrogen production electrodes, hydrogen storage materials, catalysts and catalyst carriers, composite materials, reinforcing materials, etc.

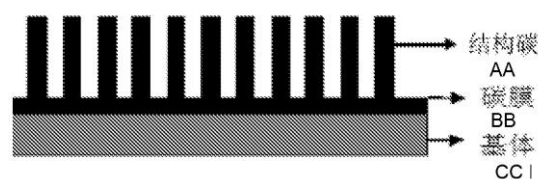


图 4

AA Structural carbon  
BB Carbon film  
CC Matrix

21: 2022/08760. 22: 2022/08/04. 43: 2022/11/03  
51: C01B; H01M

71: QINGDAO HENGNENGD ENERGY TECHNOLOGIES CO., LTD.

72: ZHANG Yongheng

33: CN 31: 202011370284.5 32: 2020-11-30

**54: CARBON-BASED COMPOSITE MATERIAL, PREPARATION METHOD THEREFOR, AND APPLICATION THEREOF**

00: -

The invention discloses a carbon-based composite material and its preparation method and application, which belongs to the technical field of carbon material preparation. The carbon-based composite material is composed of the substrate, carbon film and structural carbon. The carbon film is loaded on the substrate surface, and the structural carbon grows on the carbon film forming an integrated structure with the carbon film. In the preparation process, the alkali metal and/or alkaline earth metal catalysts are used to make the carbon source deposit an integrated carbon film and structural carbon on the substrates surface, so as to avoid the use of binder. The carbon film and structural carbon improve the effective specific surface area of the

21: 2022/08773. 22: 2022/08/05. 43: 2022/11/02  
51: B01L

71: Xuzhou College of Industrial Technology

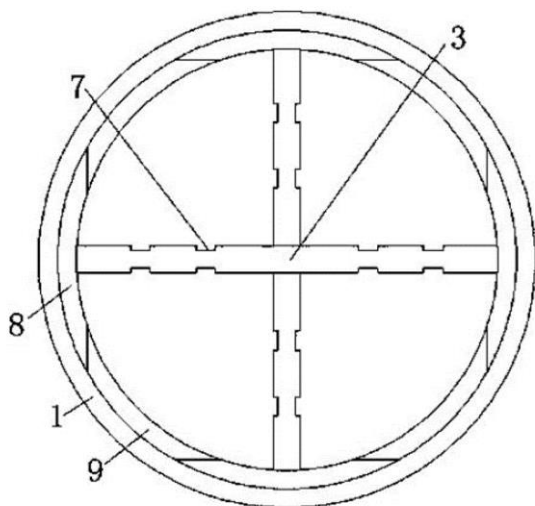
72: Wang Zhongguang, Zhao Guiying, Liu Feng, Wang Yanqiu, Wang Zaixue, Xu Yunhui, Weng Guowen, Yang Zhao, Liu Taichuang, Zhang Zhaohong, Zhao Xuan

**54: A TEST CUP FOR TESTING THE OIL RESISTANCE OF RUBBER PRODUCTS**

00: -

The utility model belongs to the technical field of experimental instruments, in particular to a test cup for testing the oil resistance of rubber products, wherein it comprises a cylindrical cup body, the cross section of the inner cavity of the cup body is a T-shaped structure, and the diameter of the cavity close to the open end of the cup body is larger; the test cup also includes a sample holder, the sample holder is a cross-shaped frame body, the four brackets of the sample holder are provided with hook grooves, and the free ends of the four brackets of the sample holder are provided with annular pads. A T-shaped cavity inside the cup body is formed with an annular shaft shoulder in the cup body, and the

annular backing plate matches the diameter of the annular shaft shoulder. The sample holder is used to hang the sample on the sample holder to ensure that the sample is vertically suspended in the medium. There are marks on the hook groove of the sample holder, which can clearly identify each sample, and the comparison is more accurate; the cup body is provided with a cup cover, which plays a sealing role during high temperature test.



21: 2022/08774. 22: 2022/08/05. 43: 2022/11/02  
51: C12N; C12P  
71: Changde Yungang Biotechnology Co., Ltd.  
72: DENG, Jiaguo, LI, Yuezhong, LI, Guojun, ZENG, Fei, SHENG, Min, OUYANG, Wenkai, XIE, Xiaoguo, TANG, Xuewen  
33: CN 31: 202111370590.3 32: 2021-11-18  
**54: METHOD FOR PRODUCING PIG BILE SALTS**  
00: -

Disclosed is a method for producing pig bile salts, including process steps of special hydrolase preparation, enzyme hydrolysis, deoiling, decoloration, concentration, drying, crushing and the like, wherein the enzyme hydrolysis includes steps of strain selection, fermentation medium preparation, fermentation, hydrolase extraction, hydrolase detection and the like. According to the process method, defects of violent reaction conditions, long time consumption, high energy consumption, difficulty in removal of grease, complex process and the like in the existing process are overcome. The method is simple in production process, short in time consumption, mild in condition, low in energy consumption, environment-friendly and easy to

implement. The pig bile salts produced have obvious microbial effect characteristics on a BGLB culture medium and an intestinal bacteria screening culture medium, and the microbial effect is more obvious than that of a culture medium prepared from the pig bile salts produced by the prior art.

21: 2022/08775. 22: 2022/08/05. 43: 2022/11/02  
51: C12C

71: Yancheng Teachers University  
72: ZHANG, Yanzhou, TANG, Xingyao, KANG, Yijun, HONG, Jian, SHEN, Min, ZHU, Dewei, WANG, Huanli, SUN, Miao

33: CN 31: 202111043878.X 32: 2021-09-07

**54: BINHAI CYNANCHUM AURICULATUM ROOT BEER WITH HIGH AUXILIARY MATERIAL RATIO AND PREPARATION METHOD THEREOF**

00: -

Provided are a Binhai cynanchum auriculatum root beer with a high auxiliary material ratio and a preparation method thereof. According to the method, the cynanchum auriculatum root starch is used as a main saccharification raw material based on the characteristic that the cynanchum auriculatum root is rich in starch, beer brewing is performed at a ratio of cynanchum auriculatum root to barley malt being 1:1, and additional enzymes such as cellulase and pullulanase are selected to strengthen the saccharification of cynanchum auriculatum root starch. The mixed saccharified mash of cynanchum auriculatum root and malt is co-fermented, which can not only give the beer a unique cynanchum auriculatum root flavor, but also reduce the influence of bitter substances in cynanchum auriculatum root, so that the flavor substances of the cynanchum auriculatum root and the malt beer are more coordinated. The content of arginine in the beer is 185-210 mg/L.

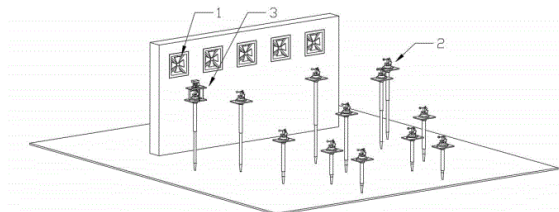
21: 2022/08776. 22: 2022/08/05. 43: 2022/11/02  
51: F04D; G06F

71: Sichuan Academy of Animal Husbandry Science  
72: GONG, Jianjun, HE, Zhiping, LV, Xuebin, TAO, Xuan, LEI, Yunfeng, ZENG, Kai, CHEN, Xiaohui, YANG, Yuekui, YING, Sancheng, GU, Yiren, TU, Teng, YANG, Xuemei, LIANG, Yan, WANG, Yan, ZHONG, Zhijun, HU, Zihui, YANG, Kun, AN, Rui, ZHANG, Qing

#### 54: METHOD FOR CONSTRUCTING COMPLEX WIND FIELD MODEL BASED ON MULTIPLE INDEPENDENT CONTROL PARAMETERS

00: -

The present invention provides a method for constructing a complex wind field model based on multiple independent control parameters, the method includes the following steps: S1, arranging a plurality of wind field measurement points in arrays in the wind field space formed by fans; S2: turning on the fans and adjusting the powers of fans, and obtaining the information on wind speed and wind direction corresponding to each wind field measurement point under powers of different fans by detecting through the wind speed sensor and the wind direction sensor; and S3: obtaining a wind field model with power parameters of different fans. Through the method, the wind field generated by fans in the existing pigsties can be analyzed.



21: 2022/08777. 22: 2022/08/05. 43: 2022/11/02  
51: E02B; E04B; E04G

71: The First Construction Engineering Company LTD. Of China Construction Second Engineering Bureau

72: HE, Junhong, ZHANG, Han, LI, Pengfei, OU, Qingsong, SHANG, Liying, WU, Zhongmao, CHEN, Chao, ZHONG, Yingshu

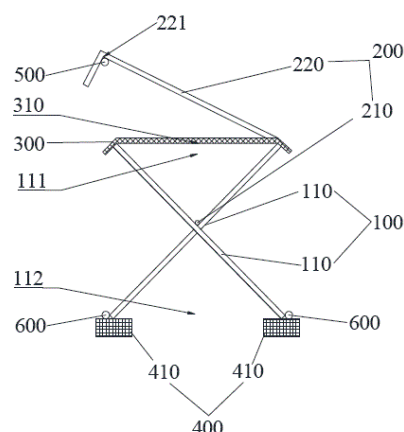
33: CN 31: 202220815871.9 32: 2022-04-08

#### 54: WATER-STOP STEEL PLATE REINFORCEMENT DEVICE

00: -

The embodiment of the present disclosure discloses a water-stop steel plate reinforcement device, which relates to the technical field of civil engineering. The water-stop steel plate reinforcement device includes a plurality of supporting devices, a connecting device and a water-stop steel plate, wherein each of the plurality of supporting devices comprises two first strips, and the two first strips intersect to form an upper opening; the plurality of supporting devices are arranged under the water-stop steel plate; the connecting device comprises a second strip and a

plurality of connecting columns, the second strip is disposed in the upper opening to be connected to the plurality of the supporting devices, and the plurality of the connecting columns are arranged above the water-stop steel plate. Achieving the effect of reducing welding connections, improving work efficiency, and avoiding damage to the structure caused by excessive welding.



21: 2022/08778. 22: 2022/08/05. 43: 2022/11/03  
51: G06Q

71: Northwest Institute of Plateau Biology, Chinese Academy of Sciences

72: LUO, Caiyun, ZHAO, Liang, HUO, Lili, CHEN, Kelong, ZUO, Chao, ZHAO, Xinquan, WANG, Shiping, CHEN, Xin

#### 54: METHOD FOR ACCOUNTING CARBON VALUES OF THREE UTILIZATION PATTERNS OF GRASSLAND

00: -

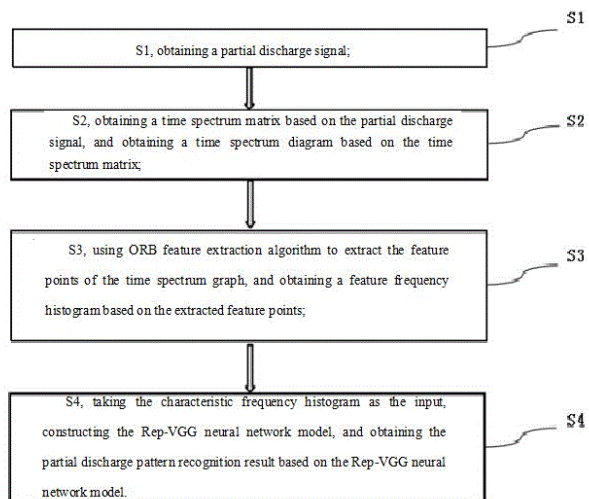
Provided is a method for accounting carbon values of three utilization patterns of grassland. The method includes: selecting sample plots, determining environment monitoring contents, determining a sampling method, measuring soil bulk density, measuring contents of soil organic carbon and plant samples, and accounting the economic carbon values. By means of the method, the carbon values of the three utilization patterns of grassland can be accurately accounted, operation is simple, and efficiency of accounting the carbon values of the three utilization patterns of grassland can be greatly improved.

21: 2022/08779. 22: 2022/08/05. 43: 2022/11/03  
51: G06K

71: NORTH CHINA ELECTRIC POWER UNIVERSITY  
 72: XIE Qing, ZHANG Yutong, XIE Jun, WANG Chunxin, CAI Yang, LI Jinghang, XU Zhikang, DUAN Qijun, LI Yan, LV Fangcheng

**54: HIGHLY ROBUST PARTIAL DISCHARGE PATTERN RECOGNITION METHOD**

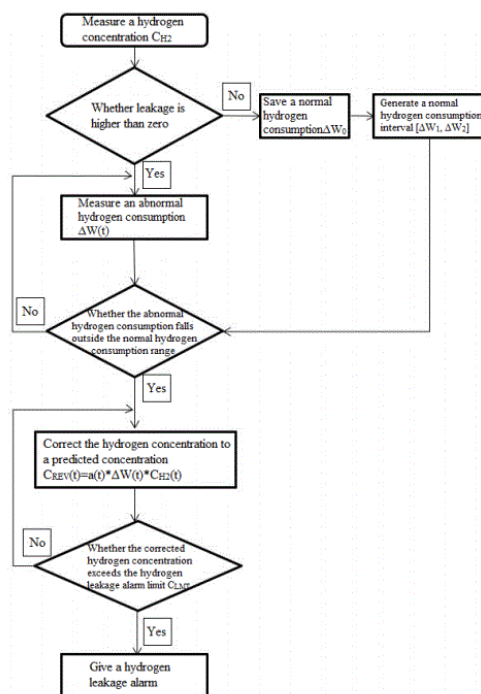
00: -  
 The invention provides a high-robustness partial discharge pattern recognition method, which comprises that following steps: based on partial discharge signals, obtain a time spectrum matrix, and based on the time spectrum matrix, obtaining a time spectrum diagram; The ORB feature extraction algorithm is used to extract the feature points of the time spectrum, and the feature frequency histogram is obtained based on the extracted feature points. Taking the characteristic frequency histogram as input, the Rep-VGG neural network model is constructed, and the partial discharge pattern recognition results are obtained based on the Rep-VGG neural network model. The invention meets that application requirements of on-site partial discharge fault diagnosis and greatly improves the speed and accuracy of pattern recognition.



21: 2022/08780. 22: 2022/08/05. 43: 2022/11/02  
 51: B60L; H01M  
 71: CATARC Automotive Test Center (Tianjin) Co., Ltd., CHINA AUTOMOTIVE TECHNOLOGY AND RESEARCH CENTER CO.,LTD.  
 72: REN, Meilin, LI, Jingyuan, LING, Jian, GUO, Ting, LIANG, Rongliang, WU, Chunling, WU, Taoyang

**54: PREDICTING AND WARNING METHOD BASED ON ABNORMAL HYDROGEN CONSUMPTION OF HYDROGEN LEAKAGE FOR HYDROGEN INTERNAL COMBUSTION ENGINE VEHICLE OR HYDROGEN FUEL CELL VEHICLE**

00: -  
 The present invention relates a predicting and warning method based on abnormal hydrogen consumption of hydrogen leakage for a hydrogen internal combustion engine vehicle or a hydrogen fuel cell vehicle. The present application can optimize signals collected by sensors by using an algorithm, achieve information interaction among modules, and give a timely hydrogen safety alarm. In the case of hydrogen leakage, when abnormal hydrogen consumption is measured, a high-sensitivity hydrogen concentration sensor can also measure micro-hydrogen leakage. According to the abnormal hydrogen consumption, a concentration weighted by a hydrogen consumption algorithm can be calculated for a hydrogen concentration, so as to reach a hydrogen concentration alarm limit in advance, and shorten prediction and alarm time of hydrogen leakage.



21: 2022/08786. 22: 2022/08/05. 43: 2022/09/16  
 51: H02J  
 71: MOUTAI INSTITUTE

72: YUN, LIU, PENG, TIAN , LANG, LI, SHIXUN, SHEN , KE, ZHOU , HUAZHONG, FENG  
 33: CN 31: 202210678060.3 32: 2022-06-15

**54: ZERO-SAMPLE PICTURE QUESTION-AND-ANSWER METHOD BASED ON SEMANTIC SPACE MAPPING**

00: -

The invention discloses a zero-sample picture question-and-answer method based on semantic space mapping, comprising: first, extracting picture information into picture area features, extracting nouns from question sentences, using a pre-trained word embed to represent noun features, and designing a noun-guided attention network; second, using the word embed to encode questions features, enhancing the questions features by means of cross-modality information after semantic alignment to generate question-related multi-modality representations, and designing a question-guided attention network; and finally, establishing a semantic space shared by answers, performing semantic matching, semantic distance control and semantic clustering in the space, mapping joint embed features of question-picture pairs into the semantic space which gather around corresponding answers, and finding a best match in the semantic space for answer deduction. The invention models the feature association between pictures and questions, realizes the prediction of unlabeled answers, and improves the accuracy of zero-sample picture question-and-answer.

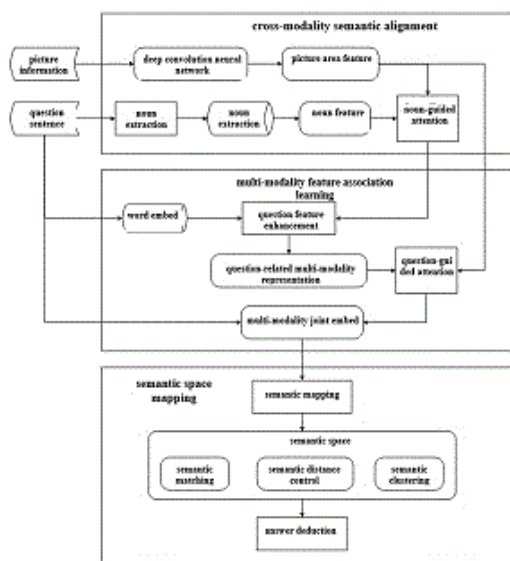
21: 2022/08787. 22: 2022/08/05. 43: 2022/09/16  
 51: G06K  
 71: MOUTAI INSTITUTE

72: YUN, LIU, PENG, TIAN , LANG, LI, SHIXUN, SHEN , KE, ZHOU , HUAZHONG, FENG  
 33: CN 31: 202210680394.4 32: 2022-06-15

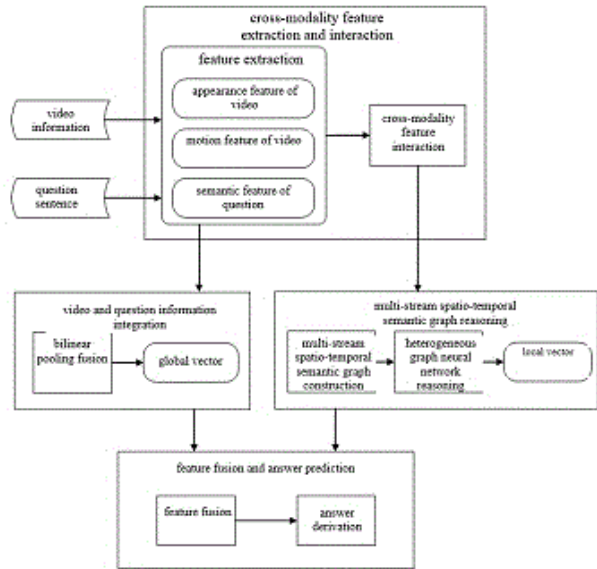
**54: VIDEO QUESTION-AND-ANSWER METHOD BASED ON CROSS-MODALITY HETEROGENEOUS GRAPH NEURAL NETWORK**

00: -

The invention discloses a video question-and-answer method based on a cross-modality heterogeneous graph neural network, which comprises the following steps: dividing information in a video question-and-answer task into a video frame, a video clip and a question sentence, extracting them into corresponding features respectively, and performing cross-modality interaction on the three types of features by using multi-head and multi-hop attention; constructing a multi-stream spatio-temporal semantic graph based on the cross-modality features, with each node in the graph corresponding to a video frame, clip or question word; on a heterogeneous graph, performing intra-modality and inter-modality synchronous reasoning by means of a graph neural network, to generate a local reasoning vector; and based on a multi-modality bilinear pooling model, fusing the video and question information to realize overall feature association and generate a global vector; and integrating the local and global vectors into a multi-modality joint feature vector for answer derivation. According to the invention, the fine-grained association information is utilized, and answer prediction is realized by using the classification or regression technology according to the question types, so that the accuracy of video question-and-answer is obviously improved.



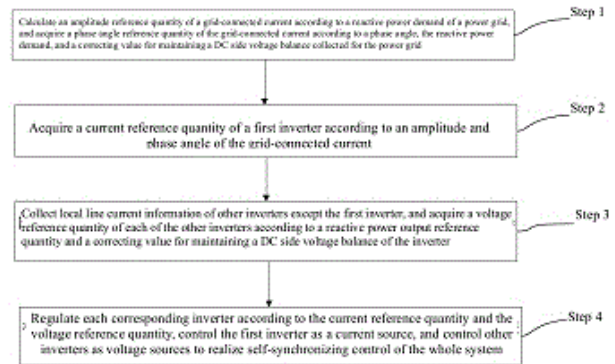




21: 2022/08788. 22: 2022/08/05. 43: 2022/09/16  
 51: H02J  
 71: MOUTAI INSTITUTE  
 72: LANG, LI, PENG, TIAN, SHIXUN, SHEN, YUN, LIU, KE, ZHOU, HUAZHONG, FENG  
 33: CN 31: 202210670257.2 32: 2022-06-14  
**54: SELF-SYNCHRONIZING CONTROL METHOD AND DEVICE FOR CASCADED STATCOM SYSTEM**  
 00: -

The invention discloses a self-synchronizing control method and device for a cascaded STATCOM system. The method comprises the following steps: calculating an amplitude reference quantity of a grid-connected current according to a reactive power demand of a power grid, and acquiring a phase angle reference quantity of the grid-connected current according to a phase angle, the reactive power demand, and a correcting value for maintaining a DC side voltage balance collected for the power grid; acquiring a current reference quantity of a first inverter according to an amplitude and phase angle of the grid-connected current; collecting local line current information of other inverters, and acquiring a voltage reference quantity of each of the other inverters according to a reactive power output reference quantity and a correcting value for maintaining a DC side voltage balance of the inverter; and regulating each corresponding inverter according to the current reference quantity and the voltage reference quantity, controlling the first inverter to serve as a current source, and

controlling the other inverters to serve as voltage sources to realize self-synchronizing control. The invention can reduce the dependence of the system on communication during normal operation, thereby improving the reliability of the system and reducing the one-time investment cost of the system.



21: 2022/08789. 22: 2022/08/05. 43: 2022/09/16  
 51: H02J  
 71: MOUTAI INSTITUTE  
 72: LANG, LI, PENG, TIAN, SHIXUN, SHEN, YUN, LIU, KE, ZHOU, HUAZHONG, FENG  
 33: CN 31: 202210670015.3 32: 2022-06-14  
**54: DECENTRALIZED ECONOMICAL OPERATION CONTROL METHOD FOR MICRO-GRID BASED ON CASCADED INVERTERS**  
 00: -

The invention discloses a decentralized economical operation control method for a micro-grid based on cascaded inverters, comprising: acquiring load voltage of the micro-grid, a total number of distributed micro-sources, and a functional relationship between generating cost and output active power of each distributed micro-source; according to the load voltage, the total number of the micro-sources, and the generating cost function, constructing a functional relationship between an optimal active power output of each distributed micro-source and load current; according to the load voltage and the function of the optimal power output, constructing a functional relationship between output voltage of each micro-source and the load current; with the output voltage as a voltage reference value of each micro-source, constructing a frequency reference value of each micro-source based on a synchronization theory; and adjusting each inverter according to the outer voltage loop and inner current

loop control technology and the PWM technology, so as to realize optimal economical operation control.

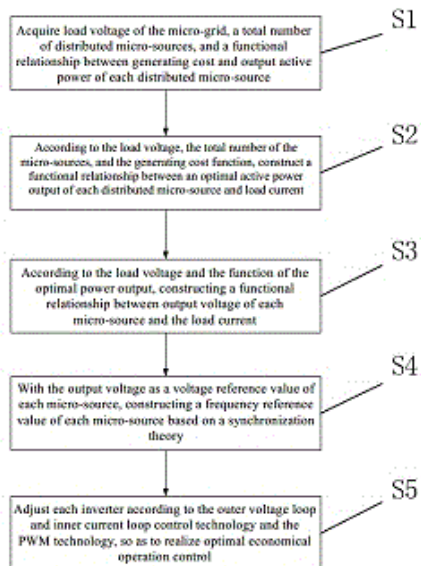


Fig. 13

spatial extent of a qualitative location based on a knowledge graph, thereby effectively solving the problem of fuzzy location cognition of human beings to the real world with an unclear spatial extent, and providing reference for geographic knowledge service and location intelligent perception.



21: 2022/08790. 22: 2022/08/05. 43: 2022/09/16  
51: G06F; G09B; G06T

71: HEFEI UNIVERSITY OF TECHNOLOGY, SHENZHEN DATA MANAGEMENT CENTER OF PLANNING AND NATURAL RESOURCE  
72: ZHANG , CHUNJU, ZHANG, LEI, CHEN , XUEYE, CHEN , XIN

**54: METHOD FOR CONSTRUCTING SPATIAL EXTENT OF QUALITATIVE LOCATION BASED ON A KNOWLEDGE GRAPH**

00: -

A method for constructing a spatial extent of a qualitative location based on a knowledge graph, the method comprising: step 1, constructing a location expression model; step 2, structural extracting of location knowledge in the text; step 3, realizing disambiguation and fusion of toponym entities on the basis of a similarity calculation method of a word vector; step 4, storing and visually expressing the location knowledge on the basis of a graph database; step 5, querying the location knowledge on the basis of the knowledge graph; step 6, constructing the spatial extent of the location on the basis of a spatial relationship semantic network; step 7, constructing the spatial extent of the location on the basis of a multi-layer attribute constraint model. The present invention realizes the construction of a

21: 2022/08900. 22: 2022/08/10. 43: 2022/10/17  
51: C25D

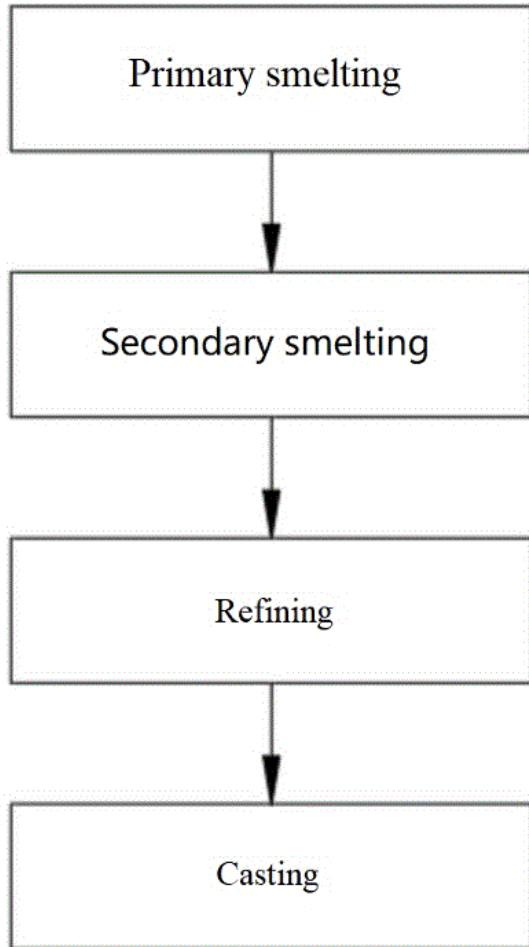
71: Anhui kelante Aluminum Industry Co., Ltd  
72: Zutang Pan, Maoqing Xiong, Xuebing Yuan  
33: CN 31: 114273616A 32: 2021-12-31

**54: ALUMINUM ALLOY PROCESSING TECHNOLOGY FOR HIGH-STRENGTH ANTI-THEFT LOCK CYLINDER**

00: -

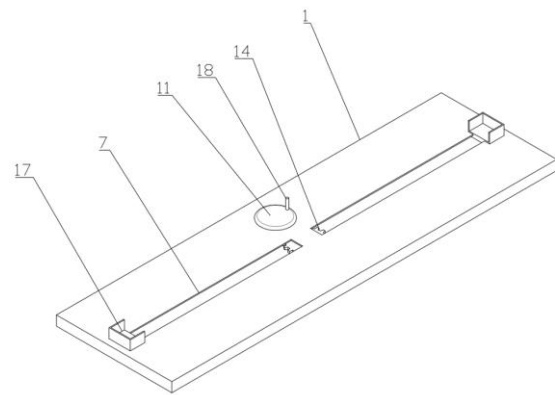
Provided is an aluminum alloy processing technology for a high-strength anti-theft lock cylinder. The technology includes: step one, conducting primary smelting on an aluminum ingot, to form primary molten aluminum; step two, injecting a slag-removal agent into the primary molten aluminum, conducting secondary smelting, standing and slag discharging to obtain secondary molten aluminum, and introducing nitrogen into the primary molten aluminum during the secondary smelting; step three, injecting a refining agent into the secondary molten aluminum, introducing nitrogen into the secondary molten aluminum in a refining process, conducting standing on refined secondary molten aluminum, and removing molten slag, to obtain molten aluminum; and step four, pouring the

molten aluminum into a casting mold, to form a cast, and putting the cast into a processing apparatus, to finally obtain a lock cylinder. In this way, a problem of low strength of an existing metal lock cylinder is solved.



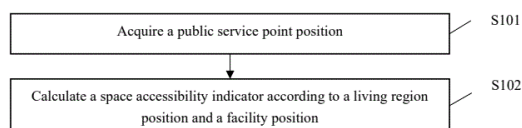
21: 2022/08901. 22: 2022/08/10. 43: 2022/10/17  
 51: A63B  
 71: Qian Zhi, Bao Liang  
 72: Qian Zhi, Bao Liang  
**54: STRETCHING DEVICE FOR YOGA TRAINING**  
 00: -  
 The invention discloses a stretching device for yoga training, comprising a base plate, a transmission mechanism, and an adjustment positioning mechanism; the base plate is provided with a transmission cavity matched with the transmission mechanism and an adjustment cavity matched with the adjustment positioning mechanism from bottom to top, respectively, and a first shaft through hole is provided between the transmission cavity and the

adjustment cavity; the top of the top plate is provided with a sliding groove communicated with the adjustment cavity, and one side of the sliding groove is provided with a second shaft through hole; the transmission mechanism comprises a driven gear, a transmission gear, and a turntable; the adjustment positioning mechanism comprises an adjustment gear, an adjustment tooth plate, a load-bearing sliding plate, and a limiting piece. The device drives the transmission gear to rotate through the turntable, and uses the meshing between the transmission gear and the driven gear to drive the driven gear and the second transmission shaft to rotate, so that the adjustment gear is meshed with the two adjustment tooth plates, to realize synchronous movement of the two limiting pieces; the stretching degree of the legs can be adjusted, which facilitates the stretching exercise for users with different leg lengths.



21: 2022/08902. 22: 2022/08/10. 43: 2022/10/17  
 51: G06Q  
 71: Institute of Urban Environment, Chinese Academy of Sciences  
 72: ZHANG, Guoqin, LIU, Wenhui, ZHAO, Yu, LIN, Tao, CAO, Xin  
 33: CN 31: 202111341582.6 32: 2021-11-12  
**54: PUBLIC SERVICE SPACE ACCESSIBILITY MEASUREMENT METHOD AND APPARATUS BASED ON PEOPLE DEMANDS**  
 00: -  
 One or more embodiments of this specification provide a public service space accessibility measurement method and apparatus based on people demands. The method includes: acquiring a public service point position, the public service point position including a living region position and a facility position; and calculating a space accessibility indicator according to the living region position and

the facility position. The accessibility of a public service facility space can be accurately measured, and a basis can be provided for planning and configuration of public service facilities. A composite accessibility indicator can also be calculated according to demand weights of different people for different facilities and a standardized accessibility indicator; and a public service matching state is compositely estimated according to different people demands.



21: 2022/08903. 22: 2022/08/10. 43: 2022/10/17

51: B01D; B23K; C04B

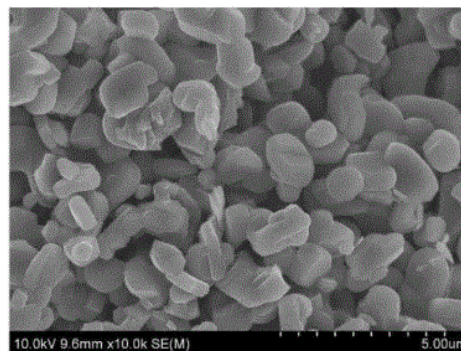
71: Anhui Shenghong Electronics Co., Ltd.

72: LIU, Guoqiang, ZHANG, Kuanwen, ZHANG, Haijun

#### 54: METHOD FOR PREPARING SODIUM POTASSIUM TITANATE WITH HIGH FLUIDITY AND MOISTURE RESISTANCE

00: -

The present disclosure provides a method for preparing sodium potassium titanate with high fluidity and moisture resistance, comprising the steps of: 1) weighing main materials and an auxiliary agent according to a certain ratio, wherein the main materials are potassium carbonate, sodium carbonate and rutile titanium ore, and the auxiliary agent is a mixture of silica gel, potassium silicate, sodium silicate and lithium silicate; 2) transferring the weighed main materials and auxiliary agent into a mixing device by adopting a solid-phase synthesis technology, and blending; 3) taking out the mixture, placing the mixture into a mullite sagger, then feeding the mullite sagger into a tunnel kiln for roasting, and then cooling to obtain a block; 4) crushing, grinding and sieving the block to obtain a powdery final product.



21: 2022/08904. 22: 2022/08/10. 43: 2022/10/17

51: C07C; C11C

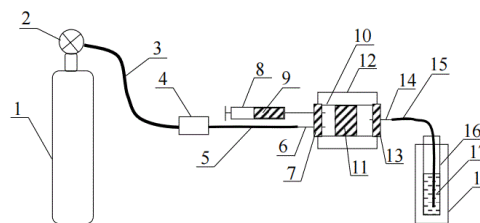
71: Yanbian University

72: WANG, Juan, NAN, Jingxi

#### 54: METHOD FOR SIMULTANEOUSLY DERIVATIZING, EXTRACTING AND DETECTING PHENOL COMPOUNDS AND ORGANIC ACID COMPOUNDS IN MEAT

00: -

The present invention relates to the technical field of analysis of organic matters in food, particularly to a method for detecting phenol compounds and organic acid compounds in meat. The present invention discloses a method for simultaneously derivatizing, extracting and detecting phenol compounds and organic acid compounds in meat. The phenol compounds and organic acid compounds in a sample are derivatized while subjected to thermal desorption, and driven by air flow to enter an absorption liquid. Thus, derivatives of the phenol compounds and organic acid compounds are obtained by extraction. The phenol compounds and organic acid compounds are qualitatively or quantitatively analyzed after the derivatives are subjected to GC-MS detection. The whole technology is simple to operate, rapid, integrated, liable to use with a gas chromatography system, and practical in qualitative and quantitative analysis.



21: 2022/08905. 22: 2022/08/10. 43: 2022/10/17

51: A23L

71: Yanbian University

72: LI, Guanhao, WANG, Juan, NAN, Jingxi, LIANG, Chengyun, WANG, Shitong, MU, Baide, PIAO, Chunxiang, CUI, Mingxun, LI, Hongmei

**54: METHOD FOR INHIBITING FORMATION OF POLYCYCLIC AROMATIC HYDROCARBONS IN GRILLED MEAT THROUGH ONION SKIN EXTRACT**

00: -

The present invention relates to the technical field of the control of hazardous substances in food, and in particular to a method for inhibiting formation of polycyclic aromatic hydrocarbons (PAHs) in grilled meat through an onion skin extract. The method specifically includes the following steps: drying, crushing and sieving onion skins, extracting with hot water, concentrating and drying the materials to obtain an onion skin extract, adding the extract into meat according to a certain proportion for pickling, and roasting the pickled meat on charcoal fire until the meat is cooked. The content of PAHs in the grilled meat is less than that of the grilled meat without an addition of the onion skin extract. The method provided by the present invention can effectively inhibit formation of PAHs in grilled meat. The method provided by the present invention is simple and easy to operate.

21: 2022/08906. 22: 2022/08/10. 43: 2022/10/17  
51: G06Q

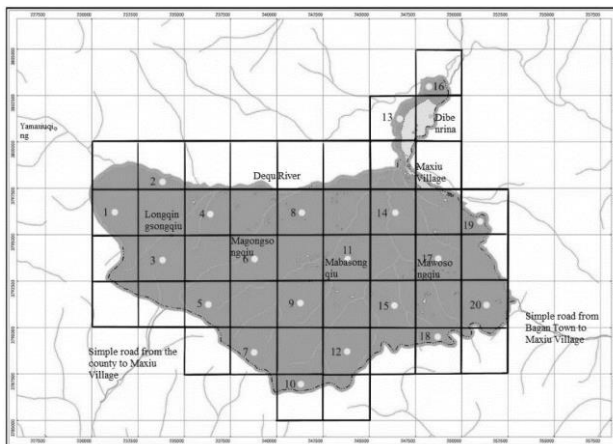
71: Northwest Institute of Plateau Biology, Chinese Academy of Sciences

72: LUO, Caiyun, ZHAO, Liang, CHEN, Kelong, ZUO, Chao, ZHAO, Xinquan, WANG, Shiping

**54: METHOD FOR CALCULATING CARBON SINK VALUE OF WETLAND PARK**

00: -

The present invention provides a method for calculating a carbon sink value of a wetland park, including the following steps: selection of sample plots, determination of environmental monitoring contents, sampling methods, determination of a soil bulk density, determination of a soil organic carbon content and a plant sample content, and calculation of an economic value of carbon sinks. By using the method, the carbon sink value of a wetland park can be calculated accurately. The method is simple to operate and can greatly improve the efficiency of calculating the carbon sink value of the wetland park.



21: 2022/08907. 22: 2022/08/10. 43: 2022/10/17  
51: B22F; B33Y

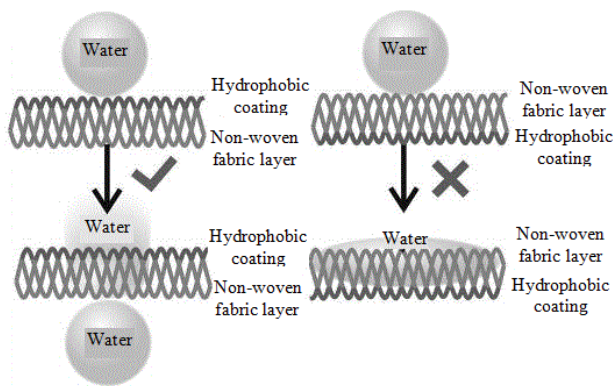
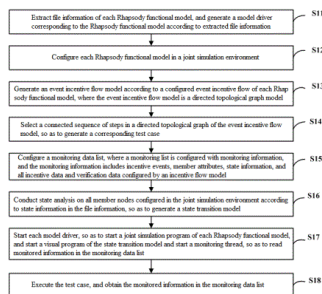
71: Nanchang Hangkong University

72: XIAO, Peng, NIE, Jiahao, ZHENG, Wei, YANG, Fengyu, WU, Ting

**54: TESTING VERIFICATION METHOD FOR MODEL CO-SIMULATION**

00: -

Disclosed are an integration testing verification method and apparatus for joint simulation, a readable storage medium and a device. To solve the problem that in a forward design process of an avionics system, it is difficult for a Rhapsody functional model to conduct joint simulation testing in a total system integrated environment, a set of event-driven integration testing verification method and supporting environment are designed. The Rhapsody functional model is analyzed, a model driver is generated, and a joint simulation model is configured to be connected to a Rhapsody tool. A test scene model is designed, a test case file is generated, a monitoring data list is configured, and a testing process and recording are executed. The invention can effectively solve the problem that it is difficult for the Rhapsody functional model to conduct integration verification in joint simulation, and significantly improve automation and intelligence of testing verification.



21: 2022/08908. 22: 2022/08/10. 43: 2022/10/17  
51: A61K

71: Anhui Polytechnic University  
72: WANG Hongjie, WANG He, RUAN Fangtao,  
ZUO Hongmei, YAO Lan, SHU Cuicui

**54: WATER-LOCKING MOISTURIZING MASK CLOTH, PREPARATION METHOD AND APPLICATION THEREOF**

00: -

The invention provides a preparation method of water-locking moisturizing mask cloth, belonging to the field of skin care products. The invention prepares a hydrophobic coating on the surface of the hydrophilic non-woven fabric, and forms a hydrophobic-hydrophilic gradient along the thickness direction of the non-woven fabric. Hydrophilic gradient, water has unidirectional flow characteristics on the surface of non-woven fabrics, which makes the prepared non-woven fabrics have the functions of unidirectional water guiding, water-locking moisturizing. The hydrophobic coating can effectively prevent the evaporation of the mask liquid, so that the mask liquid can be continuously absorbed by the skin. At the same time, the residual mask liquid in the packaging bag can be smeared on the surface of the hydrophobic coating by the user, and the mask liquid attached to the surface of the hydrophobic coating can spontaneously penetrate into the skin-friendly layer, thus improving the utilization rate of the mask liquid. The prepared water-locking moisturizing mask cloth has the functions of water locking and moisturizing. The data of the embodiments show that the liquid residue on the water-locking moisturizing mask cloth prepared by the invention is increased by more than 50 percent compared with the common mask cloth, and the residue of active ingredients (collagen) is reduced by more than 44 percent.

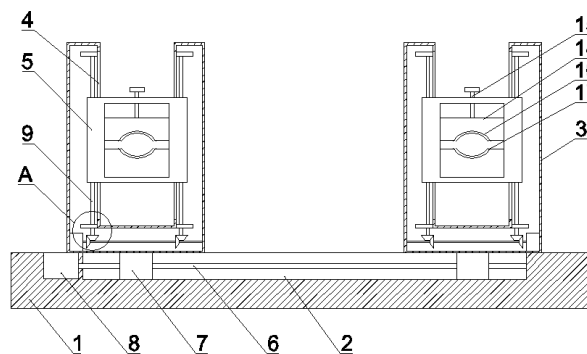
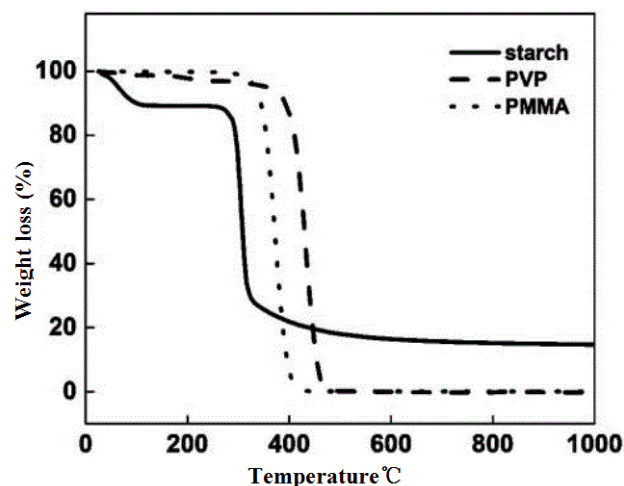
21: 2022/08909. 22: 2022/08/10. 43: 2022/10/17  
51: B82Y

71: Anhui Polytechnic University  
72: WANG He, WANG Hongjie, RUAN Fangtao,  
ZUO Hongmei, XU Rongrong, SUN Ran, BAI Weikang

**54: PREPARATION METHOD AND APPLICATION OF CARBON NANOFIBER**

00: -

The invention belongs to the technical field of electrode materials, in particular to a method for preparing carbon nanofibers and application. According to the invention, starch is used as a pore-forming agent, and in the preparation process of carbon nanofibers, the adopted starch decomposition temperature (200-300 degree Celsius) is lower, and the starch is decomposed in the pre-oxidation stage, and a large number of micropores and mesopores are generated with the shrinkage of the fibers after pre-oxidation and carbonization, so that the specific surface area and porosity of the carbon nanofibers are greatly improved; the carbon nanofiber prepared by the invention is used for manufacturing a supercapacitor, and the specific capacitance of the obtained supercapacitor can reach 70 F/g, which indicates that the carbon nanofiber prepared by the invention has excellent electrochemical performance.



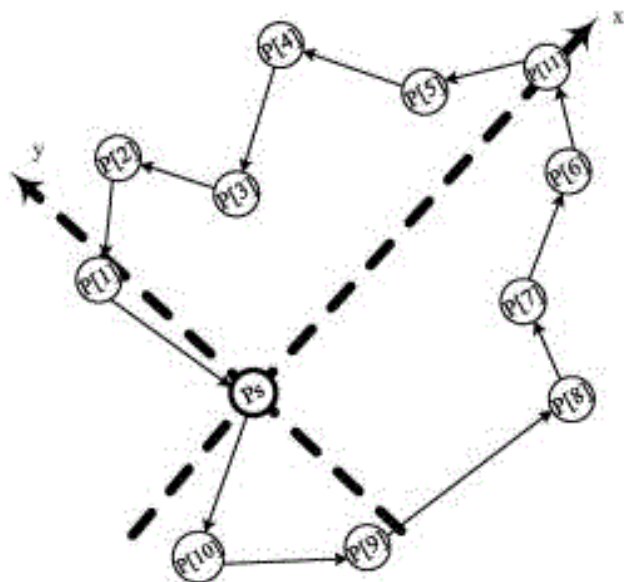
21: 2022/08910. 22: 2022/08/10. 43: 2022/10/17  
 51: A63B  
 71: Guyuan Institute of Traditional Chinese Medicine and Acupuncture  
 72: LI Wenai  
**54: RHEUMATOID ARTHRITIS EXERCISE MOVEMENT DEVICE**

00: -  
 The invention discloses a rheumatoid arthritis exercise movement device, a base plate, a chute is arranged at the top of the base plate, support blocks are arranged at both ends in the chute, an adjusting assembly is arranged in the base plate, two support blocks are slidably connected with the chute through the adjusting assembly, a groove is arranged on the support block, vertical chutes are arranged on two opposite side walls in the groove, support frames are arranged in the vertical chutes, and lifting assemblies are arranged in the support blocks; the support frame is slidably connected with the vertical chute through the lifting assembly, and an arm limiting assembly is arranged in the support frame, and the arm limiting assembly is correspondingly arranged with the arm of the patient. The invention has the advantages of simple structure, convenient adjustment, suitability for different patients, realization of auxiliary activities for joints of patients with rheumatic arthritis, and obvious exercise effect.

21: 2022/08911. 22: 2022/08/10. 43: 2022/10/17  
 51: G01C

71: DONGGUAN CITY UNIVERSITY, RUAN Chunyan, LUO Jianfeng, DONGGUAN POLYTECHNIC  
 72: RUAN Chunyan, LUO Jianfeng  
**54: PATH PLANNING METHOD, EQUIPMENT AND STORAGE MEDIUM FOR REALIZING SHORTEST HAMILTON LOOP**

00: -  
 The application discloses a path planning method, equipment and storage medium for realizing the shortest Hamilton loop, and relates to the field of information technology. The method comprises the following steps: according to the distance between a passing point and a starting and ending point, processing the passing point set in descending order to obtain a sequence set PS; The PS with M passing points is repeatedly calculated for M times to obtain M different loops. Repeated calculation includes: selecting one passing point from PS one by one as the demarcation point, and taking the straight line passing through the starting point and the demarcation point at the same time as the demarcation line to establish a new rectangular coordinate system to obtain the upper quadrant point set and the lower quadrant point set; At the same time, the upper and lower quadrant paths are obtained according to the X coordinate values of each passing point; Take the boundary point as the junction, and combine the upper and lower quadrant paths to form a loop; Select the shortest loop from m different loops as the shortest Hamilton loop. The equipment and storage medium of the application can quickly realize the path planning of the shortest Hamilton loop by applying the above method.

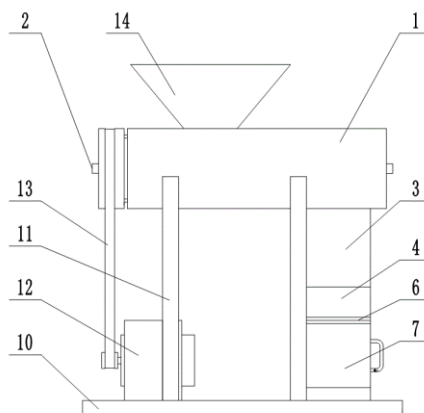


21: 2022/08912. 22: 2022/08/10. 43: 2022/10/17  
 51: A23N  
 71: JIANGXI AGRICULTURAL UNIVERSITY  
 72: TANG Ming, XU Ying, CHEN Shangxing, WANG Zongde, WANG Jiawei, LIU Juan, LUO Hai, WANG Dan

**54: LITSEA CUBEBA QUICK PEELING AND SORTING DEVICE**

00: -  
 The invention provides a litsea cubeba quick peeling and sorting device, comprising a support assembly, an extrusion assembly, a drive assembly, a separation assembly and a sorting assembly; the extrusion assembly comprises an extrusion cylinder fixedly connected with the support assembly, and a rotating roller is rotatably connected in the extrusion cylinder; the drive assembly is fixedly mounted on the support assembly, and is connected to the rotating roller in a driving manner; the separation assembly is fixedly installed on the support assembly, the separation assembly comprises a discharge cylinder communicated with the outlet of the extrusion cylinder, and a kernel discharge cylinder is communicated with the outlet of the discharge cylinder; the discharge fan is arranged in the discharge cylinder; and the sorting assembly comprises a sorting row pipe communicated with the kernel discharge cylinder, and a plurality of storage boxes are correspondingly arranged below the sorting row pipe, the storage box is detachably connected to the support assembly. The invention has simple structure and convenient operation,

changes the traditional manual operation of litsea cubeba peeling and sorting into mechanical replacement, quickly peels litsea cubeba in large quantities, separates seed coat and seed kernel, and sorts seed kernel quality, thus greatly improving work efficiency and saving labor cost.

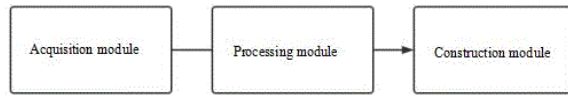
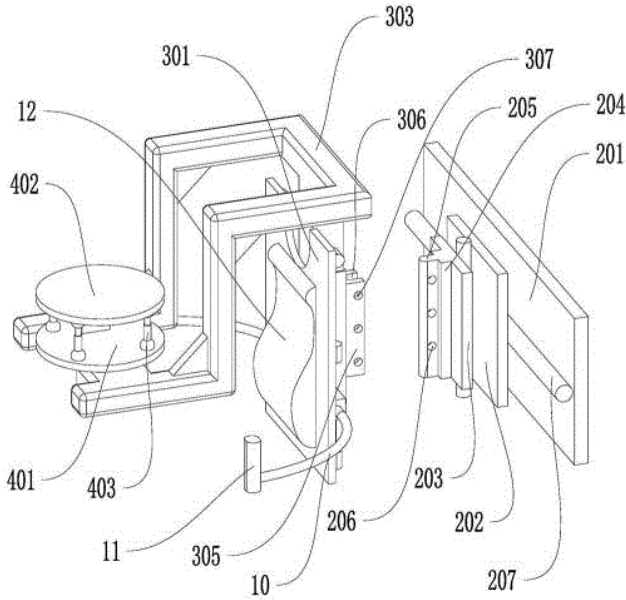


21: 2022/08913. 22: 2022/08/10. 43: 2022/10/17  
 51: F16M; G03B  
 71: JIAXING VOCATIONAL & TECHNICAL COLLEGE  
 72: LU Chun, ZHAO Yude

**54: MULTIFUNCTIONAL CAMERA MOUNTING PLATFORM**

00: -  
 The invention discloses a multifunctional camera mounting platform, which comprises a translation mechanism, a wearing mechanism, a stabilizing mechanism and a controller, wherein the wearing mechanism is detachably connected with the translation mechanism, the stabilizing mechanism is connected with the wearing mechanism, and the camera is mounted on the stabilizing mechanism; and through the detachable connection between the wearing mechanism and the translation mechanism, the camera can be quickly switched between two different shooting modes without using two cameras in two different modes, so that the equipment cost is reduced.





21: 2022/08914. 22: 2022/08/10. 43: 2022/10/17  
 51: G06F  
 71: East China University of Technology, Geological Survey of Jiangxi Province  
 72: WU Zhichun, GUO Fusheng, LOU Fasheng, WU Shijin, ZHOU Wanpeng, QIN Yaozu, LI Zenghua, GUO Jinshan, GONG Liangxin, LI Bin

**54: MINING AREA THREE-DIMENSIONAL GEOLOGICAL MODELING SYSTEM BASED ON MULTI-SOURCE DATA FUSION**

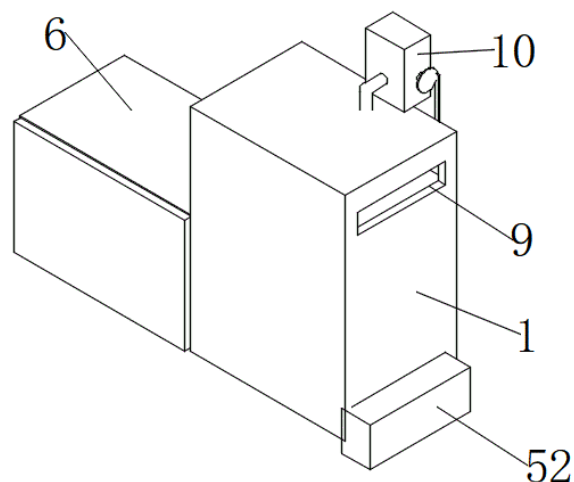
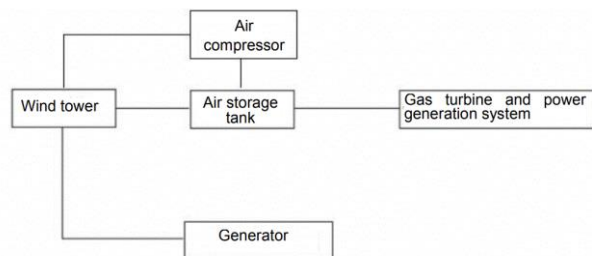
00: -  
 The invention discloses a mining area three-dimensional geological modeling system based on multi-source data fusion, which comprises an acquisition module, a processing module and a construction module, wherein the acquisition module, the processing module and the construction module are connected in sequence; the acquisition module is used for acquiring multi-source data of mining area, and the processing module is used for screening multi-source data of mining area, performing data fusion processing based on the screening result, and generating mining area modeling data based on the data fusion processing result; the construction module constructs the geological three-dimensional model based on the mining area modeling data to obtain the mining area three-dimensional geological model. Through the technical scheme, the invention can effectively construct the three-dimensional geological model of the mining area through multi-source data fusion.

21: 2022/08915. 22: 2022/08/10. 43: 2022/10/17  
 51: F03D

71: Zhang Lei  
 72: Zhang Lei

**54: TOWER-TYPE WIND POWER GENERATION SYSTEM**

00: -  
 The present invention provides a tower-type wind power generation system, comprising a wind tower, a generator, an air compressor, an air storage tank, a gas turbine and a turbo generator; the power generated by the wind tower is transported to the generator to generate electricity; the power generated by the wind tower is transported to the air compressor to generate compressed air which is stored in the air storage tank, and the compressed air is transported to the turbo generator through the gas pipeline to generate electricity; the wind tower includes several layers of wind generators; each layer of wind generator comprises a steel column, a central support frame, a bracket, a walking platform beam, a support beam, a rotor shaft, a fan blade, a universal coupling and an outer support beam; the bracket is fixedly connected with the steel column; one end of the walking platform beam and the support beam is connected with the bracket, and the other end is connected with the central support frame; the rotor shaft is fixedly connected with the central support frame through a bearing. The tower structure of the present invention is layered and assembled, which is very convenient for transportation and installation, and is convenient for large-scale development in remote areas with inconvenient transportation.



21: 2022/08916. 22: 2022/08/10. 43: 2022/10/17

51: C02F

71: Qianshi JIAYE environmental protection

(Suzhou) Co., Ltd

72: Fu Hong Lei

33: CN 31: 202210761699.8 32: 2022-06-30

**54: MUNICIPAL SEWAGE TREATMENT DEVICE**

00: -

The invention discloses a municipal sewage treatment device, which comprises a primary filtration box, wherein a primary filtration screen and an impurity removal device are arranged inside the primary filtration box, a feeding device is fixedly connected to the side surface of the primary filtration box, and the impurity removal device is arranged inside the primary filtration box; a fine filtration box, wherein ion membranes are interspersed in the fine filtration box, and a pressurizing device is arranged in it. Through the synchronization of the feeding device and the sewage inlet, the corresponding proportion is realized, so that the internal flocculation is thorough, and the water after internal flocculation can be discharged faster through the impurity removal device.

21: 2022/08917. 22: 2022/08/10. 43: 2022/10/17

51: G07G

71: Zhejiang University of science and technology

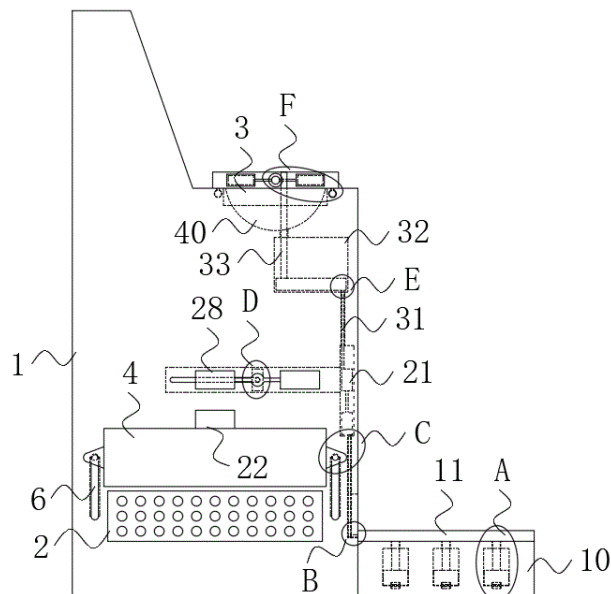
72: Xu Tao, Guo Yao, Wu Lin

33: CN 31: 202210870628.1 32: 2022-07-23

**54: SELF-SERVICE TERMINAL DEVICE FOR DIGITAL LIBRARY**

00: -

The invention discloses a self-service terminal device for a digital library, which comprises a terminal, a heat dissipation area and an operation area, wherein the terminal is provided with a dustproof plate matched with the heat dissipation area through a vertical sliding structure, the terminal is fixedly provided with a base, and the base is provided with a pedal through a magnetic sliding structure. Has the advantages that when the terminal is not used, the heat dissipation area is in a shielded state, so that dust can be effectively prevented from entering the inside of the terminal through the heat dissipation area; the pedal plate capable of moving in the vertical direction is arranged, so that when a user stands to step on the pedal plate, the dustproof plate is driven to move upwards, At the same time, it can also drive the moving wiping plate to slide in a single direction in the horizontal direction, so as to clean and wipe the surface of the operation area and improve the cleanliness of the surface of the operation area.



21: 2022/08918. 22: 2022/08/10. 43: 2022/10/17  
51: G07G

71: Zhejiang University of science and technology

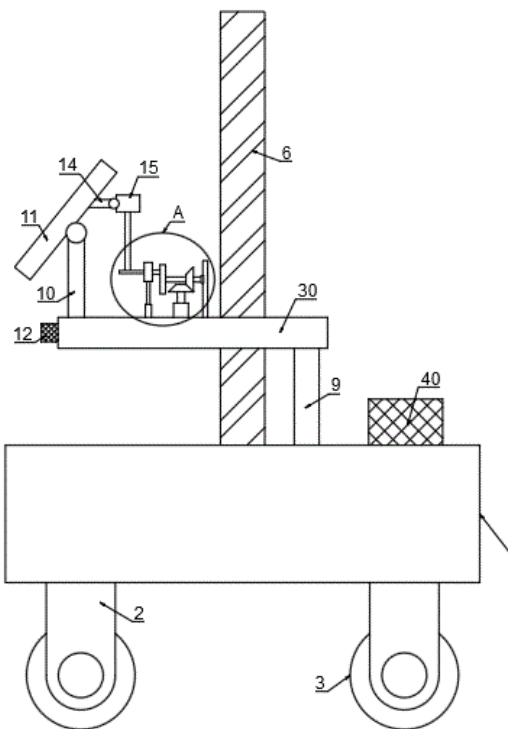
72: Xu Tao, Guo Yao, Wu Lin

33: CN 31: 202210883862.8 32: 2022-07-26

**54: LIBRARY INFORMATION SERVICE EQUIPMENT**

00: -

The invention discloses library information service equipment, which comprises a base, wherein the inner bottom wall of the base is fixedly connected with a first motor, the driving end of the first motor is fixedly connected with a first belt pulley, and the inner bottom wall of the base is rotatably connected with a screw rod extending to the outside of the base. According to the invention, the panel can be automatically adjusted in height according to the height of a user through the upward or downward movement of the panel, so that the panel can better carry out face recognition on users with different heights, the convenience and accuracy of the user are improved, and the pitch angle of the panel is adjusted. Through the PLC controller, the corresponding pitch angle of the panel can be adjusted well, so that the panel can collect information on the face of a user better, thereby improving the accuracy and efficiency of face information collection. Due to the arrangement of the power generation device, electric energy is stored in the storage battery 40, thereby saving the use of electric energy well and reducing the use cost.



21: 2022/08921. 22: 2022/08/10. 43: 2022/10/17  
51: C25D

71: Anhui kelante Aluminum Industry Co., Ltd

72: Xuebing Yuan, Zutang Pan, Maoqing Xiong

33: CN 31: 114350993A 32: 2021-12-30

**54: PRODUCTION PROCESS FOR HIGH-STRENGTH ALUMINUM ALLOY FOR BICYCLE FRAMES**

00: -

Provided is a production process for high-strength aluminum alloy for bicycle frames. The production process includes: transferring electrolytic molten aluminum into a smelting furnace, and adding Mg, Si, Cu and Mn for heating and melting; adding a ceramic composite material; adding an aluminum alloy refining agent; conducting tapping and pouring to obtain a cast rod blank, and conducting hot extrusion formation and heat treatment on the cast rod blank, so as to obtain an aluminum alloy pipe; and dip-coating a surface of the aluminum alloy pipe with a superhydrophobic coating. According to the present invention, TiB<sub>2</sub> and CeB<sub>6</sub> nanoparticles are introduced into an aluminum alloy melt, such that a nucleation rate during crystallization and solidification is increased, aluminum alloy grains are refined, and produced aluminum alloy is greatly

enhanced in hardness, elongation and fatigue resistance and can pass a European Union safety standard of bicycle frames.

21: 2022/08922. 22: 2022/08/10. 43: 2022/10/17  
51: C25D

71: Anhui Kelante Aluminum Industry Co., Ltd  
72: Xuebing Yuan, Maoqing Xiong, Zutang Pan  
33: CN 31: 114369746A 32: 2021-12-31

**54: HIGH-TEMPERATURE ALUMINUM ALLOY FOR FLOOR HEATING PIPES AND PRODUCTION PROCESS THEREFOR**

00: -

Provided are a high-temperature aluminum alloy for floor heating pipes and a production process therefor. The aluminum alloy includes an aluminum alloy pipe substrate and a corrosion-resistant coating; the aluminum alloy pipe substrate includes Si, Fe, Cu, Mg, B, Bi, Ti, Sc, Ni, Zr, Nb, Mo and Al; the corrosion-resistant coating includes pigment paste, methyltrimethoxysiloxane and formic acid; and the pigment paste includes silica sol, modified graphene, aluminum oxide, a dispersant and deionized water. According to the present invention, a surface of the aluminum alloy pipe substrate is processed with corrosion-resistant paint, thereby improving corrosion resistance and heat resistance of the aluminum alloy pipe substrate; and the modified graphene is introduced to modify a coating, thereby enhancing heat dissipation performance of organic silicon ceramic paint. The aluminum alloy has desirable strength, hardness and toughness, and further has excellent corrosion resistance and high-temperature resistance.

21: 2022/08923. 22: 2022/08/10. 43: 2022/10/17  
51: G01N

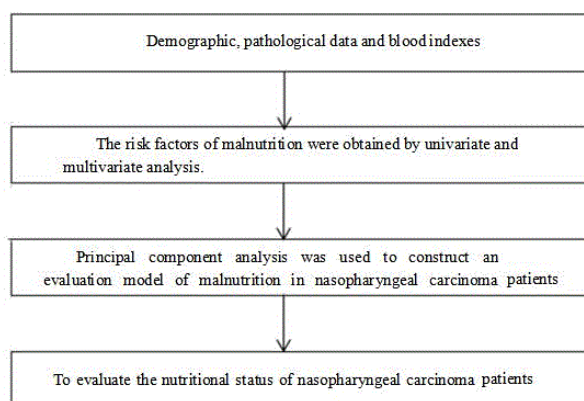
71: College of nursing, Guangxi Medical University  
72: WANG Pengpeng, HUANG Xueling, ZENG Pingping, WU Liucong, WU Hualin, LIU Jieying, WEI Minyi, LI Binggeng, HUANG Jie, BAO Jingru, LIAO Jinlian, ZENG Xiaofen, FENG Yan, YUE Yuanyuan, WANG Liuyan, LU Lan, SU Tong, ZHANG Yulin

**54: EVALUATION METHOD OF MALNUTRITION IN NASOPHARYNGEAL CARCINOMA PATIENTS**

00: -

The invention discloses a method for evaluating malnutrition of nasopharyngeal carcinoma patients, which comprises the following steps: obtaining demographic and pathological data and blood

indexes of nasopharyngeal carcinoma patients; Based on the demographic and pathological data and blood indexes, the nutritional variables were obtained by single factor and multi-factor analysis. Based on the nutritional variables, principal component analysis was used to construct an evaluation model of malnutrition in nasopharyngeal carcinoma patients. Based on the evaluation model of malnutrition of nasopharyngeal carcinoma patients, the nutritional status of nasopharyngeal carcinoma patients is evaluated. According to the invention, comprehensive indexes which can comprehensively and objectively reflect the nutritional status of nasopharyngeal carcinoma patients are detected from a plurality of detection indexes, and finally, a nutritional index model is established, and compared with similar malnutrition evaluation tools, the result is more objective.



21: 2022/08924. 22: 2022/08/10. 43: 2022/10/17  
51: H01L; H02S

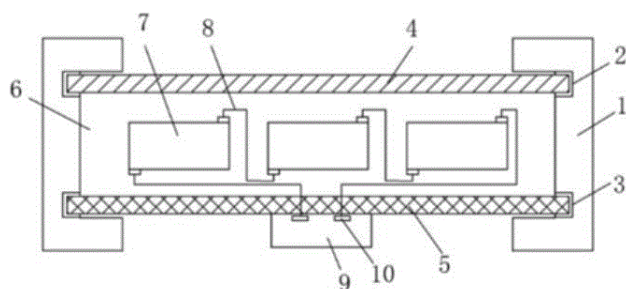
71: HuangHuai University  
72: LIU Wenfu, QI Xinghua, YAO Haizi, HU Jingyu, GUO Xiaolei, WANG Yinling

**54: SOLAR CELL BASED ON CARBON NANOSTRUCTURE**

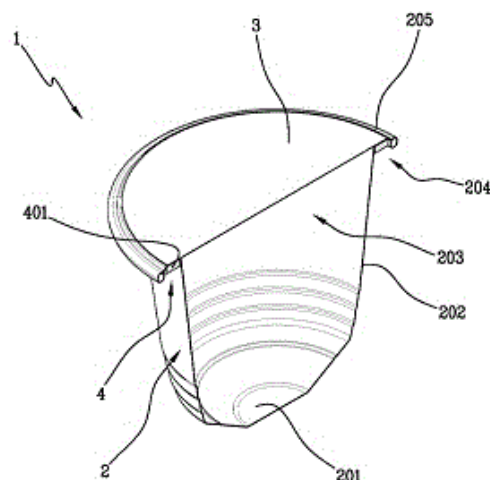
00: -

The invention discloses a carbon nanostructure-based solar cell in the technical field of solar cells, which comprises two groups of aluminum frames, wherein the top and bottom of the inner walls of the two groups of aluminum frames are respectively provided with a first clamping groove and a second clamping groove; a light source receiving cover plate is arranged at the top between the two groups of aluminum frames; a thermal insulation back plate is arranged at the bottom between the two groups of

aluminum frames; and an EVA filling plate is arranged between the light source receiving cover plate and the thermal insulation back plate. Solar cells are uniformly arranged in the inner cavity of the EVA filled plate, bus bars are arranged between two groups of solar cells, and junction boxes are arranged at the bottom of the thermal insulation back plate, which have good light transmittance and can effectively improve the light conversion efficiency. The carbon nanostructure layer is arranged in a corrugated shape, which can ensure the light conversion efficiency more forcefully in quantity, and effectively store the converted electric energy, making full use of its characteristics. The structure is simple and easy to manufacture, thus providing convenience for actual production.



portion (208) between the first portion (206) and the second portion (207); in which the second portion (207) is annular and lies on a first plane and the first portion (206) is displaced towards the base wall (201) and is at least at a predetermined distance (D) from the first plane, between the connecting portion (208) and the side wall (202) a seat 209 being defined in which the ring (401) is housed at least partially.



21: 2022/08948. 22: 2022/08/10. 43: 2022/09/14

51: B65D

71: SARONG SOCIETA' PER AZIONI

72: BARTOLI, ANDREA, CAPITINI, DAVIDE

33: IT 31: 102020000003425 32: 2020-02-19

33: IT 31: 102020000007669 32: 2020-04-09

#### 54: CAPSULE FOR BEVERAGES

00: -

A capsule (1) is proposed comprising: a casing (2) that extends about an axis (Z), which comprises a base wall (201) and a side wall (202) defining a cavity (203) containing an initial product to be combined with a fluid to obtain a final product, and a flanged edge (204) extending from said side wall (202) and comprising an end annular bead (205); a covering element (3), fixed to the flanged edge (204) to close the cavity (203); a sealing element (4), associated with the flanged edge (204) to make a fluidic seal with a dispensing machine. The casing (2) is made of aluminium and the sealing element (4) comprises a cellulose-based ring (401); the flanged edge (204) comprising a first portion (206) which comprises the annular bead (205), a second portion (207) contiguous side wall (202), and a connecting

21: 2022/08966. 22: 2022/08/11. 43: 2022/10/12

51: G01G

71: HEILONGJIANG ACADEMY OF

AGRICULTURAL MACHINERY SCIENCES

72: Xiaoyan JIN, Shiming SUN, Aiguo PENG,

Xiaobo YU, Baihui SUN, Shengchun WANG,

Jingwen WU, Ruxin YANG, Xupeng JIANG, Zengxin

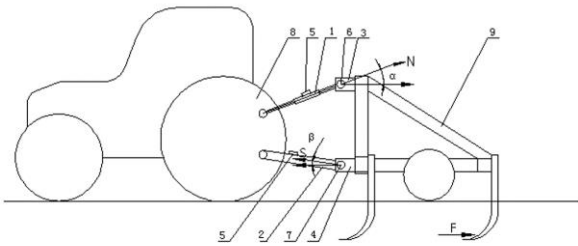
TAN

#### 54: SUSPENDED FORCE MEASURING DEVICE FOR AGRICULTURAL IMPLEMENT AND METHOD THEREOF

00: -

A suspended force measuring device for agricultural implement, which belongs to the field of agricultural machinery. The invention includes an upper pull rod, a lower pull rod, an upper suspension arm hinged seat, a lower suspension arm hinged seat, a horizontal inclination sensor, a strain upper shaft pin sensor and a strain lower shaft pin sensor. The upper suspension arm hinged seat and the lower suspension arm hinged seat are fixedly installed on agricultural implement respectively. One end of the upper pull rod is hinged on the tractor, and the other end of the upper pull rod is hinged on the upper suspension arm hinged seat through the strain upper

shaft pin sensor. One end of the lower pull rod is hinged on the tractor, the other end of the lower pull rod is hinged on the hinged seat of the lower suspension arm through the strain lower shaft pin sensor. And the horizontal inclination sensor is installed on the upper pull rod and the lower pull rod respectively. The object of the present invention is to solve the problem that the existing suspended agricultural implements cannot feedback the data based on the actual operation situation in time. The invention has the advantages of simple structure, ingenious design, convenient disassembly and assembly, firm assembly, which is suitable for popularization and use.

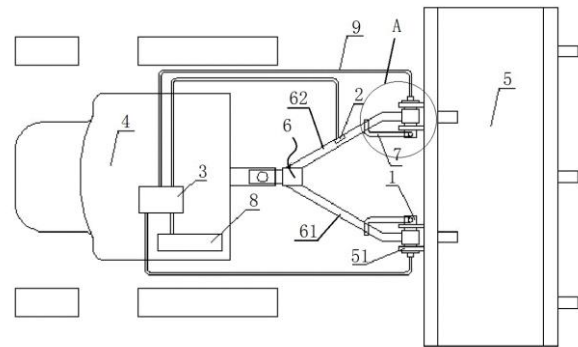


21: 2022/08967. 22: 2022/08/11. 43: 2022/10/13  
 51: G01M  
 71: HEILONGJIANG ACADEMY OF AGRICULTURAL MACHINERY SCIENCES  
 72: Xiaoyan JIN, Shiming SUN, Aiguo PENG, Xiaobo YU, Baihui SUN, Shengchun WANG, Jingwen WU, Ruxin YANG, Xupeng JIANG, Zengxin TAN

**54: DEVICE FOR MEASURING OPERATION RESISTANCE AND OPERATION AREA OF HINGED TRACTION AGRICULTURAL IMPLEMENT AND METHOD THEREOF**

00: -  
 The invention relates to a device and a method for measuring the operation resistance and operation area of a traction agricultural implement, which relates to the field of agricultural machinery and is provided to solve the problem that the operation resistance and operation area of agricultural implements cannot be accurately measured, including a resistance measuring device, an angle measuring device and a speed measuring device. The speed measuring device is installed on the tractor, the resistance measuring device and the angle measuring device are both arranged on the triangular traction frame between the tractor and the

traction agricultural implement. The triangular traction frame includes a left pull rod and a right pull rod. The left pull rod and the right pull rod are installed on the agricultural implement traction arm of the traction agricultural implement through the resistance measuring device, and a positioning pull rod is respectively provided between the left pull rod and the right pull rod and the corresponding resistance measuring device, the angle measuring device is installed on the left or right pull rod, and the resistance measuring device, the angle measuring device and the speed measuring device transmit the collected signals to the test display for calculation, storage and display. The invention has accurate measurement results and strong versatility of the equipment.

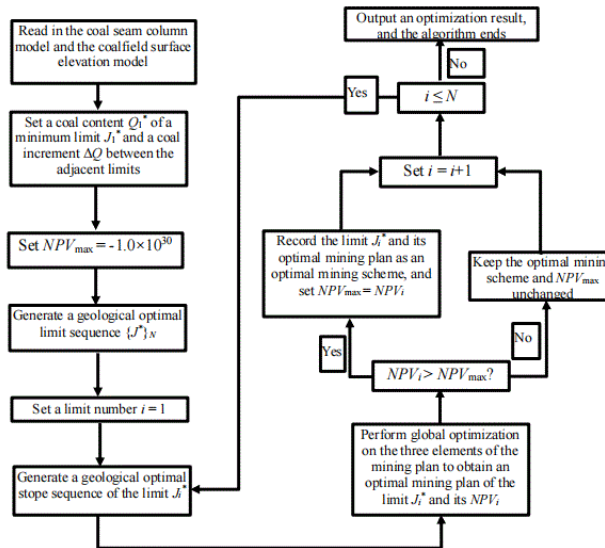


21: 2022/08968. 22: 2022/08/11. 43: 2022/10/13  
 51: E21C  
 71: Northeastern University  
 72: GU, Xiaowei, XU, Xiaochuan, WANG, Qing, WANG, Hao  
 33: CN 31: 202210491534.3 32: 2022-05-07

**54: OPEN-PIT COAL MINING METHOD AND SYSTEM BASED ON FOUR-ELEMENT GLOBAL OPTIMIZATION**

00: -  
 Disclosed are an open-pit coal mining method and system based on four-element global optimization. The method includes the following steps: acquiring a coalfield raw coal reserve; calculating a production capacity and a minimum mining life according to the raw coal reserve to obtain a geological minimum limit; obtaining a geological maximum limit by optimizing a historically highest coal price; processing the geological minimum and maximum limits by a cone exclusion algorithm to obtain a geological optimal limit sequence; simultaneously

optimizing a production capacity, a mining sequence and a mining life to obtain a mining plan and a NPV; acquiring a limit with a maximum NPV among all geological optimal limits; and taking the geological optimal limit with a maximum NPV and its mining plan as a final mining scheme. Four elements, simultaneously used as decision variables, are subjected to global optimization to obtain a global optimal open-pit coal mining scheme.



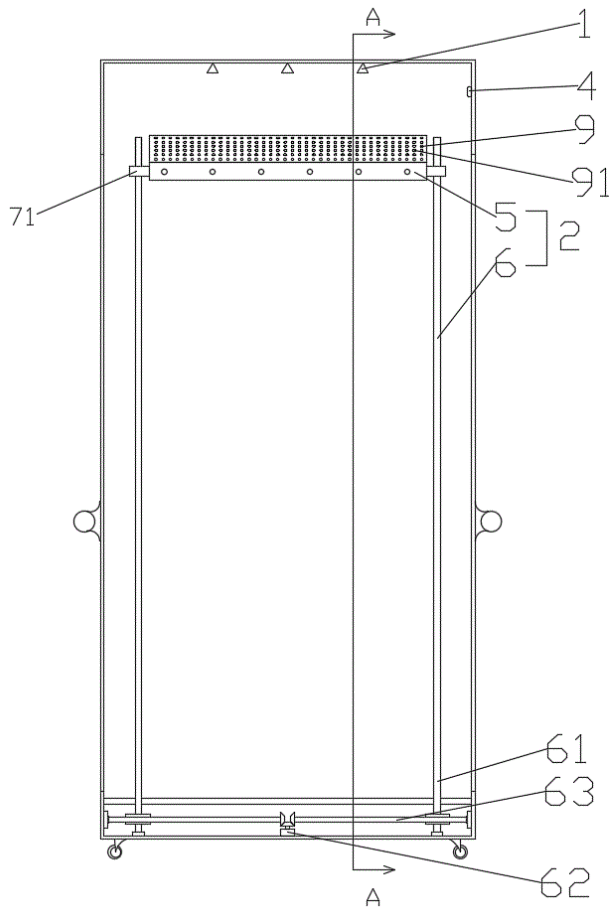
21: 2022/08972. 22: 2022/08/11. 43: 2022/10/13  
 51: C08B  
 71: Zhejiang Academy of Agricultural Sciences  
 72: Guoying LV, Zuofa ZHANG, Jianfei CHEN, Aizhen HE, Mei WANG, Yuntao LI, Jinrong CHEN  
**54: EFFICIENT PREPARATION METHOD OF POLYSACCHARIDE FROM SPARASSIS CRISPA**  
 00: -

The invention discloses an efficient preparation method of polysaccharide from Sparassis Crispa, which comprises the following steps: S1, drying the fruiting body of Sparassis Crispa and crushing it for later use; S2, taking the pretreated Sparassis Crispa powder, adding dimethyl sulfoxide aqueous solution, and extracting in a bipolar square wave high-voltage pulsed electric field, where the intensity of the pulsed electric field is 10-50 Kv/cm with a frequency of 200-1,000 Hz, collecting the extractive solution; S3, carrying out microwave extraction on the extractive solution, where the microwave power is 300-500 W, the extraction temperature is 100-120 degree Celsius; S4, centrifuging the extractive solution after microwave extraction, concentrating the supernatant

under reduced pressure, and precipitating with absolute ethanol to obtain crude polysaccharide precipitate; the crude polysaccharide precipitate is washed with organic solvent and dried. According to the invention, the high-voltage pulsed electric field is combined with microwave extraction, dimethyl sulfoxide solution is used as the extraction solvent, so that the polysaccharide of Sparassis Crispa can be efficiently extracted, and the extraction rate and purity of the polysaccharide of Sparassis Crispa are improved.

21: 2022/08973. 22: 2022/08/11. 43: 2022/10/13  
 51: A61L  
 71: The Affiliated Hospital of Youjiang Medical University for Nationalities  
 72: LIN Qiqing, PENG Hao, XU Shuzhen  
**54: DISINFECTING ROOM FOR EPIDEMIC PREVENTION AND CONTROL**  
 00: -

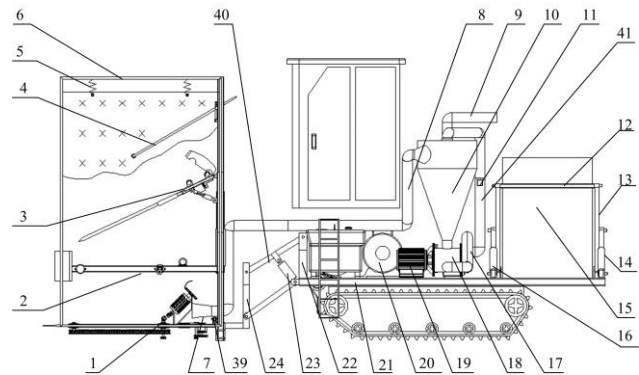
This invention relates to the technical field of disinfection, and discloses a disinfecting room for epidemic prevention and control, which includes a disinfecting room body, a height measuring module, a disinfecting device, a control system and a prompting module; the height measuring module and the prompting module are respectively connected with the control system by signals, and the disinfecting device is electrically connected with the control system; the height measuring module detects the height of human body by sending ultrasonic waves, and sends the height data to the control system; the disinfecting device includes an atomizing mechanism and a lifting mechanism for adjusting the height of the atomizing mechanism; and the control system receives the height data and controls the lifting mechanism and the atomizing mechanism to disinfect the part below the neck of the human body, and the control system controls the prompting module to prompt after the disinfection is finished. The invention only disinfects the parts below the neck according to human bodies with different heights, and that reduces the occurrence of allergic phenomena on the face and neck of the disinfected people and the risk of disinfectant entering the human body through the nose and mouth, and improves the use efficiency of disinfectant.



21: 2022/08974. 22: 2022/08/11. 43: 2022/10/13  
 51: A01D  
 71: Inner Mongolia Minzu University, Inner Mongolia Tongruida Biotechnology Co., Ltd., Qingdao University of Technology  
 72: ZHAO Huayang, LI Changhe, QIU Hongxiang, ZHAO Genxiong, HUANG Fenglan, YU Xiaoze, Baiyerta, Yongsheng, ZHANG Dandan  
**54: VIBRATION PICKING CASTOR HARVESTER**  
 00: -

The invention belongs to the technical field of castor harvesting and discloses a vibration picking castor harvester, which comprises a car body, a cab, a storage box assembly, an air feeding and sucking device, a power assembly, a three-point suspension device, and a harvesting box; the harvesting box is arranged in the front of the car body, and is internally provided with a grain pulling and seedling discharging device, a belt vibrating picking device, a vibrating fork vibrating picking device, a seedling retaining bracket device, and a ridge distance

adjusting device; the cab is arranged above the middle of the car body, the three-point suspension device is arranged between the harvesting box and the car body, and the storage box assembly is arranged behind the car body. The invention has the advantages of reasonable structure, space saving, manufacturing cost saving and low energy consumption, and can improve the separation rate of fruits and castor seedlings, avoid missing harvesting of low castor fruits, improve the net harvesting rate of fruits and reduce the loss rate.



21: 2022/08975. 22: 2022/08/11. 43: 2022/10/13  
 51: A23L

71: NINGBO UNIVERSITY  
 72: Pan Daodong, Sun Yangying  
**54: A FUNCTIONAL AGED DUCK BRAISED WITH FEATURED FLAVOR AND ITS PREPARATION METHOD**

00: -  
 This invention discloses the development of a functional aged duck braised with special flavor and its preparation method. For obtaining the product, the aged duck that has been raised for more than one year is slaughtered, depilated with hot water, eviscerated, and cleaned, and then it is cut into blocks by a poultry meat cutter, and mixed with red bean powder, laver powder and glucose powder ingredients uniformly; then, sterilization, colling, inoculation, fermentation, proportioning, inner packaging, sterilization, cooling and outer packaging are carried out to obtain the functional aged duck braising product with special flavor and antioxidant and immunomodulatory functions, with good taste. And the beta-glucosidase produced in the fermentation process of sweet wine and *Aspergillus oryzae* can transform the flavone glycosides in red bean that are not easily absorbed into flavonoid aglycones that are easily absorbed, thus improving



its biological activities such as antioxidation and immunomodulation, due to the addition of laver powder and yam which are rich in polysaccharides, laver and yam polysaccharides presenting antioxidant and immunomodulatory functions.

21: 2022/08979. 22: 2022/08/11. 43: 2022/10/13  
51: E21C

71: Northeastern University

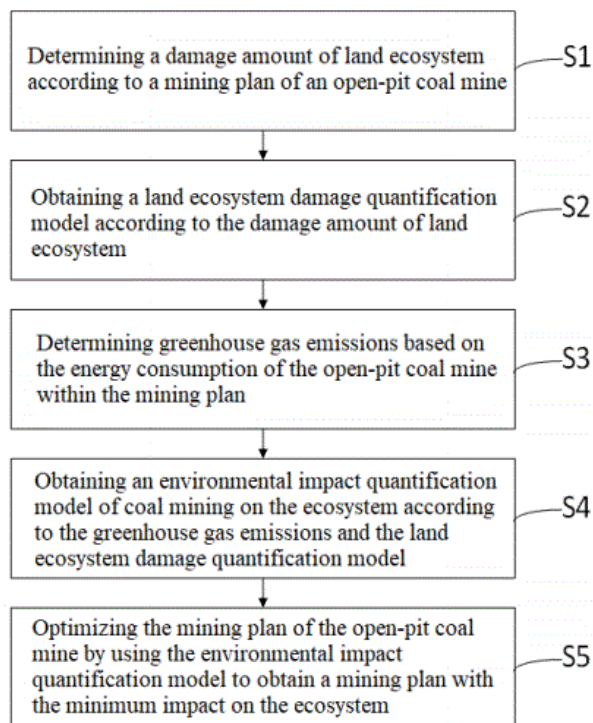
72: GU, Xiaowei, XU, Xiaochuan, WANG, Qing, WANG, Hao

33: CN 31: 202210474610.X 32: 2022-04-29

**54: QUANTITATIVE CALCULATION METHOD AND SYSTEM FOR ECOLOGICAL IMPACT GENERATED BY OPEN-PIT COAL MINING**

00: -

Disclosed are a quantitative calculation method and system for ecological impact generated by open-pit coal mining. The method includes the following steps: determining a damage amount of land ecosystem according to a mining plan of an open-pit coal mine; obtaining a land ecosystem damage quantification model according to the damage amount of land ecosystem; determining greenhouse gas emissions based on the energy consumption of the open-pit coal mine within the mining plan; obtaining an environmental impact quantification model of coal mining on the ecosystem according to the greenhouse gas emissions and the land ecosystem damage quantification model; and optimizing the mining plan of the open-pit coal mine by using the environmental impact quantification model to obtain a mining plan with the minimum impact on the ecosystem. According to the characteristics of production process of open-pit coal mines, the mining plan of the open-pit coal mine is optimized.



21: 2022/08988. 22: 2022/08/11. 43: 2022/10/13  
51: H01M

71: OBSHCHESTVO S OGRANICHENNOJ OTVETSTVENNOSTYU "INENERGY" (OOO "INENERGY")

72: MELNIKOV, Alexey Petrovich, LEVCHENKO, Egor Aleksandrovich, RYCHKOV, Andrei Aleksandrovich, SIVAK, Aleksandr Vladimirovich

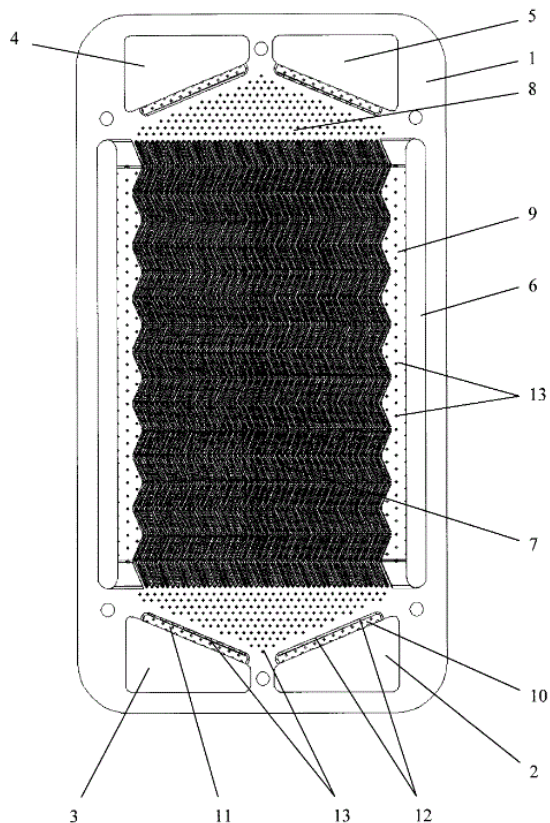
33: RU 31: 2019145110 32: 2019-12-30

**54: BIPOLAR PLATE FOR FUEL CELL STACKS**

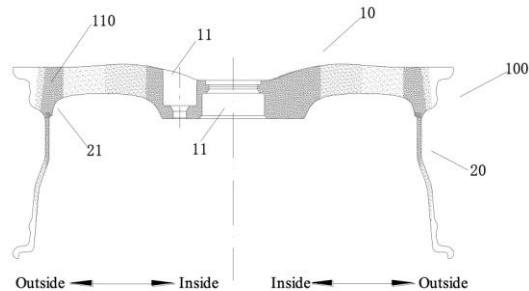
00: -

The invention relates to electrochemical power generation, and more particularly to components of liquid-cooled or evaporatively-cooled fuel cells which use a polymer membrane, hydrogen and oxygen as an electrolyte, a fuel and an oxidant respectively. A bipolar plate for liquid-cooled fuel cell stacks consists of two identically sized and shaped sheet elements (1) that are symmetrical about their centres, each of which contains a system of gas manifolds (2-5), coolant manifolds (6) and an active region (7), as well as gas distribution zones (8), a coolant distribution zone (9), perforated regions (10) for communication between gas manifolds and a gas distribution zone, and non-perforated regions (11) for communication between gas manifolds and a gas distribution zone. The active regions are corrugated such that longitudinal zigzag-shaped distribution

channels (14) are formed on both sides of each of the sheet elements. Structural protuberances (13) are provided on the surfaces of the distribution zones and of the communication regions. The plate has laser-welded edges. Coolant manifolds are arranged on the opposite longitudinal ends of each sheet element of the plate. 5 cl, 7 dwg

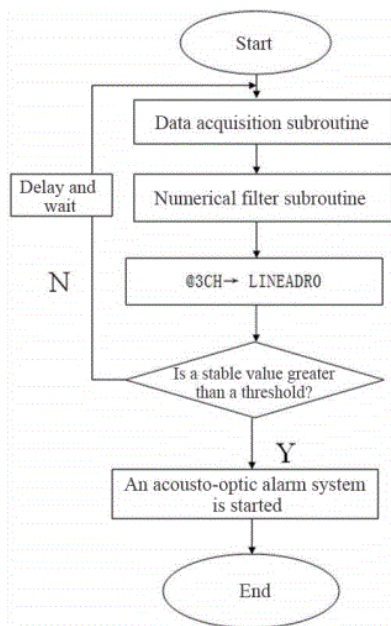


6061 aluminum alloy wheel hub; the wheel hub is provided with AlNiFeCrCoTi high-entropy alloy powder particles (110) serving as a strengthening phase; the addition amount of the strengthening phase gradually decreases from a bolt hole (11) of the wheel hub and a joint (21) of a wheel rim and a wheel spoke to a direction close to each other along a radial direction, and gradually decreases from the joint (21) of the wheel rim and the wheel spoke to the outside along the radial direction. The strengthening phase at each part of the wheel hub is distributed according to a preset gradient respectively, so that the performance of each part of the wheel hub also presents a gradient change, and the actual comprehensive mechanical property of the wheel hub is improved.



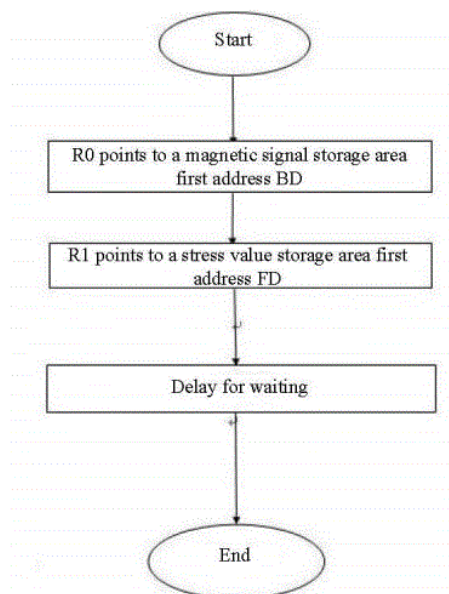
21: 2022/08989. 22: 2022/08/11. 43: 2022/10/13  
 51: B22D; B60B  
 71: JIANGSU POMLEAD CO., LTD  
 72: WAN, Jinhua, PENG, Guiyun, WANG, Fei, MAO, Wen, XIA, Chengqiang, ZHANG, Tong, ZHOU, Jinfeng, HUANG, Ningning, DONG, Qi, PENG, Yazhen  
 33: CN 31: 202011349171.7 32: 2020-11-26  
**54: WHEEL HUB MADE OF HIGH-ENTROPY ALLOY STRENGTHENED ALUMINUM-BASED GRADIENT MATERIAL AND METHOD FOR MANUFACTURING SAME**  
 00: -  
 The present invention discloses a wheel hub made of a high-entropy alloy strengthened aluminum-based gradient material and a method for manufacturing same. The wheel hub includes a

21: 2022/09018. 22: 2022/08/12. 43: 2022/10/17  
 51: B21C  
 71: Shenyang University of Technology  
 72: LIU, Tong, LIU, Bin, HE, Luyao, ZHANG, He, REN, Jian, YANG, Lijian, FU, Yanduo, DING, Liying, ZENG, Fanyu, MA, Xue  
**54: FIXED-POINT STRESS DETECTION SYSTEM**  
 00: -  
 A fixed-point stress detection system, belonging to the technical field of fixed-point flaw detection monitoring and inspection of metal materials, includes a single chip microcomputer, a sensor, an A/D converter, an external parameter memory, an alarm portion, a reset portion, and an external interrupt portion.



**54: STRESS DETECTION SYSTEM CAPABLE OF ADJUSTING EXTERNAL TEMPERATURE**

00: -  
 A stress detection system capable of adjusting an external temperature belongs to the field of researches on properties of magnetic memory signals of metals, and includes a single-chip microcomputer, a temperature control system, a magnetic sensor, a force sensor, an Analog/Digital (A/D) converter, a memory expansion part, and a reset/interrupt control part.

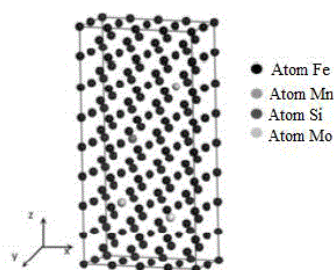


21: 2022/09019. 22: 2022/08/12. 43: 2022/10/17  
 51: G01N

71: Shenyang University of Technology  
 72: HE, Luyao, LIAN, Zheng, LIU, Bin, WU, Zihan, MA, Xue, REN, Jian, YU, Hui, YANG, Lijian

**54: STRESS SIGNAL FEATURE RESEARCH METHOD BASED ON FLAPW ALGORITHM**

00: -  
 The present invention relates to a stress signal feature research method based on a Full-potential Linearized Augmented Plane Wave (FLAPW) algorithm, including the following steps: step 1): building a magneto-mechanical model; and step 2): using a FLAPW method.



21: 2022/09021. 22: 2022/08/12. 43: 2022/10/17  
 51: C12Q

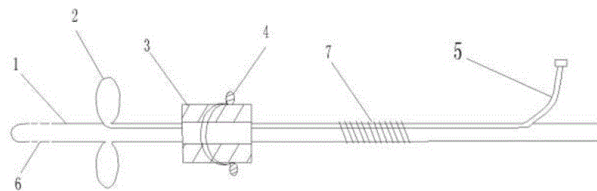
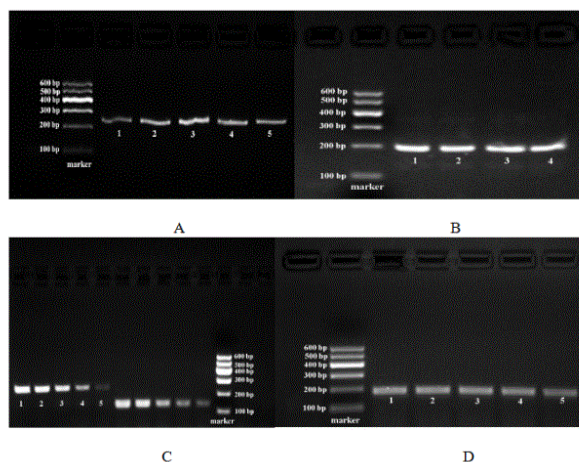
71: Shanxi University of Chinese Medicine  
 72: LI, Zhen

**54: ESTABLISHMENT METHOD OF STANDARD CURVE OF QRT-PCR ASSAY FOR DETECTION OF INFLAMMATORY FACTORS IN RATS WITH RHEUMATOID ARTHRITIS**

00: -  
 The present disclosure relates to the technical field of medical treatment, sets forth an establishment method of standard curves of qRT-PCR assay for detection of inflammatory factors in rats with rheumatoid arthritis, and establishes standard curves of qRT-PCR assay for detection of inflammatory factors in rats with rheumatoid arthritis, providing an accurate experimental basis for subsequent studies of expression characteristics thereof.

21: 2022/09020. 22: 2022/08/12. 43: 2022/10/17  
 51: G01N

71: Shenyang University of Technology  
 72: ZHANG, He, LIU, Bin, HE, Luyao, LIAN, Zheng, WU, Zihan, YANG, Lijian, MA, Xue, MA, Zeyu, YU, Hui



21: 2022/09023. 22: 2022/08/12. 43: 2022/10/17  
51: A61M

71: The Affiliated Hospital of Southwest Medical University

72: FU Yong, LIU Hui, LIAO Bin, WAN Juyi, YU Fengxu, DENG Mingbin, NIE Yongmei, LIU Feng, ZHANG Pei, GAN Yang, LIAO Ruili

#### 54: CLOSED THORACIC DRAINAGE TUBE

00: -

The invention discloses a closed thoracic drainage tube, which comprises a drainage tube body, a balloon arranged on the front section of the drainage tube body and a balloon tube communicated with the balloon, wherein the rear section of the drainage tube body is provided with a thread-shaped reinforcing structure, a movable fixing block is arranged between the reinforcing structure and the balloon, and an annular clamp which can fix the fixing block is arranged on the fixing block.

According to the scheme, the problem that the drainage tube body is broken at the corner, the pipeline is blocked, and the thoracic drainage is not smooth can be avoided; meanwhile, after the fixing block is tightly attached to the outer side of the thoracic cavity, the annular clamp is used for further fixing the fixing block, so that the drainage tube can be prevented from moving at will, and the wound can be pressed to stop bleeding, so that manual fixing is not required, and the use is very convenient.

21: 2022/09024. 22: 2022/08/12. 43: 2022/10/17  
51: A01N; A01P

71: South China University of Technology, GUANGDONG CITY TECHNICIAN COLLEGE, Guangzhou Zhongjian TCM Technology Co., Ltd

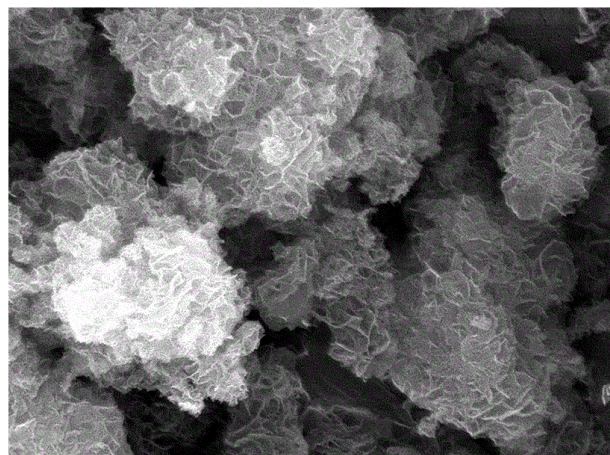
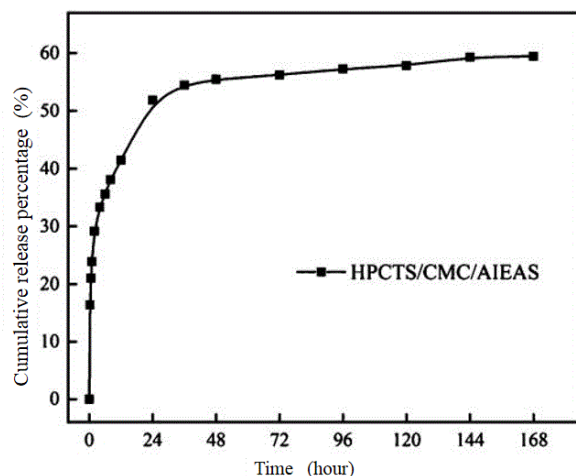
72: ZHAO Hui, JIA Zhixin, ZHAO Qi, ZHANG Qingzhong, JIA Demin

#### 54: HYDROXYPROPYL

#### CHITOSAN/CARBOXYMETHYL CHITOSAN DRUG-LOADED PARTICLES BASED ON EUPATORIUM ADENOPHORUM EXTRACT AND PREPARATION METHOD THEREOF

00: -

The invention discloses hydroxypropyl chitosan/carboxymethyl chitosan drug-loaded particles based on Eupatorium adenophorum extract and a preparation method thereof. The medicine used in the invention is the extract of Eupatorium adenophorum, named AIEAS, and the hydroxypropyl chitosan/carboxymethyl chitosan drug-loaded particles are polyelectrolyte complex formed by electrostatic interaction between hydroxypropyl chitosan and carboxymethyl chitosan. The polyelectrolyte complex shows light blue opalescence when it disperses in water phase. Through particle size analysis and SEM observation, it is found that it is a micron-sized polydisperse spherical particle. The hydroxypropyl chitosan/carboxymethyl chitosan drug-loaded particles of the invention have slow release and biodegradability, are clean and environment-friendly, and fully contacts with crops. From the choice of carrier matrix materials, chitosan and its derivatives have many characteristics, such as sterilization and pest control, pesticide synergy, etc. All of these not only expand the application range of Eupatorium adenophorum, but also open up a new direction for pesticide sustained-release formulation forms.



21: 2022/09025. 22: 2022/08/12. 43: 2022/10/17  
51: C09D

71: Inner Mongolia Power (Group) Co.,Ltd.,  
Bayannur Power Branch, Inner Mongolia Power  
(Group) Co.,Ltd., Inner Mongolia Power Research  
Institute Branch

72: TANG Zhanrong, YE Hailong, KANG Haiping,  
CHEN Yan, YANG Yaoguo, XUE Shouhong, GE  
Lihong, LI Danyang

#### 54: EPOXY CORROSION COATING AND PREPARATION METHOD THEREOF

00: -

The invention relates to the field of electric power corrosion protection, in particular to an epoxy resin anti-corrosion coating and a preparation method thereof. The epoxy resin anti-corrosion coating is used for concrete poles in high saline-alkali areas and comprises epoxy resin emulsion; 5-25 parts of solidifying agent; 5-25 parts of attenuant; 5-10 parts of defoamer; 5-10 parts of nano-lamellar titanium dioxide. The nano-lamellar titanium dioxide material is added into the concrete epoxy resin anti-corrosion coating, which can increase the strength of the coating, make the coating non-layered, have excellent adhesion and excellent hydrophobic performance, thus greatly improving its self-cleaning property and anti-staining performance, and being used for coating on the concrete surface, the surface drying time is rapid, the surface is smooth and flat, and the concrete epoxy resin anti-corrosion coating has obvious chloride ion corrosion resistance. The preparation method of the concrete epoxy resin anti-corrosion coating is simple, the yield is high, and the application prospect is broad.

21: 2022/09026. 22: 2022/08/12. 43: 2022/10/17  
51: C08K

71: Research Institute of Highway Ministry of  
Transport

72: LI Mingliang, LI Jun, WU Hao

33: CN 31: 202210267743.X 32: 2022-03-17

#### 54: ASPHALT MIXTURE MODIFYING ADDITIVE, PREPARATION METHOD THEREOF AND HIGH- TOUGHNESS ASPHALT MIXTURE

00: -

The invention provides an asphalt mixture modifying additive, a preparation method and a high-toughness asphalt mixture containing the additive, wherein the raw materials of the asphalt mixture modifying additive include: 30-85 parts of polypropylene resin; 10-50 parts of toughening agent; the toughening agent is one or a mixture of ethylene-propylene-diene rubber, ethylene-propylene-diene rubber, styrene and butadiene thermoplastic elastomer, butadiene rubber and styrene-butadiene rubber; 2-6 parts of tackifier; 1-3 parts of mica powder; 0.1-1 part of grinding aid; 0.05-0.5 part of coupling agent; 0.1-0.3 part of antioxidant. The asphalt mixture modification additive is used in the asphalt mixture production process, and has the functions of improving the high-temperature plasticity of the asphalt mixture and enhancing the low-temperature ductility at the same time. The high-temperature stability of the obtained asphalt mixture is higher than that of the existing anti-rutting agent, high-modulus agent and other materials, and has good anti-fatigue performance and water stability.

21: 2022/09027. 22: 2022/08/12. 43: 2022/10/17

51: A23L

71: Hainan Tropical Ocean University, Sanya Yazhou Bay South China Sea Deep Water Research Institute Co., Ltd

72: Hu Yaqin, Hu Ziheng, Yang Xin, Lu Zijing, Xu Yuanzhe

**54: A PREPARATION METHOD OF GOLDEN POMFRET NOODLES WITH DEEP SEA SALT**

00: -

The invention discloses a preparation method of golden pomfret noodles with deep sea salt, and relates to the technical field of aquatic product processing. The method comprises the following steps: removing the head, tail and internal organs of fresh pomfret, taking the dorsal and abdominal muscles of pomfret, and removing fishy smell to obtain fish meat after removing fishy smell; adding purified water, starch, deep sea salt and xanthan gum into the fish meat after removing fishy smell, mixing and mincing, and crushing and chopping to obtain the mixed material; finally, pressing, ripening, cutting into strips and freeze-drying the mixed materials to obtain the fish noodles product. The golden pomfret noodle of the invention has the characteristics of high nutritional value, good taste, low processing difficulty and so on.

21: 2022/09030. 22: 2022/08/12. 43: 2022/11/09

51: G06Q

71: Yancheng Institute Of Technology

72: Liu Ying

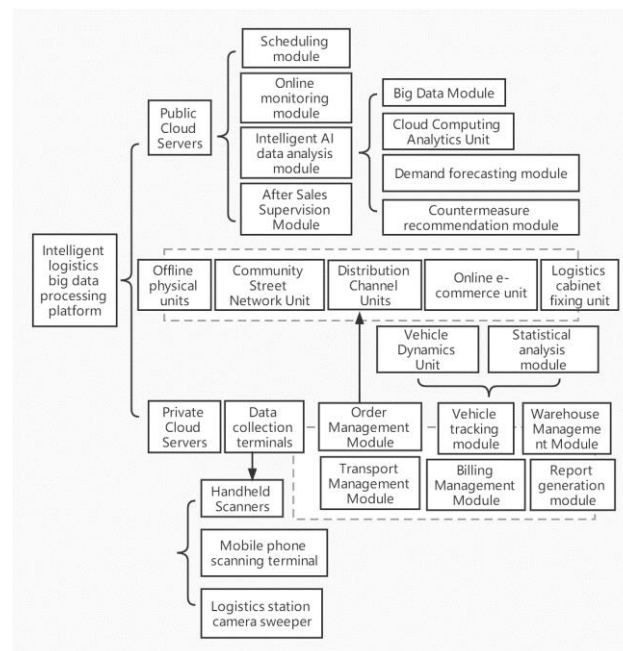
33: CN 31: 202210231519.5 32: 2022-03-09

**54: AN INTELLIGENT LOGISTIC BIG DATA PROCESSING PLATFORM**

00: -

The invention relates to the technical field of logistics processing platforms, and discloses an intelligent logistics big data processing platform which comprises a public cloud server and a plurality of private cloud servers which realize data interaction with the public cloud server through a wireless communication network and are used for being controlled by different logistics companies, The public cloud server is used for carrying out online monitoring, intelligent AI data analysis, integrated management and scheduling management on the logistics process in the plurality of private cloud servers; Ach private cloud server comprises a data acquisition terminal, an order management module, a vehicle tracking module, a warehouse

management module, a transportation management module, an accounting management module and a report generation module; The order management module comprises an offline entity unit, a community street network unit, a distribution channel unit, an online e-commerce unit and a logistics cabinet fixed-point unit. The invention has the beneficial effects of perfecting the data of each link of the logistics and improving the analysis, prediction and optimization scheme.



21: 2022/09033. 22: 2022/08/12. 43: 2022/11/09

51: B05B

71: Wuhu Heyu Electronic Technology Co., Ltd

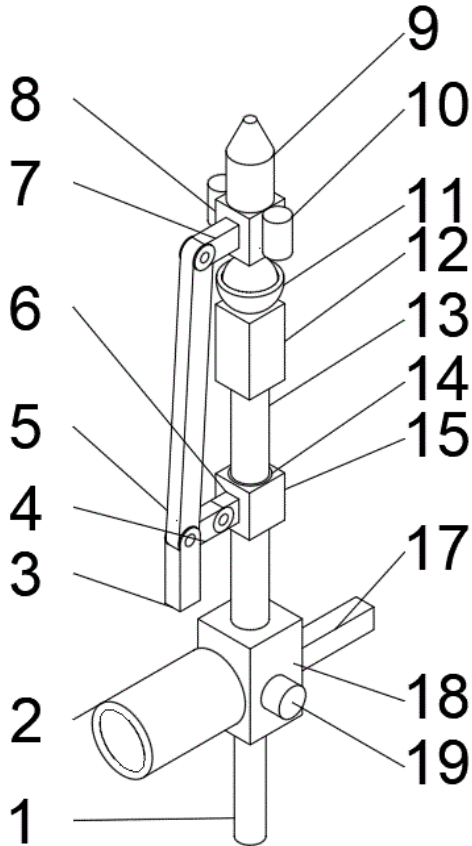
72: Xu Yang

**54: MULTI-ANGLE PAINT SPRAY DEVICE FOR AUTOMOBILE PART**

00: -

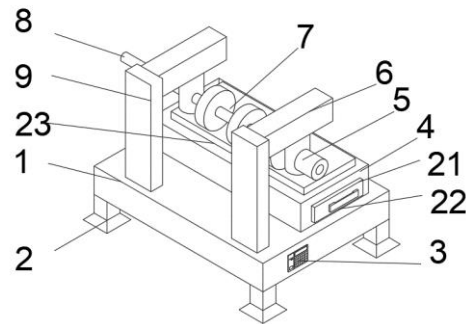
The invention relates to the field of paint spraying of automobile parts, and discloses a multi-angle paint spraying device for the automobile parts, which comprises a first fixing block, wherein the middle part of the upper end of the first fixing block is fixedly connected with a protective cylinder, the middle part of the upper end of the first fixing block is fixedly connected with a corrugated paint spraying pipe in the protective cylinder, the middle part at the left end of and the lower end of which are fixedly connected with material cylinders; A cylindrical groove is perforate at that middle end inside the first fixed

block, the middle part of the out wall of the protective cylinder is rotatably connected with a rotating block through a bearing, the middle part of the left end of the rotating block is fixedly connected with a first fix seat, the upper end of the protective cylinder is fixedly connected with a second fixed block, the middle parts of the upper ends of the second fixed blocks are movably connected with third fixed blocks through universal connectors, and the middle parts of the upper ends of the third fixed blocks are fixedly connected with paint spraying heads. In that invention, the light system is assembled, and the light lamps are fixedly arranged at the front end and the rear end of the third fixing block, so that the light lamps can be turned on when the brightness is low to illuminate and improve the painting quality.



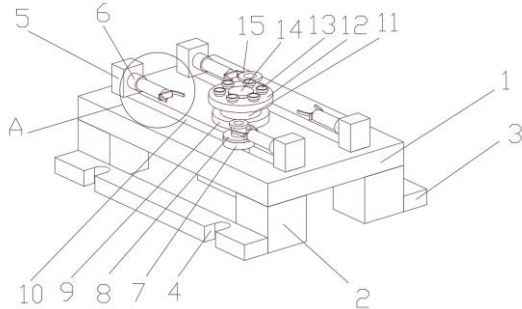
21: 2022/09034. 22: 2022/08/12. 43: 2022/11/09  
 51: B24B  
 71: Wuhu Dengding Machinery Equipment Co., Ltd  
 72: Mu guopei  
**54: GEAR GRINDING DEVICE WITH HIGH AUTOMATION DEGREE**  
 00: -

The invention relates to the technical field of gear grinding devices, and discloses a gear grinding device with high automation degree, which comprises a workbench, wherein one side of the top end of the workbench is fixedly provided with two support columns, the top ends inside the two support columns are fixedly provided with second rotating motors, the output ends of the two second rotating motors are fixedly provided with second rotating shafts, And second slide blocks are arrange on that two second rotating shafts, support plates are fixedly arrange on the two second sliding blocks, and third rotating motors are fixedly arranged in the two support plates. In the gear grinding device with high automation degree disclosed by the invention, the positions of the second rotating motors arranged inside the two supports and the third rotating motor arranged inside the support rod can be automatically adjusted to be aligned with the gear, and the grinding roller is driven to grind the gear through the output of the first rotating motor, so that the grinding automation is realized, and the working efficiency is improved.



21: 2022/09035. 22: 2022/08/12. 43: 2022/11/09  
 51: F16H  
 71: Wuhu Dengding Machinery Equipment Co., Ltd  
 72: Mu guopei  
**54: FIXTURE FOR PROCESSING SPLICED GEAR**  
 00: -  
 The invention relates to the field of clamps, and discloses a spliced gear machining clamp which comprises a first fixing plate, wherein first fixing blocks are fixedly arranged at four corners of the bottom of the first fixing plate; two second fixing plates are fixedly arranged on the outer walls of the bottoms of the four first fixing blocks; and fixing clamping grooves are formed in two ends of each

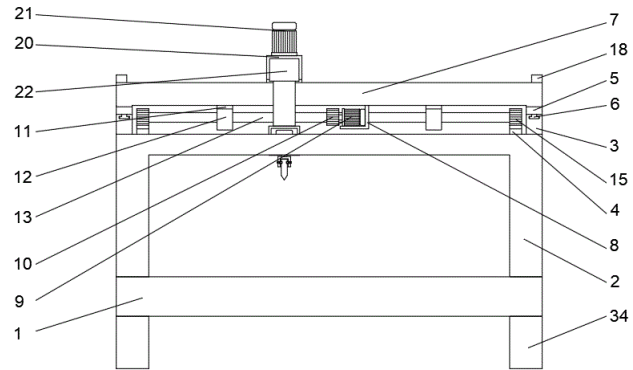
second fixing plate, which are close to one side of each outer wall. According to the invention, the sliding block is arranged, the first fixed chassis is arranged on the sliding block, and the positions of the two first fixed chassis are moved, so that spliced gears with different sizes can be processed, and the processing fixture can be widely applied to processing spliced gears with different sizes.



21: 2022/09036. 22: 2022/08/12. 43: 2022/10/17  
 51: B23Q  
 71: Wuhu Heyu Electronic Technology Co., Ltd  
 72: Xu Yang  
**54: HIGH-ACCURACY PERFORATE DEVICE FOR AUTOMOBILE PART**

00: -  
 The invention relates to the technical field of automobile production and manufacturing, and discloses a high-accuracy punching device for automobile accessories, which comprises a workbench, wherein the upper end surface of the workbench is fixedly connected with a support frame, the upper end surface of the support frame is fixedly connected with Y-axis slide rails and Y-axis racks at two sides, and Y-axis slide blocks are connected in the two Y-axis slide rails in a sliding manner. And that upper end of the two Y-axis slide blocks are fixedly connecte with a Y-axis cross beam, the middle of the lower end face of the Y-axis cross beam is fixedly connected with a first mounting frame, a first motor is fixedly arrange on the first mounting frame, and the output end of the first motor is fixedly connected with a first driving wheel. In the invention, the omnibearing movement of the drill bit is realized through the movement of the Y-axis cross beam and the X-axis mounting rack and the work of the electric telescopic rod, the gear and rack transmission enables the device to have higher

precision, and a Y-axis slide block is clamped with a Y-axis slide rail, an X-axis slide block is clamped with an X-axis slide rail, and a Y-axis stop block and an X-axis stop block play a role in fixing and limiting the device.

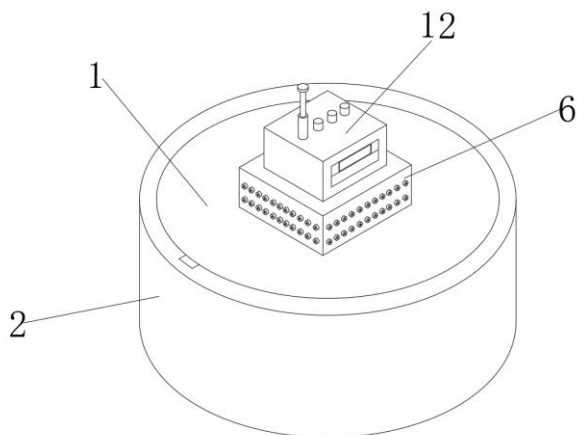


21: 2022/09037. 22: 2022/08/12. 43: 2022/10/17  
 51: A47L  
 71: Wuhu Kedi Electronic Technology Co., Ltd  
 72: Chen Lin

**54: MULTIFUNCTIONAL INTELLIGENT SWEEPING ROBOT**

00: -  
 The invention relates to the field of intelligent sweeping robots, and discloses a multifunctional intelligent sweeping robot which comprises a mounting shell, an anti-collision shell and a driving roller, wherein a fixed block is fixedly connected to the center of the outer wall of the front end of the mounting shell, a sliding groove is formed in the center of the inner wall of the front end of the anti-collision shell, and the fixed block is in sliding connection inside the sliding groove. The upper surfaces of the front end and the rear end of the mounting shell are fixedly connected with frames, and infrared sensors are fixedly connected inside the frames. In the invention, the humidity of the surrounding air is sensed by the humidity sensor, when the surrounding air is sensed to be dry, the water inlet pipe of the water pump is connected with the agent storage box to inject the humidifying agent in the agent storage box into the inner wall of the square box through the water outlet pipe of the water pump, The use requirements of a user are met, and the purpose of multiple functions is achieved.





21: 2022/09038. 22: 2022/08/12. 43: 2022/10/17  
 51: C04B  
 71: Zhejiang Boming Environmental Protection and Energy Saving Technology Co.,Ltd  
 72: Weng boming

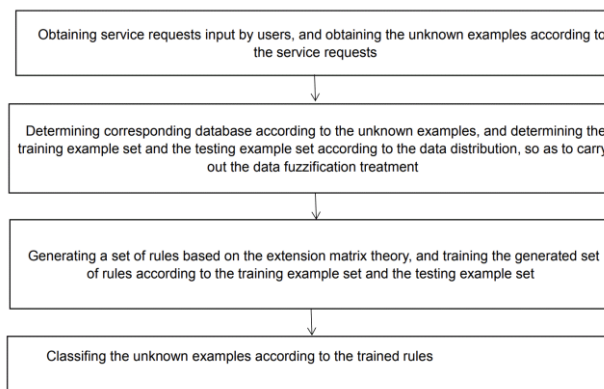
**54: A PREPARATION METHOD OF ALPHA-HEMIHYDRATE PHOSPHOGYPSUM AND THE ALPHA-HEMIHYDRATE PHOSPHOGYPSUM**

00: -  
 The invention provides a preparation method of Alpha-hemihydrate phosphogypsum and Alpha-hemihydrate phosphogypsum, belonging to the technical field of phosphogypsum preparation. The invention is prepared by a dihydrate-hemihydrate phosphoric acid process. And the present invention can produce qualified phosphoric acid and at the same time prepare low-phosphorus and high-strength Alpha-hemihydrate phosphogypsum raw materials on a large scale. And the low-phosphorus and high-strength Alpha-hemihydrate phosphogypsum can be used to produce the gypsum building blocks, and can be used as raw materials of gypsum-based self-leveling mortar, high-quality plastic filler, cast-in-place wall, gypsum Board with paper surface, gypsum Board without paper surface and plastering mortar, etc., so as to effectively meet the demand of building market for high-quality and low-cost gypsum building materials, expand the new application field of phosphogypsum, and have a good development prospect.

21: 2022/09039. 22: 2022/08/12. 43: 2022/10/17  
 51: G06F  
 71: Hebei Wangxin Technology Group Co., Ltd  
 72: Yan Rongxin

**54: AN EXTRACTION METHOD AND A EXTRACTION SYSTEM OF FUZZY EXTENSION MATRIX RULES BASED ON BIG DATA**

00: -  
 The invention relates to the technical field of classification prediction and provides an extraction method and an extraction system of fuzzy extension matrix rules based on big data. And the extraction method of fuzzy extension matrix rules based on big data comprises the following steps: S101: obtaining service requests input by users, and obtaining the unknown examples according to the service requests; S102: determining corresponding database according to the unknown examples, and determining the training example set and the testing example set according to the data distribution, so as to carry out the data fuzzification treatment; S103: generating a set of rules based on the extension matrix theory, and training the generated set of rules according to the training example set and the testing example set; S104: classifying the unknown examples according to the trained rules. Through the technical scheme, the problem of low classification prediction accuracy in fuzzy environment in the prior art is solved.



21: 2022/09040. 22: 2022/08/12. 43: 2022/10/04  
 51: A61K; A61P  
 71: Dr. Pranay Wal, Dr. Biplab Debnath, Dr. Sangram Keshari Panda, Mr. Uddhav Patangia, Dr. Ramesh Kumari Dasgupta, Mrs. Manasi Khadanga, Ranadeep Borgohain, Joyanta Kishore Debnath, Mokinur Rahaman, Jisu Das  
 72: Dr. Pranay Wal, Dr. Biplab Debnath, Dr. Sangram Keshari Panda, Mr. Uddhav Patangia, Dr. Ramesh Kumari Dasgupta, Mrs. Manasi Khadanga,

Ranadeep Borgohain, Joyanta Kishore Debnath, Mokinur Rahaman, Jisu Das

**54: FORMULATION FOR IMPROVING INSULIN RESISTANCE IN GESTATIONAL DIABETES MELLITUS**

00: -

The present invention provides herbal formulation for the treatment of Gestational Diabetes Mellitus, the formulation comprising at least 250 mg/kg of each of *Cajanus cajan* chloroform extract, Methanol extract, and Ethyl acetate extract. The formulation can be in any form including such as but not limited to tablet, liquid, and powder. The formulation is administered via at least one of injection, oral, and chewable. The *Cajanus cajan* chloroform extract is leaves-based extract. The extract is in powdered form.

S. No.	Group	Treatment	BGBT	BGAT	% Increase or decrease
1.	I	Control	73.18±0.731	74.46±0.431	1.72
2.	II	GDM group	160.3±0.396	162.29±0.314	1.23
3.	III	Chloroform extract (270mg/kg)	165.31±0.486**	155.43±0.389**	-5.98
4.	IV	Ethyl acetate extract (270mg/kg)	172.5±0.341**	126.36±0.252**	-26.74
5.	V	Methanol extract (270mg/kg)	168.1±0.362**	104.24±0.352**	-37.98

21: 2022/09043. 22: 2022/08/12. 43: 2022/10/17  
51: C03B

71: Chuda Intelligent (Wuhan) Technology Research Institute Co., Ltd.

72: DENG, Jiahui, CAI, Zhixiang, GUO, Yunfei, NIE, Yunfei, FAN, Shengzheng, LIU, Hu

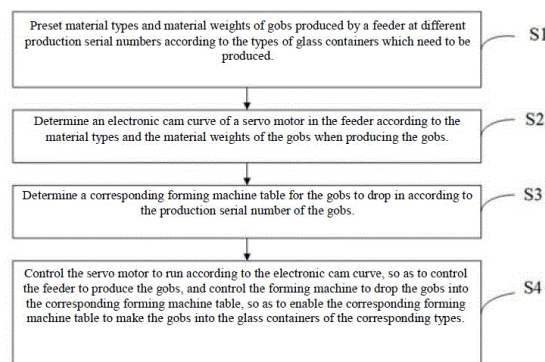
33: CN 31: 202210014344.2 32: 2022-01-07

**54: DIFFERENT-WEIGHT FEEDING METHOD AND DIFFERENT-WEIGHT FEEDING SYSTEM**

00: -

The present application provides a different-weight feeding method and a different-weight feeding system. The method includes: presetting material types and material weights of gobs produced by a feeder at different production serial numbers; determining an electronic cam curve of a servo motor in the feeder according to the material types and the material weights of the gobs when producing the gobs; determining a corresponding forming machine table for the gobs to drop in according to

the production serial number of the gobs; and controlling the servo motor to run according to the electronic cam curve, so as to control the feeder to produce the gobs, and controlling the forming machine to drop the gobs into the corresponding forming machine table, so as to enable the corresponding forming machine table to make the gobs into the glass containers of the corresponding types.

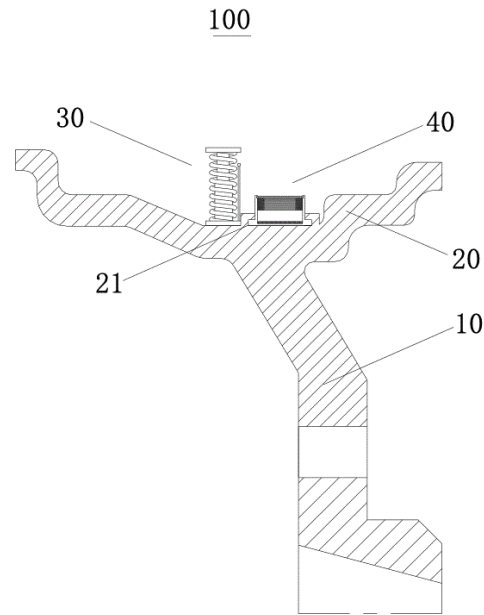
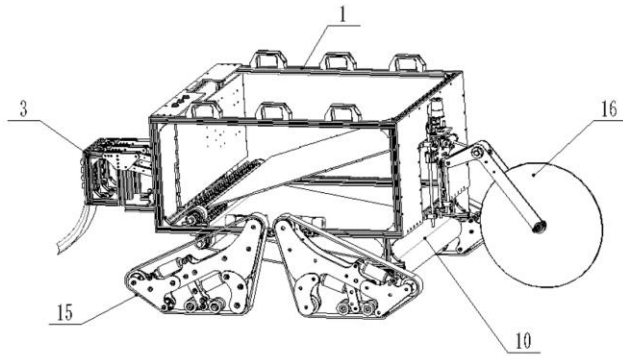


21: 2022/09046. 22: 2022/08/12. 43: 2022/11/07  
51: A01B

71: Shenyang University of Technology  
72: GUO, Zhongfeng, HE, Qihua, YANG, Junlin  
**54: A GRASS GRID LAYING ROBOT**

00: -

The invention discloses a grass grid laying robot, which comprises a robot body frame, on which a first driving mechanism, a second driving mechanism, a third driving mechanism and a conveyor belt grass conveying mechanism are arranged, the driving end of the first driving mechanism is provided with a ditch opener, the driving end of the second driving mechanism is provided with a moving device, and the driving end of the third driving mechanism is provided with a grass pressing device, the moving mechanism is located at both sides of the robot body frame, the trencher is located at the front end of the robot body frame, and the grass pressing device is located at the rear end of the robot body frame; The grass conveying mechanism of the conveyor belt is fixed in the main frame of the robot with fasteners and is located between the ditch opener and the grass pressing device; The upper end of the robot body frame is provided with a handle.



21: 2022/09055. 22: 2022/08/12. 43: 2022/10/17

51: B60C

71: JIANGSU POMLEAD CO., LTD

72: WAN, Jinhua, PENG, Guiyun, WANG, Fei, MAO, Wen, XIA, Chengqiang, ZHANG, Tong, ZHOU, Jinfeng, HUANG, Ningning, DONG, Qi, PENG, Yazhen

33: CN 31: 202011349173.6 32: 2020-11-26

**54: EXPLOSION-PROOF WHEEL HUB WITH BUFFER STRUCTURE**

00: -

The present invention discloses an explosion-proof wheel hub with a buffer structure. The explosion-proof wheel hub comprises a wheel rim and a wheel spoke connected inside the wheel rim, wherein a tire is suitable for being mounted on the wheel rim. The explosion-proof wheel hub further comprises an elastic device and an air bag assembly. The elastic device comprises a mechanical spring, one end of which is suitable for being connected to the wheel rim and the other end of which is suitable for extending towards an inner side wall of the tire; the elastic device is configured such that the mechanical spring, when pressed, has a trend to move towards the tire; the air bag assembly comprises an air bag, an air generating agent filling the air bag, and a flip-flop which is in contact with the air generating agent to trigger the air generating agent; the air bag is suitable for being mounted on the wheel rim, and the wheel rim is arranged in the air bag; and when a pressure on the wheel hub reaches a threshold pressure, the flip-flop triggers the air generating agent to expand the air bag, so as to jack up the tire. The height of the elastic device that is in a non-pressed state is greater than that of the air bag assembly that is in a non-expanded state.

21: 2022/09056. 22: 2022/08/12. 43: 2022/10/17

51: C22C; C23C

71: JIANGSU POMLEAD CO., LTD

72: WAN, Jinhua, PENG, Guiyun, WANG, Fei, MAO, Wen, XIA, Chengqiang, ZHANG, Tong, ZHOU, Jinfeng, HUANG, Ningning, DONG, Qi, PENG, Yazhen

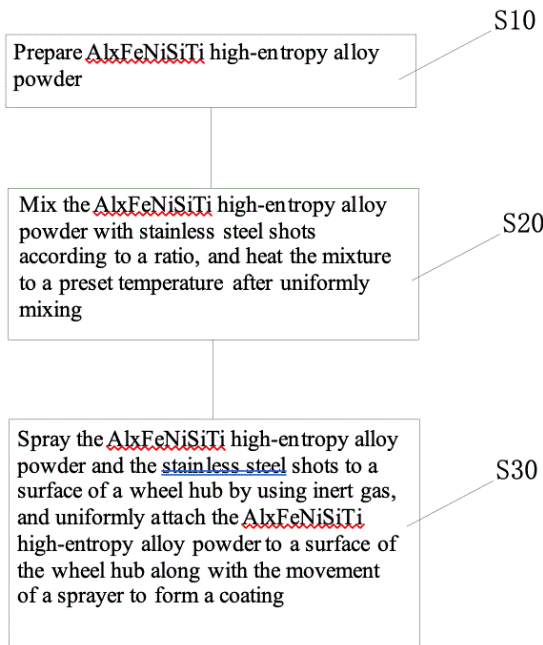
33: CN 31: 202011349201.4 32: 2020-11-26

**54: TECHNOLOGICAL METHOD FOR PREPARING HIGH-HARDNESS CORROSION-RESISTANT WHEEL HUB COATING**

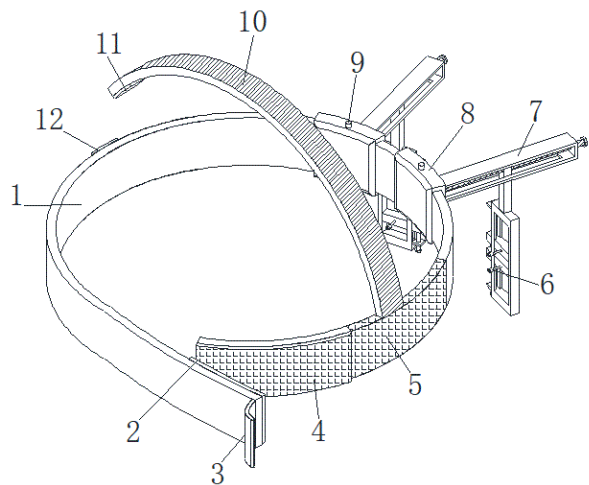
00: -

The present invention discloses a technological method for preparing a high-hardness corrosion-resistant wheel hub coating, which includes the following steps: preparing Al<sub>x</sub>FeNiSiTi high-entropy alloy powder; mixing the Al<sub>x</sub>FeNiSiTi high-entropy alloy powder with stainless steel shots according to a ratio, and heating the mixture to a preset temperature after uniformly mixing; and spraying the Al<sub>x</sub>FeNiSiTi high-entropy alloy powder and the stainless steel shots to a surface of a wheel hub by using inert gas, and uniformly attaching the Al<sub>x</sub>FeNiSiTi high-entropy alloy powder to a surface of the wheel hub along with the movement of a sprayer to form a coating. According to the technological method, a coating material can be better attached to a surface of a wheel hub, which improves the adhesion and compactness of the coating material; at the same time, some surface

defects of the wheel hub can be repaired, and the content of Al in the Al<sub>x</sub>FeNiSiTi high-entropy alloy can be changed for different wheel hubs and different use conditions, so as to adjust the hardness and corrosion resistance of the alloy.



After that, the double-shaft screw is turned, and the double-shaft screw turns to drive the two moving bases to move toward each other, and the two moving bases to move toward each other to drive the two eyelid-opening rods to open the patient's eye. The two moving bases move toward each other to form the operation area, which is convenient for the doctor to treat the eye. The adjustment component is set to facilitate the movement of the eyelid-opening rod, so as to facilitate the treatment of the eye.



21: 2022/09084. 22: 2022/08/15. 43: 2022/10/17  
51: A61B

71: Liuzhou Worker's Hospital  
72: Lili Liu, Le Han, Dexian Zhou, Shiyang Zhou, Peiyao Zhou, Min Hu, Liubin Lu

**54: AN OPHTHALMIC EXTERNAL EYELID-OPENING APPARATUS**

00: -  
The invention discloses an ophthalmic external eyelid-opening apparatus, which belongs to the technical field of eyelid-opening apparatus, including a head ring. The surface of the head ring is provided with two sliding locks, the upper end of the sliding lock is provided with a locking button, and one side of the sliding lock is provided with two eyelid-opening rods. The eyelid-opening rod is connected with the sliding lock through an adjusting component. The invention is connected between the eyelid-opening rod and the sliding lock through an adjusting component, and the screw rod is rotated to drive the sliding rod to move, and the sliding rod drives the lower frame to move. Thus, the eyelid-opening rod is brought into contact with the eye.

21: 2022/09085. 22: 2022/08/15. 43: 2022/10/17  
51: G06T

71: Institute of Water Resources for Pastoral Area, Ministry of Water Resources

72: Weijie Zhang, Qiang Quan, Wenjun Wang, Yingjie Wu, Jiuji An, Xiaojun Chen, Quancheng Zhou, Hang Yin, Wei Li, Shuixia Zhao

**54: A DROUGHT EVENT RECOGNITION METHOD BASED ON THREE-DIMENSIONAL PERSPECTIVE**

00: -  
The invention discloses a drought event identification method based on a three-dimensional perspective, and a drought event identification method based on a three-dimensional perspective, including the following steps: S1. Construct the VIC land hydrological model; S2. Construct accurate drought identification index; S3. Establish evaluation index of drought three-dimensional spatio-temporal model; S4. Confirmation of large data range; S5. Big data range analysis; S6. Drought event identification; S7. Define drought development and recovery stages based on changes in drought severity. The

invention deepens the definition of sudden drought event and improves the monitoring accuracy of sudden drought event based on the combination test of a variety of hydrometeorological elements, and comprehensively considers two schemes of intensity change rate and short time scale. This can not only describe the overall trend law of each drought in the time and space dimensions, but also reveal the dynamic evolution law of the whole process from the onset to the end of drought under different spatio-temporal coupling conditions.

21: 2022/09094. 22: 2022/08/15. 43: 2022/10/17

51: C12N

71: University of Electronic Science and Technology of China

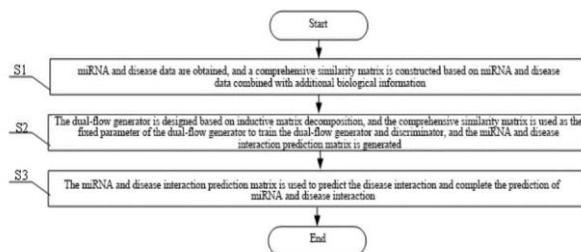
72: Yun Zhang, Jihui Song, Yongguo Liu, Jiajing Zhu, Qiaoqin Li, Xin Lu, Chong Fu

33: CN 31: 202210219782.2 32: 2022-03-08

#### **54: AN INTERACTION PREDICTION METHOD AND SYSTEM FOR MIRNA AND DISEASE**

00: -

The invention provides an interaction prediction method and system for miRNA and disease, belonging to the technical field of interaction prediction between miRNA and disease. First, during the generation of similarity matrix, other biological data are fused to calculate the Gaussian spectral kernel similarity between miRNA and disease, and the weight of similarity fusion is calculated according to the proportion of miRNA or disease with functional or semantic similarity, so as to obtain a more reasonable comprehensive similarity matrix. Based on inductive matrix decomposition, the simulation of the original matrix is decomposed into two parameter matrices, and a dual-flow generator is designed to generate a low-rank similarity projection coefficient matrix. The Dropout layer is added to ensure the sparsity of the generation matrix. Finally, the final miRNA disease interaction prediction result is obtained by averaging the multiple generation results, which achieved higher miRNA and disease interaction prediction ability and prediction reliability, and provided an auxiliary decision for researchers to determine candidate miRNA for disease interaction.



21: 2022/09096. 22: 2022/08/15. 43: 2022/10/17

51: G01B; G06T

71: Tangshan UDO Technology Limited

72: LI, Zhiyong

33: CN 31: 202111598623.X 32: 2021-12-24

#### **54: METHOD AND DEVICE FOR DETECTING TYRE CREEP OF ROTARY KILN**

00: -

The present disclosure discloses a method and device for detecting a tyre creep of a rotary kiln. An image acquisition unit tracks a relative displacement of a target object in real time by acquiring three-dimensional coordinates of a target image fixed to a tyre, and then coordinate data and images of the tracked object are sent to a central processing unit by a signal transmission unit; the central processing unit receives and processes the data, computes a relative displacement between the tyre and a cement kiln cylinder in X and Y directions, so that the tyre creep relative to the kiln cylinder and a tyre clearance are measured, a curve of the relative displacement between the tyre and the cylinder is formed; and meanwhile, the displacement curve is shown on a user terminal, and measured process data can be saved in a hard disk of the user terminal.

21: 2022/09097. 22: 2022/08/15. 43: 2022/10/17

51: A01H

71: Jiangsu Academy of Agricultural Sciences

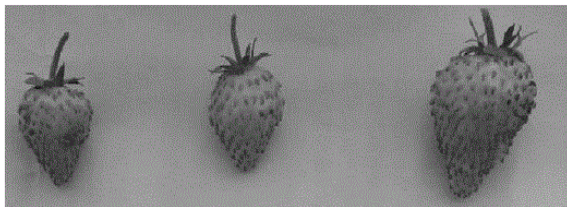
72: Jing WANG, Fuhua PANG, Huazhao YUAN, Mizhen ZHAO, Weijian CAI, Xiaodong CHEN, Hongmei YU

#### **54: METHOD FOR BREEDING AND PROPAGATING EVER-BEARING WHITE-FRUIT STRAWBERRIES**

00: -

The present invention relates to a method for breeding and propagating ever-bearing white-fruit strawberries, including the following steps: (1) taking germplasm from white-fruit non-ever-bearing strawberries, performing self-crossing to obtain the

first generation of self-crossed offspring, planting and growing these offsprings in the natural environment under all-year observation, and screening target individuals with target traits; and (2) self-crossing, planting and screening the target individuals obtained in step (1) according to the method of step (1), performing self-crossing for more than 18 successive generations, and screening ever-bearing strawberries with stable traits and without variation. The ever-bearing white-fruit strawberries obtained are stable without variation, and can be propagated by seeds with stable inheritable traits. The strawberry seeds obtained can germinate directly with a higher germination rate, and the germination rate will not be greatly affected if the seeds are stored at a room temperature for more than 2 years.



21: 2022/09098. 22: 2022/08/15. 43: 2022/10/17  
51: C07C

71: Hainan Tropical Ocean University, Yazhou Bay Innovation Institute Hainan Tropical Ocean University

72: Hu Yaqin, Mao Yunxiang, Han Qiuying, Hu Zhiheng, Zhou Jiaying

#### **54: METHOD FOR EXTRACTING ANTIOXIDATIVE ASTAXANTHIN FROM SALMON**

00: -

The invention discloses a method for extracting antioxidative astaxanthin from salmon, belonging to the technical field of astaxanthin processing. The method comprises the following steps: cutting salmon meat into fillet, placing them in the mixture of allicin and mustard oil and performing catalytic impregnation treatment to obtain the catalyzed salmon; heating the catalyzed fish meat in vacuum at low temperature; extracting the astaxanthin from heated fish and purifying to obtain astaxanthin with excellent antioxidant activity. The astaxanthin extracted by the method can scavenge more than 50% of ABTS radicals and more than 90% of superoxide anion radicals, and displays strong antioxidant activity.

21: 2022/09099. 22: 2022/08/15. 43: 2022/10/17  
51: F16P

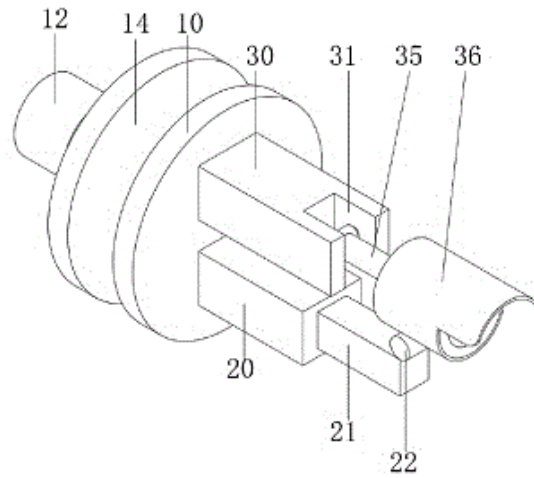
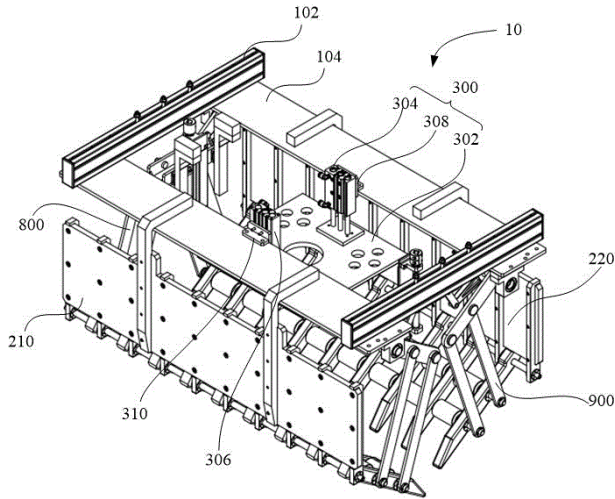
71: Shenyang University of Technology

72: GUO Zhongfeng, YANG Junlin, FU Xiaohan

#### **54: A GRAB FOR BAGGED GOODS**

00: -

The invention provides a grab for bagged goods, which comprises a connecting base; a first gripping mechanism disposed on a first side of the connecting base; the second gripping mechanism is arranged on the second side of the connecting base, and the first side and the second side are opposite sides of the connecting base; a pressing mechanism provided on the connecting base, the pressing mechanism comprising a pressing part, the pressing part being able to expand and contract with respect to the connecting base to achieve pressing; the driving mechanism is arranged on the connecting base, the output end of the driving mechanism is connected with the first gripping mechanism and the second gripping mechanism, and the driving mechanism is used to drive the first gripping mechanism and the second gripping mechanism to grab or release materials. In the present application, the first gripping mechanism and the second gripping mechanism are driven by the driving mechanism to realize gripping and releasing of materials, thereby avoiding high-intensity labor and low efficiency work caused by manual handling. The pressing part of the pressing mechanism presses the placed materials to improve the stability and compactness of the overall placement of materials.



21: 2022/09105. 22: 2022/08/15. 43: 2022/09/16

51: G06V; G03B; H04N  
71: SUQIAN UNIVERSITY  
72: LV, KUN

**54: COMPUTER VISION-BASED HUMAN BEHAVIOR RECOGNITION DEVICE**

00: -

The present disclosure relates to the field of behavior recognition technologies, and discloses a computer vision-based human behavior recognition device, including a turntable. A second rod and a fourth rod are installed on the turntable, a rotating motor is connected to the turntable, an output shaft of the rotating motor is fixedly connected to the center of the turntable, and a vision camera is rotatably connected to the fourth rod. After a telescopic motor is turned on, the telescopic motor drives the extension and retraction of the second rod and a third rod, so as to achieve the effect of driving the vision camera to rotate around a second shaft, to make the vision camera rotate up and down, thus achieving the effect of improving the shooting range of the vision camera. The rotating motor is turned on to drive the turntable to rotate with the rotating motor, and the positions of the fourth rod and the second rod are adjusted, in combination with the effect that the telescopic motor drives the vision camera to rotate, so that the vision camera can be rotated in multiple directions, which further improves the shooting range of the vision camera.

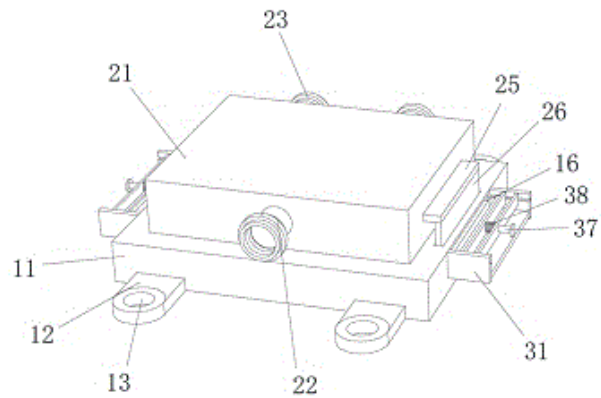
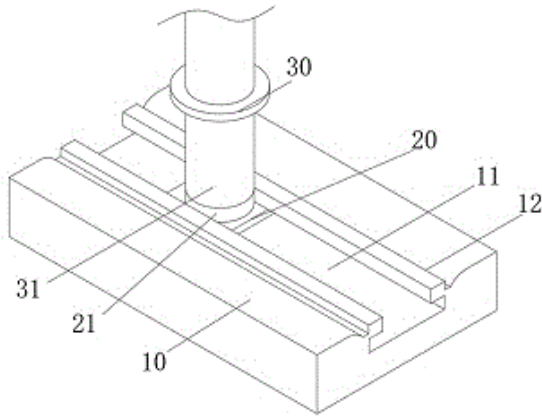
21: 2022/09106. 22: 2022/08/15. 43: 2022/09/16

51: G06V; G03B; H04N  
71: SUQIAN UNIVERSITY  
72: LV, KUN

**54: ARTIFICIAL INTELLIGENCE-BASED SAFETY EARLY WARNING DEVICE**

00: -

The present disclosure relates to the field of artificial intelligence technology, and discloses an artificial intelligence-based safety early warning device, including a track plate. The track plate is provided with a track groove, a retaining plate is slidably installed in the track groove, a rotating shaft is rotatably installed at the center of the retaining plate, a connecting rod is fixedly installed on the rotating shaft, a first ring is fixedly installed on the connecting rod, a limit rod is fixedly installed below the first ring, the limit rod is matched with the position of the upper surface of the track groove, a toggle plate is fixedly installed on the connecting rod, and a vision camera is movable at the top of the connecting rod. Due to the function that the vision camera itself is capable of rotating, a shooting warning is given. When the limit rod is in the horizontal section of the limit groove, a contact plate is separated from the limit groove, and meanwhile a pressure sensor and a pulley are in contact with the track groove, and the pressure sensor transmits a sense signal to a computer. At this time, the computer can control the pulley to drive the retaining plate to move inside, so that the position of the vision camera can be changed to achieve the effect of multi-position early warning.



21: 2022/09107. 22: 2022/08/15. 43: 2022/09/16

51: H01P

71: SUQIAN UNIVERSITY

72: XU, CHONGCAI , LI, MIN , DING, HAO , LV, KUN

**54: ULTRA-WIDEBAND WAVEGUIDE POWER SPLITTER**

00: -

The disclosure relates to a technical field of waveguide power splitters, and more particularly, to an ultra-wideband waveguide power splitter, including a base; the base having a fixing block fixedly mounted on a side wall; and the fixing block having a mounting hole opened at an upper end portion; wherein, four corners of the upper end portion of the base are each opened with an insert opening; the upper end portion of the base is symmetrically opened with slots; the side walls of the base are symmetrically opened with limit slots; the two limit slots are respectively in communication with the two slots; four corners of a lower end portion of the power splitter body each have an insert block fixedly mounted; the splitting mechanisms include U-shaped plates; the two U-shaped plates are respectively symmetrically and fixedly mounted on the side walls of the base; inner walls of the U-shaped plates are each symmetrically opened with sliding grooves; the two sliding grooves each have a slider slidably mounted inside; a moving bar is fixedly mounted between the two sliders; a squeeze bar is fixedly mounted on a side wall of a moving bar; a fixing bar is fixedly mounted in an inner wall of a U-shaped plate, which makes mounting and disassembly of the power splitter body more convenient and labor-saving when the device is in use.

21: 2022/09108. 22: 2022/08/15. 43: 2022/09/16

51: H01Q

71: SUQIAN UNIVERSITY

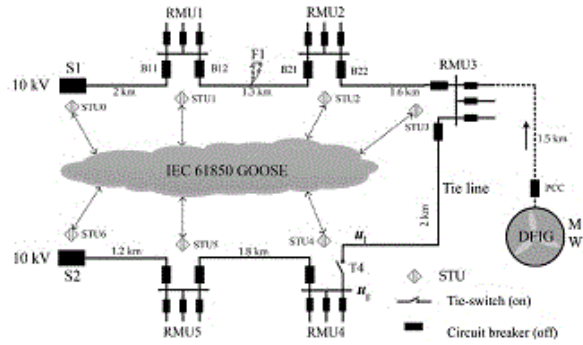
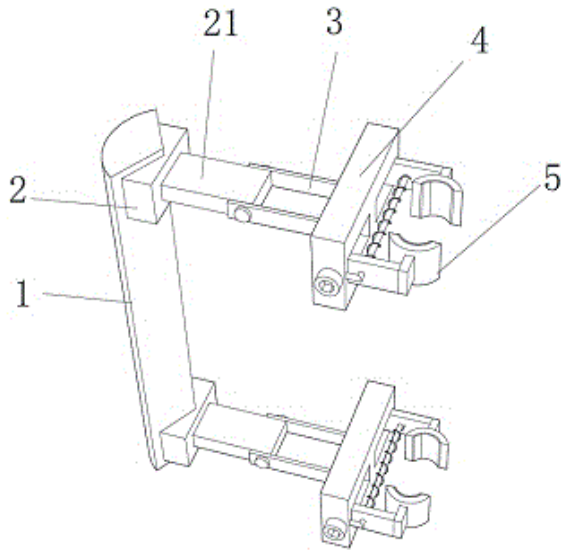
72: LI, MIN , XU, CHONGCAI , LI, HAIXIA , SHI, HONGWEI , CHEN, LIN, CUI , LEI

**54: INTEGRATED BASE STATION ANTENNA**

00: -

The disclosure relates to a technical field of antennas, and more particularly, to an integrated base station antenna, including an antenna body; wherein, upper and lower sides of an end portion of the antenna body are each fixedly mounted with a fixing block; end portions of the two fixing blocks are each fixedly connected with a connecting plate; the two connecting plates each have a connecting rod fixedly run through therein; the two connecting plates are each movably mounted with a connecting piece; the connecting pieces are each fixedly mounted with a connecting block; the two sliding rods move away from each other to drive the two clamping pieces to move away from each other, so that a gap between the two clamping pieces is enlarged; then the two clamping pieces are sleeved on a connecting part, and thereafter, the threaded rod is rotated in an opposite direction, so that the two clamping pieces move close to each other until they are fastened on the connecting part; the clamping piece has an inner wall provided with an anti-skid layer, which increases a friction force with the connecting part, so that connection with the connecting part is more stable; and the antenna is easy to mount, and more convenient to operate.



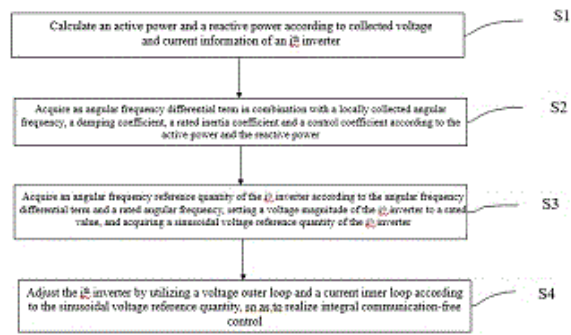
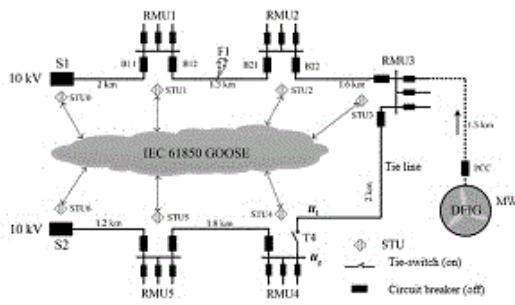


21: 2022/09109. 22: 2022/08/15. 43: 2022/09/16  
 51: H02J  
 71: MOUTAI INSTITUTE  
 72: PENG, TIAN , LANG, LI, SHIXUN, SHEN , YUN,  
 LIU, WEI, HUANG , KE, ZHOU , HUAZHONG,  
 FENG , FENG, PAN  
 33: CN 31: 202210353492.7 32: 2022-04-06  
**54: DFIG ADAPTIVE CONTROL STRATEGY AND  
 COORDINATION METHOD COMPATIBLE WITH  
 FEEDER AUTOMATION**

00: -  
 The invention discloses a DFIG adaptive control strategy and coordination method compatible with feeder automation. Firstly, based on a virtual synchronous machine control technology, a DFIG adaptive control method is designed, which allows grid-connection/islanding control modes of a DFIG to be seamlessly switched and is able to create synchronous conditions for any distant tie-switch; secondly, under the condition of no network-source communication, a coordination method is designed to make an ACS-controlled DFIG island safely connected to a grid through any tie-switch. The ACS and coordination technology disclosed by the invention enables the DFIG and FA to be compatible without disconnecting and restarting the DFIG, thus realizing the purposes of continuously supplying power to the grid side without stopping, increasing the utilization ratio of the DFIG, reducing the maintenance cost, and improving the power supply reliability and flexibility of a distribution network.

21: 2022/09110. 22: 2022/08/15. 43: 2022/09/16  
 51: H02J  
 71: MOUTAI INSTITUTE  
 72: PENG, TIAN , LANG, LI, SHIXUN, SHEN , YUN,  
 LIU, WEI, HUANG , KE, ZHOU , HUAZHONG,  
 FENG , FENG, PAN  
 33: CN 31: 202210353579.4 32: 2022-04-06  
**54: DFIG COORDINATION CONTROL METHOD  
 COMPATIBLE WITH FEEDER AUTOMATION**  
 00: -

The invention discloses a DFIG coordination control method compatible with feeder automation, comprising: 1, adopting a DFIG islanding active synchronization control method (IAS) to support islanding and pre-synchronization control; 2, sensing, by a DFIG, a state of a circuit breaker through a GOOSE message to quickly switch control modes and realize distant synchronization; and 3, sensing, by a tie-switch, a state of the DFIG through a GOOSE message and switching on. In the invention, the DFIG can sense the switch state information of a distribution network in real time through the GOOSE message, so as to realize fast switching of DFIG control modes; the DFIG can sense the voltage synchronization state on two sides of any distant tie-switch in real time by the GOOSE message without the need for real-time sinusoidal AC voltage on two sides of a tie-switch, and coordinate with the proposed IAS control technology to realize distant synchronization of DFIG islands; and the tie-switch can sense the control state of the DFIG through the GOOSE message and switch on synchronously, so as to realize safe grid connection of DFIG islands.

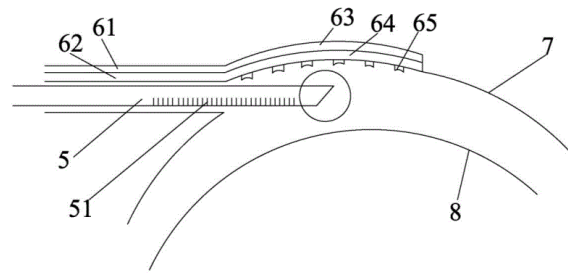
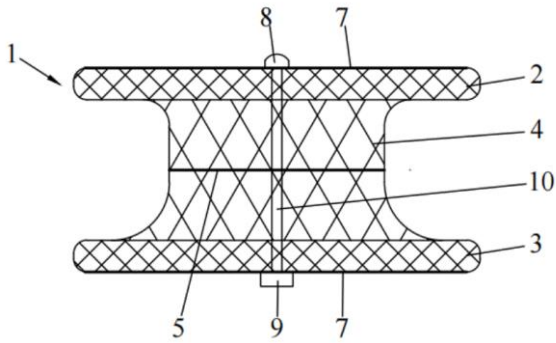


21: 2022/09111. 22: 2022/08/15. 43: 2022/09/16  
 51: H02J  
 71: MOUTAI INSTITUTE  
 72: LANG, LI, PENG, TIAN, SHIXUN, SHEN, YUN, LIU, LEILEI, ZHANG  
 33: CN 31: 202210832206.5 32: 2022-07-14  
**54: METHOD AND DEVICE FOR CONTROLLING COMMUNICATION-FREE SELF-ADAPTIVE VIRTUAL INERTIA OF SERIES MICROGRID**  
 00: -

The present invention discloses a method and device for controlling communication-free self-adaptive virtual inertia of a series microgrid. The method comprises: calculating an active power and a reactive power according to collected voltage and current information of an  $i^{\text{th}}$  inverter; acquiring an angular frequency differential term in combination with a locally collected angular frequency, a damping coefficient, a rated inertia coefficient and a control coefficient according to the active power and the reactive power; acquiring an angular frequency reference quantity of the  $i^{\text{th}}$  inverter according to the angular frequency differential term and a rated angular frequency, setting a voltage magnitude of the  $i^{\text{th}}$  inverter to a rated value, and acquiring a sinusoidal voltage reference quantity of the  $i^{\text{th}}$  inverter; and adjusting the  $i^{\text{th}}$  inverter by utilizing a voltage outer loop and a current inner ring according to the sinusoidal voltage reference quantity, so as to realize communication-free control overall. The present invention is capable of inhibiting dynamic power oscillation, so as to improve dynamic performance of a system, thereby providing high quality electric energy for users.

21: 2022/09139. 22: 2022/08/16. 43: 2022/10/17  
 51: A61B  
 71: Shanghai University of Medicine And Health Sciences  
 72: LI, Yanfei, SHEN, Junwei, NING, Zhongping, CHEN, Xiaoyan  
 33: CN 31: 202210883258.5 32: 2022-07-26  
**54: OCCLUDER FOR TREATING HEART DISEASE**  
 00: -

Disclosed is an occluder for treating heart disease. The occluder includes a mesh stent woven from a shape memory alloy wire, where the mesh stent includes a first support disc, a second support disc and a waist, the waist is provided with a waist flow blocking film for occluding the mesh stent, one surface of the waist flow blocking film is provided with support ribs distributed in a scattering mode from a center to the outside, the support ribs are movably connected at the center, ends, away from the center, of the support ribs are movably connected to the waist, and an entire body formed by the support ribs and the waist flow blocking film is of an umbrella shape and can be freely unfolded or folded. According to the occluder, stability of the flow blocking film in use is improved, and an occlusion effect is guaranteed.



21: 2022/09140. 22: 2022/08/16. 43: 2022/10/17  
51: A61B

71: Shanghai University of Medicine And Health Sciences

72: LI, Yanfei, NAN, Dehong, YANG, Zhifang, XU, Yixin, FANG, Wenjuan, SHI, Jin, LIU, Shishi

33: CN 31: 202210883182.6 32: 2022-07-26

**54: MYOCARDIAL ABLATION DEVICE**

00: -

Disclosed is a myocardial ablation device. The myocardial ablation device includes a conveying pipe body for adjusting an ablation position and an ablation assembly for myocardial ablation, where a bending-adjustable catheter of the conveying pipe body penetrates into a bending-adjustable sheath, a first bending adjustment section and a second bending adjustment section are configured to adjust a pointing direction of an ablation needle, an attaching portion is arranged at a second adjustment section, vacuumized by a gas pipeline and then attached to epicardium, such that the ablation needle can pierce the epicardium. The attaching portion can ensure that the ablation needle pierces a proper position, and defects of complications caused by an excessively large ablation range of one side of the epicardium or endocardium, and transmural difficulty caused by an excessively small ablation range of the other side of the epicardium or the endocardium are overcome.

21: 2022/09141. 22: 2022/08/16. 43: 2022/10/17  
51: A61B

71: Shanghai University of Medicine And Health Sciences

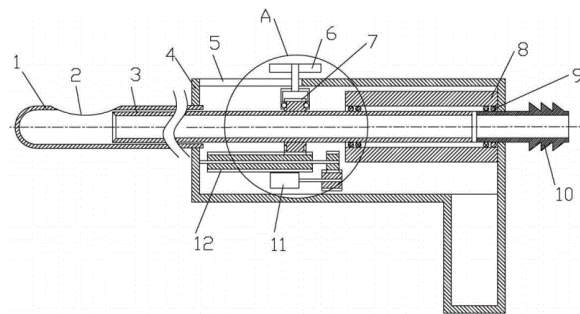
72: MA, Linlin, WU, Yue, SUN, Baihe

33: CN 31: 202210864433.6 32: 2022-07-21

**54: MYOCARDIAL CUTTER**

00: -

Disclosed is a myocardial cutter. The myocardial cutter includes a sleeve, a cutting tube, a housing, a rotary drive mechanism and a feed mechanism; one end of the sleeve is a spherical seal, and the other end of the sleeve is connected to the housing; a window is arranged on the sleeve; and the feed mechanism is used for controlling relative positions of one end of the cutting tube and the window. The myocardial cutter can accurately cut a hypertrophic part of myocardium, without injuring myocardium at a non-target area by mistake, and a surgeon is not required to determine the quantity of myocardium to be cut by experience, such that safety of surgery is improved; and the cutting tube is finally in communication with a negative pressure mechanism to take out cut myocardial tissue, thereby preventing peripheral arterial embolism caused by falling of the cut myocardial tissue.



21: 2022/09142. 22: 2022/08/16. 43: 2022/10/19  
51: A61M

71: Shanghai University of Medicine And Health Sciences

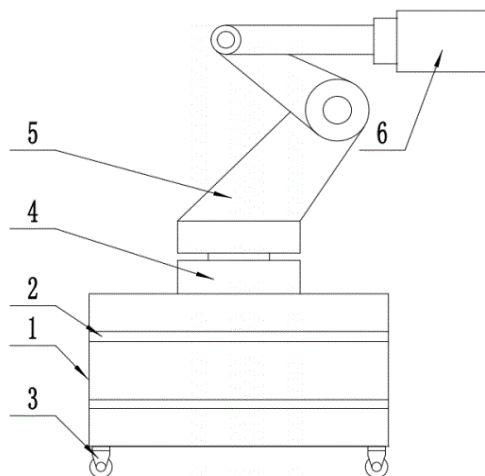
72: LI, Yanfei, LI, Jue, FANG, Wenjuan, YANG, Lijun, WANG, Cuiping

33: CN 31: 202210880779.5 32: 2022-07-21

**54: CARDIAC INTERVENTIONAL THERAPY APPARATUS**

00: -

Disclosed in the present invention is a cardiac interventional therapy apparatus. The apparatus includes a workbench, a driving device and a conveying device, where the conveying device is configured to convey a surgical instrument, to treat a heart, the conveying device is connected to the driving device, the driving device is configured to drive the conveying device to move to a site to be operated, to treat the heart, and a camera is further mounted at a position, close to the conveying device, of the driving device; and the driving device is mounted on the workbench, and moving wheels are mounted at a bottom of the workbench. According to the present invention, the surgical instrument can be automatically conveyed, so as to reduce manual operation, and further to reduce injury of a radiography device to medical staff.



21: 2022/09143. 22: 2022/08/16. 43: 2022/10/19

51: A61K

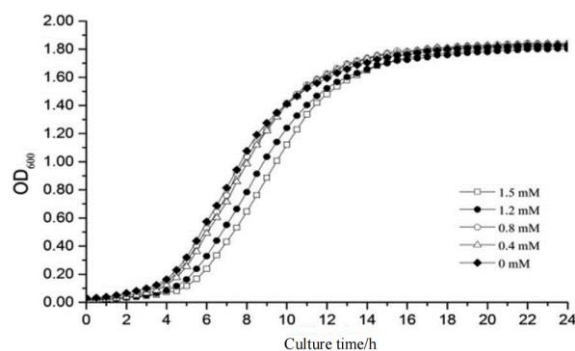
71: UNIVERSITY OF SHANGHAI FOR SCIENCE AND TECHNOLOGY

72: XIA Yongjun, AI Lianzhong, LIN Xiangna, WANG Guangqiang, XIONG Zhiqiang, ZHANG Hui

**54: LACTIPLANTIBACILLUS PLANTARUN CAPABLE OF RELIEVING THE HARM OF FRYING OIL AND APPLICATION THEREOF**

00: -

The invention discloses a Lactiplantibacillus plantarun AR501 strain which can alleviate the harm of frying oil. The Lactiplantibacillus plantarun AR501 strain has been preserved in the General Microbiology Center of China Microbial Culture Collection Management Committee with the preservation number of CGMCC No.13910. The Lactiplantibacillus plantarun AR501 provided by the invention has excellent antioxidant activity, can reduce the oxidative stress damage and fat attachment of the liver of mice fed with over-fried oil, can be used as a medicine combination and fermented food for relieving the harm of over-fried oil, and has a wide application prospect.



21: 2022/09151. 22: 2022/08/16. 43: 2022/10/19  
51: G01N

71: VEGETABLE RESEARCH INSTITUTE, GUANGDONG ACADEMY OF AGRICULTURAL SCIENCES

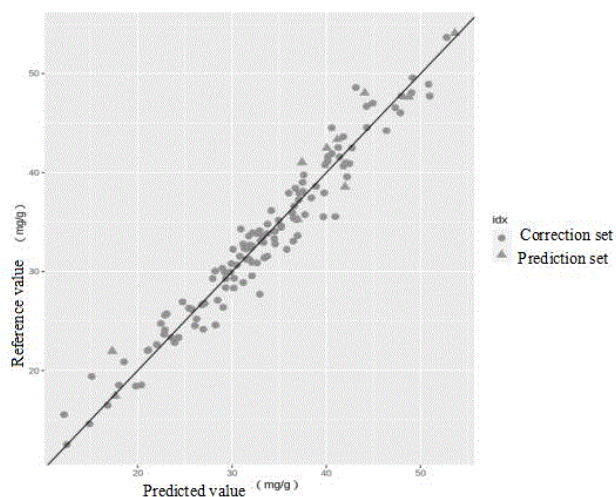
72: XUE Shudan, XIE Dasen, ZHONG Yujuan, WAN Xiaotong, LU Sen, CHEN Fengshi

**54: METHOD FOR QUICKLY DETECTING MALIC ACID AS WAX GOURD TASTE DECISIVE FACTOR BASED ON NEAR-INFRARED SPECTROSCOPY**

00: -

The invention belongs to the technical field of vegetable quality detection, and in particular relates to a method for quickly detecting malic acid as wax gourd taste decisive factor based on near-infrared spectroscopy. Remove outliers, then compare and screen the near-infrared spectrum with different preprocessing methods, and then use biPLS-CARS to reduce the dimensionality of the spectrum, extract the characteristic wavelength of the near-infrared spectrum of malic acid index, and finally use the selected characteristic wavelength to pass the bias. The partial least squares method combined with the absolute content of malic acid to establish a

prediction model for the malic acid as wax gourd taste decisive factor. The established model can accurately detect the content of the taste factor malic acid in wax gourd, and the operation process is simple, fast and environmentally friendly, which is the best taste of wax gourd. The detection of factor malic acid provides a new technical means, and provides technical support for the quality breeding of wax gourd and shortening the breeding process.



21: 2022/09152. 22: 2022/08/16. 43: 2022/10/19  
51: B43L

71: Beibu Gulf University

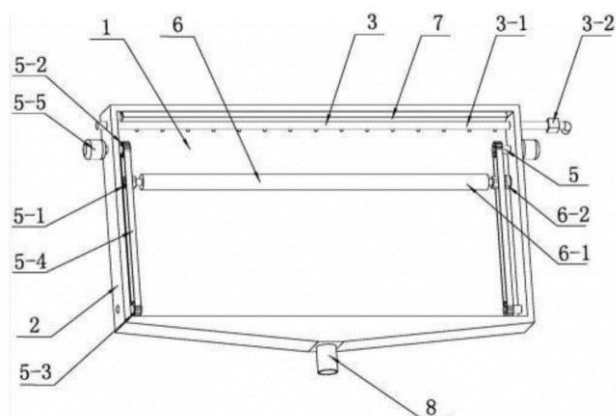
72: DENG SHAOYUN, QIU QINGHUA

#### 54: A DUSTPROOF BLACKBOARD FOR TEACHING

00: -

The invention provides a dustproof blackboard for teaching comprises a blackboard body, and the blackboard body is composed of a writing board and a frame surrounding the writing board, wherein the upper frame is fixed with a board surface washing device, the lower frame is provided with a collecting annulus for collecting washing water, and the bottom of the collecting annulus is connected with a drainage pipe; The writing board is provided with a board surface wiping device, which comprises a wiping roller horizontally attached to the writing board, and a driving device I for driving the wiping roller to rotate; The lateral side of the writing board is provided with a lifting mechanism, and the board surface wiping device is connected with a lifting moving block of the lifting mechanism; The frame is provided with a blackboard drying device. The

dustproof blackboard for teaching provided by the invention can automatically erase the handwriting written on the board surface, effectively avoid the spread of chalk dust during erasing, and improve the teaching environment of teachers and students to a certain extent.



21: 2022/09205. 22: 2022/08/17. 43: 2022/10/19  
51: A01G

71: Kunming Institute of Botany, Chinese Academy of Sciences

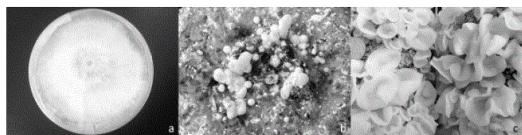
72: Basnayake Mudiyansele Asanka Ranjana

BANDARA, Peter E. MORTIMER, Jianchu XU, Shixi WU, Zhiqiang GE, Tianfu ZHANG

#### 54: CULTURE SUBSTRATE AND CULTURE METHOD OF AURICULARIA CORNEA

00: -

The present disclosure provides a culture substrate and a culture method of Auricularia cornea relating to the technical field of mushroom culture. In the present invention, the residues of C4 plant that widely exist and rapidly grow are used as the raw material, reducing the current demand on the use of C3 plants as substrates in the mushroom-cultivation industry. The present disclosure also provides the matched industrial culture method of Auricularia cornea on the basis of the culture substrate; and the culture method is simple and can realize large-scale commercial production. By using the culture substrate and the culture method provided by the present disclosure for culture of Auricularia cornea, the colonization time of mycelia is  $57.8 \pm 1.1$  d, and the average biological efficiency for harvesting is  $16.7 \pm 1.2\%$ .



21: 2022/09206. 22: 2022/08/17. 43: 2022/10/19

51: G01N

71: Guizhou Medical University

72: GONG, Zipeng, LI, Mengting, CHEN, Yi, JIN, Yang, PENG, Jianqing, HUANG, Yong, ZHENG, Lin, CHEN, Siying, LI, Yueting, HUANG, Jing

**54: METHOD FOR SIMULTANEOUSLY DETERMINING CONCENTRATIONS OF 7 COMPONENTS ABSORBED INTO BLOOD IN EUCOMMIA ULMOIDES EXTRACT**

00: -

The present disclosure discloses a method for determining the concentration of 7 components absorbed into blood in Eucommia ulmoides extract.

21: 2022/09207. 22: 2022/08/17. 43: 2022/10/19

51: G01N

71: Zhongkai University of Agriculture and Engineering, South China Agricultural University, Guangzhou Jinnong Technology Development Co., Ltd.

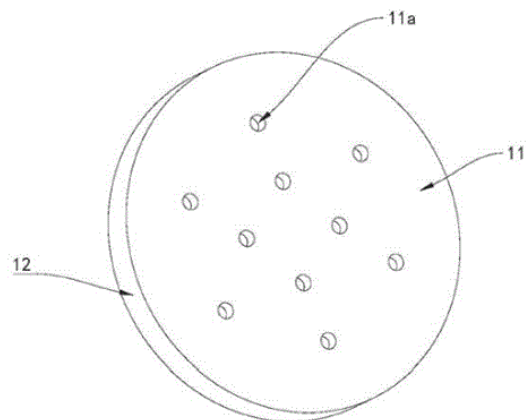
72: Suqing Huang, Zhixiang Zhang, Hanhong Xu, Dongmei Cheng, Jiao Ding, Chang'an Huang

**54: RAPID IDENTIFICATION KIT, SPECIAL FEED BOTTLE AND METHOD FOR DRUG RESISTANCE OF SPODOPTERA FRUGIPERDA**

00: -

The invention discloses a rapid identification kit for drug resistance of Spodoptera frugiperda. The kit comprises a 2-instar diagnostic reagent bottle, a 3-instar diagnostic reagent bottle and a 4-instar diagnostic reagent bottle which are formed by adopting a special feed bottle to prepare feed and insecticide; diagnostic dosages of insecticides in the 2-instar insect diagnostic reagent bottle, the 3-instar insect diagnostic reagent bottle and the 4-instar insect diagnostic reagent bottle are determined by toxicity of insecticides with different concentrations in the special feed bottle on sensitive strain Spodoptera frugiperda of different instar insect; the LC99 of the insects of different ages is calculated as the diagnostic dose of the insecticide for the insects of the same age. The invention also discloses a preparation method of the kit, a special feed bottle and a method for rapidly identifying drug resistance

by using the kit. According to the method, the resistance level of the Spodoptera frugiperda to emamectin benzoate, chlorantraniliprole, efficient cyhalothrin, chlorfenapyr, indoxacarb, lufenuron and the like can be rapidly and accurately determined, and the method has wide popularization and application values.



21: 2022/09208. 22: 2022/08/17. 43: 2022/10/19

51: A01M; H02J

71: Northwest Institute of Plateau Biology, Chinese Academy of Sciences

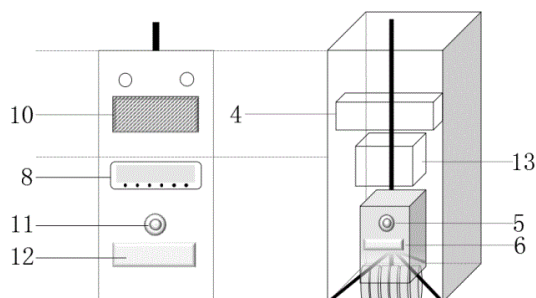
72: QU, Jiapeng, LIN, Fangzhou, LI, Jing, ZHANG, Yan, TAN, Zhaoxian, ZHOU, Huakun

33: CN 31: 202210676237.6 32: 2022-06-15

**54: APPARATUS FOR CONTROLLING RODENTS ON GRASSLAND**

00: -

The present invention relates to an apparatus for controlling rodents on grassland. The apparatus for controlling rodents on grassland uses an infrared sensor to generate a rodent sensing signal, and uses a numerical control system to set a sensing range of the infrared sensor, and to generate a control instruction based on the rodent sensing signal; moreover, through data interaction between the numerical control system and a remote monitoring system, remote control over and data transmission to the infrared sensor and an ultrasonic transmitter can be achieved, so as to control rodents on grassland through a physical means, to solve the problems of high consumption of time and labor and environmental pollution in traditional deratization, and further to achieve energy conservation, environmental protection and saving of human resources.



21: 2022/09209. 22: 2022/08/17. 43: 2022/10/19

51: G01N

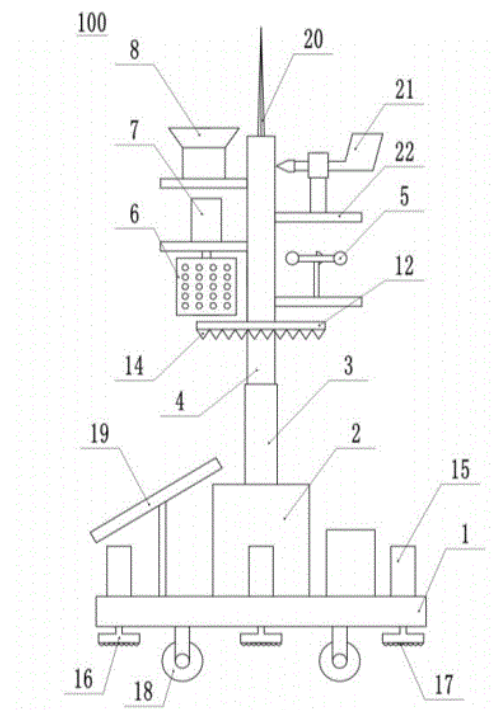
71: SUN, Juan

72: SUN, Juan

#### 54: AIR POLLUTION MONITORING DEVICE

00: -

Disclosed is an air pollution monitoring device. The air pollution monitoring device includes a base, a first driving structure, a threaded pipe, a support rod, a wind direction sensor, an air quality monitoring structure, a second driving structure and a controller, where a wind direction sensor and the air quality monitoring structure are both arranged on the support rod, the wind direction sensor transmits a detected wind direction signal to the controller, and the controller drives the second driving structure according to the wind direction signal detected by the wind direction sensor, such that the air quality monitoring structure is arranged upwind. The present invention can satisfy monitoring needs at different heights, and an orientation of the air quality monitoring structure can be adjusted, such that monitoring results can be more accurate.



21: 2022/09210. 22: 2022/08/17. 43: 2022/10/19

51: C12N; C12Q; C12R

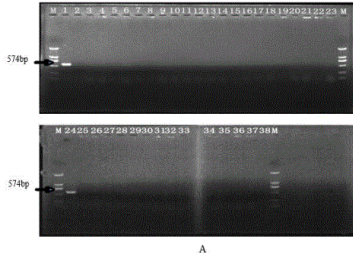
71: Anhui Science and Technology University

72: ZHAI, Ligong, WANG, Junying, LI, Ganghui, HUANG, Ju, YANG, Jianting

#### 54: TARGET GENE, SPECIFIC PRIMER PAIR, DETECTION METHOD AND KIT FOR DETECTING SALMONELLA PARATYPHI A

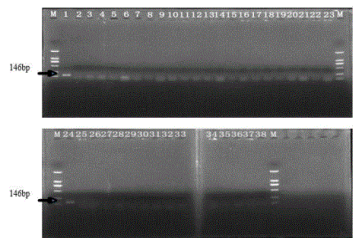
00: -

The present disclosure provides a target gene, a specific primer pair, a detection method and a kit for detecting *Salmonella paratyphi A*. The specific primer pair provided by the present disclosure is designed based on three *S. paratyphi A* specific detection targets, and these detection targets have high stability and strong specificity. The detection method provided by the present disclosure includes steps of: extracting sample DNA, and conducting PCR amplification; detecting PCR products by gel electrophoresis; and comparing bands after electrophoresis. Through experimental comparative analysis, the method provided by the present disclosure features strong unity, reliable detection results, and simple result determination.

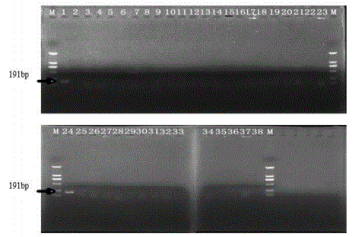


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12



B



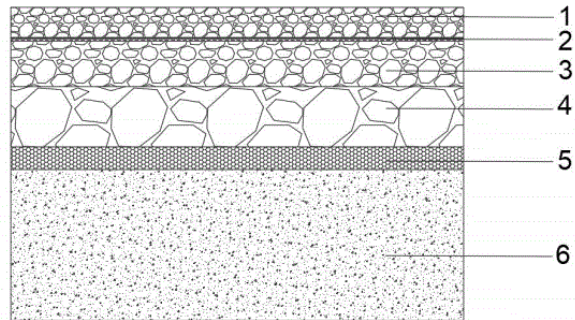
C

21: 2022/09211. 22: 2022/08/17. 43: 2022/10/19  
 51: E01C  
 71: GUANGXI TRANSPORTATION SCIENCE AND TECHNOLOGY GROUP CO., LTD., Guangxi Jiaoke New Materials Technology Co., Ltd.  
 72: ZHANG, Honggang, YUAN, Haitao, HUANG, Hui, TAN, Hua, XIONG, Jianping, XIE, Zehua, ZHANG, Hongbo, TAN, Jizong, ZHANG, Yangpeng, XUAN, Weian, XIONG, Baolin, CHEN, Jie, JIAO, Xiaodong

**54: MULTI-LAYER RUBBER ASPHALT DRAINAGE PAVEMENT STRUCTURE FOR ANTI-CRACKING AND ANTI-RUTTING**

00: -  
 The present disclosure discloses a multi-layer rubber asphalt drainage pavement structure for anti-cracking and anti-rutting. The present disclosure optimizes the pavement structure by controlling the

key sieve pass rate of the aggregate and the ratio of asphalt-stone, and forms the multi-layer rubber asphalt pavement structure with the rubber asphalt drainage upper layer, the anti-rutting rubber asphalt middle layer and the rubber asphalt stress absorbing layer as the main body, comprehensively improve the drainage performance, anti-fatigue deformation, anti-cracking, anti-rutting and other properties of the pavement. The present disclosure has good economic and social benefits.

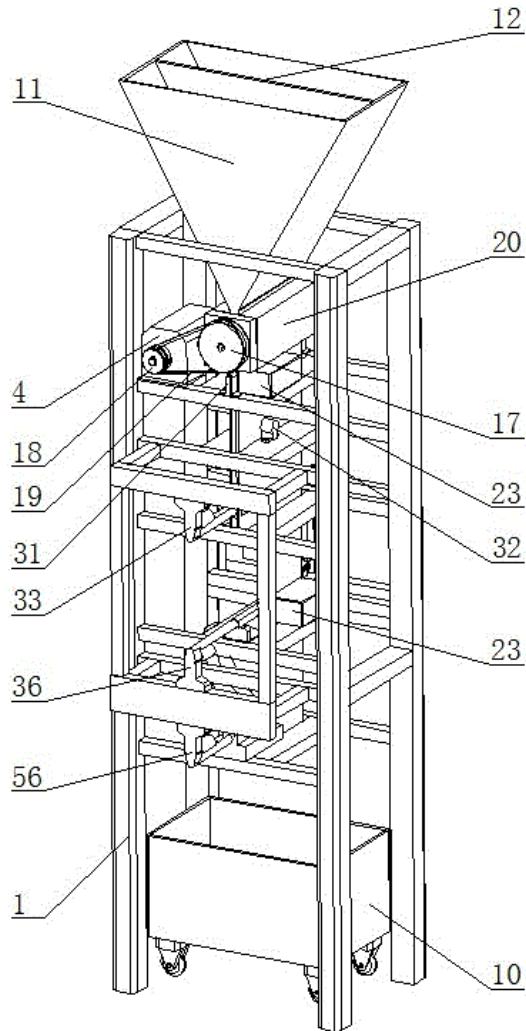


21: 2022/09213. 22: 2022/08/17. 43: 2022/10/19  
 51: B43K  
 71: Zhengzhou University of Aeronautics  
 72: LIU Xing, LIU Huizhen, ZHANG Guohui, ZHU Jie  
**54: MULTIFUNCTIONAL INTELLIGENT AUTOMATIC ASSEMBLY PRODUCTION LINE**  
 00: -

The invention relates to the technical field of production and assembly, and in particular to a multifunctional intelligent automatic assembly production line. A multifunctional intelligent automatic assembly production line, which includes a frame, wherein the top of the frame is provided with a raw material storage device, a working channel is arranged below the raw material storage device, and baffle components are arranged at the outside of the working channel corresponding to each station; a direction adjusting mechanism is arranged below the raw material storage device, a pen refill preassemble mechanism is arranged below the direction adjustment mechanism, an end cap synchronous assembly mechanism is arranged below the pen fill preassemble mechanism, a pen cap assembly mechanism is arranged below the end cap synchronous assembly mechanism, a finished product storage basket is arranged below the pen cap assembly mechanism, and the finished product storage basket is used for collecting the assembled

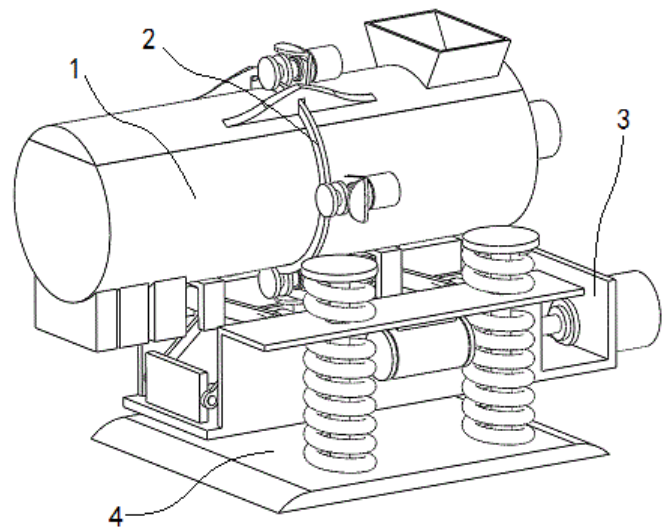


gel ink pen finished products; each mechanism is vertically arranged on the frame through working channels, and is connected with the controller through circuits; the vertically arranged assembly structure of the production line not only greatly reduces the floor area of the whole automatic production line, but also saves the transmission device and its energy consumption adopted in the prior art.



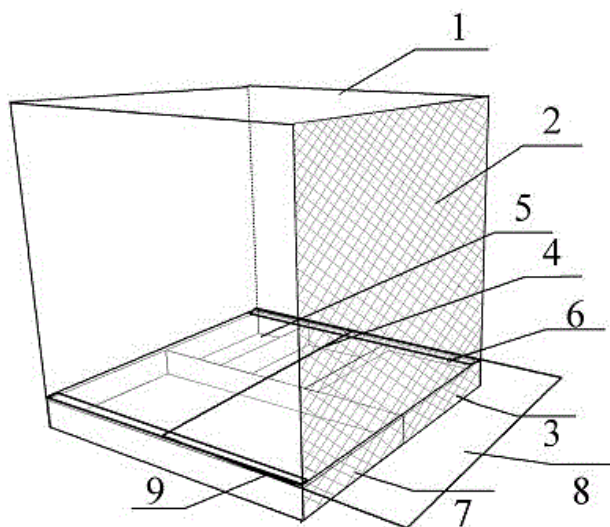
21: 2022/09214. 22: 2022/08/17. 43: 2022/10/19  
 51: B07B  
 71: North China University of Science and Technology  
 72: NIU Fusheng, ZHANG Jinxia  
**54: GRADING AND SCREENING EQUIPMENT FOR FINE-GRAINED MATERIALS**  
 00: -  
 This invention discloses a grading and screening equipment for fine-grained materials. When the

invention is in use, a first-layer inner screen plate and a second-layer inner screen plate are fixedly arranged in the grading and screening cylinder assembly for fine-grained material, a primary screening structure is formed in the first-layer inner screen plate, and a secondary screening structure is formed between the first-layer inner screen plate and the second level inner screen plate; the state of fine-grained materials in the first-layer inner screen plate is broken by the rotation of the stirring rotating shaft and the stirring supporting rod. The reciprocating rotation of the four I-shaped guide wheels realizes the reciprocating rotation of the screen anti-clogging high-pressure recoil assembly in the middle of the fine-grained material grading screen barrel assembly, and this rotation path is a quarter of the annular path. At this time, the high-pressure air ejected from the high-pressure recoil air nozzles on the first high-pressure recoil air pipe and the second high-pressure recoil air pipe recoils the first-layer inner screen plates and the second layer of inner screen plates, so as to realize the recoil-type blockage removal of the fine mesh clogging screens.

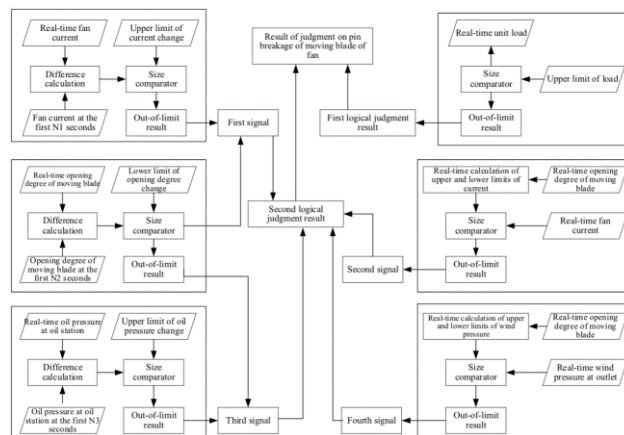


21: 2022/09215. 22: 2022/08/17. 43: 2022/10/19  
 51: A01K  
 71: SHANDONG AGRICULTURAL UNIVERSITY  
 72: YAN Yi, XIE Lixia, ZHANG Na, WAN Zixuan, TAN Yanying, CHEN Menglei, LU Wenzhi, ZHANG Shuo  
**54: MUSCA DOMESTICA FEEDING DEVICE FOR QUICKLY COLLECTING EGGS AND CHANGING FEEDS AND FEEDING METHOD THEREOF**

00: -  
 The application relates to a *Musca domestica* feeding device for quickly collecting eggs and changing feeds and feeding method thereof, where the feeding device comprises a feeding box, where one side surface of the feeding box is a gauze, and an isolation plate which passes through the side surface of the gauze and is in sliding connection with the feeding box, the side wall of the feeding box is fixedly provided with a track for the separating plate to slide, and the feeding box below the separating plate is internally provided with an egg collection box, a water box, a food box and a pupa box which can be drawn out of the feeding box. By arranging the extractable isolation plate, it is convenient to quickly collect the eggs of *Musca domestica*, and it can effectively prevent *Musca domestica* from escaping in the process of changing feeding materials, simplify the manual operation procedure, improve the breeding efficiency, and effectively keep the internal humidity of the device, which is conducive to the efficient and large-scale feeding of *Musca domestica*.



The invention relates to a method for predicting pin breakage of a moving blade of a fan, which comprises: acquiring real-time measurements of various working parameters of the fan, acquiring judgment thresholds of the working parameters, obtaining an out-of-limit result of each working parameter based on the real-time measurements and the judgment thresholds, and obtaining a result of judgment on pin breakage of the moving blade of the fan based on the out-of-limit results of all the working parameters, wherein the working parameters include: unit load, fan current, opening degree of the moving blade, wind pressure at an outlet and oil pressure at an oil station. Compared with the prior art, the method of the invention predicts a pin breakage fault of a moving blade of a fan in the early stage of the fault according to slight changes of related working parameters, which is obviously earlier than determining a fault depending on the experience of operators, thus improving the safety and economical efficiency of unit operation, and reducing the working pressure of operators.

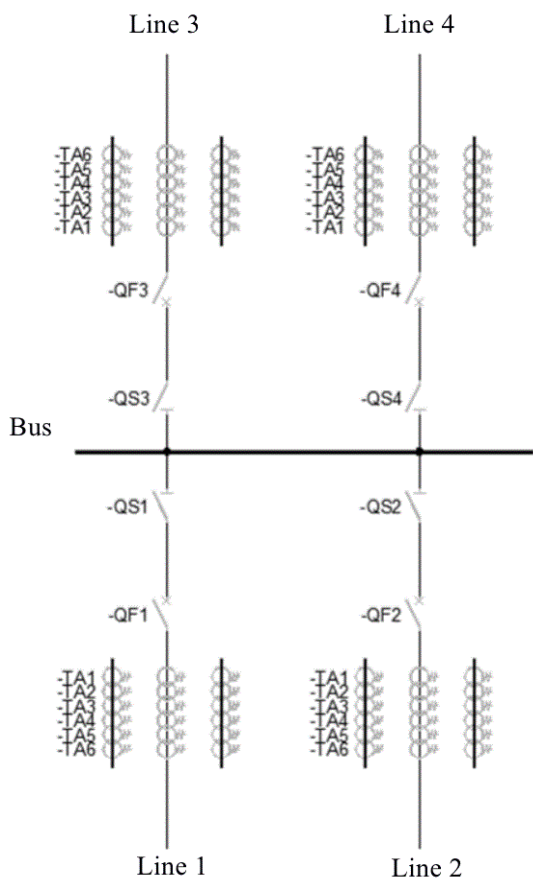


21: 2022/09216. 22: 2022/08/17. 43: 2022/10/19  
 51: F04D  
 71: Huaneng Taicang Power Generation Co. LTD  
 72: QIAN, Ziqiang, GUAN, Rixin, YU, Lingwei, YANG, Fang  
 33: CN 31: 202111159528.X 32: 2021-09-30  
**54: METHOD FOR PREDICTING PIN BREAKAGE OF MOVING BLADE OF FAN**  
 00: -

21: 2022/09217. 22: 2022/08/17. 43: 2022/10/19  
 51: G01R  
 71: Huaneng Taicang Power Generation Co. LTD  
 72: HUANG, Peng  
 33: CN 31: 202111159168.3 32: 2021-09-30  
**54: WIRING IDENTIFICATION METHOD FOR INLET CURRENT TRANSFORMER OF BUS DIFFERENTIAL PROTECTION DEVICE**

00: -  
 The invention relate to a wiring identification method for an inlet current transformer of a bus differential protection device. Compared with the prior art, the invention artificially creates a differential current by short-circuiting a current transformer circuit

connected to a bus differential protection device on a line to ground, and the differential current flows through an equivalent median resistor of the bus differential protection device, forming an alternating voltage on the median resistor; secondary voltages of current transformers connected to the bus differential protection device on other lines will increase, but secondary voltages of current transformers not connected to the bus differential protection device on other lines will not be affected; in this way, current transformers connected to the bus differential protection device can be clearly and accurately identified on each line during site operation. The method is suitable for phase comparison type and medium impedance type bus differential protection devices, and has strong operability and universality.



21: 2022/09218. 22: 2022/08/17. 43: 2022/10/19  
 51: A23L  
 71: Guizhou Institute of Biology, Zhijin Huiyuan Characteristic Agriculture Co.,Ltd

72: Yang Ling, Wang Wankun, Zheng xuan, Luo Liping, Kang Chao, Chen Shaofen, Zeng Weijun, Wu Xianlin, Xiang Zhun, LiPeng

**54: PREPARATION METHOD OF DICTYOPHORA RUBROVOLVATA PASTE**

00: -  
 The invention belongs to the technical field of food processing, in particular to a preparation method of Dictyophora rubrovolvata paste, which comprises the following steps: (1) wheat treatment; (2) wheat fermentation; (3) preparation of wheat flour; (4) preparation of Dictyophora rubrovolvata juice; (5) preparation of ingredient juice: add water to crushed Zanthoxylum bungeanum leaves, Zanthoxylum bungeanum seeds, Foeniculum vulgare seeds and dried Lentinus edodes, boil, cool and filter to obtain ingredient juice; (6) mixing and fermentation: mix and ferment wheat flour, Dictyophora rubrovolvata juice and ingredient juice to make finished products; (7) finished product packaging. The invention selects natural plant raw materials such as Dictyophora rubrovolvata, wheat, yellow bean flour, Lentinus edodes, Zanthoxylum bungeanum, Foeniculum vulgare seeds and the like to prepare Dictyophora rubrovolvata paste, and the obtained product has harmonious taste, delicious flavour and rich nutrition. The bacteriostatic components of Dictyophora rubrovolvata juice can achieve the effects of sterilization and antiseptic, and conventional sterilization operations such as high temperature and high pressure are not needed, so that the unique taste, flavor and nutritional contents of Dictyophora rubrovolvata, wheat, etc. are well retained. As preservatives are not needed, so the Dictyophora rubrovolvata paste is green and safe, meanwhile, the shelf life can reach 12 months.

21: 2022/09219. 22: 2022/08/17. 43: 2022/10/19  
 51: A01G  
 71: Guizhou Institute of Biology, Guizhou Guifu Mushroom Industry Development Co.,Ltd  
 72: Yang Ling, Wang Wankun, Zheng xuan, Kang Chao, Zeng Weijun, Luo Liping, Li Jing, Li Wei, Lin Zhaohong, Zhou Jinming, Xiang Zhun, LiPeng  
**54: METHOD FOR PREPARING AGROCYBE AEGIRITA MEDIUM FROM TOBACCO STEMS AND THE APPLICATION THEREOF**

00: -  
 The invention belongs to the technical field of edible fungi cultivation, in particular to a method for

preparing *Agrocybe aegirita* medium from tobacco stems and the application thereof. The method comprises the following steps: firstly, drying and crushing tobacco stems, mixing them with EM (Effective Microorganisms) bacilli and tea polyphenols solution uniformly, and stacking for fermenting to prepare fermented tobacco stem; then, mixing 30-50% of cottonseed hull, 15-25% of wheat bran, 15-35% of fermented tobacco stem, 5-15% of bagasse, 1-5% of soybean meal, 3-8% of corn flour and 1-5% of gypsum to prepare the medium. Making edible fungus sticks by this medium, inoculating tree fungus, culturing mycelium, and moving into a greenhouse for fruiting. Compared with the traditional sawdust medium, the medium prepared by the invention can shorten the mycelium culture time by 15 days, and the whole mycelium is whiter and denser, the fruiting time is no more disperse, the tide-turning period can be shortened by 4-5 days at the most, the contamination rate of infectious microbe is reduced by 5-8%, the raw material cost is saved by 15-20%, the biotransformation rate is increased by 20-21%, the average yield is raised by 12-13%, and the whole yield is more stable

21: 2022/09220. 22: 2022/08/17. 43: 2022/10/19  
51: E04B

71: Hunan Construction Engineering Group No.2 Co., Ltd.

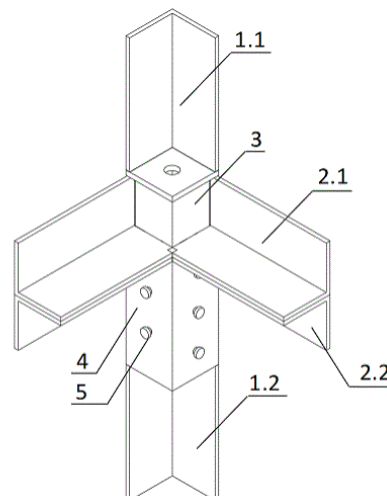
72: Mingliang ZHANG, Wei LIU, Qiliang WANG, Jiangying WANG, Chao ZHOU

#### **54: SOCKET TYPE BOLT CONNECTION JOINT STRUCTURE FOR A MODULAR BUILDING WITH A STEEL STRUCTURE**

00: -

A socket type bolt connection joint structure for a modular building with a steel structure comprises an upper box steel column, an upper box steel beam, an upper plug, a lower receiver, a lower box steel column and a lower box steel beam. The top of the upper plug is connected to the upper box steel column by means of welding; the upper side of the upper plug is connected to the upper box steel beam by means of welding; the bottom of the lower receiver is connected to the lower box steel column by means of welding; the upper side of the lower receiver is connected to the lower box steel beam by means of welding; and the upper plug is socketed into the lower receiver and connected therewith

through bolts. The present invention has features such as easy installation, high assembly efficiency, clear mechanical behaviour, good overall stability, strong applicability and good component integrity.



21: 2022/09221. 22: 2022/08/17. 43: 2022/10/19  
51: A23L

71: Guizhou Institute of Biology, Guizhou Guifu Mushroom Industry Development Co.,Ltd

72: Yang Ling, Wang Wankun, Zheng xuan, Luo Liping, Kang Chao, Zeng Weijun, Li Jing, Li Wei, Lin Zhaohong, Zhou Jinming, Xiang Zhun, LiPeng

#### **54: METHOD FOR PREPARING SUGARED AGROCYBE AEGIRITA**

00: -

The invention belongs to the technical field of edible fungi processing, in particular to a method for preparing sugared *Agrocybe aegirita*, which applies the process steps of raw material pretreatment-sterilization and enzyme inactivation-sugar liquid preparation-vacuum sugar soaking-desugarization and water filtration-freezing-vacuum frying-vacuum deoiling-flavor blending-packaging. In the invention, vacuum sugar soaking is adopted to make *Agrocybe aegirita* taste unique, and in the treatment process, the temperature and the oxygen concentration are low, so *Agrocybe aegirita* is not easy to deteriorate; freezing at -35~-20 Celsius degrees can effectively remove the respiratory heat of *Agrocybe aegirita* and prevent its deterioration during processing and storage; using vacuum frying and vacuum deoiling technology, the temperature and the oxygen concentration during treatment are low, so the nutrition and flavor of *Agrocybe aegirita* can be well maintained. The sugared *Agrocybe aegirita* prepared

by the invention is crisp, good palatability, rich in flavor and nutrition, meets the requirements of consumers for *Agrocybe aegirita* products with different flavors, improves the added value of *Agrocybe aegirita*, in addition, it is convenient to carry and eat, and has a good market prospect.

21: 2022/09222. 22: 2022/08/17. 43: 2022/10/19  
51: A61K

71: Gao Si Yu

72: Gao Si Yu, Ni Li Xiang, Zang Zhao Yun, Wang Jian Guo

**54: TRADITIONAL CHINESE MEDICINE COMPOSITION FOR TREATING DUCK FLAVIVIRUS AND THE PREPARATION METHOD THEREOF**

00: -

The invention discloses a traditional Chinese medicine composition for treating duck flavivirus and the preparation method thereof. The traditional Chinese medicine composition comprises 1-10 part (s) of *Lonicera japonica* Thunb., 1-5 part (s) of *Bos taurus domesticus* Gmelin, 5-15 parts of *Tulipa gesneriana*, 5-15 parts of *Cornu Bubali*, 5-15 parts of *Coptis chinensis* Franch., 0.5-5 part (s) of *Borneolum*, 10-20 parts of *Gardenia jasminoides* Ellis, 1-5 part (s) of *Realgar*, 10-20 parts of *Scutellaria baicalensis* Georgi, 5-15 parts of *Isatis tinctoria* and 10-30 parts of *Gypsum Fibrosum*. According to the traditional Chinese medicine composition for treating duck flavivirus and the preparation method thereof, the formula combination is complete, and a special process is adopted, so that the finished product can control the casualties caused by duck flavivirus in two days, and the dosage is saved by 50% compared with that of the old process; the existing process needs a treatment course of 4-5 days, but the finished product of the invention can realize complete recovery in two days, so the treatment course is shortened by more than 50%, and the pollution is reduced by about 80%.

21: 2022/09223. 22: 2022/08/17. 43: 2022/10/19  
51: A23C

71: NINGBO UNIVERSITY, Ningbo Dairy Group

72: Pan Daodong, Wu Zhen, Zeng Xiaoqun, Tu Maolin, Lian Liwei

**54: A FUNCTIONAL YOGURT WITH A COMPOUND FLAVOR OF COIX CHINENSIS TOD.**

**AND SETARIA ITALICA AND A PREPARATION METHOD THEREOF**

00: -

The invention discloses a functional yogurt with a compound flavor of *Coix chinensis* Tod. and *Setaria italica* and its preparation method, which is characterized in that *Setaria italica* and *Coix chinensis* Tod. are mixed and ground into emulsion, carried out the enzymolysis by flavor protease, Alpha-amylase and glucoamylase, fermented by *Bacillus subtilis* starter, filtered, treated by ultra-high pressure or ultrasonic wave to obtain mixed enzymolysis fermentation broth of *Setaria italica* and *Coix chinensis* Tod., and then added with *Haematococcus Pluvialis* hydrolysates, skim milk powder and white sugar, and after the procedures of stirring and mixing uniformly, sterilizing, cooling, adding lactic acid bacteria starter, then mixing, canning, fermenting, cooling and post-ripening, the product is prepared. It has the advantages of containing functional factors such as SOD, astaxanthin, polypeptide, has antioxidant and immunomodulatory functions and can inhibit the ACE activity.

21: 2022/09229. 22: 2022/08/17. 43: 2022/10/19  
51: G06N

71: University of Electronic Science and Technology of China

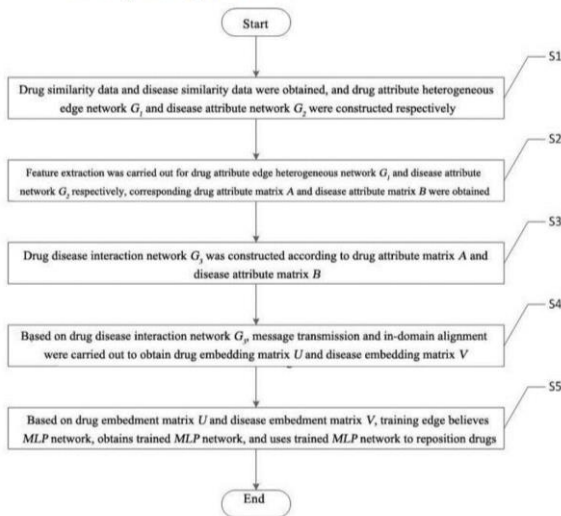
72: Jiajing Zhu, Sicheng Zhao, Yongguo Liu, Yun Zhang, Qiaoqin Li, Xin Lu, Chong Fu

33: CN 31: 202210219786.0 32: 2022-03-08

**54: A DRUG RELOCATION METHOD AND SYSTEM BASED ON DRUG CLASSIFICATION GRAPH NEURAL NETWORK**

00: -

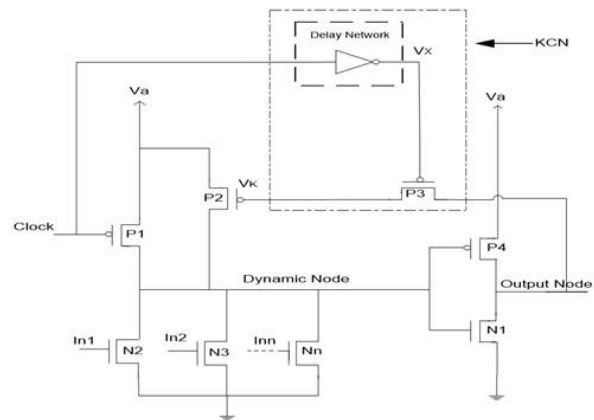
The invention discloses a drug relocation method and system based on drug classification graph neural network, which belongs to the technical field of drug relocation. The method is as follows: drug attribute heterogeneous edge network  $G_1$  and disease attribute network  $G_2$  are constructed respectively; Feature extraction was carried out for drug attribute edge heterogeneous network  $G_1$  and disease attribute network  $G_2$  respectively, to obtain drug attribute matrix  $A$  and disease attribute matrix  $B$ . Construct drug disease interaction network  $G_3$ ; Drug embedding matrix  $U$  and disease embedding matrix  $V$  were obtained. Based on drug embedding matrix  $U$  and disease embedding matrix  $V$ , the trained  $MLP$  network is obtained by training the edge belief  $MLP$  network, and the trained  $MLP$  network was used for drug relocation. The invention establishes drug attribute network, disease attribute network and drug disease interaction heterogeneous network in stages, fully extracts drug attribute characteristics, disease attribute characteristics and spatial topological features of drug disease interaction, and effectively improves the accuracy of drug relocation.



21: 2022/09261. 22: 2022/08/18. 43: 2022/10/04  
 51: H03K  
 71: Dr. Amit Kumar Pandey, Dr. Tarun Kumar Gupta, Dr Vijayshri Chaurasia, Prof. Vishal Singh Chandel, Dr Hari Shanker Srivastava, Dr Shiv Prasad Kori, Mr. Vikas Patel, Mr. Prince Rajpoot, Dr. Abhinav Gupta, Mr. Shivendu Mishra  
 72: Dr. Amit Kumar Pandey, Dr. Tarun Kumar Gupta, Dr Vijayshri Chaurasia, Prof. Vishal Singh Chandel, Dr Hari Shanker Srivastava, Dr Shiv Prasad Kori, Mr. Vikas Patel, Mr. Prince Rajpoot, Dr. Abhinav Gupta, Mr. Shivendu Mishra

**54: SYSTEM OF EFFECTIVE KEEPER BASED DOMINO CIRCUIT FOR LOW POWER APPLICATION**

00: -  
 The present invention relates to system of effective keeper based domino circuit for low power application. The proposed circuit improves the circuit performance of large fan-in footless domino. A weak keeper is controlled by a novel silicon based network controller known as a keeper controlling network. The keeper controlling network includes a silicon PMOS transistor and an odd number of inverters.

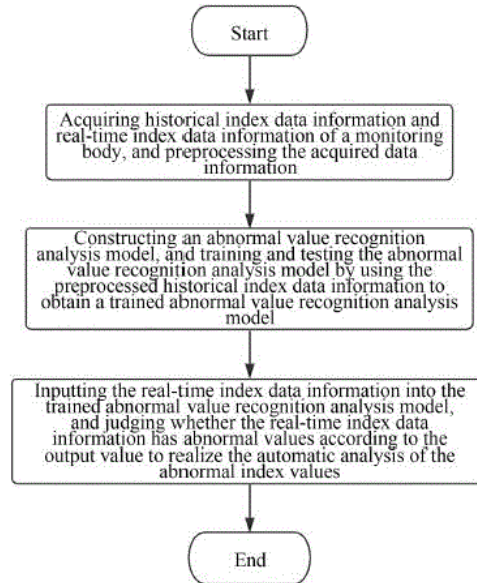


21: 2022/09262. 22: 2022/08/18. 43: 2022/10/19  
 51: G05B  
 71: Huaneng Shantou Wind Power Co., Ltd.  
 72: WEI, Wang, YUPENG, Dong, JIANBIN, Wang, QINGXIN, Lin, YUN, Zeng, JIANJUN, Zhang  
 33: CN 31: 202111057890.6 32: 2021-09-09  
**54: COMPREHENSIVE ANALYSIS METHOD OF AUXILIARY CONTROL SYSTEM OF BOOSTER STATION**

00: -  
 The present disclosure discloses a comprehensive analysis method of an auxiliary control system of a booster station, which comprises: discretization based on entropy; scanning a transaction database, sorting after obtaining a support count of each item set, and generating a tree according to each scanned transaction; and mining a strong association rule according to the generated tree. The present disclosure focuses on a multi-index association analysis and prediction algorithm and the application thereof, puts forward a new parallel mining algorithm and an incremental mining

algorithm based on a dictionary tree, and improves the current commonly used data discretization method to discretize each continuous index data by clustering based on an entropy distribution function.

12 <sub>d</sub>	7 <sub>d</sub>
11 <sub>d</sub>	6 <sub>d</sub>
13 <sub>d</sub>	6 <sub>d</sub>
14 <sub>d</sub>	2 <sub>d</sub>
15 <sub>d</sub>	2 <sub>d</sub>



21: 2022/09263. 22: 2022/08/18. 43: 2022/10/19  
51: G06F

71: Huaneng Shanwei Wind Power Co., Ltd.  
72: XURUI, Wu, XU, Sun, XIAOTONG, Huang, JIABIN, Tang, YONGXIN, Liu, XIAO, Qiu

33: CN 31: 202111555152.4 32: 2021-12-17

**54: AUTOMATIC ANALYSIS METHOD FOR MONITORING ABNORMAL INDEX VALUES**

00: -

The present disclosure discloses an automatic analysis method for monitoring abnormal index values, which comprises the steps of: acquiring historical index data information and real-time index data information of a monitoring body, and preprocessing the acquired data information; constructing an abnormal value recognition analysis model, and training and testing the abnormal value recognition analysis model by using the preprocessed historical index data information to obtain a trained abnormal value recognition analysis model; inputting the real-time index data information into the trained abnormal value recognition analysis model, and judging whether the real-time index data information has abnormal values according to the output value to realize the automatic analysis of the abnormal index values. The method can make accurate judgment by using less historical data, and can automatically adjust the judgment basis according to the increase of data.

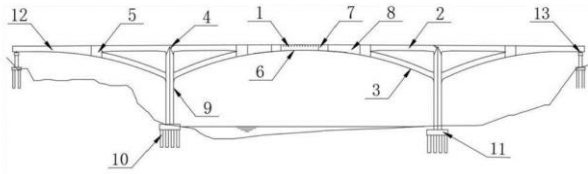
21: 2022/09264. 22: 2022/08/18. 43: 2022/10/19  
51: E01D

71: Chongqing Jiaotong University  
72: XIANG, Zhongfu, DING, Yanchao, LIU, Anshuang, LAI, Yaping, ZHENG, Bangyou, ZHOU, Xueyong, LI, Yayong, HUANG, Haidong, QIAO, Yunqiang, XIANG, Nan

**54: BEAM-ARCH COMBINED AND STEEL-CONCRETE COMPOSITE CONTINUOUS RIGID FRAME BRIDGE**

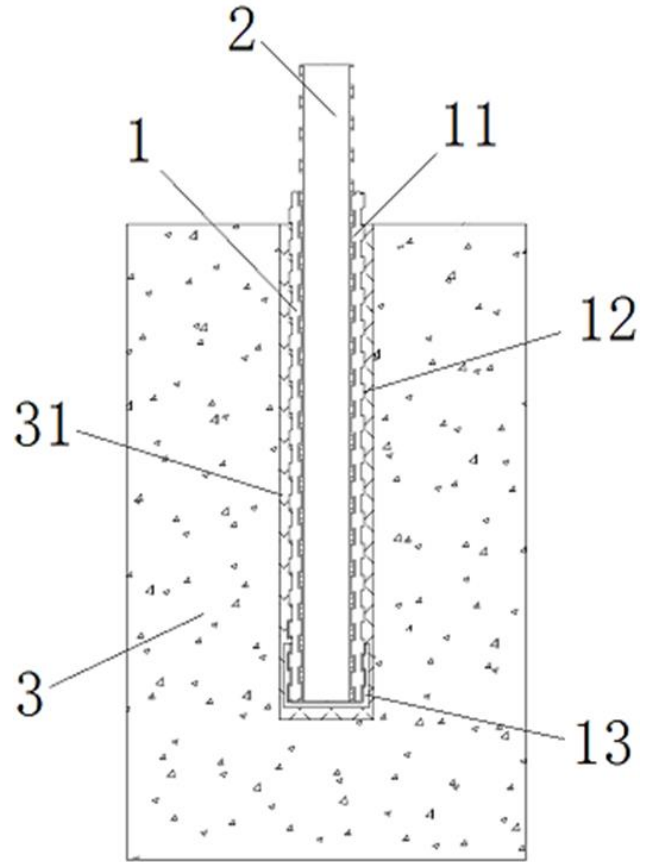
00: -

Disclosed is a beam-arch combined and steel-concrete composite continuous rigid frame bridge. The bridge includes a steel box beam, where the steel box beam is provided with upper chord box beams, the upper chord box beams are provided with lower chord box arches, the upper chord box beams and the lower chord box arches jointly form a beam-arch combined continuous rigid frame, the upper chord box beams are provided with pier upper chord box beam roots, the upper chord box beams are provided with beam-arch joint area beam sections, the steel box beam and the lower chord box arches on the two sides form a main span, and transition sections between the steel box beam and the upper chord box beams are provided with steel-concrete joint areas. On the premise of keeping a traditional cantilever construction technology, spanning capability of a prestressed concrete continuous rigid frame bridge is improved.



21: 2022/09266. 22: 2022/08/18. 43: 2022/10/04  
 51: E04C  
 71: Hohhot Sifang Engineering Quality Inspection and Testing Co., Ltd.  
 72: LIU, Hong, FU, Yonggang, WANG, Xiangping, HAN, Liang, XU, Xiaobin, WANG, Chenfei, HAO, Na  
 33: CN 31: 202221867423. X 32: 2022-07-19  
**54: THREADED SLEEVE FOR ANCHORING THREADED STEEL BAR**

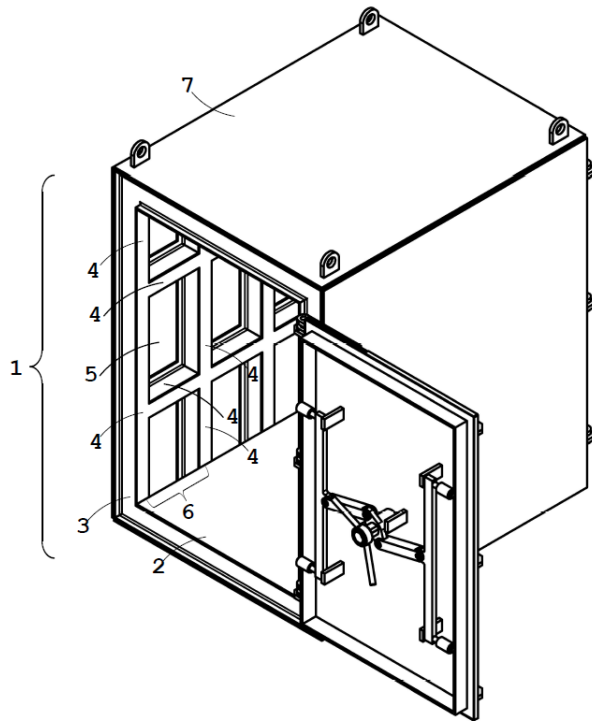
00: -  
 The present invention discloses a threaded sleeve for anchoring a threaded steel bar, and relates to the technical field of building construction, including a sleeve body capable of extending into a bar glue in a drilling hole of a foundation pile, wherein an inner wall of the sleeve body is provided with an internal thread, and the threaded steel bar can be screwed into the sleeve body through the internal thread. The threaded sleeve for anchoring the threaded steel bar provided by the present invention can make the threaded steel bar to be reused and reduces costs.



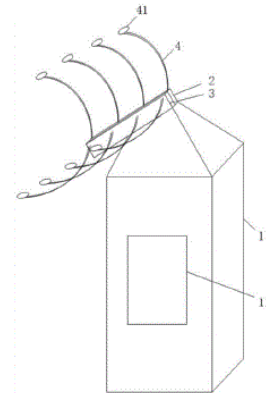
21: 2022/09267. 22: 2022/08/18. 43: 2022/10/04  
 51: E21F  
 71: DREAM AFRICAN FOUNDATION (PTY) LTD  
 72: MAKHETHA, SIPHIWE  
**54: SAFETY BARRIER**

00: -  
 This invention relates to an explosive proof safety barrier and more specifically, but not exclusively, to a safety barrier for use in the mining industry. In accordance with the invention there is provided a safety barrier comprising a base, a structural member extending from the base, and structural protrusions arranged across the surface of the structural member. The protrusions may form rectangular reinforcement structures of 400mm x 400mm and may be operatively located on the inside of the structural member. It is envisaged that the invention will provide a safety barrier which can withstand an underground explosion and high pressure applied to a safety chamber resulting from the explosion.

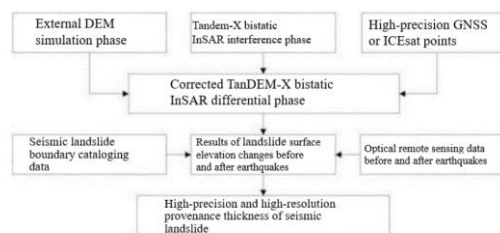
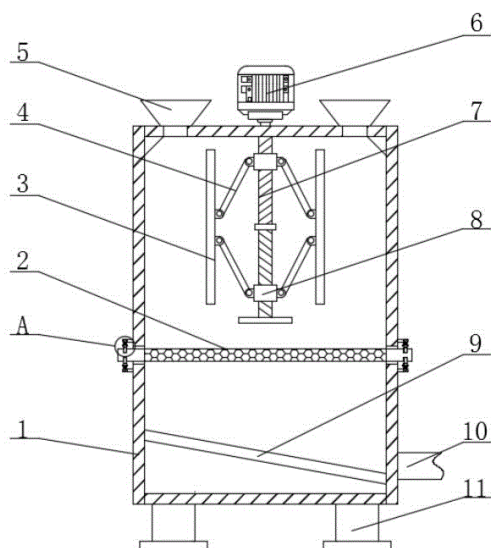




21: 2022/09269. 22: 2022/08/18. 43: 2022/10/19  
 51: A47K; A61M  
 71: CHEN, Xiangli  
 72: CHEN, Xiangli, WANG, Liancai, ZANG, Yuzhu, FU, Ying, LI, Ningning, WEI, Zhenghong, XU, Nuo  
**54: DISINFECTOR FOR HEMATOPOIETIC STEM CELL TRANSPLANTATION FOR TREATING HEMATOLOGIC DISEASE**  
 00: -  
 Disclosed is a disinfectant for hematopoietic stem cell transplantation for treating a hematological disease. The disinfectant includes a liquid storage bottle, where a spraying device is mounted at a bottle opening of the liquid storage bottle and includes a flow control structure and a deformable liquid outlet device; and the deformable liquid outlet device includes a first branch pipe, a second branch pipe and a plurality of spraying pipes, the spraying pipes are distributed on the first branch pipe and the second branch pipe, the flow control structure is in communication with each spraying pipe, and a plurality of spraying holes are provided in pipe bodies of the spraying pipes. The plurality of spraying pipes and spraying holes are arranged, and a spraying amount is large, such that a patient in a large area or a whole body can be disinfected, so as to improve disinfection efficiency.



21: 2022/09270. 22: 2022/08/18. 43: 2022/10/19  
 51: B01F  
 71: Chongqing Xintonglian Feed Co., Ltd.  
 72: Li Chen  
**54: A MIXING DEVICE FOR FEED PRODUCTION**  
 00: -  
 The invention discloses a mixing device for feed production, it includes a box body, the center of the top surface of the box body is fixedly arranged a motor. The output shaft of the motor is fixed with a two-way screw, and one end of the two-way screw runs through the top of the box body and extends to the inside of the box body. Both ends of the surface of the bidirectional screw and is located in the inner screw of the box body are connected with a sliding sleeve, and both sides of the sliding sleeve are connected with a rotating rod. The invention effectively solves the problem that the existing mixing device for feed production has fixed mixing radius and limited mixing range, which resulting in the uneven mixing and poor mixing effect. And after using the existing feed production mixing device , the inner wall surface of the box will adhere to a large number of residual feed. Therefore, the proportioned feed can not be fully utilized, and it will result in the waste of resources, and then improve the difficulty of cleaning the device.



21: 2022/09271. 22: 2022/08/18. 43: 2022/10/19  
51: G01V

71: Henan University of Urban Construction  
72: SUN, Yafei, WU, Yifei

**54: METHOD FOR EXTRACTING SEISMIC LANDSLIDE VOLUME BY USING TANDEM-X BISTATIC INSAR**

00: -

The present invention discloses a method for extracting a seismic landslide volume by using TanDEM-X bistatic InSAR. The method specifically comprises the following steps: step (1) calculating a bistatic InSAR interference phase; step (2) estimating a bistatic InSAR differential phase; step (3) estimating the results of landslide surface elevation changes before and after the earthquake; and step (4) obtaining the seismic landslide volume. A corrected TanDEM-X bistatic InSAR differential phase is obtained through a TanDEM-X bistatic InSAR interference phase, an external DEM simulation phase, and high-precision GNSS or ICESat correction points, then the results of landslide surface elevation changes before and after the earthquake are obtained, and finally, the seismic landslide volume is obtained by combining seismic landslide boundary cataloging data and optical remote sensing data before and after the earthquake. At the same time, there is no need to set up ground survey equipment.

21: 2022/09272. 22: 2022/08/18. 43: 2022/10/19

51: G01N

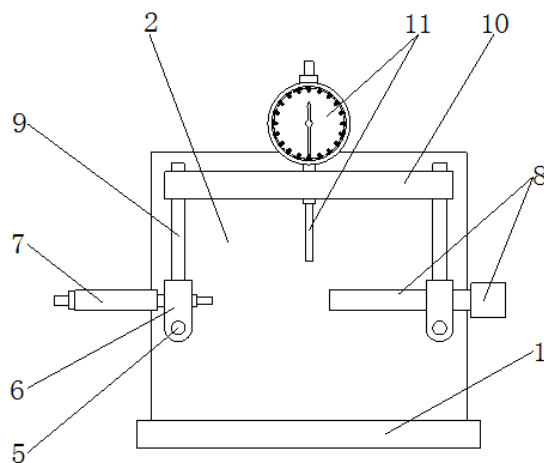
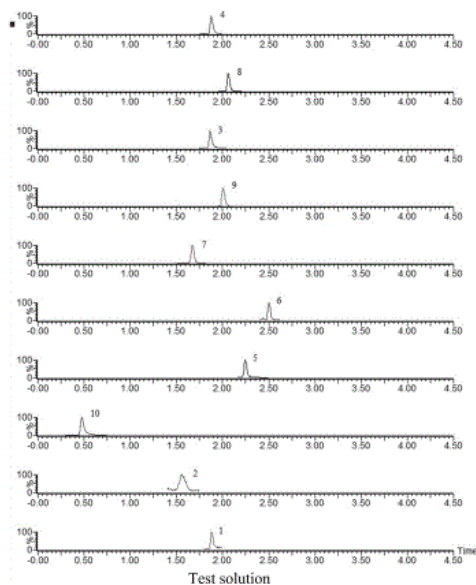
71: Guizhou Medical University

72: GONG, Zipeng, ZENG, Yan, HE, Feng, KANG, Ningfang, CHEN, Yi, PENG, Jianqing, HUANG, Yong, ZHENG, Lin, LI, Yueting, CHEN, Siying

**54: METHOD FOR SIMULTANEOUS QUANTITATIVE DETERMINATION OF TEN ACTIVE INGREDIENTS IN SHUGANNING INJECTION**

00: -

The present disclosure provides a method for simultaneous quantitative determination of ten active ingredients in a Shuganning injection, including the following steps: S1, preparation of a test solution: conducting vortex mixing on a Shuganning injection diluted 1,000 times with methanol for 5 min, and conducting centrifugation at 14,000 rpm for 10 min to obtain the test solution; and S2, determination of ingredients: determining contents of ten ingredients of hydroxyacetophenone, caffeic acid, cynaroside, scutellarin, baicalin, oroxylin A, geniposide, oroxylin A-7-O-beta-D-glucuronide, baicalin, and adenosine in the test solution using an ultra-high performance liquid chromatography-triple quadrupole mass spectrometer under specific chromatographic conditions and specific mass spectrometry conditions. In the present disclosure, the method for determining contents of the ten ingredients in the Shuganning injection is established by liquid chromatography-mass spectrometry. The method has a short measurement time, and desirable precision, stability, and repeatability.



21: 2022/09274. 22: 2022/08/18. 43: 2022/10/19  
51: C04B

71: Shenyang University of Technology  
72: NING, Baokuan, SHI, Xinxin, LI, Mingshuo,  
ZHANG, Wenxin

#### 54: EXPANDED PERLITE FOAM LIGHT SOIL AND PREPARATION METHOD THEREOF

00: -

The present invention discloses expanded perlite foam light soil and a preparation method thereof. The expanded perlite foam light soil includes the following components in parts by weight: 9-27 parts of expanded perlite, 420 parts of cementing material, 155-195 parts of water, 20-60 parts of emulsion powder, 1.25-2.1 parts of foaming agent, 1.5 parts of thickening agent and 0.5 part of water-reducing agent. In the prepared foam light soil, the lightweight aggregate expanded perlite added can improve pumping defoaming, segregation, bleeding and the like easily occurring in construction, and reduce the density of the foam light soil while ensuring the strength as a skeleton; the redispersible emulsion powder added can improve toughness and impact resistance, reduce water absorption and enhance durability.

21: 2022/09275. 22: 2022/08/18. 43: 2022/10/19  
51: A01G

71: Fujian Agriculture and Forestry University  
72: Lijin GUO, Wei LIN, Jie SHI

#### 54: METHOD FOR IN VITRO PROPAGATION AND EFFECTIVE ROOTLESS SEEDLING GRAFTING OF WOODY RHODODENDRON

00: -

The invention discloses a method for in vitro culturing and microbud grafting of Rhododendron.

21: 2022/09273. 22: 2022/08/18. 43: 2022/10/19  
51: G01B; G01N

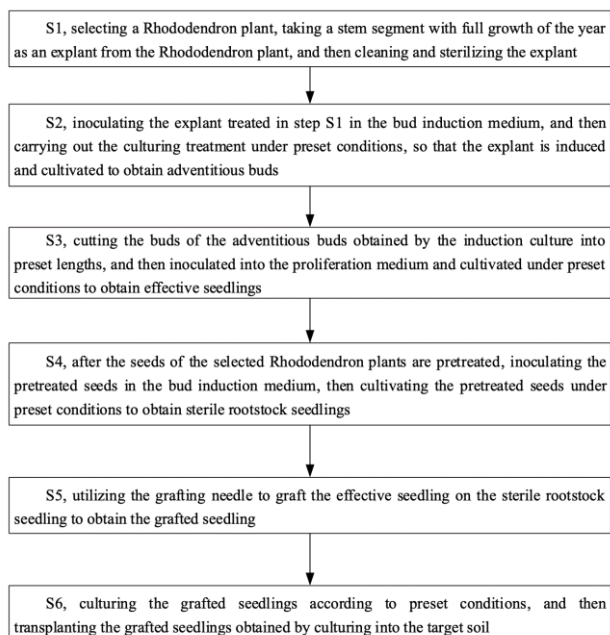
71: Shenyang University of Technology  
72: NING, Baokuan, SHI, Xinxin, LI, Mingshuo,  
ZHANG, Wenxin

#### 54: APPARATUS FOR MEASURING SHRINKAGE OF CONCRETE

00: -

Disclosed is an apparatus for measuring the shrinkage of concrete. The apparatus includes a base, a length dial indicator, a width dial indicator and a height dial indicator, side plates are symmetrically fixed on the two sides of the base, the length dial indicator is arranged on the side plate at one end, a length adjustable bolt is mounted in the side plate at the other end in a threaded manner, a supporting rod is provided between the side plates symmetrically, and surfaces of the supporting rod at both ends are movably sleeved with a movable block. Through the setting of various dial indicators, the apparatus facilitates simultaneous measurement of the shrinkage of length, width and thickness of concrete, thereby improving the efficiency of measurement work and increasing the accuracy of measurement, preventing the workers from repeated and multiple measurement, and reducing the labor intensity of workers.

The method comprises the following steps: transferring explants to Rhododendron plants, and then performing bud induction and proliferation culture on the explants to obtain effective seedlings, and then grafting the effective seedlings on sterile plants. The rootstock seedlings are cultivated and planted, and the grafted seedlings obtained by cultivation are finally transplanted into the target soil; the cultivation method of this scheme has low cost, high survival rate, improved yield and good quality, which is conducive to the cultivation of alpine mountain Rhododendron.



21: 2022/09276. 22: 2022/08/18. 43: 2022/10/19  
51: C02F

71: Kunming University of Science and Technology  
72: ZHANG, Dongdong, LI, Qi, LONG, Xiaoxia, YANG, Zhijie, QU, Guangfei, NING, Ping  
**54: METHOD FOR HEAVY METAL FIXATION AND SOILIZATION OF COPPER TAILINGS**

00: -

The present disclosure discloses a method for heavy metal fixation and soilization of copper tailings, specifically comprising the following steps: (1) modifying montmorillonite by using carboxymethyl chitosan; (2) carrying out low-temperature co-pyrolysis on the modified montmorillonite and a biomass raw material to obtain co-pyrolysis biochar; (3) activating fly ash at a high temperature to prepare activated fly ash; (4) performing soilization

of tailings on the co-pyrolysis biochar, the copper tailings and the activated fly ash in a mass ratio of (10-20) parts: (60-70) parts: (10-15) parts. In the present disclosure, montmorillonite is modified by using carboxymethyl chitosan, which facilitates to improve the stability of montmorillonite, increase adsorption sites and improve the complexing ability to heavy metals; meanwhile, low-temperature co-pyrolysis is adopted to produce a synergistic effect, increase the number and porosity of functional groups, improve the adsorption capacity of heavy metals and reduce the bioavailability.

21: 2022/09277. 22: 2022/08/18. 43: 2022/10/19  
51: A23C

71: Chengdu Academy of Agriculture and Forestry Sciences

72: ZHANG, Chisong, BAI, Juhong, DI, Feida, LIU, Zhiyu, FANG, Qiuye, LIU, Yijing, FENG, Jun  
33: CN 31: 202110962047.6 32: 2021-08-20

**54: DOUBLE-PROTEIN YOGURT CONTAINING NATTOKINASE AND PREPARATION METHOD THEREOF**

00: -

The present invention discloses a double-protein yogurt containing nattokinase and a preparation method thereof, and solves the technical problems that yogurts in the prior art are relatively single in function and there are no healthy yogurts suitable for population with chronic diseases to drink. The double-protein yogurt includes the following components in percentage by weight: 90-96% of fermentation base solution, 0.5-2% of *Bacillus subtilis*, 0.5-2% of fiber gel aid, 0.5-1% of calcium carbonate and 0.5-3% of lactic acid bacteria, wherein the fermentation base solution includes 75-85% of fresh cow milk, 2-8% of low-GI whole grain raw material, 2-8% of low-fat high-protein bean raw material and 5-15% of water. The yogurt has active nattokinase beneficial to the human body, and starch raw materials in the formula are not easily absorbed and have no influence on blood sugar, so that the yogurt can be drunk by population with chronic diseases.

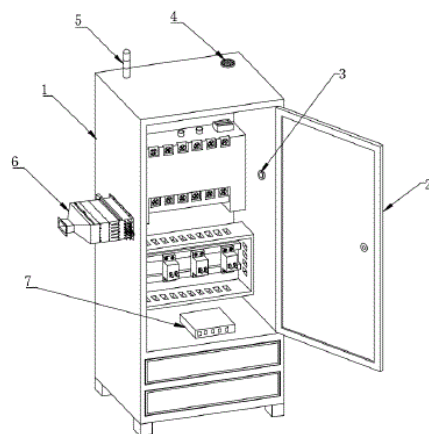
21: 2022/09278. 22: 2022/08/18. 43: 2022/10/19  
51: A47L; D06F; H02B

71: Hunan Institute of Technology  
72: HONG, Lu, WANG, Chaoyuan

**54: INTELLIGENT ELECTRICAL CABINET WITH AUTOMATIC DRYING FUNCTION**

00: -

The present disclosure relates to the technical field of electrical equipment, and discloses an intelligent electrical cabinet with an automatic drying function, which can prevent parts inside a cabinet body from being corroded by moisture and high temperature to be damaged.



21: 2022/09279. 22: 2022/08/18. 43: 2022/10/19  
51: G06F

71: Zhejiang Wanli University

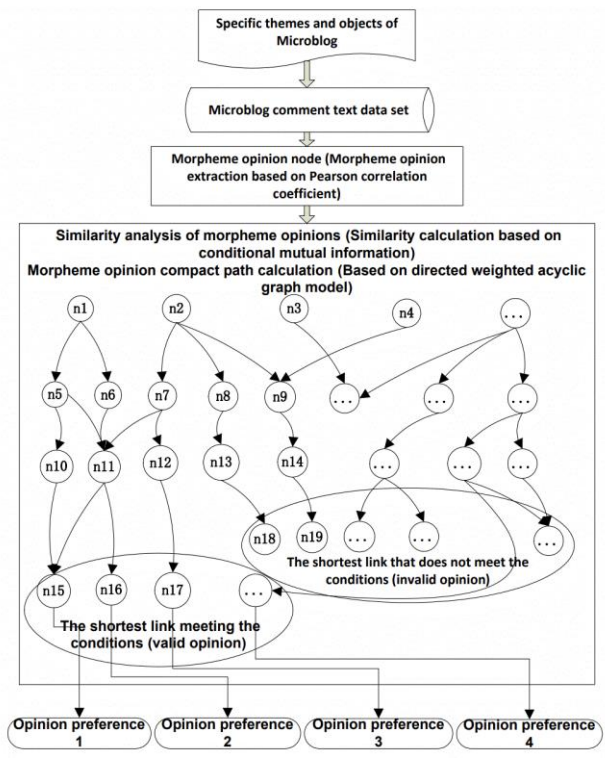
72: Zhang Shaozhong, Zhang Dingkai, Zhong Haidong, Xu Jin

**54: AN OPINION PREFERENCE ANALYSIS METHOD FOR COMMENTS ON MICROBLOG**

00: -

The invention provides an opinion preference analysis method of Microblog comments, and the technology involved is suitable for opinion classification of comments. The method takes user comment data in social media as the processing object, combines the directed weighted acyclic graph model with opinion preference analysis, introduces the morpheme method, divides the traditional morphemes into two types, one is the morpheme type and the other is opinion type, and realizes the opinion preference classification of comments through three steps: extracting various morpheme opinions of comments, analyzing the similarity relationship between morpheme opinions, and calculating the compact path of morpheme opinions. Among them, the extraction of morpheme opinion is based on the existing morpheme lexicon and opinion corpus lexicon to analyze various morpheme words

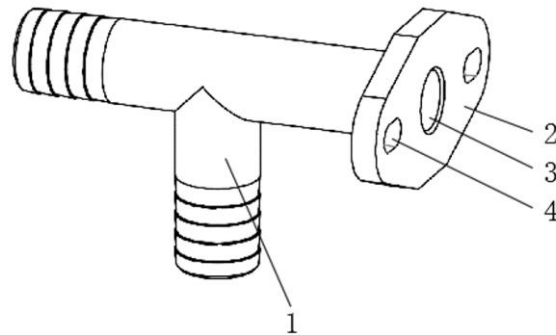
and opinion words of the commented object in the review text. Pearson correlation coefficient method is used to calculate the correlation coefficient between morpheme words and opinion words, and the morpheme opinion is formed by the correlation coefficient. The similarity analysis between morpheme opinions is that morpheme opinions are regarded as independent entities, and the conditional mutual information calculation formula is used to describe the relationship between morpheme opinions. The calculation of compact path of morpheme opinion is based on the directed weighted acyclic graph model, which regards morpheme opinions as nodes in directed weighted acyclic graph, constructs a directed weighted relation connection among these morpheme opinion nodes, and then searches for a valid path satisfying certain weight conditions through an improved shortest path search algorithm. The set of all morpheme opinion nodes experienced on the obtained path represents a certain opinion preference type. By setting a certain path length limit, we can find out a number of such paths as needed, and each path is a kind of opinion preference classification.



21: 2022/09313. 22: 2022/08/19. 43: 2022/10/20  
 51: B61L  
 71: ELECTRICAL ENGINEERING CO., LTD. OF CTCE GROUP  
 72: Zhen Shen, Hao Sun, Jian Chen, Zhineng Hong, Yongshuai Yuan, Jianguo Wang, Yan Zhao, Wei Ye, Xianfeng Sun, Chao Zhang  
 33: CN 31: 202111640922.5 32: 2021-12-29  
**54: NOVEL CONNECTION DEVICE SUITABLE FOR VARIOUS TRACKSIDE APPARATUSES**  
 00: -

Disclosed is a novel connection device suitable for various trackside apparatuses, which relates to the technical field of track apparatuses. The novel connection device includes T-shaped round steel, threads are provided at a bottom tail end and any one of a left end and a right end of the T-shaped round steel, a device connection sheet is installed at one end, away from the thread, of the left end and the right end of the T-shaped round steel, a wiring hole is provided in the device connection sheet, and at least one adjustment hole is provided in one side, close to the wiring hole, of the device connection sheet. The connection device in the present disclosure can be suitable for three-way connections of various trackside apparatuses, disassembly is convenient, assembly line operation is formed,

installation efficiency of apparatuses is improved, and constructors can independently carry out construction; and moreover, in the connection device, the T-shaped round steel is connected to the device connection sheet in a welding mode, such that various trackside apparatuses do not shake and bend when being connected, thereby improving safety.



21: 2022/09314. 22: 2022/08/19. 43: 2022/10/20  
 51: A23L  
 71: Qinghai Nationalities University  
 72: LI, Junqiao, BAI, Shijun  
**54: METHOD FOR MAKING RED JUJUBE-FLAVORED POTENTILLA ANSERINA FRUIT CRISPS**  
 00: -

The present invention relates to a method for making red jujube-flavored Potentilla anserina fruit crisps, including the following steps: washing fresh Potentilla anserina fruits, boiling red jujubes, adding white sugar for seasoning, then putting the Potentilla anserina fruits in the obtained red jujube water, performing high-pressure cooking, and then performing deep-freezing and freeze-drying to obtain the red jujube-flavored Potentilla anserina fruit crisps. Compared with original-flavored Potentilla anserina fruit crisps, the preservation time is also obviously prolonged. Moreover, according to the red jujube-flavored Potentilla anserina fruit crisps made by the method, the red jujube flavor and the sweet and fragrant flavor are increased, the crispy and delicious taste of the original-flavored Potentilla anserina fruit crisps is guaranteed, and the shape, color and nutritional components of fresh Potentilla anserina fruits crude oil are maintained. The

Potentilla anserina fruit crisps are a very ideal health-care and leisure ready-to-eat food.

21: 2022/09315. 22: 2022/08/19. 43: 2022/10/20  
51: A21D

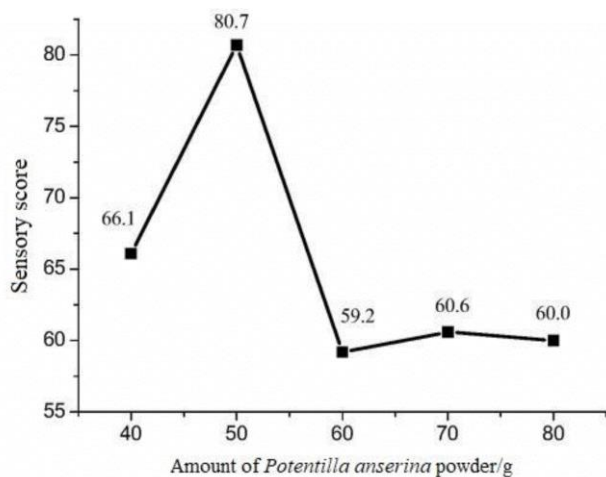
71: Qinghai Nationalities University

72: LI, Junqiao, BAI, Shijun

**54: POTENTILLA ANSERINA BISCUIT AND PREPARATION METHOD THEREOF**

00: -

The present invention relates to a Potentilla anserina biscuit and a preparation method thereof. The Potentilla anserina biscuit includes the following raw materials based on parts by weight: 50-60 parts of Potentilla anserina powder, 90-100 parts of wheat flour, 40-45 parts of vegetable oil, 10-20 parts of white granulated sugar, 15-25 parts of egg and 40-50 parts of water. The Potentilla anserina biscuit features high comprehensive scores in five aspects of appearance, color, taste, flavor and texture, and the sensory evaluation is excellent. Moreover, the Potentilla anserina biscuit also shows after testing that the content of main nutritive elements is high, and the overall nutrition is balanced and sufficient. The method for preparing the Potentilla anserina biscuit is simple to operate, easy to produce, and advantageous for large-scale production.



21: 2022/09316. 22: 2022/08/19. 43: 2022/10/20  
51: C02F

71: Hebei Zhuhe Group Xinglong County Mining Co., Ltd.

72: YANG, Guanghe, ZHANG, Zhiguo, SHEN, Yi

**54: SODIUM TITANOSILICATE COMPOSITE FIBER FOR CESIUM ION ADSORPTION AND PRODUCT THEREOF**

00: -

The present disclosure belongs to the technical field of wastewater treatment, particularly relates to a sodium titanasilicate composite fiber, a preparation method thereof, a fabric and an application thereof. The present disclosure provides a sodium titanasilicate composite fiber, comprising an inorganic fiber and sodium titanasilicate supported on the surface of the inorganic fiber. In the present disclosure, sodium titanasilicate is grown on the surface of the inorganic fiber, which increases the contact area between the sodium titanasilicate and the wastewater, thereby enhancing the probability of contact between the sodium titanasilicate and the radioactive ions in wastewater such as cesium ions, improving the efficiency of treating wastewater with sodium titanasilicate composite fiber as an inorganic ion exchanger and achieving the efficient and continuous treatment of wastewater.

21: 2022/09317. 22: 2022/08/19. 43: 2022/10/20  
51: B01J

71: Hebei Zhuhe Group Xinglong County Mining Co., Ltd.

72: YANG, Guanghe, ZHANG, Zhiguo, SHEN, Yi

**54: SODIUM TITANOSILICATE COMPOSITE POROUS MICROSPHERES FOR CESIUM ION ADSORPTION**

00: -

The present disclosure belongs to technical field of wastewater treatment, particularly relates to a sodium titanasilicate composite microsphere, a preparation method and an application thereof. The present disclosure provides sodium titanasilicate composite microsphere, comprising porous microspheres and sodium titanasilicate supported on the surface of the porous microspheres. In the present disclosure, sodium titanasilicate is grown on the surface of the porous microspheres, which increases the contact area between the sodium titanasilicate and the wastewater, thereby enhancing the probability of contact between the sodium titanasilicate and the radioactive ions in wastewater such as cesium ions, thereby improving the efficiency of treating radioactive wastewater with sodium titanasilicate composite microspheres and achieving the efficient and continuous treatment of wastewater.

21: 2022/09318. 22: 2022/08/19. 43: 2022/10/20  
51: A01G

71: Shanxi Institute for Functional Food, Shanxi Agricultural University

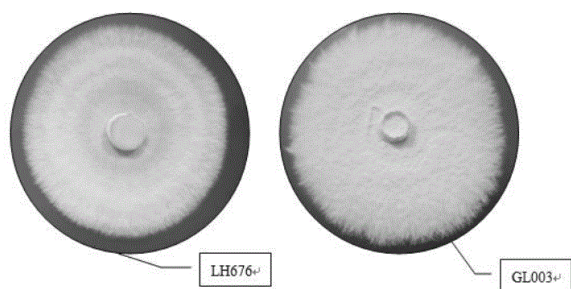
72: LIU, Hong, YANG, Jie, GUO, Shang, BAI, Yaoyun

33: CN 31: 202111111300.3 32: 2021-09-23

**54: GANODERMA STRAIN AND CULTIVATION METHOD OF FRUITING BODY OF GANODERMA SHANXIENSE THEREOF**

00: -

The present disclosure provides a Ganoderma strain, named Ganoderma shanxiense, which is deposited at China General Microbiological Culture Collection Center (CGMCC) on August 11, 2021 under accession number 23077. A fruiting body cultivation method is further provided: adding glucose to a carbon base medium to achieve a glucose concentration of 30 g/L, adjusting the medium to pH 4.0, adding a yeast powder to a nitrogen base medium to achieve a yeast powder concentration of 2 g/L, and adjusting the medium to pH 4.0 to obtain suitable carbon and nitrogen base media for mycelial growth of Ganoderma shanxiense; and inoculating the Ganoderma strain into media for mycelial growth of Ganoderma shanxiense, and cultivating the Ganoderma strain in the dark at 30°C for inducement to primordium to obtain the fruiting body of Ganoderma shanxiense. The Ganoderma shanxiense provided by the present disclosure has a strong natural selenium enrichment capability.



21: 2022/09319. 22: 2022/08/19. 43: 2022/10/20  
51: C02F

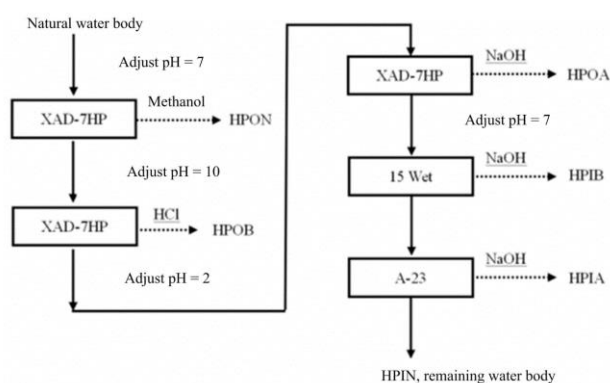
71: Jilin Jianzhu University

72: LIN, Yingzi, LIN, Huan, LV, Zunjing, LIU, Gen, LI, Siwen, LI, Yang

**54: METHOD FOR SEPARATING ORGANIC MATTER FROM NATURAL WATER BODY**

00: -

The present invention provides a method for separating an organic matter from a natural water body, and belongs to the field of water purification. In the present invention, organic matters in the natural water body are divided into six categories, and three different kinds of resins are used, namely an XAD-7HP macroporous adsorption resin, a 15-WET strong-acid cation exchange resin and an A-23 weak-base anion exchange resin; the XAD-7HP macroporous adsorption resin sequentially adsorbs a hydrophobic neutral (HPON), a hydrophobic base (HPOB) and a hydrophobic acid (HPOA) in the natural water body, then the 15-WET strong-acid cation exchange resin absorbs a hydrophilic base (HPIB), and finally, the A-23 weak-base anion exchange resin adsorbs a hydrophilic acid (HPIA), retaining a hydrophilic neutral (HPIN) in the remaining water body.



21: 2022/09320. 22: 2022/08/19. 43: 2022/10/14  
51: E21D

71: Huaneng Coal Technology Research Co., Ltd., Anhui University of Science and Technology, Anhui chen'an Mine Support Technology Co., Ltd., Shaanxi Mining Branch of Huaneng Coal Industry Co., Ltd., Xichuan coal mine branch of Huaneng Tongchuan Zhaojin Coal Power Co., Ltd.

72: WANG Yilong, ZHOU Xiang, LI Yongyuan, LU Xingyi, ZHANG Duxue, LI Hanhan, LIU Chengbo, ZHANG Lei, JING Laiwang, XUE Weipei, JING Wei, HAO Pengwei, CAO Feifei

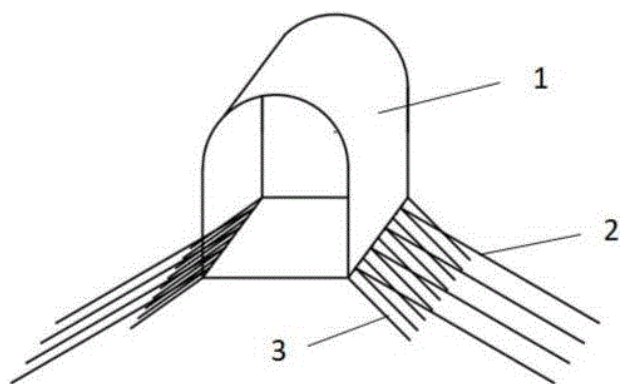
33: CN 31: 2021110871206 32: 2021-09-16

**54: SUPPORT METHOD OF ROADWAY SIDE AND FLOOR WITH COORDINATE STABILIZATION OF BOTTOM ANGLE PRESTRESSED GROUTING BOLTS AND BOTTOM ANGLE ANCHOR CABLES AT DIFFERENT ANGLES**

00: -



The invention relates to a support method of a roadway side and a floor with a coordinate stabilization of bottom angle prestressed grouting bolts and bottom angle anchor cables at different angles, belongs to the field of mine support, and includes following implementation steps: 1) drilling grouting holes of bottom angle prestressed grouting bolts along a direction of 45 degrees between a roadway bottom angle and a horizontal plane; 2) installing the bottom angle prestressed grouting bolts, applying a prestress and completing grouting; 3) drilling the grouting holes of bottom angle prestressed grouting anchor cables along the direction of 30 degrees between the roadway bottom angle and the horizontal plane; and 4) installing the bottom angle prestressed grouting anchor cables, applying the prestress and completing grouting. According to the invention, the prestressed bolt and the anchor cable are installed at different angles to form a conical area between them, and after grouting the anchor cable, a reinforced concrete conical dam body is formed along the roadway direction, so as to transfer a large part of a circumferential stress transmitted by a bearing structure of surrounding rocks to the surrounding rocks or deep coal, thereby effectively inhibiting a displacement of the roadway side and a floor heave and ensuring a safety production of mines.



21: 2022/09321. 22: 2022/08/19. 43: 2022/10/20

51: A61K

71: YANG, Tongshen

72: YANG, Tongshen, YANG, Zhenchao

**54: PREPARATION METHOD OF EXTERNALLY APPLIED LINIMENT FOR RELIEVING ONYCHIA LATERALIS**

00: -

The present disclosure discloses an externally applied liniment for relieving onychia lateralis. The external liniment is prepared from the following raw materials in parts by weight: 1 to 5 parts of Meixliuncliic, 1 to 5 parts of XongkSems and 3 to 15 parts of camellia oil. The above raw materials of the externally applied liniment are weighed in parts by weight. Preferably, the Meixliuncliic and the XongkSems are local wild fresh herbs, and the camellia oil is special superior camellia oil prepared by a traditional technology of Dong nationality. The Meixliuncliic and the XongkSems are mixed, supplemented with the camellia oil and soaked for half a month, and the liniment should be sealed to avoid light for standby. The Chinese herbal medicines in the present disclosure complement each other, have the effects of clearing away heat, killing worms and eliminating dampness, and beautify nails.

21: 2022/09322. 22: 2022/08/19. 43: 2022/10/19

51: G01N

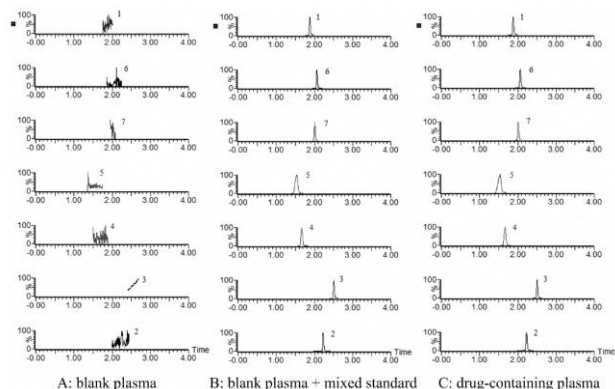
71: Guizhou Medical University

72: GONG, Zipeng, TANG, Chao, HE, Feng, CHEN, Yi, KANG, Ningfang, PENG, Jianqing, JIN, Yang, HUANG, Yong, ZHENG, Lin, LI, Yueting

**54: METHOD FOR SIMULTANEOUS DETERMINATION OF CONTENTS OF SIX ACTIVE INGREDIENTS IN SHUGANNING INJECTION IN RAT PLASMA**

00: -

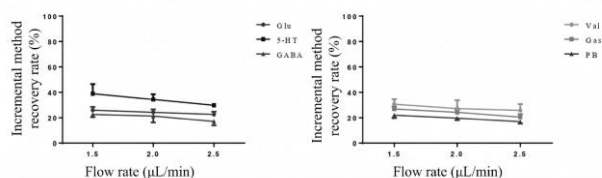
Based on an ultra-performance liquid chromatography-tandem mass spectrometry (UPLC-MS/MS) technology, the present disclosure establishes a quantitative analysis method of scutellarin, baicalein, oroxylin A, geniposide, oroxylin A-7-O-beta-D-glucuronide, and baicalin in rat plasma. The method examines specificity, linearity, accuracy, precision, extraction recovery, a matrix effect, and stability of a plasma sample.



21: 2022/09323. 22: 2022/08/19. 43: 2022/10/19  
 51: G01N  
 71: Guizhou Medical University  
 72: GONG, Zipeng, CHEN, Yi, CHEN, Yan, WANG, Aimin, HUANG, Jing, LI, Yueting, HUANG, Yong, ZHENG, Lin, CHEN, Siying, LI, Yongjun

**54: METHOD FOR SIMULTANEOUS DETECTION OF GASTRODIN (GAS), PARISHIN B (PB), AND FOUR NEUROTRANSMITTERS IN RAT BRAIN BY MICRODIALYSIS IN VITRO AND IN VIVO**

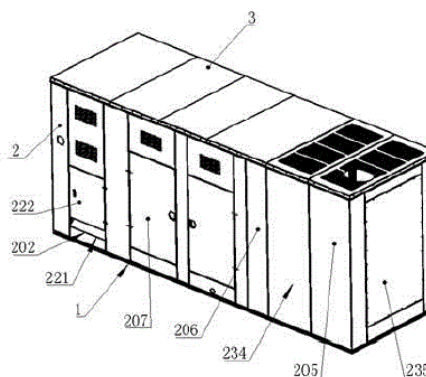
00: -  
 The present disclosure provides a method for simultaneous detection of gastrodin (Gas), parishin B (PB), and four neurotransmitters in a brain by microdialysis in vitro and in vivo using a high-performance liquid chromatography with tandem mass spectrometry (HPLC-MS-MS) technology.



21: 2022/09324. 22: 2022/08/19. 43: 2022/10/27  
 51: F02B; F16M  
 71: ShanDong JiaoTong University  
 72: CUI, Wenchao  
**54: MUTE CASE OF A GENERATOR SET**

00: -  
 A mute case of a generator set, which belongs to the technical field of generator sets. The mute case is used for external protection of the generator set, and is particularly suitable for working occasions with noise requirements. A case body achieves external protection of the generator set, and a control box and a switch box are used for control elements of the generator set to be placed. Air baffles are used

for flow disturbance and lowers working noise of the generator set together with soundproof cotton adhering to internal structures of the case body and a case top plate.

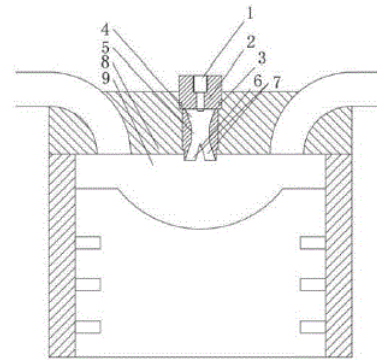
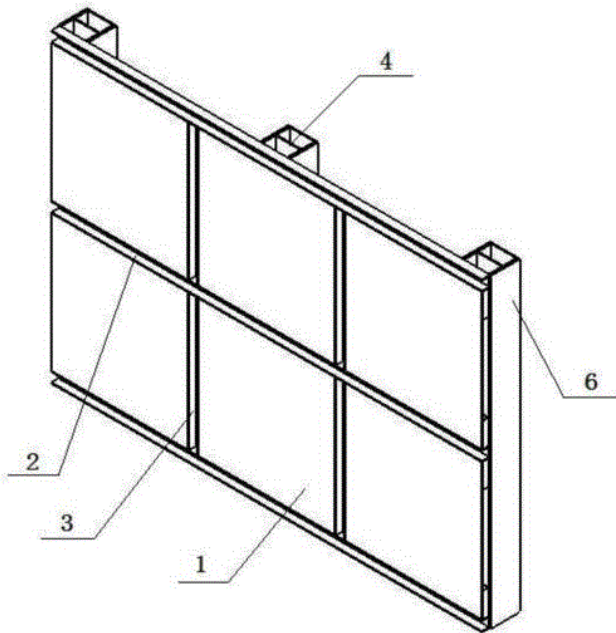


21: 2022/09325. 22: 2022/08/19. 43: 2022/10/19  
 51: E04H

71: Hangzhou Electric Power Design Institute Co.LTD  
 72: LI Xianfeng, YANG Xianjin, HU Chengang, SHENG Xueqing, TU Feng, LI Jianyu, CHEN Pan, PAN Shengjun, CHEN Jiahui, JI Xiaomeng  
**54: WRAPPED ENCLOSURE STRUCTURE SYSTEM SUITABLE FOR PREFABRICATED SUBSTATION**

00: -  
 A wrapped enclosure structure system suitable for prefabricated substation comprises an inner keel composite wallboard, an external light steel wall beam, an external light steel wall column, a light steel column, a light steel beam, a special-shaped spliced decorative column and a special-shaped spliced decorative beam, which are connected by bolts. The technology is simple, replaceable and detachable, and the connection is stable. The inner keel composite wallboard can be customized in size according to the actual needs of the project, and holes are reserved, so that large wallboards in the traditional building mode can be converted into combinable small pieces. The enclosure system is convenient and flexible, no secondary processing is needed, the on-site construction quantity is reduced, the modularization of wallboard and the decoration-free of beams and columns are realized, the fire-proof and corrosion-proof treatment processes for beams and columns are omitted, the decoration is simple, the effective protection of columns and

beams is realized, and the enclosure structure is beautiful.



21: 2022/09326. 22: 2022/08/19. 43: 2022/10/19  
51: F02B  
71: ShanDong JiaoTong University  
72: LI, Yue

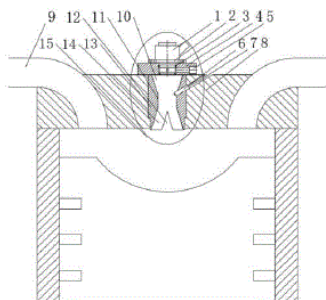
**54: STRUCTURE OF STRONG PREMIXING PRECOMBUSTION CHAMBER HAVING MULTI-STAGE REFLECTION OF SHOCK WAVES**

00: -  
Provided is a structure of a strong premixing precombustion chamber having multi-stage reflection of shock waves. The structure includes an oil injector, an oil injector mounting seat and a precombustion chamber body, where the oil injector is mounted on the oil injector mounting seat, one end of the precombustion chamber body is connected to the oil injector, a precombustion chamber injection outlet is provided at the other end of the precombustion chamber body, and a diameter of a middle of the precombustion chamber body is less than that of two ends of the precombustion chamber body. The present invention achieves multi-stage reflection superposition of the shock waves in the precombustion chamber body, promotes mixing of fuel oil and air and injection of combustion flames into a main combustion chamber, and improves ignition stability of an engine and thermal efficiency of the whole engine.

21: 2022/09327. 22: 2022/08/19. 43: 2022/10/19  
51: F02B  
71: ShanDong JiaoTong University  
72: LI, Yue

**54: STRUCTURE OF SHOCK WAVE COMBUSTION-SUPPORTING TYPE PRECOMBUSTION CHAMBER FOR A GAS ENGINE**

00: -  
Provided is a structure of a shock wave combustion-supporting type precombustion chamber for a gas engine. The structure includes a gas injection valve, a gas injection valve mounting seat, a precombustion chamber body and a spark plug, where a gas inlet is machined on the gas injection valve mounting seat; a precombustion chamber injection outlet is provided at the precombustion chamber body, and a diameter of a middle of the precombustion chamber body is less than that of two ends of the precombustion chamber body; and a spark plug lead is led out from a through hole in a cylinder cover. The present invention achieves multi-stage reflection superposition of gas jet shock waves in the precombustion chamber body, promotes mixing of fuel gas and air and injection of combustion flames into a main combustion chamber, and improves ignition stability of the gas engine and thermal efficiency.



21: 2022/09328. 22: 2022/08/19. 43: 2022/10/19  
51: C07D

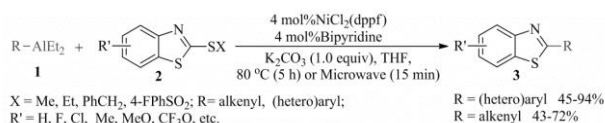
71: Southwest Minzu University

72: LI Qinghan, JIANG Xin

#### 54: SYNTHETIC METHOD OF 2-SUBSTITUTED BENZO[D]THIAZOLE DERIVATIVES

00: -

This invention discloses a synthesis method of 2-substituted benzo[d]thiazole derivatives, and relates to the technical field of organic synthesis. A variety of 2-aryl or 2-alkenyl benzo[d]thiazole derivatives are prepared by nickel-catalyzed cross-coupling reaction between 2-substituted benzo[d]thiazole derivatives and aryl aluminum reagents or alkenyl aluminum reagents, under conventional heating or microwave-assisted reaction conditions, with 4 mol%NiCl<sub>2</sub>(dppf) as catalyst and 4 mol%2,2'-bipyridine as ligand, and the separation yield is 41-94%. No matter the organoaluminum reagent has an electron donating group or an electron withdrawing group on its aromatic ring, it can successfully carry out coupling reaction with 2-substituted benzo[d]thiazole derivatives to obtain the corresponding 2-aryl and 2-alkenyl benzo[d]thiazole derivatives; the 2-substituted benzo[d]thiazole derivatives with electron donating or electron withdrawing groups on the aromatic ring is also applied to this reaction system.



21: 2022/09329. 22: 2022/08/19. 43: 2022/10/19  
51: G06Q

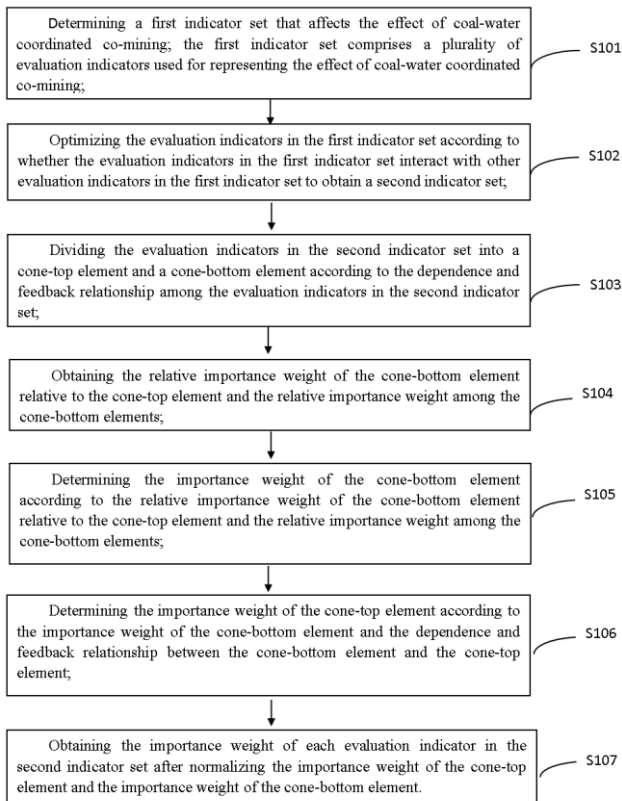
71: Inner Mongolia Agricultural University

72: Liu XiaoMin, Wang ZhenYu, Wang WenJuan, Liu HaiYan, Wang WenGuang

#### 54: EVALUATION-PROCESSING METHOD AND DEVICE FOR IMPORTANCE OF COAL-WATER COORDINATED CO-MINING

00: -

The invention provides an evaluation-processing method and an evaluation-processing device for importance of coal-water coordinated co-mining. The method comprises the following steps: dividing the evaluation indicators in the second indicator set into a cone-top element and a cone-bottom element according to the dependence and feedback relationship among the evaluation indicators in the second indicator set; determining the importance weight of the cone-bottom element according to the relative importance weight of the cone-bottom element relative to the cone-top element and the relative importance weight among the cone-bottom elements; determining the importance weight of the cone-top element according to the importance weight of the cone-bottom element and the dependence and feedback relationship between the cone-bottom element and the cone-top element. The method fully consider that interaction between different indicators, and judge the dependence and feedback relationship between the indicators, thereby constructing a sharp cone network analysis structure, and reducing the subjective deviation of the evaluation result to the greatest extent. Meanwhile, the relative importance of each indicator is evaluated and the combination of subjective evaluation and objective evaluation is realized according to the theory of professional knowledge and combined with the opinions of experts in related fields.



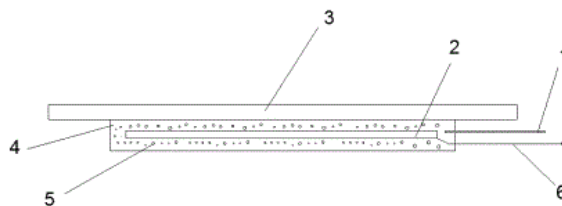
21: 2022/09330. 22: 2022/08/19. 43: 2022/10/19  
51: A61F

71: Guang'an People's Hospital  
72: Tuo tian, Ren zhang-xia, Yang ning, Zhang xin

**54: TRADITIONAL CHINESE MEDICINE APPLICATION WITH FAR INFRARED AUTOMATIC HEATING FUMIGATION**

00: -  
The utility model discloses a traditional Chinese medicine application with far infrared automatic heating fumigation, comprising an outer film for sticking, a traditional Chinese medicine dressing layer, a humidifying assembly for moistening the medicinal powder and a temperature control assembly for heating and evaporating the medicine to make the medicine penetrate deep skin. The traditional Chinese medicine dressing layer is arranged on the outer film, and the medicinal powder is filled in the traditional Chinese medicine dressing layer. The humidifying assembly comprises an electric syringe and a liquid injection tube, one end of the liquid injection tube is inserted into the traditional Chinese medicine dressing layer, and the other end is connected with the electric syringe. The temperature control assembly comprises a graphene electrothermal film, a temperature controller, a wire

and a detector; the graphene electrothermal film is arranged in the traditional Chinese medicine dressing layer; one end of the wire is connected with the graphene electrothermal film, and the other end is connected with the temperature controller; the detector is connected to the wire and located between the graphene electrothermal film and the temperature controller. The utility model can accelerate wound healing without frequent replacement.



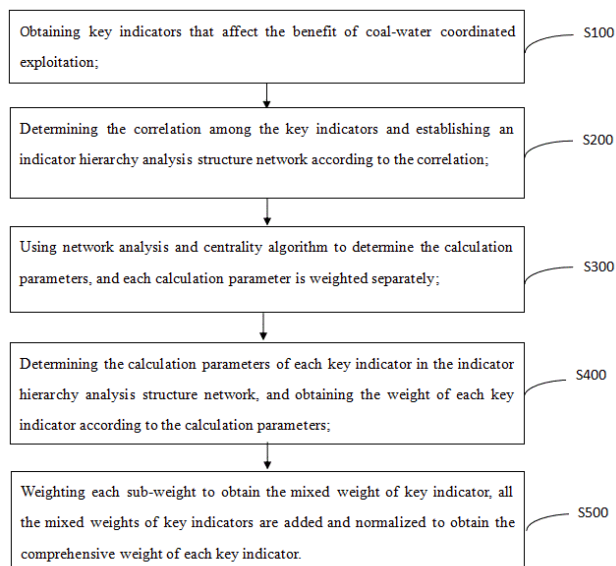
21: 2022/09331. 22: 2022/08/19. 43: 2022/10/19  
51: G06F

71: Inner Mongolia Agricultural University  
72: Liu XiaoMin, Wang WenJuan, Liu HaiYan, Wang ZhenYu

**54: EVALUATION METHOD AND SYSTEM OF COAL-WATER COORDINATED EXPLOITATION DEGREE BASED ON ANP THEORY**

00: -  
The invention discloses an ANP-based evaluation method of coal-water coordinated exploitation degree, which comprises the following steps: obtaining key indicators that affect the benefit of coal-water coordinated exploitation; Determine the correlation among key indicators and establish an indicator hierarchy analysis structure network; The calculation parameters are determined by network analysis and centrality algorithm, and weighted respectively. Determining the calculation parameters of each key indicator in the indicator hierarchy analysis structure network, and obtaining the weight of each key indicator; Each sub-weight is weighted to obtain the mixed weight of key indicators, and the mixed weight of each key indicator is added and normalized to obtain the comprehensive weight of each key indicator. The invention also discloses an ANP theory-based coal-water coordinated exploitation degree evaluation system. The purpose of this ANP-based evaluation method and system of coal-water coordinated exploitation degree is to solve the problem of coal-water balance. There are

many influencing factors and complex relationships in the coordinated evaluation of water exploitation degree, which leads to the low accuracy of traditional evaluation methods.

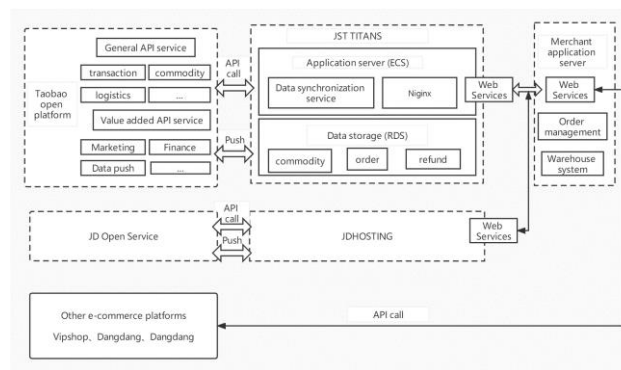


21: 2022/09332. 22: 2022/08/19. 43: 2022/10/19  
51: G06Q  
71: Shenzhen Guangde Education Technology Co., Ltd, Huizhou University, Xuri Trading (China) Co., Ltd

72: Chen GuiLin, Chen XueJun, Lin Hong  
**54: NEW M2B-BASED SYSTEM FOR COMBINE COOPERATIVE POOL AND MIXED COMMERCIAL SERVICES**

00: -  
The invention provides a system based on M2B new cooperative joint venture mixed commercial service, and relates to the technical field of electronic commercial service. The mixed commercial service system based on M2B new cooperation and association comprises an e-commerce development platform, a platform cloud server and an offline system, wherein the e-commerce development platform comprises a Taobao open platform, a Jingdong open platform and other e-commerce platforms, and the platform cloud server comprises a Taobao server, a Jingdong server, other e-commerce servers and other merchant application servers; The merchant server comprises an online shop assistant unit, an order management unit and a warehouse system unit. By analyzing the online sales data of Jeanswest and combining with the big

data of the platform, the system summarizes the preferences of online consumers for products, relies on its strong product development capabilities, timely launches online special products, strengthens the diversified choice of products, and meets the various requirements of consumers for products.



21: 2022/09333. 22: 2022/08/19. 43: 2022/10/19  
51: C09K  
71: Institute of Applied Ecology.Chinese Academy of Sciences  
72: Wang Lingli, Wei Zhanbo, Shi Yuanliang, Zhang Lei

**54: ALBIC SOIL MODIFY AND PREPARATION METHOD THEREOF**

00: -  
The invention provides an albic soil modifier and a preparation method thereof, and relates to the technical field of chemical fertilizers. The albic soil modifier comprises the following raw materials in parts by weight: 50-80 parts of crop straw powder, 10-25 parts of humic acid, 1-5 parts of polyamino acid, 20-40 parts of modified montmorillonite, 30-40 parts of coal cinder and 5-20 parts of bentonite. The invention provides an albic soil modifier and a preparation method thereof.humic acid is added into the raw material, humic acid organic matter can improve the structure of the albic soil, increase the depth of a surface soil layer, improve the physical property of moisture of an albic layer, increase the nutrient content of the albic layer and improve the capability of the albican soil for supplying nutrients, modified montmorillonite is added into the raw material, and the modified montmorillonite can improve the acidity of soil The problem that the soil is hardened due to long-term or massive use of lime, the soil is prone to compound acidification, and the degree of acidification is enhanced is solved; and the bentonite is added into the raw material, and the

bentonite can effectively improve the water retention and air permeability of the soil.

21: 2022/09354. 22: 2022/08/19. 43: 2022/10/19  
51: F24H

71: HAILUN LIMIN ENERGY SAVING BOILER MANUFACTURING CO., LTD.

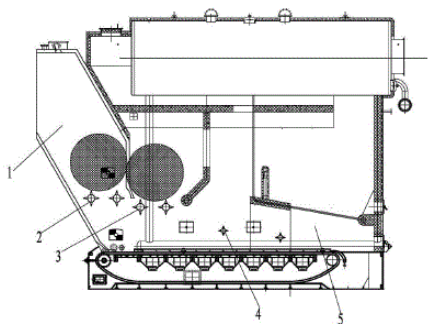
72: WAN, Bangqi, BIE, Rushan, LIU, Fenglei, ZHANG, Liangliang, ZHANG, Huaiyu, LI, Cai

33: CN 31: 202210428259.0 32: 2022-04-22

**54: STRAW BALE BURNING DIRECT-FIRED BIOMASS BOILER WITH BOILER DRYING INSIDE**

00: -

A straw bale burning direct-fired biomass boiler with boiler drying inside, including a drying roller assembly, a bale breaking roller assembly and a feeding roller assembly. The drying roller assembly is located in a drying chamber inside a feed inlet of the boiler, and the drying roller assembly includes one or two drying roller main shaft pipes, each drying roller main shaft pipe has a water cooling channel, and a plurality of drying thorns are evenly distributed on an outer ring wall of the drying roller main shaft pipe, and the drying thorn is a hollow drying thorn communicated with the water cooling channel, the cooling water enters the drying thorn after passing through the water cooling channel of the drying roller main shaft pipe. The bale breaking roller assembly is located in a furnace chamber. The feeding roller assembly is located in the furnace chamber of the boiler.



21: 2022/09362. 22: 2022/08/22. 43: 2022/10/20  
51: G01N

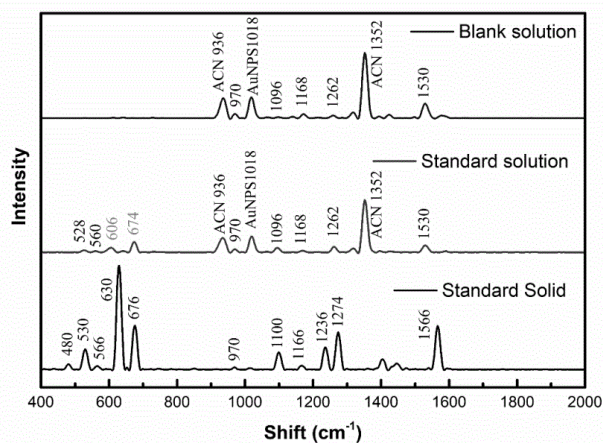
71: Zhejiang University

72: HUANG, Lingxia, GAO, Huaqi, YANG, Liang

**54: SURFACE ENHANCED RAMAN SPECTRUM RAPID DETECTION METHOD FOR CHLORPYRIFOS AND ACETAMIPRID IN MULBERRY LEAVES**

00: -

Disclosed is a surface enhanced Raman spectrum rapid detection method for chlorpyrifos and acetamiprid in mulberry leaves. The mulberry leaf samples to be detected are extracted by using acetonitrile, sodium chloride and magnesium sulfate anhydrous, and the extracted samples are oscillated, ultrasonically treated and centrifuged; the supernatant is mixed with magnesium sulfate anhydrous, PSA, C18 and GCB, and then the mixture is oscillated, centrifuged and filtered; after being mixed with appropriate amounts of nano enhancing reagent A and enhancing reagent B uniformly, the purified liquid samples are detected by using a Raman spectrometer. The results show that a detection limit of the method for chlorpyrifos in mulberry leaves is less than 0.3 mg/L, and a detection limit of the method for acetamiprid in mulberry leaves is below 50 ug/L. Compared to other detection methods, the method has the obvious advantages of rapid and convenient detection, high precision and low cost.



21: 2022/09363. 22: 2022/08/22. 43: 2022/10/20  
51: C08F

71: Tianjin University of Science and Technology, PetroChina Company Limited

72: CAO, Chengang, LU, Chao, LIU, Ruoxuan, GAO, Xueqi, SHANG, Wenjing

**54: METHOD FOR PREPARING POLYETHYLENE COPOLYMER**

00: -

The present invention discloses a preparation method of a polyethylene copolymer. The method uses an imidazolyl nickel-based catalyst to catalyze the copolymerization of ethylene and a polar

monomer in the presence of the ethylene. The density and number of polar functional groups of the polyethylene copolymer can be regulated. The copolymer maintains the original excellent performances of polyethylene such as high toughness, high crystallinity and the like.

21: 2022/09364. 22: 2022/08/22. 43: 2022/10/20  
51: G06F; G06Q

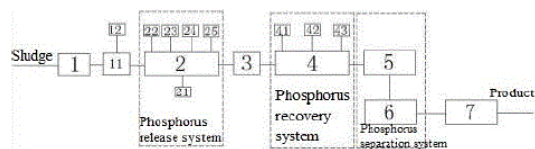
71: Guizhou Minzu University

72: YANG, Cheng, PAN, Guiying, PENG, Yan, YUAN, Ju, JIANG, Xiuya, WANG, Zhikang, ZENG, Guangneng

#### 54: SLUDGE PHOSPHORUS RECOVERY SYSTEM FOR DOMESTIC SEWAGE TREATMENT PLANT

00: -

Provided is a sludge phosphorus recovery system for a domestic sewage treatment plant, including a phosphorus release system, a phosphorus recovery system and a phosphorus separation system, wherein the phosphorus release system includes a hydrolysis tank, wherein a heating device, an ultrasonic device, a first stirring device, a thermometer and a first reagent tank are respectively arranged in the hydrolysis tank, and the hydrolysis tank is connected with a centrifuge; the phosphorus recovery system includes a phosphorus recovery reaction device, wherein the phosphorus recovery reaction device is also connected with the centrifuge, and a second stirring device, a pH meter and a second reagent tank are respectively arranged in the phosphorus recovery reaction device; the phosphorus separation system includes a static device and a pressure filter. The purpose of the present invention is to solve the existing problems of the residual-sludge phosphorus recovery technology of the domestic sewage treatment plant.



21: 2022/09385. 22: 2022/08/22. 43: 2022/10/04  
51: B09B

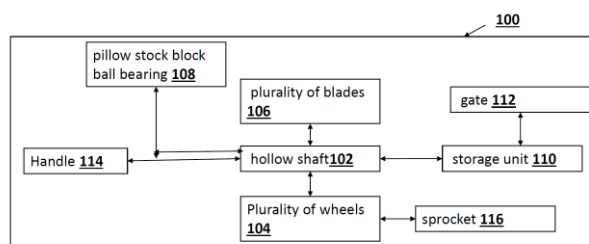
71: Darpan Tripathi, Kuldeep Rana, Dr. Satyendra Singh, Santosh Kumar, Kapil Mohan

72: Darpan Tripathi, Kuldeep Rana, Dr. Satyendra Singh, Santosh Kumar, Kapil Mohan

#### 54: A TRASH COLLECTING MACHINE

00: -

A trash collecting machine (100), wherein the machine (100) comprises of: a hollow shaft (102) associated with a plurality of wheels (104) for movement of the the plurality of wheels (104) in a required direction; a plurality of equally spaced blades (106) mounted on the hollow shaft (102) in a specified angle for collecting waste from ground; atleast a pair of pillow stock block ball bearing (108) interconnected with the hollow shaft (102) for smooth rotation of the hollow shaft (102) along the required direction; a storage unit (110) associated with the hollow shaft (102) and the blade (106) for storing the waste from the plurality of blades (106); and a gate (112) detachably connected the storage unit (110), wherein the gate (112) is opened during collecting and removing of the waste to and from the storage unit (110).



21: 2022/09387. 22: 2022/08/22. 43: 2022/10/04  
51: B01J

71: SIDHO-KANHO-BIRSHA UNIVERSITY

72: DR. DEBASIS DHAK, ARNAB MUKHERJEE, Dr. PRASANTA DHAK

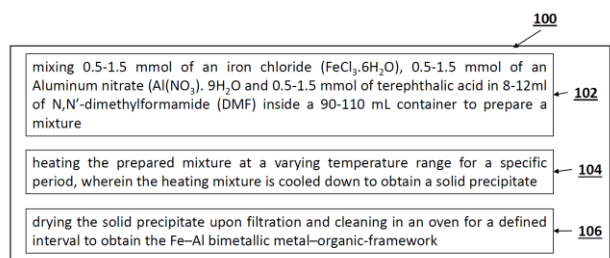
#### 54: A COMPOSITION AND A METHOD FOR SOLVOTHERMAL SYNTHESIS OF A 3D Fe–Al BIMETALLIC METAL–ORGANIC-FRAMEWORK

00: -

A composition and a method (100) for solvothermal synthesis of a 3D Fe–Al bimetallic metal–organic–framework, wherein the method (100) comprises of:mixing 0.5-1.5 mmol of an iron chloride (FeCl<sub>3</sub>.6H<sub>2</sub>O), 0.5-1.5 mmol of an Aluminum nitrate (Al(NO<sub>3</sub>). 9H<sub>2</sub>O and 0.5-1.5 mmol of terephthalic acid in 8-12ml of N,N'-dimethylformamide (DMF) inside a 90-110 mL container to prepare a mixture;heating the prepared mixture at a varying temperature range for a specific period, wherein the heating mixture is cooled down to obtain a solid



precipitate; and drying the solid precipitate upon filtration and cleaning in an oven for a defined interval to obtain the Fe–Al bimetallic metal–organic–framework.

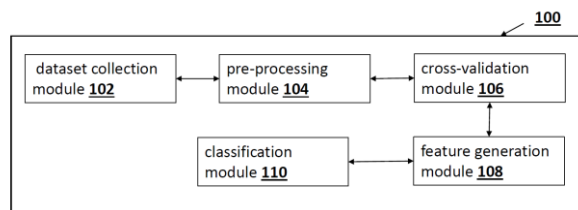


21: 2022/09388. 22: 2022/08/22. 43: 2022/10/04  
51: C12Q

71: Fahime Khozeimeh, Danial Sharifrazi, Navid Hoseini Izadi, Javad Hassannataj Joloudari, Afshin Shoeibi, Roohallah Alizadehsani, Mehrzad Tartibi, Sadiq Hussain, Zahra Alizadeh Sani, Marjane Khodatars, Delaram Sadeghi, Hamid Alinejad-Rokny, Saeid Nahavandi, U Rajendra Acharya  
72: Fahime Khozeimeh, Danial Sharifrazi, Navid Hoseini Izadi, Javad Hassannataj Joloudari, Afshin Shoeibi, Roohallah Alizadehsani, Mehrzad Tartibi, Sadiq Hussain, Zahra Alizadeh Sani, Marjane Khodatars, Delaram Sadeghi, Hamid Alinejad-Rokny, Saeid Nahavandi, U Rajendra Acharya  
**54: A CONVOLUTIONAL NEURAL NETWORK SYSTEM FOR CORONARY ARTERY DISEASE DIAGNOSIS**

00: -

A convolutional neural network system (100) for coronary artery disease (CAD) diagnosis, comprises of: a dataset collection module (102) for collecting and storing a plurality of multiparametric cardiovascular magnetic resonance (CMR) images, wherein the plurality of the CMR sequence is collected by at least four sequences; a pre-processing module (104) to resize the input data to  $100 \times 100$  and normalize the resized data between 0 and 1; a cross-validation module (106) to divide the dataset into a plurality of parts; a feature generation module (108) for training a convolutional neural network (CNN) by converting a two-dimensional CMR images into a plurality of vectors of real values; and a classification module (110) for creating random forest decision trees to train the CNN, wherein the decision trees of the random forest determines a vector with CAD disease.



21: 2022/09401. 22: 2022/08/22. 43: 2022/10/20  
51: G02B; G03F

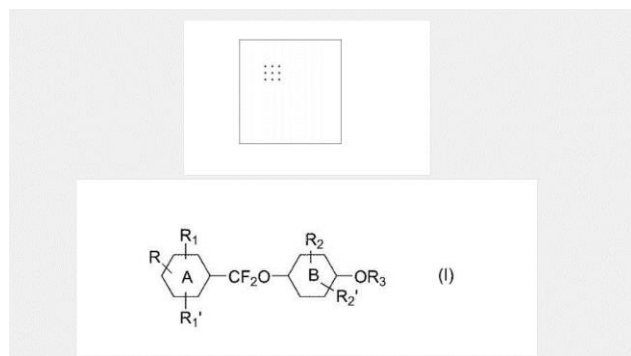
71: XI'AN MANARECO NEW MATERIALS CO., LTD.

72: ZHANG, Yang, MA, Aiping, WANG, Pengfei, LI, Qigui, LIU, Shuang, GAO, Renxiao, WANG, Xiaowei  
33: CN 31: 202011612200.4 32: 2020-12-30

**54: FLUORINE-CONTAINING RESIN COMPOSITION, PREPARATION METHOD THEREFOR, AND PREPARATION METHOD FOR CURED FILM CONTAINING SAME**

00: -

A fluorine-containing resin composition, comprising the following raw materials in parts by weight: an alkali-soluble resin (A) containing a compound (I), a photoinitiator, a sensitizer, an active diluent, a solvent, and an auxiliary agent. The structural formula of the monomer of the compound is shown as compound (I), wherein R is selected from among  $-\text{CH}=\text{CH}_2$ ,  $-\text{C}(\text{CH}_3)=\text{CH}_2$ , acryloyl or methacryloyl; R1, R1', R2, and R2' are respectively and independently selected from among hydrogen, hydroxyl, C1-C4 alkyl or C1-C4 alkoxy; R3 is selected from hydrogen or C1-C6 alkyl; ring A is selected from cyclohexyl or phenyl; and ring B is selected from phenyl, naphthyl or anthryl. The fluorine-containing resin composition has a good coating performance, electrical insulating property and light permeability, and also has better chemical resistance, heat resistance, hardness and a better adhesive force.



21: 2022/09416. 22: 2022/08/23. 43: 2022/10/20

51: B65D

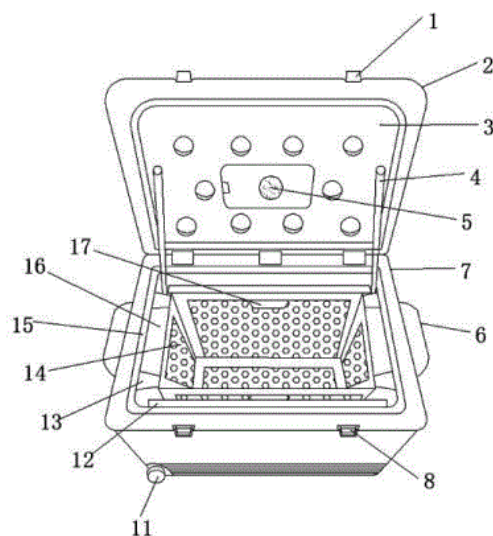
71: Beijing Wuzi University

72: GAO, Ge, CHEN, Jing, LAN, Gongming, QIAO, Jianlin

**54: COLD CHAIN THERMAL INSULATING BOX FOR PREVENTING FRUITS FROM PREMATURE RIPENING AND SQUEEZING EACH OTHER**

00: -

The present utility model discloses a cold chain thermal insulating box for preventing fruits from premature ripening and squeezing each other, comprising a flip cover, an outer box body, and an inner box body. The upper end face of the outer box body is hinged with the flip cover, a lining structure is provided in the outer box body, an interlayer is provided in the lining structure, and the inner box body is installed in the interlayer. The cold chain thermal insulating box for preventing fruits from premature ripening and squeezing each other has a reasonable structural configuration and is mainly provided with a flip cover, an outer box body, and an inner box body. The flip cover is hinged on the outer box and can be opened or closed.



21: 2022/09417. 22: 2022/08/23. 43: 2022/10/20

51: A63B

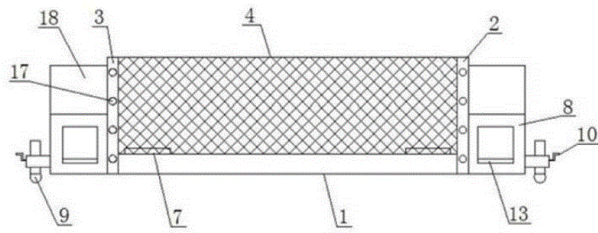
71: ShanDong JiaoTong University

72: ZHOU, Dong

**54: FOOTBALL TRAINING DEVICE**

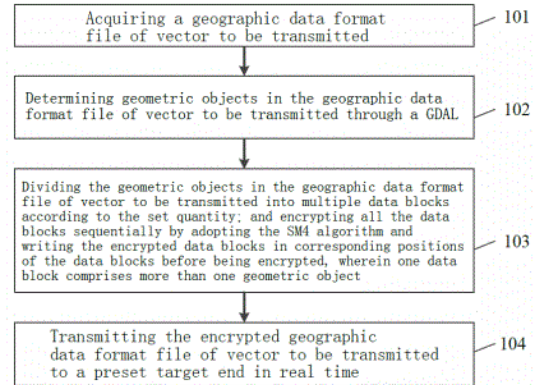
00: -

The present invention discloses a football training device comprising a goal; wherein a bottom face, a left side face and a right side face of the goal are composed of a bottom plate, a left baffle plate and a right baffle plate which are vertically connected to each other, a top face and a rear side face of the goal are both provided with a net, and the front side face of the goal is provided with an opening; the present invention can help the player practice shooting, at the same time, recover most of the football in the goal, and pass and feed the ball to the player through the automatic ball serving machine, which is beneficial to reduce the number of training partner and save manpower; providing a photovoltaic power generation device is beneficial to save electric energy and is suitable for outdoor places.



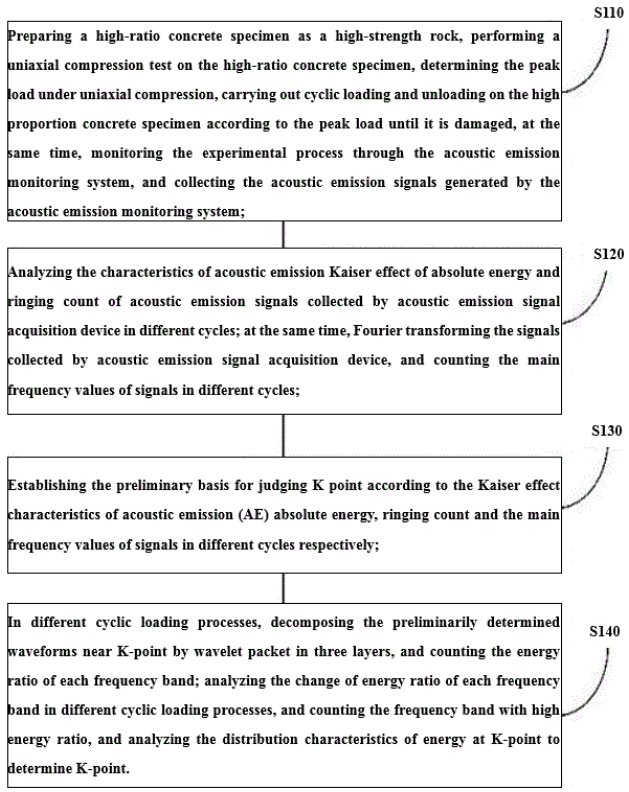
21: 2022/09418. 22: 2022/08/23. 43: 2022/10/20  
 51: G01C  
 71: Chinese Academy of Surveying and Mapping  
 72: LU, Wenjuan, ZHAO, Zhanjie, MAO, Xi, WANG, Jizhou, GAO, Wujun, MA, Weijun, JIANG, Bin, CHEN, Jie, WANG, Lixue  
 33: CN 31: 202210875413.9 32: 2022-07-25  
**54: GEOGRAPHIC DATA TRANSMISSION METHOD AND SYSTEM BASED ON SM4 ALGORITHM**

00: -  
 The present invention relates to a geographic data transmission method and system based on an SM4 algorithm, which relates to the field of geographic data processing. The method comprises: acquiring a geographic data format file of vector to be transmitted; determining geometric objects in the geographic data format file of vector to be transmitted through a GDAL (Geospatial Data Abstraction Library); dividing the geometric objects in the geographic data format file of vector to be transmitted into multiple data blocks according to the set quantity; encrypting all the data blocks sequentially by adopting the SM4 algorithm and writing the encrypted data blocks in corresponding positions of the data blocks before being encrypted; and transmitting the encrypted geographic data format file of vector to be transmitted to a preset target end in real time. The present invention improves the security of geographic data transmission.



21: 2022/09419. 22: 2022/08/23. 43: 2022/10/20  
 51: G01N  
 71: TAIYUAN UNIVERSITY OF TECHNOLOGY  
 72: DUAN Dong, FENG Xiaojing, CHANG Wei, ZHANG Baisheng, KANG Zhiqin, LI Jie, WANG Xin, CHEN Xiaoyu, CHEN Xi  
**54: K-POINT TEST METHOD OF IN-SITU STRESS OF HIGH-STRENGTH ROCK BASED ON KAISER EFFECT**

00: -  
 A K-point test method of in-situ stress of high-strength rock based on Kaiser effect uses undisturbed high proportion concrete specimens instead of rock specimens to eliminate the influence of primary stress, uses NANO30 (resonant frequency is 140 kHz, dominant frequency band is 125-750 kHz) and R6 Alpha (resonant frequency is 60 kHz, dominant frequency band is 35-100 kHz) to collect AE signals of high frequency and low frequency, uses two representative acoustic emission time domain parameters to preliminarily determine the K point, at the same time, checks its accuracy according to the distribution characteristics of its main frequency, finally, verify it again from the multi-band energy distribution characteristics, and establish a method of three methods to prove each other and improve the accuracy of the test.



21: 2022/09421. 22: 2022/08/23. 43: 2022/10/20  
51: B64C

71: Nanjing University of Aeronautics and Astronautics

72: ZHU Qinghua, ZHANG Xin, LIU Na

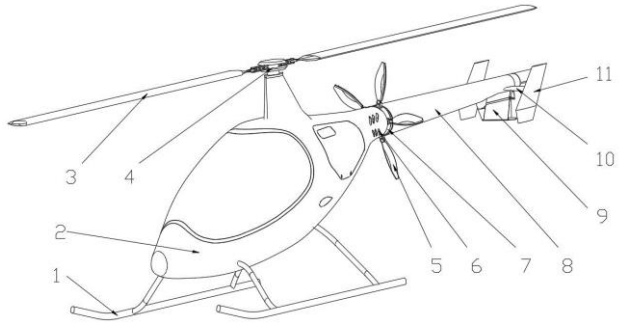
33: CN 31: 202210852363.2 32: 2022-07-19

**54: NOVEL ROTORCRAFT AND WORKING METHOD THEREOF**

00: -

The invention discloses a novel rotorcraft and its working method, which comprises a fuselage, wherein the bottom of the fuselage is symmetrically and fixedly connected with a set of landing gear, the tail of the fuselage is fixedly connected with a tail beam through a connector, one end of the tail beam far from the fuselage is fixedly connected with a tail wing, the fuselage is provided with a propulsion assembly, the tail beam is provided with a rotor system at the top, and the connector is provided with a steering control mechanism for controlling the direction of the fuselage, The tail beam is a self-supporting structure that provides power for the anti-torque assembly under the anti-torque group that balances the torque force of the fuselage. The connector is internally provided with a helicopter mode suction part, and the steering control mechanism includes a helicopter mode steering

control assembly and a rotorcraft mode steering control assembly. According to the invention, the advantages of rotorcraft and helicopter modes are combined, and through the arrangement of the rotor system and the propulsion assembly, the aircraft can take off vertically and hover.



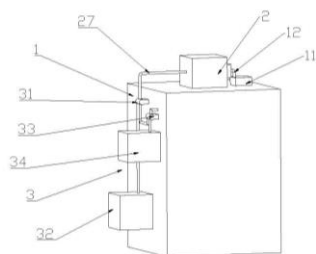
21: 2022/09422. 22: 2022/08/23. 43: 2022/10/20  
51: B01L

71: Anhui University of Science and Technology  
72: WANG, Jiangang

**54: EASILY ADJUSTED ENVIRONMENTAL CHAMBER**

00: -

The present invention belongs to the technical field of environmental chambers, and particularly relates to an easily adjusted environmental chamber. The easily adjusted environmental chamber comprises an outer shell, wherein a top end of the outer shell is fixedly connected to a fan, the top end of the outer shell is provided with a drying device, the fan is communicated with the drying device through an air inlet pipe, an outer side wall of the outer shell is fixedly connected with an environment simulation device, the environment simulation device is communicated with the drying device through a breather pipe, and a bottom end of an inner wall of the outer shell is fixedly connected with an inner shell of the environmental chamber. A first control valve and a water tank are matched to adjust the humidity of the environmental chamber. A vacuum pump adjusts an air pressure of the environmental chamber. The environment simulation device can simulate various environments for the convenience of experiments. The inner wall of the inner shell of the environmental chamber is provided with a plurality of second fans, so that the environmental chamber is uniform in environmental distribution.



21: 2022/09423. 22: 2022/08/23. 43: 2022/10/20  
51: A01C

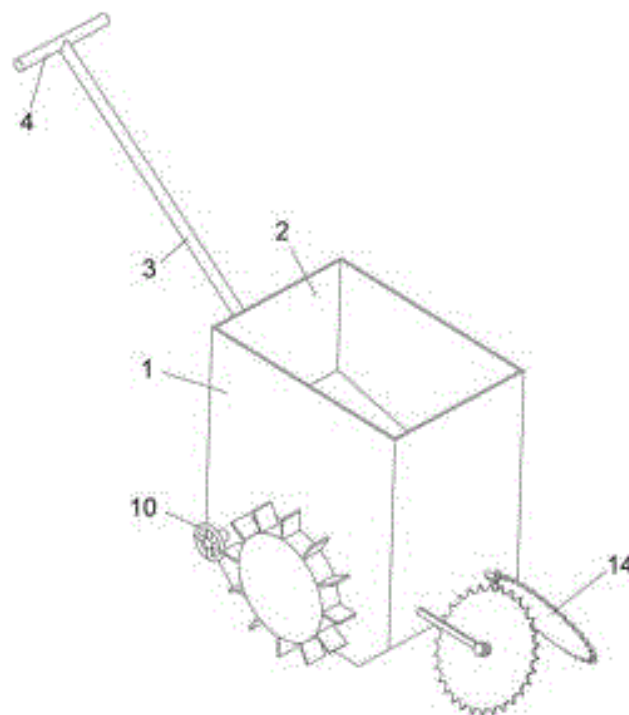
71: SHANXI AGRICULTURAL  
UNIVERSITY/SHANXI ACADEMY OF  
AGRICULTURAL SCIENCES,HIGH LATITUDE  
CROPS INSTITUTE TO SHANXI ACADEMY

72: Zhang Xiangyu, Li Xiaofeng, Song Xiaoqiang,  
Zhao Hongxia, Li Hai

#### 54: DUAL-PURPOSE SEEDER FOR CEREAL AND MILLET

00: -

The invention discloses a dual-purpose seeder for cereal and millet, which belongs to the technical field of seeding. A dual-purpose seeder for cereal and millet comprises an outer shell, the upper side of the outer shell is provided with a feed inlet A; the front side of the outer shell is provided with an inclined rod; the upper end of the inclined rod is provided with a cross rod; the inside of the outer shell is divided into storage area and equipment area by a baffle at upper and lower respectively; an inclined plate is arranged in the storage area; the right side of the lower side of the storage area is provided with a feed inlet B; a transmission component is arranged in the equipment area; a transport component is arranged on the right side of the transmission component; the outer shell is provided with a transmission component, and the right side of the lower side of the outer shell is provided with a discharge port; the lower side of the discharge port is provided with a V-shaped plate; two soil-pushing components are symmetrically arranged on the right side of the outer shell. According to the invention, the transmission component drives the transport component to sow seeds intermittently, and at the same time, the soil-pushing component pushes the soil to cover the seeds. The invention has compact and reasonable structural design and good use effect, can meet the requirements of different planting densities of cereal and millet, which improves the working efficiency.



21: 2022/09424. 22: 2022/08/23. 43: 2022/10/20  
51: A01H

71: SHANXI AGRICULTURAL  
UNIVERSITY/SHANXI ACADEMY OF  
AGRICULTURAL SCIENCES,HIGH LATITUDE  
CROPS INSTITUTE TO SHANXI ACADEMY

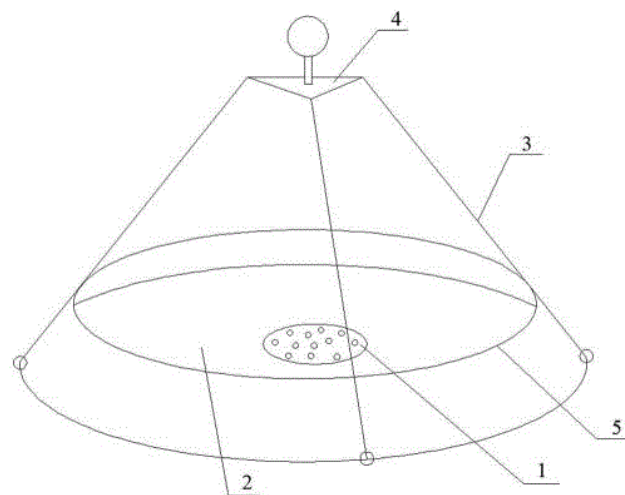
72: Liu Fei, Xing Baolong, Chen Yanni, Liu  
Guannan, Li MengJiao, Wang Guimei, Yang Fang,  
Feng Yu

#### 54: HIGH-EFFICIENCY HYBRID BREEDING METHOD FOR PEA

00: -

The invention belongs to the technical field of pea breeding, and in particular relates to a high-efficiency hybrid breeding method for pea, comprising the following steps: emasculating; artificial pollination; removing the non-hybridized flowers from the plant, and marking the hybridized flowers by labels; the artificial pollination is as follows: on the day after emasculating or the next day after emasculating, a special pollination tool is used for pollination; the structure of the special pollination tool is as follows: including parts such as porous cloth and non-porous cloth; during artificial pollinating, the porous cloth is in contact with the fluff of the exposed stigma of the female parent flower, and the pollen solution is dripped on the porous cloth, and the pollen solution flows along the porous cloth to the fluff of the exposed stigma of the female

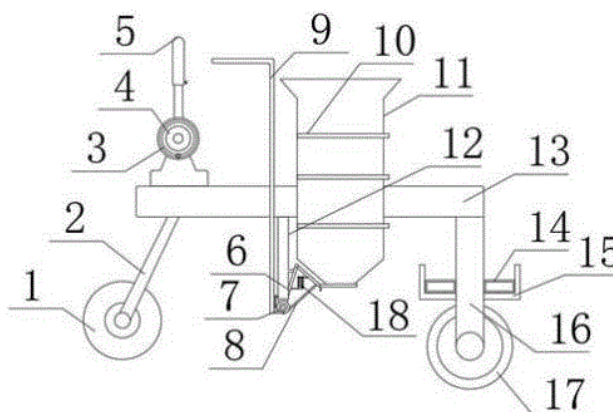
parent flower to complete the pollination, and then the special pollination tool can be removed. The invention uses the special pollination tool without manual smearing or damaging the exposed stigma of the female parent flower, thus improving the pollination efficiency and the seed setting efficiency.



21: 2022/09425. 22: 2022/08/23. 43: 2022/10/20  
51: A01C  
71: SHANXI AGRICULTURAL UNIVERSITY/SHANXI ACADEMY OF AGRICULTURAL SCIENCES,HIGH LATITUDE CROPS INSTITUTE TO SHANXI ACADEMY  
72: Xing Baolong, Liu Fei, Wang Guimei, Feng Yu, Liu Zhiping  
**54: MUNG BEAN SEEDING DEVICE**  
00: -

The invention belong to that technical field of agricultural seeding, and in particular to a mung bean seeding device, which comprises a supporting seat; a seeding box is connected through the supporting seat; a fixing plate is arranged at the lower end of the seeding box; an integrally-formed fixing rod is connected through the inside of the supporting seat; one side of the out surface of the supporting seat is welded with an integrally-formed No.3 supporting rod, and the end of one side of the No.3 supporting rod is rotatably connected with a No.2 rotating shaft through the supporting seat; the end of the out surface of the fixing rod is weld with the outer surface of the No.2 rotating shaft; one side of the outer surface of the No.3 supporting rod is connected with a hinge. In this device, a fixing rod is welded below the No.2 rotating shaft. In the process of seeding, the person in charge of seeding can

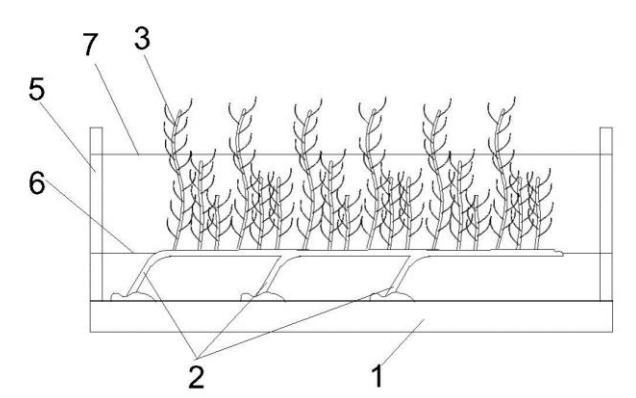
move the fixing rod upward by hand, so that the No.2 rotating shaft also rotates, and the fixing plate can be driven to slide by the No.2 supporting rod, and a gap appears at the notch below the seeding box, so the mung bean seeds inside the seeding box fall into the soil, and seeding is completed.



21: 2022/09426. 22: 2022/08/23. 43: 2022/10/20  
51: A01G  
71: Shandong Institute of Pomology  
72: Wei GuoQin, Xu Xia, Hou Sen, Fu QuanJuan, Tao JiHan, Gao Rui, Niu QingLin, Sun YuGang  
**54: EASILY MECHANIZED SHORT-DENSE TREE SHAPE WITH WIND-RESISTANCE AND HIGH-LIGHT-EFFICIENCY AND CULTIVATION METHOD THEREOF**

00: -  
The invention disclose an easily mechanized short-dense tree shape with wind-resistance and high-light-efficiency and a cultivation method thereof. The easily mechanized short-dense tree shape with wind-resistance and high-light-efficiency comprises a horizontal trunk and main branches vertically growing on the trunk; the horizontal trunks are grafted in turn; bearing branches are sprouted on the main branches, and the bearing branches extend to both sides of the planting ridge. In the process of cultivation, firstly, the trunk is fixed to be parallel to the ground; then, two adjacent trunks are grafted end to end; finally, branches and buds are selected on the trunk to be cultivated as main branches, and the main branches construct bearing branches extending on both sides. The trunk is connected into a whole to ensure wind-resistance, and the pruning of the new shoots of the trunk of each tree is avoided, thus reducing the annual workload. In the process of cultivation, reasonable close planting and

pruning of branches and buds are adopted, which is convenient for mechanized operation, which has the characteristics of dwarf planting, strong wind-resistance, good extension effect, consistent lighting effect, thus ensuring uniform fruit quality and high yield, effectively saving manpower and material resources, and facilitating field management.



21: 2022/09427. 22: 2022/08/23. 43: 2022/10/20  
51: A01G

71: Anhui Science and Technology University  
72: LU Xiaomin, YANG Dekun

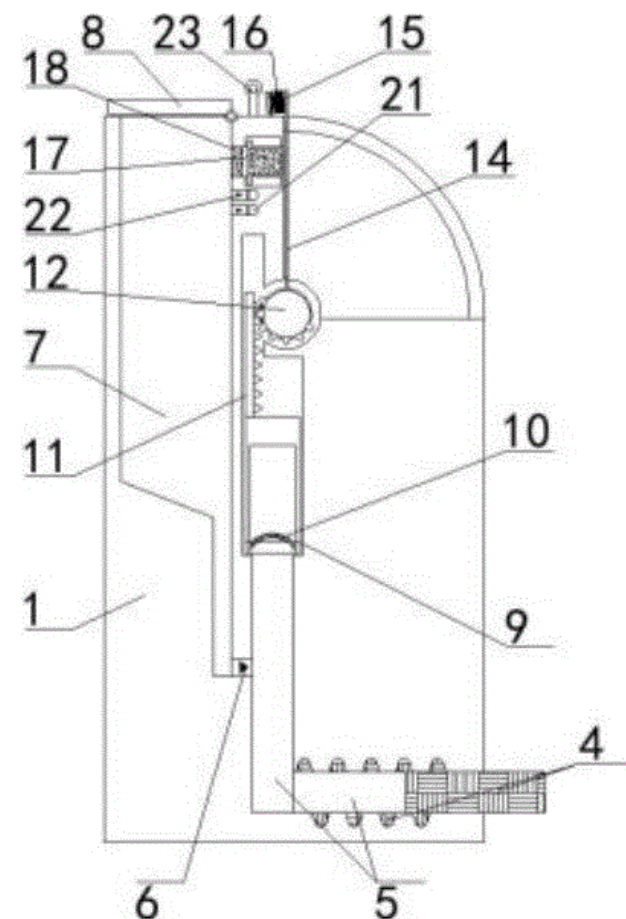
33: CN 31: 202210316265.7 32: 2022-03-29

**54: MULTI-LAYER INDOOR VEGETABLE PLANTING RACK**

00: -

The invention discloses a multi-layer indoor vegetable planting rack, which comprises a supporting block, wherein the supporting block is the main supporting structure of the planting rack, and the outer surface of the supporting block is fixedly provided with an object placing plate, and the object placing plate is grid-shaped; a base groove fixedly arranged at the bottom end of the outer surface of the supporting block, wherein the base groove is positioned below the object placing plate; the heat conduction core runs through the bottom of the outer surface of the supporting block, and an inner cavity is formed in the supporting block. According to the multi-layer indoor vegetable planting rack, when the sun shines too strongly, the sunlight can shine on the heat conducting core to heat it, and the heat conducting core will heat the water in the inner cavity, so that the air pressure pushes the square block of the air barrier cloth upward by expanding with heat and contracting with cold and rising away with hot air, and the fixing plate drives the outer plate to rotate and lay down the folding sunshade curtain

for shading, and at the same time, the first magnetic block is repelled by the second magnetic block to drive the push plate to squeeze the air bag, so that the air bag can be sprayed out through the one-way atomizing nozzle to achieve automatic irrigation.



21: 2022/09444. 22: 2022/08/23. 43: 2022/10/20  
51: A61K; A61P

71: HENAN PROVINCIAL HOSPITAL OF TRADITIONAL CHINESE MEDICINE (SECOND AFFILIATED HOSPITAL OF HENAN UNIVERSITY OF TRADITIONAL CHINESE MEDICINE)

72: MA, Chunzheng, MA, Xijia, CHENG, Hong, CHENG, Fang, LI, Honglin, CHENG, Zhenyang, CHEN, Mengli, SHAO, Shuai, REN, Juan, XU, Yanchao, LIU, Yanan, WU, Peng

33: CN 31: 202110116491.6 32: 2021-01-28

**54: TRADITIONAL CHINESE MEDICINE SKIN-SCRAPING MEDIUM AND PREPARATION METHOD THEREFOR**

00: -

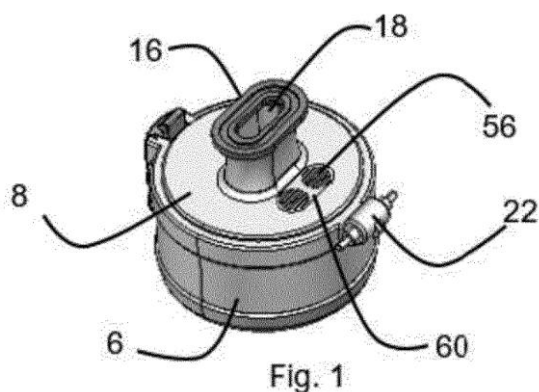
A traditional Chinese medicine skin-scraping medium and a preparation method therefor. The

medium comprises the following active pharmaceutical ingredients in parts by weight: 30-60 parts of acorus gramineus, 20-50 parts of arisaema cum bile, 35-60 parts of polygala tenuifolia, 10-30 parts of valerian, 10-30 parts of coptis chinensis, 20-50 parts of caulis polygoni multiflori, 30-60 parts of semen ziziphi spinosae, 30-60 parts of seman platycladi, 30-50 parts of cortex albiziae, 20-50 parts of angelica sinensis, 20-50 parts of radix astragali, 10-30 parts of bupleuri radix, and 50-80 parts of borneol. The medium is prepared by using a pressurized percolation method, and can improve the sleep quality of an insomnia patient after stroke.

21: 2022/09445. 22: 2022/08/23. 43: 2022/10/20  
51: B01D; B65D  
71: BW TECHNOLOGIES LTD, GRANT, James  
72: GRANT, James, GRANT, Jon  
33: GB 31: 2000357.0 32: 2020-01-10

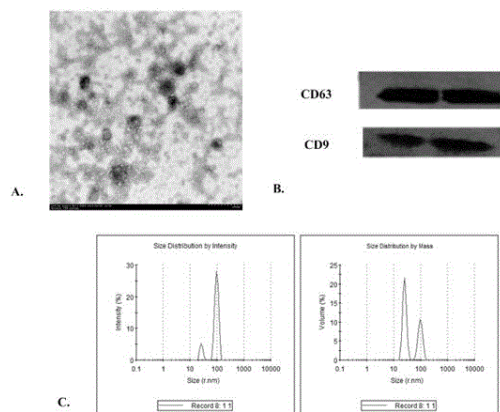
**54: A CLOSURE FOR A MULTI-USE DRINKS BOTTLE**

00: -  
A closure and filter for a multi-use water bottle (2). The closure has a main body (4) having an outlet (16) through which fluid passes to be consumed by the user and an air valve (58) remote from the outlet to provide an air channel through the closure distinct from the fluid outlet to allow flow of air into the bottle as fluid passes through the outlet.



21: 2022/09457. 22: 2022/08/24. 43: 2022/09/28  
51: C12Q  
71: CHENGDU UNIVERSITY  
72: LV, Chunyan, DING, Weijun, WANG, Yili  
**54: KIT AND METHOD FOR DETECTING URINARY EXOSOMES CARGO MIRNAS**  
00: -

The invention discloses a kit and a method for detecting urinary exosomes cargo miRNAs. The kit for detecting urinary exosomes cargo miRNAs comprises an exosomes extraction reagent and a miRNAs detection reagent, where the extraction reagent is a mixed solution of polyethylene glycol and sodium chloride; the miRNAs detection reagent is a RT-PCR detection reagent. The invention also discloses a method for detecting urinary exosomes loaded with miRNAs. The method can effectively detect miRNA in exosomes, and has the advantages of simple operation, no need of ultracentrifugation, easy popularization and application, low cost and good clinical application prospect.

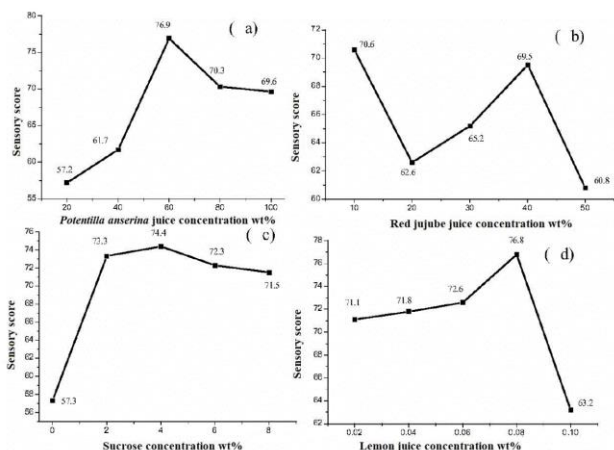


21: 2022/09503. 22: 2022/08/25. 43: 2022/10/20  
51: A23L  
71: Qinghai Nationalities University  
72: LI, Junqiao, BAI, Shijun  
**54: POTENTILLA ANSERINA BEVERAGE AND PREPARATION METHOD THEREOF**

00: -  
The present invention relates to a Potentilla anserina beverage and a preparation method thereof. The Potentilla anserina beverage includes a main material, an auxiliary material and seasonings, wherein the main material is 550-650 parts (by weight, the same below) of Potentilla anserina juice; the auxiliary material is one of 450-550 parts of red jujube juice, 450-550 parts of red bean juice or 450-550 parts of mung bean juice; and the seasonings are 20-30 parts of sucrose juice and 10-20 parts of lemon juice. The Potentilla anserina beverage has three different tastes of red jujube, red bean and mung bean in the main Potentilla anserina flavor, and the sensory score of each taste is high.



Moreover, the *Potentilla anserina* beverage shows a high nutritional value after physical and chemical tests. The method for preparing the *Potentilla anserina* beverage is simple to operate, easy to produce, and advantageous for large-scale production.



21: 2022/09504. 22: 2022/08/25. 43: 2022/10/20  
 51: A61B

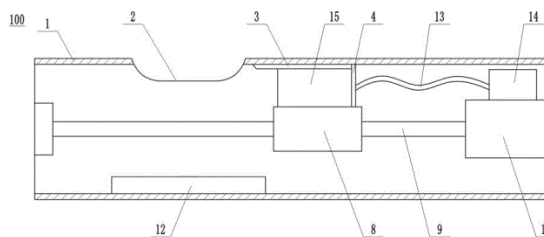
71: Shanghai University of Medicine And Health Sciences

72: MA, Linlin, FENG, Xing, LU, Yufei

33: CN 31: 202210865344.3 32: 2022-07-21

**54: MYOCARDIAL EXCISION DEVICE**

00: -  
 Disclosed is a myocardial excision device, including a sleeve, and an excision structure, a moving structure and a negative pressure structure that are arranged in the sleeve, wherein a window structure is arranged on the sleeve and detachably connected with the sleeve, a window of the window structure is used to squeeze myocardium inside, the excision structure is used to excise the myocardium, the moving structure is used to move the excision structure, and the negative pressure structure is used to perform negative pressure suction on the myocardium excised by the excision structure. The window structure can be detachably connected with the sleeve to achieve quantitative and precise excision of myocardium by changing different window structures; the moving structure drives the excision structure to excise the myocardium to achieve stable excision of myocardium. Surgical operation can be performed quickly, accurately and stably, and a physician's operation process is simplified.



21: 2022/09505. 22: 2022/08/25. 43: 2022/10/20  
 51: A61B

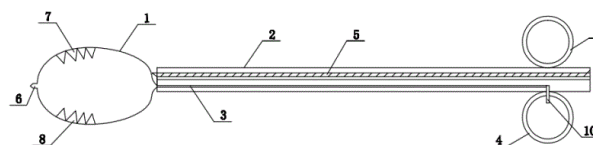
71: Shanghai University of Medicine And Health Sciences

72: MA, Linlin, ZHANG, Qingwen, WANG, Yiting

33: CN 31: 202210865353.2 32: 2022-07-21

**54: SNARE FOR TREATING HEART DISEASES**

00: -  
 Disclosed is a snare for treating heart diseases, including a loop and a handle, wherein a nickel-titanium wire is connected at the rear end of the loop, the nickel-titanium wire extends into the handle and is connected with a sliding ring on the handle, two cavities are arranged in the handle, one of the cavities is used for the nickel-titanium wire to pass, and the other is used for a needle tube of a syringe or a blood suction catheter of a blood sucker to pass; the front end of the loop is designed as a protruding flat needle, and the barbs II are engaged with gaps between the adjacent barbs I in turn. The snare for treating heart diseases can firmly capture tissue lesions, has functions of being combined with the syringe needle and the blood sucker, and is easy to operate and convenient to use.



21: 2022/09506. 22: 2022/08/25. 43: 2022/10/20  
 51: A61K; A61P

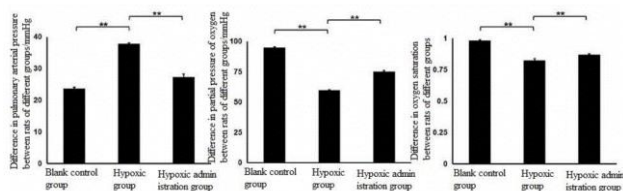
71: Qinghai university, Northwest Institute of Plateau Biology, Chinese Academy of Sciences

72: PU, Xiaoyan, ZHANG, Tongzuo, LIN, Xue

**54: PHARMACEUTICAL APPLICATION OF 1,25-DIHYDROXYVITAMIN D3 IN PREVENTING AND TREATING AMS**

00: -  
 The present invention belongs to the technical field of new applications of drugs, and particularly relates

to a pharmaceutical application of 1,25-dihydroxyvitamin D3 in preventing and treating AMS. The administration mode of the drug is injection or oral administration. The results of the present invention show that the drug 1,25-dihydroxyvitamin D3 has a certain effect in the process of preventing and treating acute high altitude disease; as compared with Rhodiola Crenulatae Radix Rhizoma and other traditional drugs for preventing high altitude disease, the 1,25-dihydroxyvitamin D3 does not need to be administered one week in advance and takes effect quickly. At present, the commonly used drugs in clinical practice have relatively great toxic and side effects and have certain limitations when administered. Secondly, the 1,25-dihydroxyvitamin D3 has been applied in clinical practice. Compared with the development of new drugs, the 1,25-dihydroxyvitamin D3 is low in cost and less time-consuming.

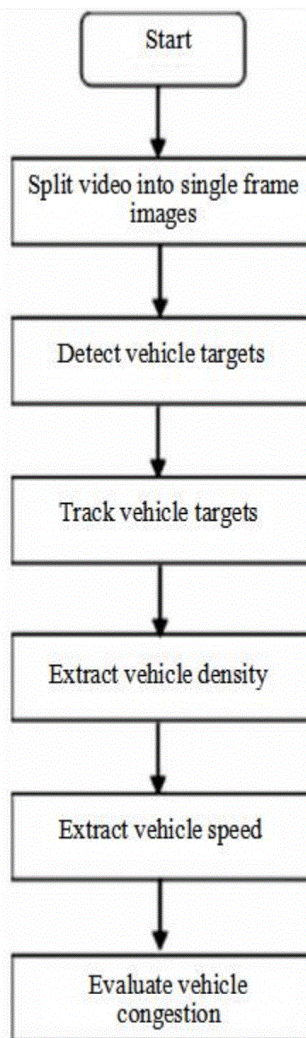


21: 2022/09507. 22: 2022/08/25. 43: 2022/10/20  
 51: G08G  
 71: Shenyang University of Technology  
 72: ZHANG Zhijia, WANG Dayong, WANG Shixian, SHI Haoran

**54: PARAMETER ACQUISITION AND EVALUATION METHOD OF TRAFFIC CONGESTION STATE IN EXPRESSWAY SECTIONS**

00: -  
 The invention belongs to the technical field of computer vision, and in particular, relates to a parameter acquisition and evaluation method of the traffic congestion state in expressway sections. It can accurately, timely, and efficiently evaluate the congestion state of vehicles in the expressway, and provide accurate data support for traffic management and operation. The method comprises the following steps: establishing a module for feature enhancement; enhancing the FCOS network's detection of vehicle targets; using the SORT algorithm to track vehicle targets; acquiring traffic

characteristic parameters; establishing a vehicle congestion state evaluation model.



21: 2022/09508. 22: 2022/08/25. 43: 2022/10/20  
 51: G05B  
 71: Hefei University of Technology  
 72: ZHANG Dabo, YE Mingdong, YANG Hejun, MA Yinghao

**54: IDENTIFICATION METHOD OF POWER GRID PARAMETER ERROR BRANCH BASED ON RESIDUAL SIMILARITY INDEX**

00: -  
 The invention discloses a method for identifying power grid parameter error branch based on residual similarity index, which comprises the following steps: (1) performing state estimation and solution based on measurement data of an actual power grid; (2) according to the calculated standardized residual error of measurement, all suspicious measurements are obtained by residual search identification

method; (3) Selecting the suspicious branch and calculating the standardized branch sensitivity matrix of the suspicious branch; (4) based on the standardized branch sensitivity matrix and suspicious measurement, the standardized branch sensitivity vector and the standardized residual vector of the corresponding branch are determined; (5) Using the similarity index of the two vectors, the parameter error branch in the suspicious branch can be judged; (6) The parameter error branch can be accurately judged by adopting the method of multi-measurement cross-section participating in identification. The method is convenient to realize and can improve the accuracy of parameter error branch identification.

21: 2022/09509. 22: 2022/08/25. 43: 2022/10/20  
51: C02F

71: Shandong Chenze Environmental Technology Co., Ltd.

72: Jianbo Zhou, Jian Jiang, Yuqin Zhang, Jianlei Zhou, Yukui Zhang

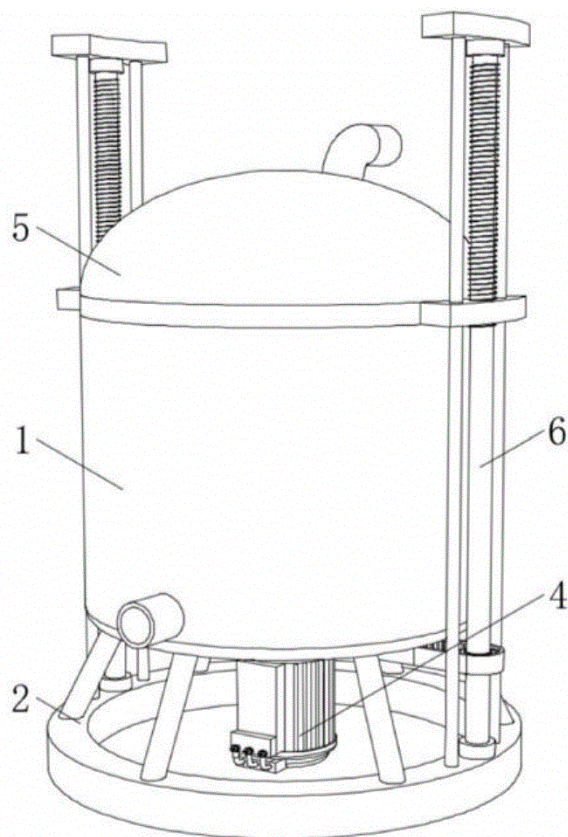
33: CN 31: 202111415799.7 32: 2021-12-27

**54: SPECIAL EQUIPMENT FOR REMOVING TOTAL NITROGEN FROM RESIN**

00: -

The invention discloses special equipment for removing total nitrogen from resin, and belongs to the technical field of total nitrogen removal equipment. The special equipment for removing total nitrogen from resin comprises a treatment box, and the lower end of the treatment box is fixedly connected with a supporting frame. A sealing top cover is installed at the upper end of the treatment box, and a total nitrogen removal mechanism is installed on the inner wall of the treatment box. Through cooperative use of a first adjusting mechanism and a second adjusting mechanism, when a worker needs to replace total nitrogen removal resin, the worker controls a servo motor to drive a first lead screw and a second lead screw to rotate at the same time, the first lead screw and the second lead screw lift a mounting net cage and a sealing top cover correspondingly, and when the mounting net cage is lifted to the highest point by the first screw rod, the first screw rod is separated from the mounting net cage, and the worker can normally take out the mounting net cage, so that the worker can replace the total nitrogen removal resin in the

mounting net cage, and does not need to enter the treatment box to take out the mounting net cage, so that the difficulty of replacing the total nitrogen removal resin by the worker is reduced.



21: 2022/09510. 22: 2022/08/25. 43: 2022/10/04  
51: C02F

71: Dr. Khushbu G. Patel, Dr. Sanjeshkumar Gotam Rathi, Dr. Prakash Srichand Sukhramani, Dr. Maheshkumar Keshavji Senghani, Mr. Sohansinh Sagramji Vaghela, Dr. Maulikkumar Dineshbhai Vaja, Mr. Kaushikbhai Rambhai Kamani, LEO NUTRISCIENCE LLP

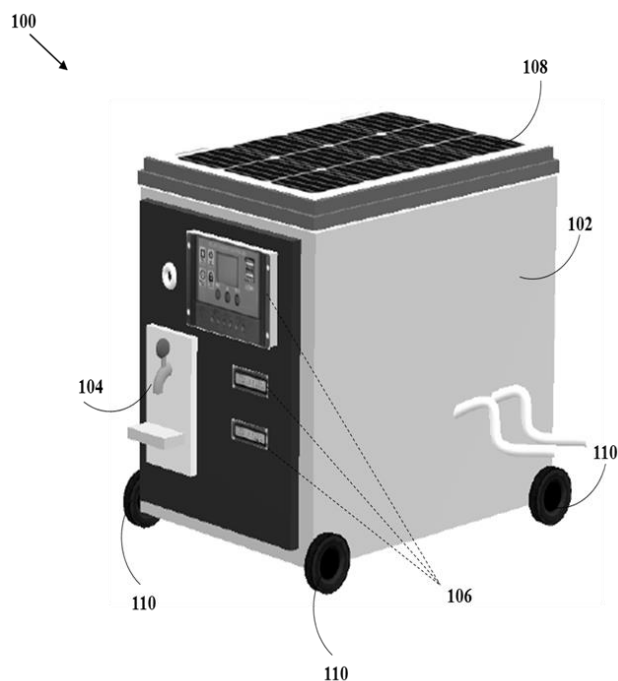
72: Dr. Khushbu G. Patel, Dr. Sanjeshkumar Gotam Rathi, Mr. Yogeshkumar B. Vataliya, Mr. Dhruvkumar A. Patel, Dr. Prakash Srichand Sukhramani, Dr. Maheshkumar Keshavji Senghani, Mr. Sohansinh Sagramji Vaghela, Dr. Maulikkumar Dineshbhai Vaja, Mr. Kaushikbhai Rambhai Kamani  
33: IN 31: 202221036721 32: 2022-06-27

**54: A NOVEL SUSTAINABLE WATER PURIFICATION PORTABLE DEVICE WITH TDS MEASURING DISPLAY AND CONTROLLER**

00: -

The present invention relates to a novel sustainable water purification portable device (100) with a TDS

measuring display and controller. The device (100) comprises a filtration unit (102), a plurality of sensors, a central processing unit, a display unit (106), a power supply unit (108), and a plurality of wheels (110). The filtration unit (102) operationally is configured to remove impurities. The plurality of sensors is configured to measure water quality by sensing the change in pH, and TDS of water after the purification process. The display unit (106) is configured to display measured and detected pH, and TDS of water. The power supply unit (108) is configured to supply electric power to the water purification portable device (100). The plurality of wheels (110) is operationally connected with the filtration unit (102). The plurality of wheels (110) is configured to easily move the water purification device (100) from one place to another.



21: 2022/09511. 22: 2022/08/25. 43: 2022/10/04  
51: A61K

71: Ms. Rita Saini, Dr. Shivanand Patil, Ms. Vandana Sahani, Ms. Meenakshi Kandwal, Ms. Anupriya Adhikari, Ms. Arti Kori, Ms. Neha Sodiya, Ms. Parul Bisht, Ms. Deepika Ghalwan, Mr. Sachin Dimri, Dr. Surendra Singh Gusain, Ms. Santoshi Shah, Mr. Vishawadeepak Kimothi

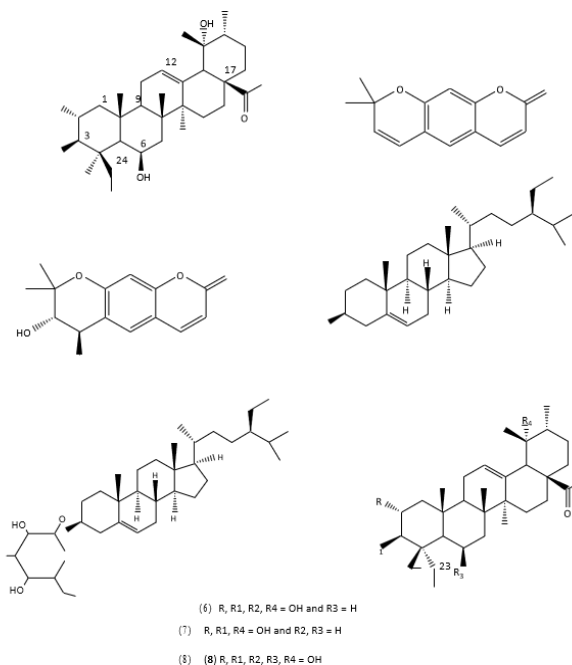
72: Ms. Rita Saini, Dr. Shivanand Patil, Ms. Vandana Sahani, Ms. Meenakshi Kandwal, Ms. Anupriya Adhikari, Ms. Arti Kori, Ms. Neha Sodiya, Ms. Parul Bisht, Ms. Deepika Ghalwan, Mr. Sachin Dimri, Dr.

Surendra Singh Gusain, Ms. Santoshi Shah, Mr. Vishawadeepak Kimothi

#### 54: A NEW TRITERPENE FROM LUDWIGIA HYSSOPIFOLIA (G.DON) EXELL

00: -

The present invention relates to the identification of a new pentacyclic triterpenoid molecule from the plant of Ludwigia hyssopifolia. Chemical studies of the ethanol extract of Ludwigia hyssopifolia whole plant led to isolation of one new compound and seven known compounds. The chemical structure of isolated compounds were identified by using the spectral analysis. The new compound was elucidated as 6 $\beta$ , 24 hydroxy tormentic acid [2a, 3 $\beta$ , 19a, 6 $\beta$ , 24- penta hydroxylurs-12-en-18-oic acid (1)] by spectroscopic data. The known compounds were identified as xanthyletin (2), (+) trans-decurtidinol (3),  $\beta$ -sitosterol (4),  $\beta$ -sitosterol- $\beta$ -D-glucopyranoside (5), 6 $\beta$ , 23-hydroxy tormentic acid (6), 23-hydroxy tormentic acid (7) and 6 $\beta$ , 23-hydroxy tormentic acid (8) by using comparison with available data and spectroscopic studies.



21: 2022/09545. 22: 2022/08/26. 43: 2022/10/20  
51: A23L; A61K; A61P

71: Xiangnan University, WANG, Junjie, Changsha Herbway Biotech Co., Ltd., Hunan Jujing Biotechnology Co., Ltd.

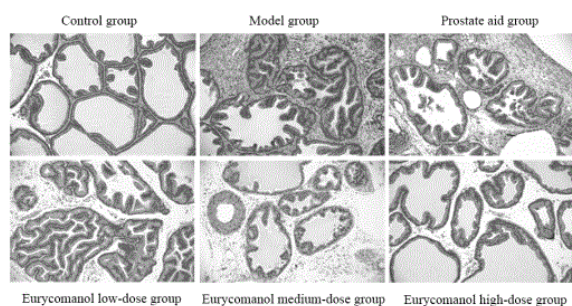
72: WANG, Junjie, CHEN, Zhijun, GOU, Ruiping, XIE, Pengfei, LIU, Fang, ZHANG, Yuanfang, LI, Wenkai, LIU, Siyu, LIU, Ze, HUANG, Jianhua

33: CN 31: 202210227599.7 32: 2022-03-08

**54: APPLICATION OF EURYCOMANOL IN PREPARATION OF DRUG, FOOD PRODUCT AND HEALTH CARE PRODUCT FOR PREVENTING AND TREATING CHRONIC NON-BACTERIAL PROSTATITIS**

00: -

The present invention discloses an application of Eurycomanol in preparation of a drug, a food product and a health care product for preventing and treating a chronic non-bacterial prostatitis. According to the present invention, an incision test of a lower abdomen of a male rat under an aseptic surgery and inflammation and swelling of a rat auricle caused by xylene show that the Eurycomanol has good anti-inflammatory and prevention and treatment effects of the chronic non-bacterial prostatitis when applied and taken orally, and the applicable range of the Eurycomanol is improved.



21: 2022/09546. 22: 2022/08/26. 43: 2022/10/20

51: G01N

71: Shandong Nuoxin Testing Co., Ltd.

72: GAO, Yingjiao, HU, Yanqiu

**54: ELISA KIT FOR DETECTING HUMAN VEGF AND USING METHOD THEREOF**

00: -

The present disclosure relates to an Elisa kit for detecting human vascular endothelial growth factor (VEGF) and using method thereof. The kit comprises an enzyme-labeled coated plate, an enzyme-labeled monoclonal antibody, a VEGF standard, a sample diluent, a concentrated PBST wash buffer, color developing agents A and B, a stop solution and a plate sealing film. The kit can be used to detect the VEGF level in biological samples from human patients and used as a diagnostic/prognostic index.

21: 2022/09547. 22: 2022/08/26. 43: 2022/10/20

51: A61K

71: Jilin University

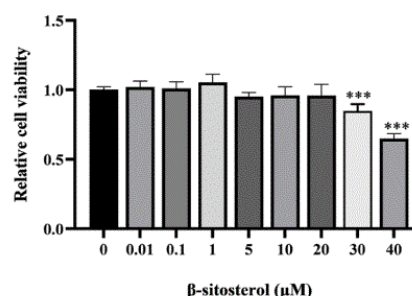
72: Yongcheng JIN, Jinglin SHEN, Dongqiao PENG, Yating FAN, Junhao CUI, Xinlu LIU, Jing ZHANG, Xudong SHI, Hengtong FANG, Chuanqi WANG

33: CN 31: 202210099159.8 32: 2022-01-25

**54: USE OF BETA-SITOSTEROL IN RELIEVING COW MAMMARY GLAND INFLAMMATION**

00: -

The present disclosure is applicable to the technical field of medicines, and provides use of Beta sitosterol in relieving cow mammary gland inflammation. In the present disclosure, Beta sitosterol can improve an oxidative effect of lipopolysaccharide (LPS) induced bovine mammary epithelial cells, and has an antioxidant effect; Beta sitosterol can prevent and improve the expression of bovine mammary epithelial cell associated apoptosis factors, and has an anti apoptosis effect; Beta sitosterol can significantly improve inhibitory effects of HIF 1Alpha and mTOR genes of LPS induced bovine mammary epithelial cells. The present disclosure meets green and healthy breeding and improves economic benefits, and also provides a new direction for an anti inflammatory effect of Beta sitosterol in preventing LPS induced cow mammary gland inflammation for the first time.



21: 2022/09548. 22: 2022/08/26. 43: 2022/10/20

51: A61G

71: Zhejiang University of Science and Technology, Zhejiang Hangzhou High School (Gongyuan Campus), Zhejiang WASON Cold Chain Science and Technology Co., Ltd.

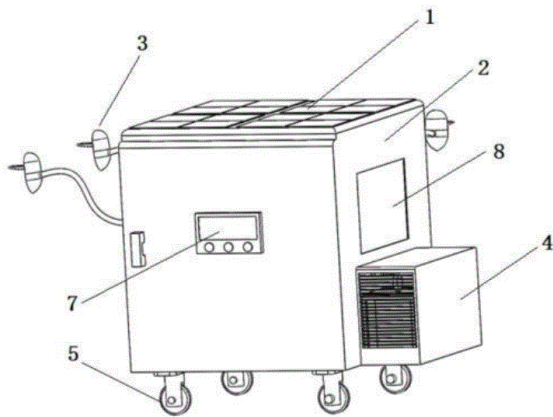
72: WU, Jian, YANG, Shengwang, WU, Hanyu, ZHANG, Songtao, HE, Linghua

**54: PRESSURIZATION AND OXYGENATION DEVICE FOR PLATEAU ENVIRONMENT**

00: -

Disclosed is a pressurization and oxygenation device for a plateau environment. The device includes a box body, an air compression device, an

oxygen generator and a single-chip microcomputer; the box body has an activity space inside and is provided with a box door that is sealed and matched, so that the box door can be opened to suck the air into the activity space; the air compression device is installed on one side of the box body for pressurizing the activity space inside the box body; the oxygen generator is installed inside the box body for oxygenating the activity space inside the box body; and the air compression device and the oxygen generator are in control connection to the single-chip microcomputer. The present invention may achieve the effect of pressurizing and oxygenating the activity space inside the box body, relieving symptoms of users having altitude sickness.

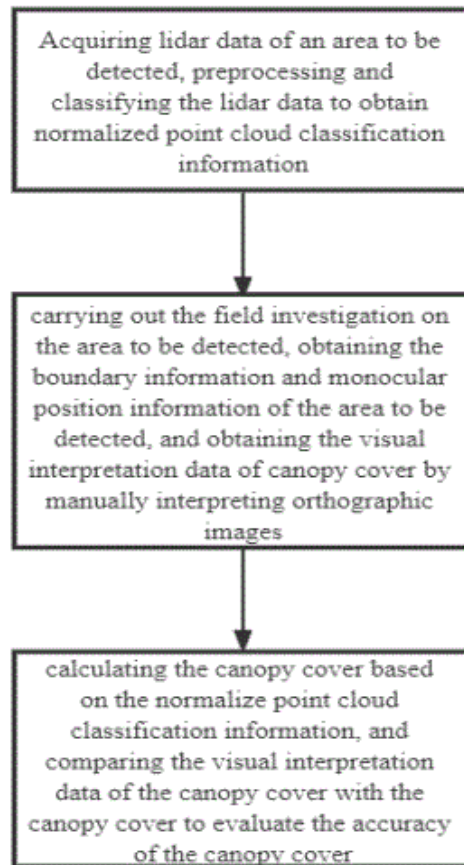


21: 2022/09549. 22: 2022/08/26. 43: 2022/10/20  
 51: G06K  
 71: Institute of Forest Resource Information Techniques CAF  
 72: FU Liyong, CHEN Qiao, MA Zhibo, PANG Lifeng, WANG Shiqiang, LEI Zhenyu

**54: METHOD FOR EVALUATING CANOPY COVER BASED ON AIRBORNE LIDAR DATA**

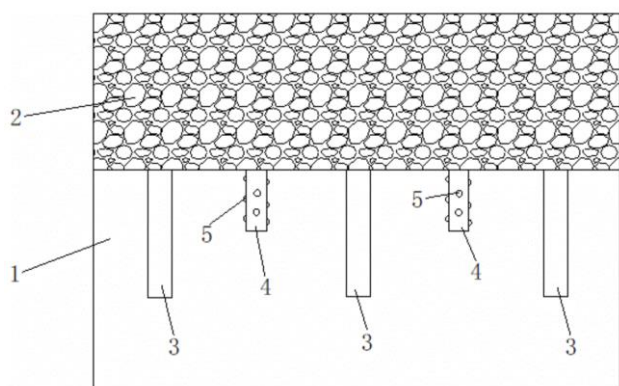
00: -  
 The application relates to a method for evaluating canopy cover based on airborne LiDAR data, which comprises: Acquiring lidar data of an area to be detected, preprocessing and classifying the lidar data to obtain normalized point cloud classification information; carrying out the field investigation on the area to be detected, obtaining the boundary information and monocular position information of the area to be detected, and obtaining the visual interpretation data of canopy cover by manually

interpreting orthographic images; calculating the canopy cover based on the normalize point cloud classification information, and comparing the visual interpretation data of the canopy cover with the canopy cover to evaluate the accuracy of the canopy cover. Combining ground measured data with UAV image data, the method estimates the quality of canopy coverage based on normalized point cloud classification information, and can provide technical support for large-scale forest canopy coverage survey.



21: 2022/09550. 22: 2022/08/26. 43: 2022/10/20  
 51: E02D  
 71: The second Construction Engineering Co., Ltd. of China Construction Second Bureau  
 72: Wang Shanfeng, Wang Kai, Hou Ya, Su Mingzhu, Wang Daliang, Li Zhidong, Wang Wei, Liu Guodong  
**54: A REINFORCEMENT STRUCTURE FOR FOUNDATION TREATMENT OF BUILDING ENGINEERING**  
 00: -

The technical discloses a reinforcement structure for foundation treatment of building engineering, which is characterized by comprising a reinforcement layer arranged in a foundation treatment area and a backfill layer arranged above the reinforcement layer, wherein a plurality of concrete piles and a plurality of reinforcement piles are vertically arranged in the reinforcement layer, and the plurality of concrete piles are arranged in a crossed grid shape. And that reinforce piles are arrange in the grid. The technical has the advantage of simple structure, reasonable design and convenient realization can be effectively apply to foundation treatment of building engineer, can solving the problem that the soil layer in the foundation gradually collapses, has universal practicability, good reinforcement effect and convenient popularization and use.

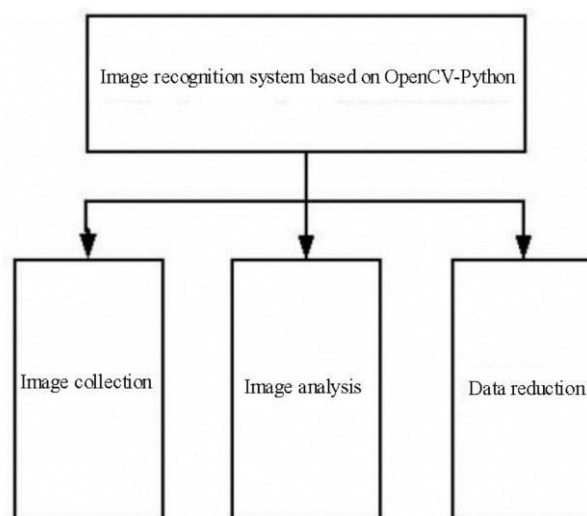


21: 2022/09551. 22: 2022/08/26. 43: 2022/10/20  
51: C12Q; G06K  
71: Fuzhou University  
72: SUN Hao, LI Haichao, DONG Hui, JIA Yuan, MO Jin, XIE Wantao

**54: INTELLIGENT QPCR INSTRUMENT DETECTION SYSTEM BASED ON IMAGE RECOGNITION TECHNOLOGY**

00: -  
The invention relates to a set of intelligent qPCR instrument detection system based on image recognition technology, which includes a system based on OpenCV- Python image recognition module and waveform chart drawing module based on LabVIEW; the image recognition module records 40 cycles of qPCR amplification reaction process in the sample pool into video, and carries out image acquisition, recognition and analysis on the video, and saves the data obtained by analysis; the

drawing module analyzes the data saved by the image recognition module and draws the waveform chart, and the curve in the waveform chart is used for researchers to calculate and quantitatively analyze. According to the invention, the fluorescence quantitative PCR amplification reaction detection can be integrated into a computer system for processing, the integration level is high, the detection result is accurate, and the sample cell style can be customized and changed according to the user's requirements; as long as there is a graphic outline, the intelligent detection function can be realized, which is beneficial to further intelligentization of qPCR instrument and improvement of economy.



21: 2022/09553. 22: 2022/08/26. 43: 2022/10/20  
51: C12G  
71: Moutai Institute  
72: YU Shirui, FENG Min, WANG Xingyue, LIU Hanyu, YANG Lingxiao, BAI Yaqi, ZHAI Shunjie  
**54: DEEP PROCESSING METHOD FOR MAKING WINE FROM BLUEBERRY POMACE**

00: -  
The invention discloses a deep processing method for making wine from blueberry pomace, belonging to the technical field of blueberry wine processing. The invention provides a preparation method of blueberry brandy, which comprises the following steps: mixing blueberry pomace and pineapple pomace to obtain compound pomace, mixing with water, adding active dry yeast for fermentation, standing, and distilling to obtain original blueberry brandy; the original blueberry brandy is reduced, stored, and sterilized to obtain the finished blueberry

brandy. According to the invention, the brandy prepared from the compound pomace has controllable fermentation process, improves the utilization rate of the blueberry pomace, and obtains a blueberry wine product with unique taste and flavor; and the finished blueberry brandy product of the invention has rich composite fruit flavor.



21: 2022/09554. 22: 2022/08/26. 43: 2022/10/20  
51: A01N

71: Jiangxi Agricultural University

72: LIAO Shengliang, SI Hongyan, WANG Zongde, WANG Peng, SHI Yunfei, ZHANG Li, CHEN Shangxing, FAN Guorong, LUO Hai, HE Lu, YANG Yuling, ZHANG Ji

**54: CITRAL THIAZOLE HYDRAZONE DERIVATIVE, PREPARATION METHOD AND APPLICATION THEREOF**

00: -

This invention discloses a citral thiazole hydrazone derivative, a preparation method and an application thereof. The preparation method includes the following steps: 1. dissolving thiosemicarbazone in water, heating to 40-80 degree Celsius for dissolution, dissolving citral in organic solvent, dripping into thiosemicarbazone aqueous solution, reacting at 40-80 degree Celsius, cooling to room temperature, precipitating solid, filtering, and washing filter cake with organic solvent to obtain citral thiosemicarbazone; 2. dissolving citral thiosemicarbazone and Alpha-bromosubstituted acetophenone in organic solvent, stirring at room

temperature for 10-100 min, filtering the solid powder after the reaction, and recrystallizing to obtain citral thiazole hydrazone derivative. This kind of derivative shows good antifungal activity against plant pathogenic fungi, and will be widely used in the preparation of antifungal agents.

21: 2022/09556. 22: 2022/08/26. 43: 2022/10/20  
51: A23J

71: Moutai Institute

72: YU Shirui, ZHENG Huayan, SONG Ya, AN Yanlin, ZHANG Bocheng, RAN Xue, SONG Yongsong, JIA Bingbing, LIU Hang

**54: METHOD FOR PREPARING ENZYMATIC HYDROLYSATE OF GIANT SALAMANDER**

00: -

The invention discloses a method for preparing enzymatic hydrolysate of giant salamander, belonging to the technical field of aquatic product processing. The method comprises the following steps: (1) taking giant salamander fish skin, grinding into slurry, adding water, then adding aminopeptidase, alkaline protease and chymotrypsin or compound enzymes of these enzymes for enzymolysis, and obtaining fish skin enzymatic hydrolysate after enzymolysis; (2) taking giant salamander meat, grinding it into minced meat, adding water, adding papain, flavor protease, neutral protease or compound enzyme of these enzymes for enzymolysis, and obtaining fish enzymatic hydrolysate after enzymolysis; (3) mixing the fish skin enzymatic hydrolysate with the fish meat enzymatic hydrolysate to obtain the giant salamander enzymatic hydrolysate. According to the invention, giant salamander skin and fish flesh are used as raw materials, and corresponding compound enzyme preparations are used in different parts for moderate enzymolysis, so that the obtained giant salamander enzymatic hydrolysate has high amino acid content, rich nutrition and is easy to be absorbed by human body, and has certain efficacy, thus realizing the deep processing of giant salamander products, improving quality and increasing efficiency.

21: 2022/09574. 22: 2022/08/26. 43: 2022/10/20  
51: E01D

71: CCCC HIGHWAY PLANNING AND DESIGN INSTITUTE CO., LTD



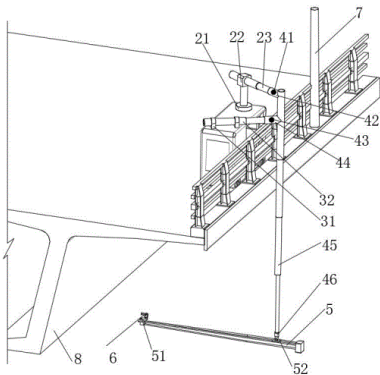
72: MENG, Fanchao, CHANG, Zhijun, HU, Bin, JIN, Xiunan, XU, Zhimin

33: CN 31: 202110902017.6 32: 2021-08-06

**54: BRIDGE INSPECTION VEHICLE**

00: -

A bridge inspection vehicle, comprising a walking device (1), an inspection device, a first obstacle avoidance telescopic device (2), and a second obstacle avoidance telescopic device (3). When inspecting a bridge (8), if the first obstacle avoidance telescopic device (2) encounters an obstacle, the first obstacle avoidance telescopic device (2) contracts to be separated from the inspection device, forming a gap. After passing the obstacle, the device (2) extends to be connected to the inspection device again. When the second obstacle avoidance telescopic device (3) encounters the obstacle, the working process thereof is the same as that of the first obstacle avoidance telescopic device (2). Thus, there is no need for folding an inspection arm or circumventing to avoid an obstacle on the side of a bridge, and the obstacle can be avoided using the first obstacle avoidance telescopic device (2) and the second obstacle avoidance telescopic device (3).



21: 2022/09594. 22: 2022/08/29. 43: 2022/10/20  
51: E02D

71: CHINA RAILWAY SIXTH GROUP CO., LTD., CHINA RAILWAY SIXTH GROUP GUANGZHOU ENGINEERING CO., LTD.

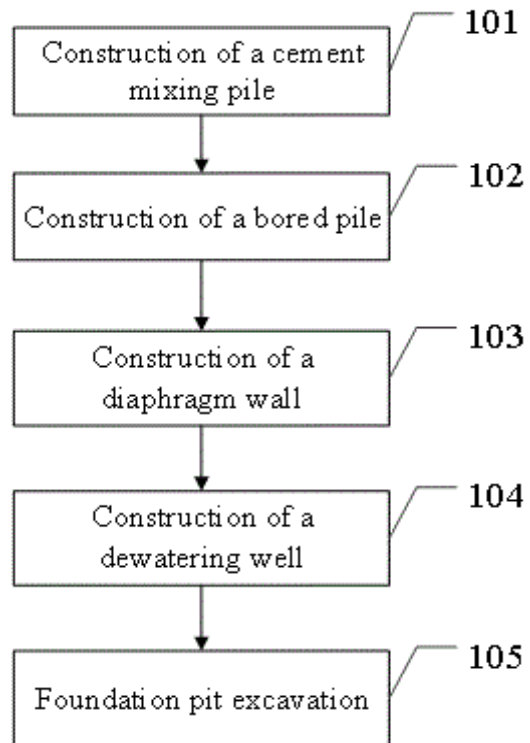
72: Qingshuang JIA, Xiaolei ZHANG, Jinjun GENG, Gai LUO, Gang XU, Bing LIU, Zenghui FU

33: CN 31: 202111444408.4 32: 2021-11-30

**54: METHOD FOR REINFORCEMENT CONSTRUCTION OF FOUNDATION PIT IN SILTY SOIL LAYER**

00: -

The present invention relates to the field of building construction technologies, and discloses a method for reinforcement construction of a foundation pit in a silty soil layer, which is used to improve stability of a foundation pit in a process of foundation pit construction. The method for reinforcement construction of a foundation pit in a silty soil layer includes step 1 of construction of a cement mixing pile; step 2 of construction of a bored pile; step 3 of construction of a diaphragm wall; step 4 of construction of a dewatering well; and step 5 of foundation pit excavation. Reinforcement construction of a foundation pit is performed by using a retaining structure formed by the cement mixing pile, the bored pile, and the diaphragm wall, and a dewatering well drainage system.



21: 2022/09595. 22: 2022/08/29. 43: 2022/10/20  
51: B65D; E21B; G01N

71: Chongqing University of Science and Technology

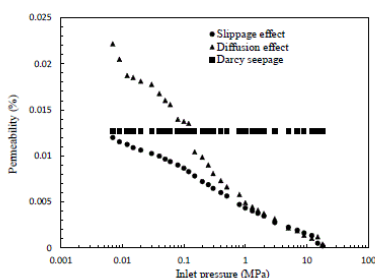
72: XIANG, Zuping, AO, Xiang, XIAO, Qianhua, LIU, Zhonghua, ZHU, Shijie, LIU, Zhezhi, CHEN, Zhonghua, ZHONG, Zhicong

**54: METHOD FOR QUANTITATIVELY EVALUATING CONTRIBUTION RATES OF DIFFERENT MASS TRANSFER DIFFUSION MECHANISMS OF SHALE GAS RESERVOIRS**

**FOR SEEPAGE CAPACITIES OF RESERVOIR STRATA**

00: -

Disclosed is a method for quantitatively evaluating contribution rates of different mass transfer diffusion mechanisms of shale gas reservoirs for seepage capacities of reservoir strata. The method includes the following steps: preparing a core sample; aging the to-be-tested core; calculating a helium permeability; replacing helium with methane, and calculating a methane permeability; saturating the core obtained after methane and helium experiments through deionized water, and calculating a deionized water measuring permeability; correcting the helium permeability; and comparing the deionized water measuring permeability and the corrected helium permeability to obtain equivalent permeabilities of two mechanisms of Darcy seepage and a slippage effect respectively, and obtaining an equivalent permeability of a surface diffusion effect by performing contrastive analysis on the corrected helium permeability and the methane permeability.



21: 2022/09596. 22: 2022/08/29. 43: 2022/10/20

51: B32B; D06N

71: Zhejiang Dongjin New Material Co., Ltd.

72: CHEN, Mingxian, XIE, Guoyan, DONG, Hongbo, JIN, Shihao, SUN, Lixin, PANG, Jianqiang, XU, Jun, GAO, Lifeng

**54: WATERPROOF AND MOISTURE-PERMEABLE COMPOSITE FABRIC**

00: -

The present disclosure discloses a waterproof and moisture-permeable composite fabric, including a fabric body, a coating on which a surface of the fabric body is coated and a TPU film compounded on an inner side of the fabric body by an adhesive, wherein the coating is prepared from nano-organosilicon-modified propenoate emulsion, a thickening agent, a wetting agent and water.

21: 2022/09599. 22: 2022/08/29. 43: 2022/10/20

51: A61K; C07K; C12N; C12P

71: Sun Yat-sen University, Sun Yat-sen University-Shenzhen

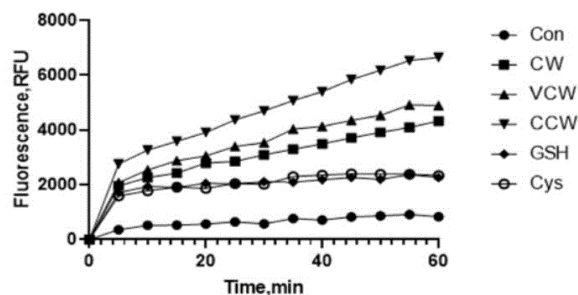
72: XIE, Chengliang, GAO, Liqian, LI, Mengchu, LU, Ciyong, XIAO, Qicai, YANG, Fen, XIA, Jiakuan, CHEN, Peng, SUN, Jie, XIANG, Menghua

33: CN 31: 202210306268.2 32: 2022-03-25

**54: BIOACTIVE PEPTIDE CONTAINING TRYPTOPHAN AND CYSTEINE AND USE THEREOF**

00: -

The present disclosure relates to the technical field of food and medicine, in particular to a bioactive peptide containing tryptophan and cysteine and use thereof. The bioactive peptide uses Aam~(residue composed of the tryptophan and the cysteine)n as a bioactive peptide unit, with antioxidant and anti-inflammatory activity; moreover, the bioactive peptide can release H<sub>2</sub>S and inhibit angiotensin-converting enzyme (ACE) activity; integrated with a plurality of the above functions, the bioactive peptide can give play to a synergistic effect and have a more outstanding effect compared with combined use of a plurality of active ingredients with a single function; the bioactive peptide has the potential to prevent and treat general hypertension and H-type hypertension and can be used to prepare a medicament or functional food having hypotensive activity.



Final peptide concentration: 0.5 mM

21: 2022/09600. 22: 2022/08/29. 43: 2022/10/20

51: G01R

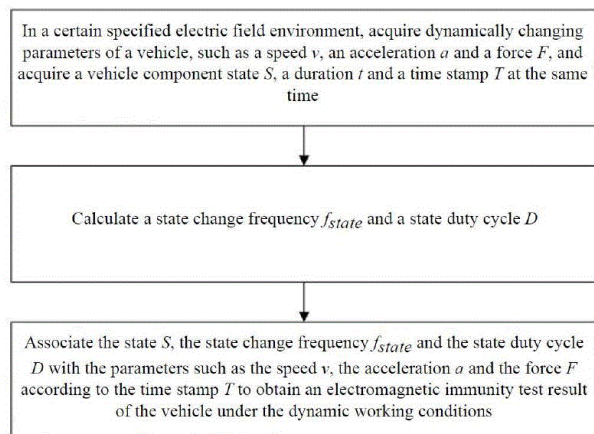
71: Guangdong Polytechnic Normal University

72: ZHONG, Senming, WANG, Xiaojun, LIN, Hongyan, BIN, Kun

33: CN 31: 202111007230 .7 32: 2021-08-30

**54: ELECTROMAGNETIC IMMUNITY TEST SYSTEM AND METHOD FOR VEHICLE UNDER DYNAMIC WORKING CONDITIONS**

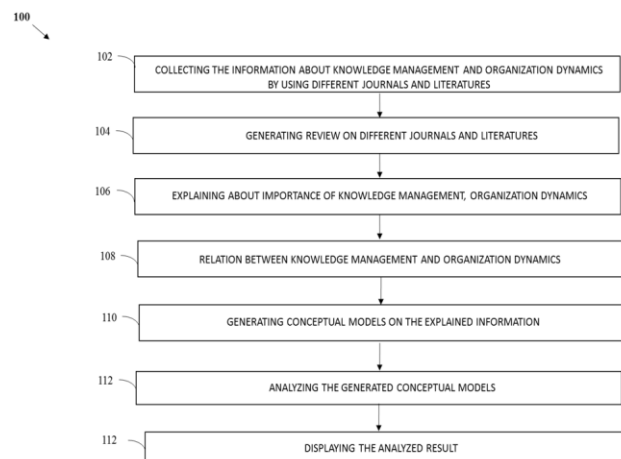
00: -  
 The present invention discloses an electromagnetic immunity test system and method for a vehicle under dynamic working conditions. The system includes an upper computer, a chassis dynamometer, a signal generator, a power meter, a switching unit, a power amplifier, a transmitting antenna, a controller area network box, a controller, a camera, a field intensity probe and a field intensity meter; the field intensity probe and the field intensity meter are used for calibrating the intensity of an electric field in a test environment; the upper computer controls the signal generator to generate a specific-frequency field intensity time domain signal; and the signal passes through the power meter, the switching unit and the power amplifier in sequence and is transmitted out of the electric field by the corresponding transmitting antenna. An electromagnetic immunity test on a vehicle can be better carried out.



21: 2022/09602. 22: 2022/08/29. 43: 2022/10/04  
 51: G06F  
 71: Ms. Shaina Arora, Dr. Abhimanyu Kumar Jha, Mr. Kamal Batta, Barneet Singh, Dr. Santosh Kumar Maurya, Dr. Parmod, Dr. Mahendra Pandey, Anand Pandey, Dr. Sushil Kalyani, Dr. Renu Pareek, Dr. Gyanesh Jain, Dr. Avtar Singh, Amit Ranjan Gupta, Sunil Dutt Trivedi  
 72: Ms. Shaina Arora, Dr. Abhimanyu Kumar Jha, Mr. Kamal Batta, Barneet Singh, Dr. Santosh Kumar Maurya, Dr. Parmod, Dr. Mahendra Pandey, Anand Pandey, Dr. Sushil Kalyani, Dr. Renu Pareek, Dr. Gyanesh Jain, Dr. Avtar Singh, Amit Ranjan Gupta, Sunil Dutt Trivedi

**54: A NEW MANAGEMENT APPROACH TO KNOWLEDGE CREATING STRATEGIC DECISION- MAKING IN ORGANIZATIONS**

00: -  
 The present invention relates to a new method (100) for the management approach to knowledge-creating (KC) strategic decision-making in organizations. The method (100) includes steps: collect the information about knowledge management and organization dynamics by using different journals and literature; generate a review of different journals and literature; explain the importance of knowledge management, and organization dynamics; the relation between knowledge management and organization dynamics; generate conceptual models on the explained information; analyze the generated conceptual models, and display the analyzed result. The new method (100) for management approach to knowledge-creating strategic decision-making in organizations to incorporate and conceptualize the related principles. The conceptual model (200) provides advantages for managers, decision-makers, and consultants to understand the role of creating new strategic and competitive knowledge from their current decision-making processes.

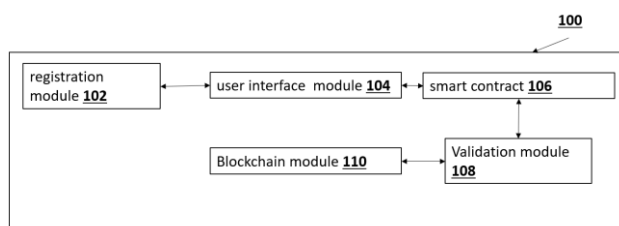


21: 2022/09603. 22: 2022/08/29. 43: 2022/10/04  
 51: H04L  
 71: Dr. Vinayak Ashok Bharadi, Bhushankumar Pitambar Nemade, Dr. Sujata Sameet Alegavi, Pravin Surtaram Jangid, Dr. Vikas Kaul, Geetanjali Nilesh Sawant  
 72: Dr. Vinayak Ashok Bharadi, Bhushankumar Pitambar Nemade, Dr. Sujata Sameet Alegavi, Pravin Surtaram Jangid, Dr. Vikas Kaul, Geetanjali Nilesh Sawant

**54: A SYSTEM FOR INTEGRATING BLOCKCHAIN WITH LOCAL PUBLIC SERVICE AND METHOD THEREOF**

00: -

A system (100) for integrating blockchain with local public service, comprises of: a registration module (102) for allowing at least a user to log in and access a user interface module (104); a smart contract (106) for the validation and review of the plurality of data entered through the user interface module (104) by digital signature of the registered user; a validation module (108) that validates each of the plurality of data in smart form and outputs a positive response if at least a data from the plurality of data is valid and outputs a negative response if at least a data from the plurality of data is invalid; and a blockchain module (110) for creating at least a block for storing the valid smart form, wherein the created block is linked to at least an existing similar block to create the blockchain.



21: 2022/09604. 22: 2022/08/29. 43: 2022/10/20

51: B01J

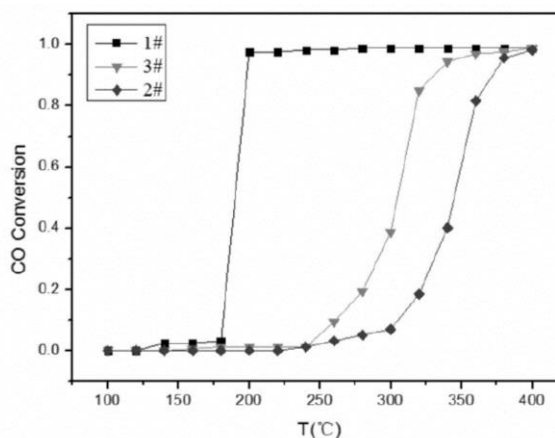
71: Beijing University of Technology, China  
Automotive Technology and Research Center Co., Ltd.

72: Guizhen Zhang, Shuzhen Li, Xiaodong Yang,  
Yameng Xu, Zhenguo Li, Yuankai Shao

#### 54: SUPPORTED PLATINUM-BASED THREE-WAY CATALYST REGENERATION METHOD

00: -

A supported platinum-based three-way catalyst regeneration method relates to the technical field of noble metal catalysis, and mainly comprises the following steps: taking a certain amount of commercial catalyst Pt/CeO<sub>2</sub>, placing the commercial catalyst Pt/CeO<sub>2</sub> in a muffle furnace, aging at 800 degree for 5 h to obtain a sintered catalyst, then coating different oxide layers by using an atomic layer deposition instrument (ALD) to regenerate the sintered and inactivated catalyst. According to the method disclosed by the invention, the sintered and inactivated catalyst can be regenerated, so that certain catalytic activity of the catalyst is recovered.

21: 2022/09605. 22: 2022/08/29. 43: 2022/10/20  
51: C02F

71: Yingkou Institute of Technology

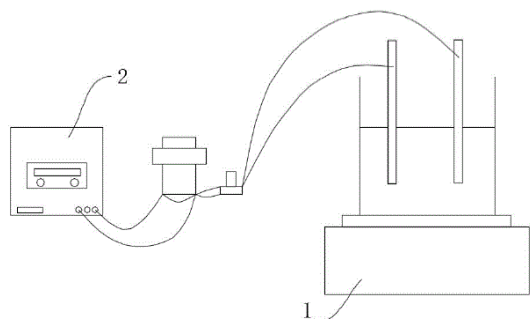
72: SUN, Zhaonan, YANG, Wei, LENG, Jiewen,  
PAN, Yujin, LIU, Huan, SHI, Ke, ZHANG, Nan

33: CN 31: 202111019594.7 32: 2021-09-01

#### 54: TREATMENT EQUIPMENT FOR DEGRADING DYE WASTEWATER BY PERIODIC REVERSAL ELECTROCHEMISTRY IN COOPERATION WITH PERSULFATE AND USING METHOD THEREOF

00: -

A treatment equipment for degrading dye wastewater by periodic reversal electrochemistry in cooperation with a persulfate and a using method thereof are provided. The present invention relates to the technical field of dye wastewater treatment and aims at solving the problem of strictly controlling the activation process of ferrous ions in the existing dye wastewater treatment process. The present invention includes a stirrer; the stirrer has a container on the top end thereof to hold dye wastewater; the container is provided with two polar plates, and one of the polar plates is made of iron, and a horizontal distance between the two polar plates is 0.5-1.5 cm, and two of the polar plates are electrically connected to a direct-current power supply through a time relay and a relay.



21: 2022/09606. 22: 2022/08/29. 43: 2022/10/20

51: G01N

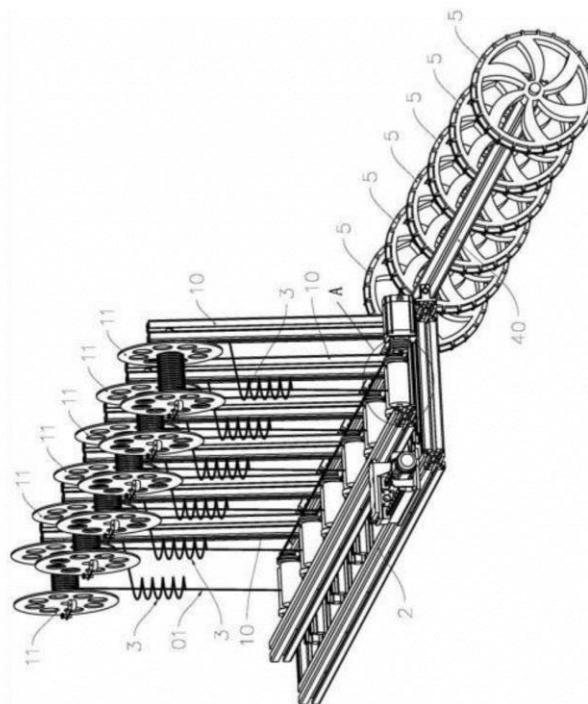
71: Hainan University

72: Hongyan Liu, Jiaolong Li, Baolong Wang

#### 54: A SEEDING DEVICE BASED ON A SEED BELT

00: -

The invention relates to a seeding device based on a seed belt. The seed belt releasing device comprises a seed belt feeding wheel, and the pinch roller mechanism comprises a pinch roller; the belt process control mechanism comprises a third mounting bracket, a feed driving wheel set, a feed driver, a clamping driver and a sliding bracket movable on the third mounting bracket; the clamping driver is used to drive the sliding bracket to move reciprocally along the clamping direction relative to the third mounting bracket, so that the driven wheel mounted on the sliding bracket is close to or away from the driving wheel paired with it, and the feed driving wheel clamps or releases the seed belt located between the two; on the wheel surface of the pinch roller, a plurality of pressure belt convex edges are arranged on the outer convex surface. The device can effectively reduce manual workload and can be widely used in seedling breeding and seeding operations.



21: 2022/09607. 22: 2022/08/29. 43: 2022/10/20

51: A61L

71: Hohai University Changzhou Campus

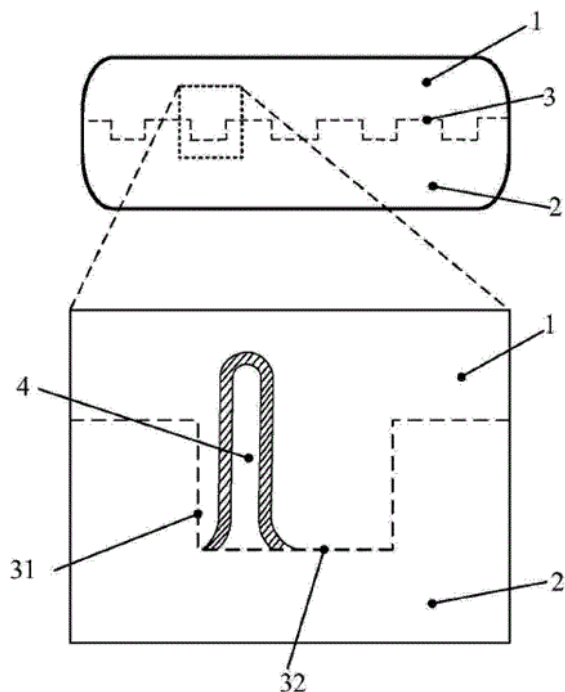
72: Xiaolu Zhu

#### 54: METHOD FOR PREPARING THREE-DIMENSIONAL TUBULAR MULTI-CELLULAR STRUCTURE

00: -

The invention relates to a method for preparing a three-dimensional tubular multi-cellular structure and relates to the field of tissue engineering. According to the method, a composite hydrogel structure composed of upper hydrogel (1) and lower hydrogel (2) which have mechanical characteristics and different molecular diffusion rates is established, cells in the hydrogel are cultured for a long time, and then the cells are made to be organized automatically near the division surface between the upper hydrogel and the lower hydrogel so as to form the tubular structure (4) or the tubular structure (5). Under the initial condition, the cells wrapped by the upper hydrogel (1) and the lower hydrogel (2) are evenly distributed but have different densities. The three-dimensional tubular multi-cellular structure prepared through the method is independent of any external composite structures, and the communication capacity between the large number of cells is fully utilized; the forming process of the three-dimensional tubular multi-cellular structure is

more similar to the natural forming process of biological tissue, rejection reactions of existing artificial tubular tissue produced through polymer can be greatly reduced, and the efficient, high-reliability and low-cost method for preparing artificial tubular tissue is provided.



21: 2022/09608. 22: 2022/08/29. 43: 2022/10/20  
 51: C08B  
 71: Lanzhou University  
 72: LIU Quan

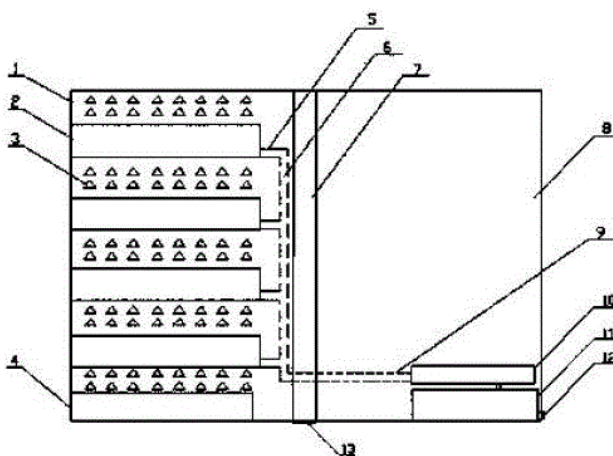
**54: A METHOD FOR IMPROVING LIPOSOLUBILITY AND THERMAL STABILITY OF RED CLOVER POLYSACCHARIDE**

00: -  
 The invention discloses a method for improving the liposolubility and thermal stability of red clover polysaccharide, belonging to the technical field of plant resource development. The method comprises the following steps: taking at least one of Arabic gum and maltodextrin as a wrapping material, dissolving polysaccharide in the solution of the wrapping material, and freeze-drying to obtain polysaccharide microcapsules. Compared with red clover polysaccharide, the solubility and thermal stability of the polysaccharide microcapsules can be obviously improved, which will be useful to increase the range and field of application for the red clover polysaccharide.

21: 2022/09609. 22: 2022/08/29. 43: 2022/10/20  
 51: A01K  
 71: Yantai Institute of China Agricultural University, Yantai Zhonghetang Agriculture Co., Ltd.  
 72: KONG Fanke, LEI Dejun, LIU Haijun, JIANG Hu, SHI Chenghai, WANG Youbin

**54: WATER-SAVING AND ENVIRONMENT-FRIENDLY PIG FARM**

00: -  
 The invention discloses a water-saving and environment-friendly pig farm, which belongs to the technical field of animal husbandry and feeding. Its structure comprises a pig farm body, wherein the pig farm body comprises a pigsty area, which is separated from a feed crop area by a road. The pigsty area is provided with a plurality of pigsties arranged in a stepped manner, and *Broussonetia papyrifera* is planted among the pigsties. The end of each pig house is provided with a sewage pipe which is connected with a main pipe buried in the ground. The outlet of the main pipe is connected with the biogas engineering system through a connecting pipe; the ground of the pig farm body has a slope from high to low along the direction from the end of the main pipe to the outlet of the main pipe; and the sewage pipe connects one end of the pig house to the direction from high to low. The invention can ensure the smooth flow of fluid, not only save water, but also keep the environment-friendly and clean in the farm, save the breeding cost and promote healthy breeding.



21: 2022/09613. 22: 2022/08/29. 43: 2022/10/20  
 51: E01F; G09F  
 71: HUNAN XIANGXU TRAFFIC & LIGHTING HI-TECH CO. LTD

72: JIANG, Lang, YI, Xuefeng

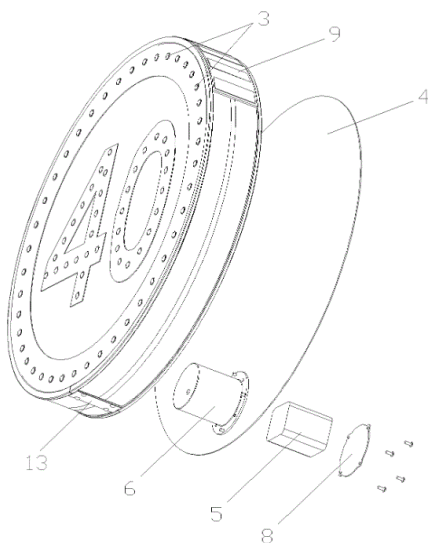
33: CN 31: 202010151442.1 32: 2020-03-06

**54: LIGHT-EMITTING ROAD TRAFFIC SIGN**

00: -

A light-emitting road traffic sign, comprising a frame assembly (1), a panel assembly (2), light-emitting assemblies (3), a back plate assembly (4) and a battery assembly (5) used for supplying power to the light-emitting assemblies (3). The frame assembly (1), the panel assembly (2) and the back plate assembly (4) constitute a sign box body; a battery limiting piece (6) for fixing the battery assembly (5) is arranged in the sign box body; the battery limiting piece (6) is fixed to the frame assembly (1) or the back plate assembly (4); a maintenance port (7) is provided at a position, corresponding to the battery limiting piece (6), on the frame assembly (1) or the back plate assembly (4); and a detachable sealing plate (8) is provided at the maintenance port (7).

When the sealing plate (8) is opened, a battery assembly (5) in the battery limiting piece (6) is taken out by means of the maintenance port (7) for maintenance and replacement.



21: 2022/09621. 22: 2022/08/29. 43: 2022/10/14

51: B27D

71: SHIJIAZHUANG HUAJIE WOOD INDUSTRY CO., LTD

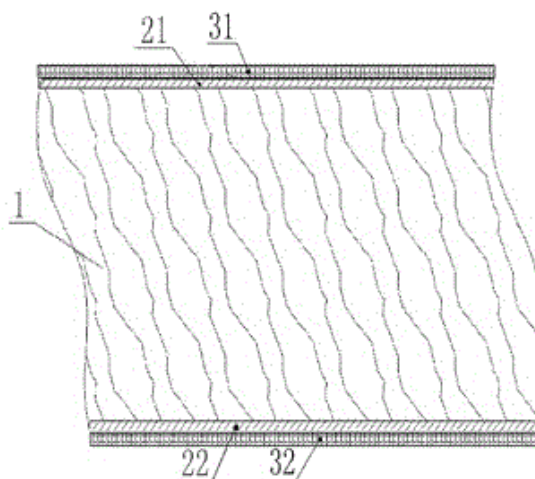
72: PENG, QINBO, PENG, ZHIJUN, YANG, GUANGYAO, PENG, SHAOANG, WEN, XIAOYAN

33: CN 31: 202011202091.9 32: 2020-11-02

**54: BOARD HAVING FLAME RETARDANT SURFACE**

00: -

A board having a flame retardant surface, which uses a flame retardant adhesive, a substrate, and a veneer board as main raw materials, and is made via steps such as gluing, pre-pressing, and hot pressing, and the flame retardant adhesive comprises an adhesive, a flame retardant, and flour. A preparation process for the board having a flame retardant surface is simple in technique, is easy to operate, has relatively low energy consumption and production costs, and may be used for batch production, a flame retardancy property does not cause problems such as dampening, board surface splitting, unevenness, bubbling, or adhesion failure, various physiochemical properties of the substrate are not affected, and said board is suitable as a material for furniture manufacturing, building, and decoration.



21: 2022/09639. 22: 2022/08/30. 43: 2022/10/18

51: C12N; C12Q

71: Vegetable Research Institute, Guangdong Academy of Agricultural Sciences

72: YAN, Jinqiang, JIANG, Biao, CHEN, Feng, LIU, Wenrui, SUN, Piaoyun, XIE, Dasen, HE, Xiaoming, WANG, Min, PENG, Qingwu

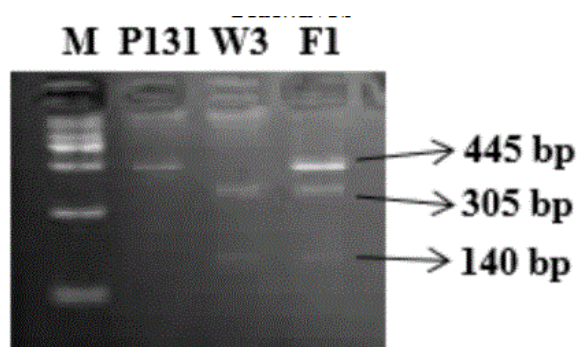
33: CN 31: 202111461951.5 32: 2021-12-02

**54: CLEAVED AMPLIFIED POLYMORPHIC SEQUENCE (CAPS) MOLECULAR MARKER FOR GENE OF EPICUTICULAR WAX BIOSYNTHESIS ON MATURE FRUIT SURFACE OF WAX GOURD AND USE THEREOF**

00: -

The present disclosure belongs to the technical field of molecular marker-assisted breeding, and in particular relates to a cleaved amplified polymorphic sequence (CAPS) molecular marker for a gene of

epicuticular wax biosynthesis on the mature fruit surface of wax gourd and use thereof. The CAPS molecular marker for a gene of epicuticular wax biosynthesis on the mature fruit surface of wax gourd has a nucleotide sequence shown in SEQ ID NO: 1, a 1370th base from a 5'-end of the nucleotide sequence shown in SEQ ID NO: 1 is a single-nucleotide polymorphism (SNP) site, and the SNP site is G or A. Meanwhile, a primer of the CAPS molecular marker can simultaneously generate a specific marker for an epicuticular wax biosynthesis-containing material and a specific marker for an epicuticular wax biosynthesis-free material, with desirable repeatability and strong specificity.



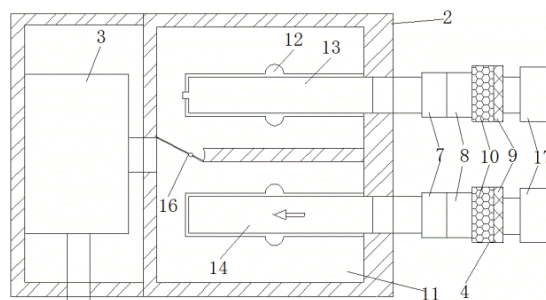
21: 2022/09640. 22: 2022/08/30. 43: 2022/10/18  
51: G01N

71: Jiangsu Environmental Monitoring Center  
72: ZHONG, Sheng

#### 54: VOC SAMPLING APPARATUS

00: -

Disclosed is a VOC sampling apparatus, which includes a machine housing, an air extracting pump, sampling tubes and filters. temperature control mechanisms are arranged in the sampling cavities, at least two sampling tubes are arranged in the sampling cavities, outer ends of the sampling tubes are connected to the filters in a sealing manner, and air inlets of the filters are in communication with ambient air by means of valves. According to the present invention, influence of an environment temperature on the sampling tubes is reduced by arranging temperature controllers, drying agents are arranged to reduce influence on the adsorption performance and an adsorption result of the sampling tubes, and at least two sample tubes are arranged, such that sampling can be conducted twice at one time, thereby effectively reducing the experimental cost of a sampling device.



21: 2022/09641. 22: 2022/08/30. 43: 2022/10/18  
51: B01D

71: Anhui Polytechnic University, Xiaogan Yunzhong Network Information Technology Co., Ltd.

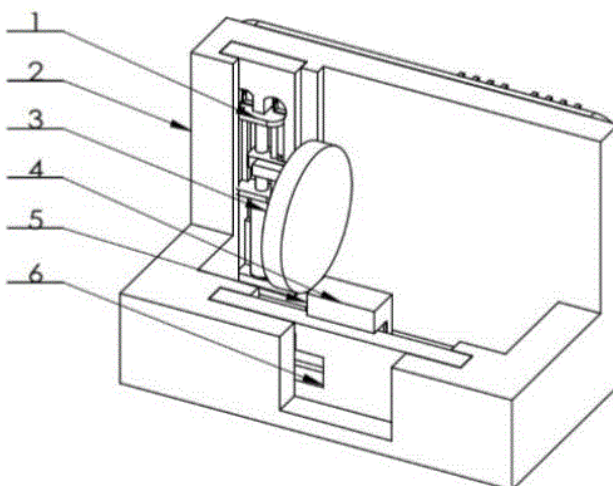
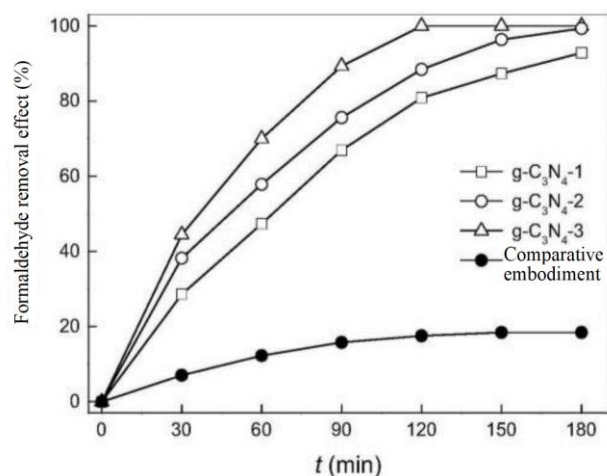
72: WANG Peng, LU Ming, HAN Xu, XU Qingbo, ZHENG Xianhong, WANG Zongqian, LI Changlong

#### 54: VISIBLE LIGHT CATALYST OF GRAPHITE-PHASE CARBON NITRIDE MODIFIED FABRIC, ONE-STEP PREPARATION METHOD AND APPLICATION THEREOF

00: -

The invention provides a visible light catalyst for graphite-phase carbon nitride modified fabric, its one-step preparation method and application. Urea and transition metal salt compounds can form a deep eutectic solvents system by heating and melting. After polyester fabric is placed in this system, polyester fiber slightly swells, which is beneficial for urea molecules to enter and penetrate into the surface layer of polyester fiber, so that graphite carbon nitride is formed under the condition of high temperature and high pressure, and is more firmly fixed on the fiber surface. In addition, the graphite carbon nitride which is not fixed on the fiber surface gradually forms precipitation. When the prepared catalyst is used for indoor air purification, pollutants such as formaldehyde can be quickly degraded, and the removal rate can reach more than 99% within 90 minutes. Moreover, the recycling performance is excellent, and it can still have excellent catalytic performance after water washing.





21: 2022/09642. 22: 2022/08/30. 43: 2022/10/18  
51: C12Q  
71: Fuzhou University  
72: SUN Hao, LI Haichao, DONG Hui, JIA Yuan, MO Jin, XIE Wantao

**54: INFECTIOUS DISEASE DETECTION DEVICE BASED ON MECHANICAL TRANSMISSION AND PCR TECHNOLOGY AND WORKING METHOD THEREOF**

00: -

The invention provides an infectious disease detection device based on mechanical transmission and PCR technology and a working method thereof, which adopts a paper-based microfluidic chip as a carrier of PCR; mounting the paper-based microfluidic chip on a first displacement mechanism driven by a first stepping motor, which has freedom of movement in the horizontal direction; installing the alumina ceramic heating sheet on a second displacement mechanism driven by a second stepping motor with freedom of vertical movement; and the paper-based microfluidic chip and the alumina ceramic heating sheet are contacted or separated under the control of the first displacement mechanism and the second displacement mechanism; the paper-based microfluidic chip is contacted with a thermistor; the thermistor, the alumina ceramic heating sheet, the first stepping motor and the second stepping motor are connected to the controller. The paper-based microfluidic PCR reaction can be carried out in small equipment.

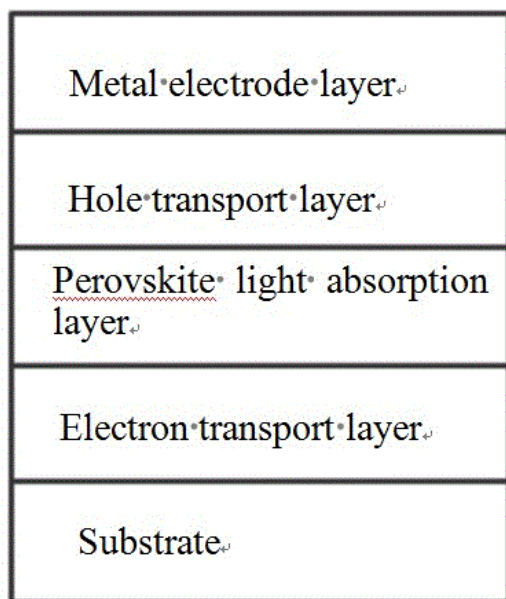
21: 2022/09643. 22: 2022/08/30. 43: 2022/10/18  
51: H01L

71: Henan University of Urban Construction  
72: LI Wei, ZHANG Renqi, WANG Chaoyong, DUAN Kunjie, DONG Haipeng

**54: PEROVSKITE THIN-FILM SOLAR CELL**

00: -

The invention discloses a perovskite thin-film solar cell, which belongs to the field of solar cells and comprises a substrate, an electron transport layer, a perovskite light absorption layer, a hole transport layer and a metal electrode layer; wherein a substrate, an electron transport layer, a perovskite light absorption layer, a hole transport layer and a metal electrode layer are sequentially laminated. The perovskite light absorption layer comprises a perovskite thin film, and the electron transport layer is one of TiO<sub>2</sub>, ZnO, SnO<sub>2</sub>, ZrO<sub>2</sub>, WO<sub>3</sub>, BaSnO<sub>4</sub> and Zn<sub>2</sub>SnO<sub>4</sub>, and the thickness of the electron transport layer is 0.15 micron 2.5 micron. According to that technical scheme, the perovskite thin-film solar cell manufactured by the invention is simple in structure and easy to produce; and meanwhile, based on the perovskite thin film, the conversion efficiency of the solar cell can be improved.



21: 2022/09644. 22: 2022/08/30. 43: 2022/10/18  
51: H01L

71: Henan University of Urban Construction  
72: LI Wei, LIU Zhiqing, WANG Chaoyong, DONG Haipeng, DUAN Kunjie

**54: PEROVSKITE LIGHT-ABSORBING LAYER MATERIAL AND APPLICATION THEREOF IN SOLAR CELLS**

00: -

This invention discloses a perovskite light-absorbing layer material and an application thereof in solar cells, and relates to the technical field of photoelectricity. The perovskite light-absorbing layer material of the invention, which includes two thin film structures, wherein the upper layer is a reinforced material layer and the lower layer is a perovskite material layer; the element composition of the perovskite material layer is  $ABX_3$ , wherein A is  $CH_3NH_3^+$  or  $Cs^+$ , B is  $Sn^{2+}$ ,  $Ge^{2+}$ ,  $Ni^{2+}$  or  $Zn^{2+}$ , and X is  $Cl^-$ ,  $Br^-$  or  $I^-$ ; the reinforced material layer is a mixture of carbon black and  $GeI_2$ . The invention promotes the flow of photo-generated carriers in the perovskite light absorption layer and improves the conversion efficiency of solar energy by controlling the types and dosage of elements in the perovskite material layer and doping carbon black. The production process is carried out at low temperature, and the preparation method is simple, safe and quick, and suitable for large-area production.

21: 2022/09645. 22: 2022/08/30. 43: 2022/10/18  
51: B01D

71: Zhaoqing University

72: Xu Li, Kang Yao-Tai, Wang Xia-Hui

**54: SUPER-HYDROPHOBIC MODIFICATION METHOD OF POLYVINYLIDENE FLUORIDE HYDROPHOBIC MEMBRANE**

00: -

The invention provides a super-hydrophobic modification method of polyvinylidene fluoride hydrophobic membrane, which relates to the technical field of membrane separation. The super-hydrophobic modification method of polyvinylidene fluoride hydrophobic membrane comprises the following steps: step 1: mixing polyvinylidene fluoride, dimethylacetamide, pore size regulator and ethylene glycol for 4-5h at a stirring speed of 1000r/min to obtain an initial solution; step 2: heating the initial solution to 65 Celsius degrees to obtain a casting solution, with the mass content of polyvinylidene fluoride of 15%-25%, that of dimethylacetamide of 5%-10%, that of pore size regulator of 2%-4% and that of ethylene glycol of 40%-50%, then placing the casting solution in an oven at 65 Celsius degrees, and standing for 36h-72h to obtain the final casting solution for later use. After the the final casting solution is scraped on a glass plate in running water, the membrane-forming efficiency is improved, so the hydrophobic membrane can be processed only by simple equipment.

21: 2022/09646. 22: 2022/08/30. 43: 2022/10/18  
51: C09D

71: Zhaoqing University

72: Xu Li, Yuan Ru-Wen, Wang Xia-Hui

**54: A FIREPROOF SUPER HYDROPHOBIC COATING, A SUPER HYDROPHOBIC MATERIAL AND THE CORRESPONDING PREPARATION METHOD**

00: -

The invention provides the fireproof super hydrophobic coating, the super hydrophobic material and the corresponding preparation method, and relates to the technical field of super hydrophobic materials. The fireproof super hydrophobic coating and super hydrophobic material comprise a super hydrophobic layer and a base material, wherein the base material comprises diatomaceous earth and

graphene; the superhydrophobic layer comprises a high-temperature resistant layer and a hydrophobic layer; the high-temperature resistant layer comprises ferric hydroxide, calcium carbonate, copper oxide, ferric oxide and aluminum oxide; and the hydrophobic layer uses super hydrophobic grade resin. By arranging ferric hydroxide, calcium carbonate, copper oxide, ferric oxide, aluminum oxide and graphene, the high-temperature resistance of the super hydrophobic material is increased, the internal structure is prevented from being damaged in a high-temperature environment, and the service life of the superhydrophobic material is prolonged.

21: 2022/09647. 22: 2022/08/30. 43: 2022/10/18  
51: E02D

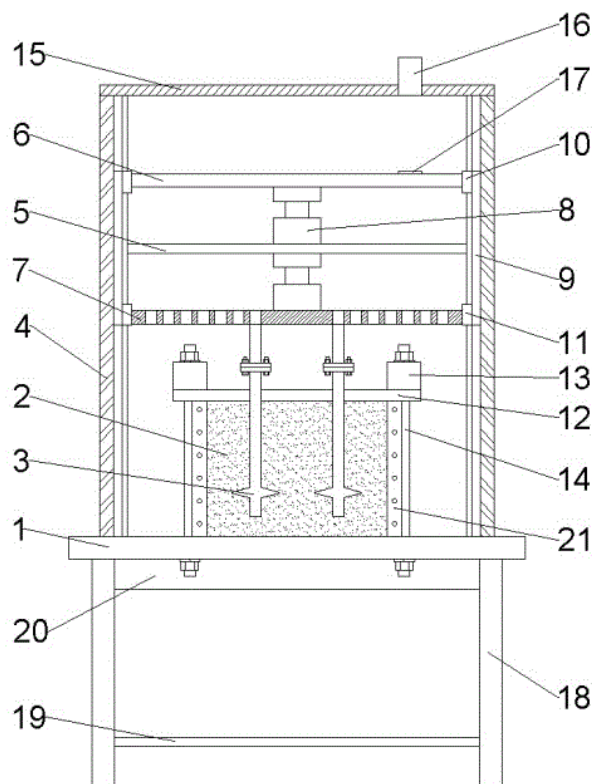
71: Jilin Jianzhu University

72: QIAN Yongmei, WANG Ruozhu, JIN Yujie, TIAN Wei, ZHU Chunfeng, XU Lina, JIANG Xin, CAI Jingwei, NIU Lei, XIE Xinying, CHEN Yang

#### 54: DOUBLE-PILE UPLIFT AND COMPRESSION TEST DEVICE

00: -

The invention discloses a double-pile uplift and compression test device, which comprises a test bench, wherein a loading device is fixedly connected on the top surface of the test bench, a distance measuring device is arranged above the loading device, a test box is arranged on the top surface of the test bench, the test box is located below the loading device, undisturbed soil is filled in the test box, and two half-section piles are embedded in the undisturbed soil, and the top ends of the two half-section piles are fixedly connected with the loading device. The device can complete the loading test and the tensile test with a single installation, without dismantling the test main body, which greatly reduces the cycle of the uplift and compression test, reduces the manpower and material resources consumption, and greatly reduces the test cost.



21: 2022/09648. 22: 2022/08/30. 43: 2022/11/09  
51: B01J

71: HENAN UNIVERSITY OF URBAN CONSTRUCTION

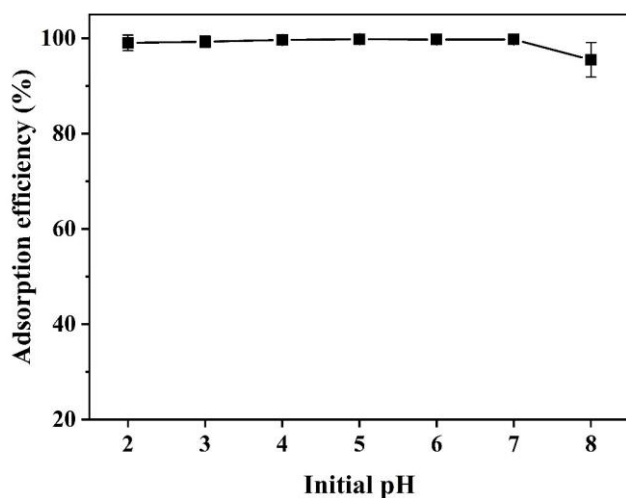
72: MAO, Yanli, LIU, Chaopeng, LUO, Yulong, SONG, Zhongxian, ZHU, Xinfeng, WU, Junfeng, LIU, Biao, WANG, Zhaodong, GENG, Hongchao, MA, Mengxia, WANG, CHAOHAI

#### 54: PREPARATION METHOD AND APPLICATION OF GOLD ION ADSORPTION MATERIAL WITH WIDE PH USE RANGE

00: -

The present invention discloses a preparation and application of a gold ion adsorption material with a wide pH use range, and belongs to the technical field of adsorbent preparation. Cu-Al layered double hydroxide grows on a surface of MCM-41 to obtain adsorbent CAM41. A preparation method of the adsorption material of the present invention is simple, and has the characteristics of low cost, low energy consumption and environmental protection. When the adsorption material is used for the treatment of gold-containing wastewater, an adsorption effect on gold is good, and the adsorption material can be reused, and has a wide pH use range. The present invention provides an efficient,

green and widely applicable adsorbent for selective recovery of gold, and also provides an idea for synthesis of composite adsorbent materials.

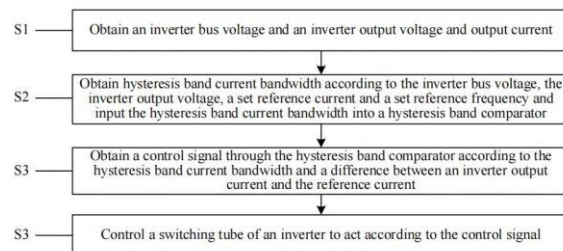


21: 2022/09651. 22: 2022/08/30. 43: 2022/10/18  
51: H02M

71: Changzhou Institute of Technology  
72: ZHAO, Jingbo, LIAO, Lianying, MENG, Haodong, XU, Yongming, CHEN, Jianfeng, LIU, Haimei, HOU, Xinglin

**54: SELF-ADAPTIVE BANDWIDTH HYSTERESIS BAND CURRENT CONTROL METHOD AND SYSTEM FOR ELECTRIC VEHICLE INVERTER**

00: -  
Provided are a self-adaptive bandwidth hysteresis band current control method and system for an electric vehicle inverter. The method includes: obtaining an inverter bus voltage and an inverter output voltage and output current; obtaining hysteresis band current bandwidth according to the inverter bus voltage, the inverter output voltage, a set reference current and a set reference frequency, and inputting the hysteresis band current bandwidth into a hysteresis band comparator; obtaining a control signal according to the hysteresis band current bandwidth and a difference between an inverter output current and the reference current; and controlling a switching tube of the inverter to act according to the control signal. According to the present invention, stability of average switching frequency of the inverter can be improved on the basis of guaranteeing high stability and rapid dynamic response of the inverter, and an output voltage range of the inverter is narrowed.

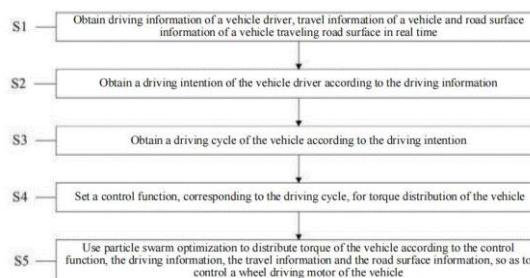


21: 2022/09652. 22: 2022/08/30. 43: 2022/10/18  
51: B60L

71: Changzhou Institute of Technology  
72: ZHAO, Jingbo, LIAO, Lianying, MENG, Haodong, XU, Yongming, CHEN, Jianfeng, LIU, Haimei, HOU, Xinglin

**54: CONTROL METHOD AND SYSTEM FOR TORQUE DISTRIBUTION OF DISTRIBUTED-DRIVE VEHICLE**

00: -  
Provided is a control method and system for torque distribution of a distributed-drive vehicle. The control method includes: obtaining driving information of a vehicle driver, travel information of a vehicle and road surface information of a vehicle traveling road surface in real time; obtaining a driving intention of the vehicle driver according to the driving information; obtaining a driving cycle of the vehicle according to the driving intention; setting a control function, corresponding to the driving cycle, for torque distribution of the vehicle; and using particle swarm optimization to distribute torque of the vehicle, so as to control a wheel driving motor of the vehicle. The present invention can achieve optimal driving energy efficiency and torque distribution control on the premise of ensuring stability of the vehicle, and is suitable for vehicles with front and rear axle wheels having driving motors of different configurations.



21: 2022/09653. 22: 2022/08/30. 43: 2022/10/18  
51: A23F

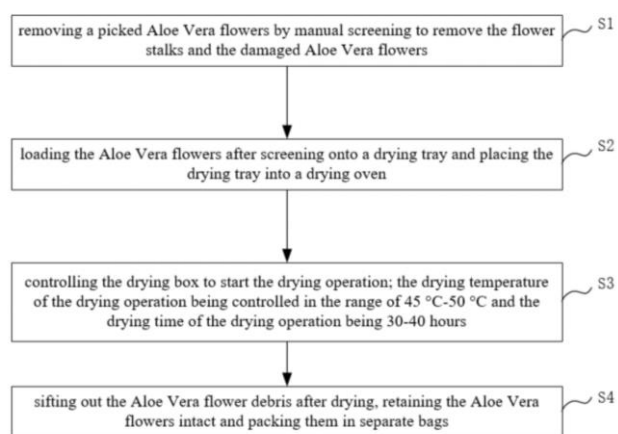
71: Fujian Agriculture and Forestry University, Second Putian Hanjiang Jiangxia Aloe Development Co., Ltd.

72: Jiehui HUANG, Xiangyang HUANG, Bixia QIU

#### 54: ALOE VERA FLOWER TEA PRODUCTION METHOD AND ALOE VERA FLOWER TEA

00: -

The present invention discloses a production method of Aloe Vera flower tea, which relates to the field of flower tea processing, the process includes the following steps: first, removing the picked Aloe Vera flowers by manual screening to remove the flower stalks and remove the damaged Aloe Vera flowers; then, loading the Aloe Vera flowers after screening on a drying tray, putting the drying tray into a drying box, controlling the drying box to start the drying operation; finally, screening off the shredded Aloe Vera flowers after drying, and the complete Aloe Vera flowers are retained and packed in separate bags.



21: 2022/09654. 22: 2022/08/30. 43: 2022/10/18  
51: A61K

71: THE AFFILIATED HOSPITAL OF QINGDAO UNIVERSITY

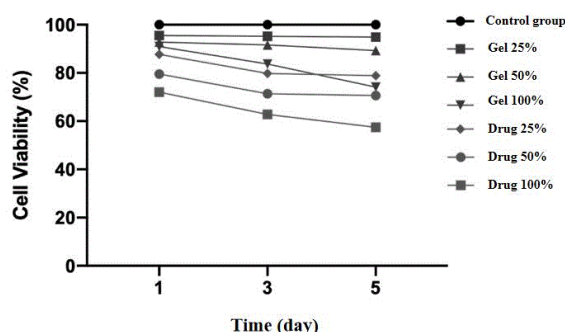
72: XI Yongming, DU Yukun, LI Jianyi, SUI Kunyan

#### 54: CELECOXIB-LOADED INJECTABLE TEMPERATURE-SENSITIVE CHITOSAN HYDROGEL, PREPARATION METHOD AND APPLICATION IN TREATING INTERVERTEBRAL DISC DEGENERATION THEREOF

00: -

This invention discloses a celecoxib-loaded injectable temperature-sensitive chitosan hydrogel, a preparation method and an application in treating intervertebral disc degeneration thereof. The hydrogel includes celecoxib, chitosan and sodium

Beta-glycerophosphate, wherein the chitosan is crosslinked with the sodium Beta-glycerophosphate to form an interpenetrating network, and the celecoxib is uniformly loaded in the interpenetrating network; the celecoxib-loaded temperature-sensitive injectable chitosan hydrogel has good biocompatibility, is implanted in vivo by injection, and has temperature-sensitive characteristics; and it may be converted into gel in situ in a short time after injection, and that effectively blocks the local defect of annulus fibrosus, relieves local inflammation, maintains the mechanical stability of intervertebral disc, and further delays intervertebral disc degeneration; this composite hydrogel material is a material for further development of intervertebral disc regeneration and repair in the future, and it provides a new therapeutic prospect for preventing disc re-protrusion and delaying disc degeneration.



21: 2022/09655. 22: 2022/08/30. 43: 2022/10/18  
51: B09B

71: Sichuan YangZiSen environmental protection equipment Co.,LTD

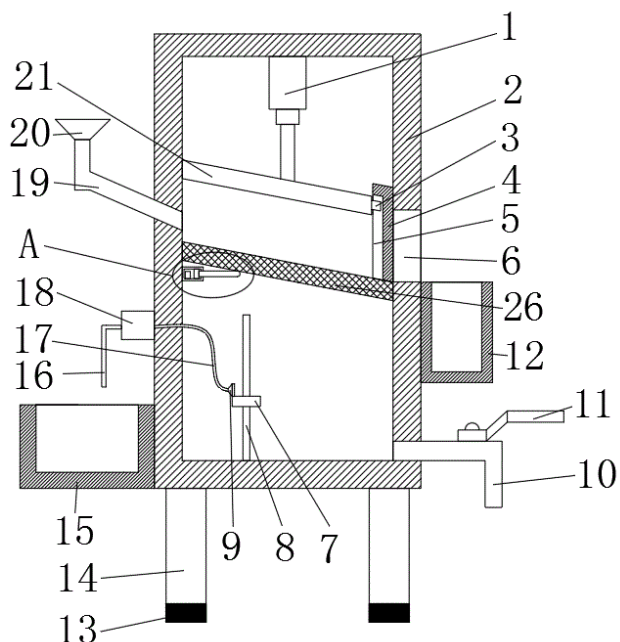
72: Wang Danjun, Huang Hao, Zhou Yong, Wang Xinyu, Huang Yujie, Zhou Zibo

#### 54: SOLID-LIQUID SEPARATION AND COLLECTION DEVICE FOR KITCHEN WASTE

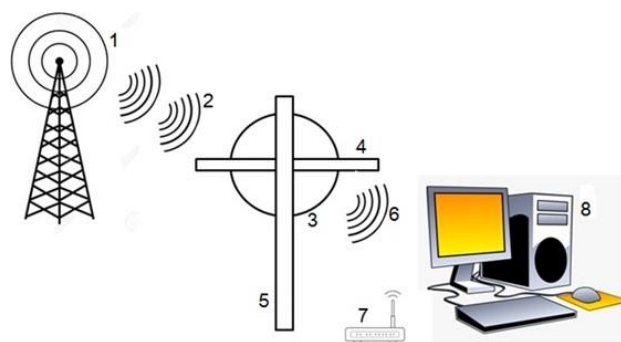
00: -

The invention discloses a solid-liquid separation and collection device for kitchen waste, which comprises a collecting box, wherein the bottom side wall of the collecting box is fixedly connected with a plurality of supporting columns; the inner side wall of the collecting box is fixedly connected with an inclined filter screen; the side wall of the collecting box is provided with an outflow port; the outflow port is located on the bottom side wall of the filter screen; the side wall of the collecting box is fixedly

connected with a solid recovery box; the solid recovery box is located at the outer bottom of the outflow port; a pressing device is arranged on the inner top side wall of the collecting box; a feeding device is arranged on the side wall of the collecting box; a vibration device is arranged on the bottom side wall of the filter screen; the bottom side wall of the collecting box is provided with a waste liquid discharging device. The device is reasonable in design, ingenious in conception, which can quickly separating solid, water liquid and oil liquid from kitchen waste, and can reduce the difficulty of waste treatment, with convenient operation and high practicability.



The internet is an essential technological feature and has become a part of daily life. The strength of the internet is low in rural and forest areas due to hilly areas and geographical structures. Due to this, it is difficult to use the internet properly. The present invention disclosed herein is a design method for antenna disc of WIFI antenna for rural and forest areas comprising of a tower (1), a signal transmitted (2), round disc (3), steel pipe (4), steel strip (5), a signal received (6), WiFi modem (7), and a computer (8). The present invention disclosed herein provides a new technology for designing a round-shaped disc (3) made with aluminum. This new internet disc (3) receives the maximum internet signal and transmits the internet RF signals to the computer through the router. The structure of the disc (3) can be modified with many thin aluminum radii, which have been used in this sphere structure to get the maximum signal. The new antenna disc is tested on certified internet speed testing applications to know its internet signal strength.



21: 2022/09656. 22: 2022/08/30. 43: 2022/10/04  
51: G06F

71: Dr.Kanchan Wagh, Mr.Mehaboob Mujawar, Dr.D.M.K.Chaitanya, Mrs.Srilakshmi Aouthu, Dr.Kilari Veera Swamy, Dr.George Fernandez.I, Dr.Sushma Jaiswal, Dr.Beulah David, Mr. Ankit Khandelwal, Mr.Tarun Jaiswal

72: Dr.Kanchan Wagh, Mr.Mehaboob Mujawar, Dr.D.M.K.Chaitanya, Mrs.Srilakshmi Aouthu, Dr.Kilari Veera Swamy, Dr.George Fernandez.I, Dr.Sushma Jaiswal, Dr.Beulah David, Mr. Ankit Khandelwal, Mr.Tarun Jaiswal

**54: DESIGN METHOD FOR ANTENNA DISC OF WIFI ANTENNA FOR RURAL AND FOREST AREAS**

00: -

21: 2022/09661. 22: 2022/08/30. 43: 2022/11/21  
51: G01N

71: GUANGDONG MEDICAL UNIVERSITY  
72: ZHOU, Yubin, CHEN, Huizhi, ZHOU, Qing, XU, Hui

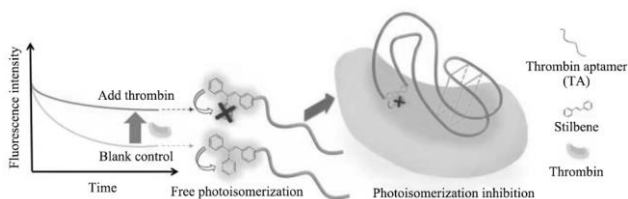
33: CN 31: 202111027286.9 32: 2021-09-02

**54: PHOTOISOMERIZATION-BASED BIOSENSOR AND APPLICATION THEREOF IN THROMBIN DETECTION**

00: -

The invention relates to the technical field of analysis and detection, and more particularly, to a photoisomerization-based biosensor and application thereof in thrombin detection. The biosensor is a fluorescent aptamer sensor, and the fluorescent aptamer sensor uses a stilbene compound as a fluorescent signal molecule, which is formed by

covalently combining with the thrombin aptamer. According to the present invention, thrombin detection can be implemented by combining the aptamer sensor with thrombin, and the detection ability of the aptamer for thrombin is further confirmed by changing the sequence and modification site of the aptamer for nucleic acid; the preparation and operation of the present invention is simple, theoretically, it cannot be interfered by background fluorescence, and it does not require complicated separation steps, and the analysis and detection of samples can be completed in a short time, and the recycling of aptamer sensors can also be implemented, which provides new inspiration for the design of such biosensors for the detection of biological macromolecules such as enzymes in the future, and has important academic and application prospects.

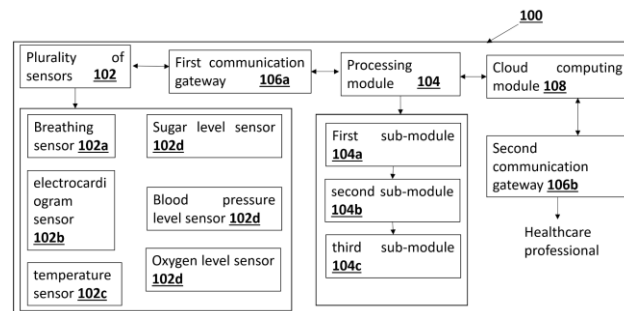


21: 2022/09665. 22: 2022/08/30. 43: 2022/10/04  
 51: A61B  
 71: Dr. Rahul Boadh, Dr. Kuljinder Kaur, Dr. Surinder Singh, Archana Gautam, Dr. Kulwinder Singh Parmar, Dr. Anil Yadav, Dr. Jatinder Singh, Dr. Dhruva Kumar, Dr. Mamta Bhagat, VINAY ARORA, Dr. Satish Kumar  
 72: Dr. Rahul Boadh, Dr. Kuljinder Kaur, Dr. Surinder Singh, Archana Gautam, Dr. Kulwinder Singh Parmar, Dr. Anil Yadav, Dr. Jatinder Singh, Dr. Dhruva Kumar, Dr. Mamta Bhagat, VINAY ARORA, Dr. Satish Kumar

**54: A SYSTEM FOR MONITORING REALTIME HEALTH CONDITION OF A PATIENT AND A METHOD THEREOF**

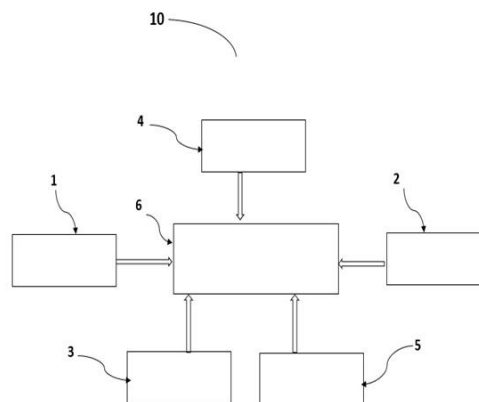
00: -  
 A system (100) and a method (200) for monitoring real-time health condition of a patient, comprises of: a plurality of sensors (102) positioned on skin of the patient for acquiring a plurality of psychological signals; a processing module (104) linked with the plurality of sensors (102) via a first communication gateway (106a) for receiving the plurality of psychological signals in raw form to obtain an output for determining the real-time health condition of the

patient, wherein the output is obtained by incorporating fuzzy rule with Mamdani technique; and a cloud computing module (108) associated with the processing module (104) for storing the acquired plurality of psychological signals and output obtained.



21: 2022/09666. 22: 2022/08/30. 43: 2022/10/04  
 51: G06F; G06Q  
 71: SELVAM, Murugesan, JAYAPAL, Gayathri, SOMASUNDARAM, Balakrishnan, RAJA, Mariappan  
 72: SELVAM, Murugesan, JAYAPAL, Gayathri, SOMASUNDARAM, Balakrishnan, RAJA, Mariappan  
**54: SYSTEM FOR PREDICTION OF FIRM PERFORMANCE**  
 00: -

The present invention relates to System for prediction of firm performance through a computer model using bigdata computing. The objective of the present invention is to solve the problems in the prior art technologies related to computing and prediction of firm or company performance using various data and parameters.



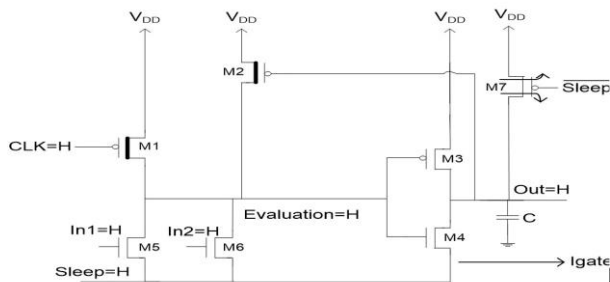
21: 2022/09667. 22: 2022/08/30. 43: 2022/10/04  
 51: H03K

71: GUPTA, Tarun Kumar, PANDEY, Amit Kumar, CHAURASIA, Vijayshri, KUMAR, Ana, VAISHYA, Rahul O, PATEL, Pramod Kumar, MAGRAIYA, Vijay Kumar, SHRIVASTAVA, Yogesh, KORU, Shiv Prasad, KUMAR, Shailendra

72: GUPTA, Tarun Kumar, PANDEY, Amit Kumar, CHAURASIA, Vijayshri, KUMAR, Ana, VAISHYA, Rahul O, PATEL, Pramod Kumar, MAGRAIYA, Vijay Kumar, SHRIVASTAVA, Yogesh, KORU, Shiv Prasad, KUMAR, Shailendra

**54: LEAKAGE CURRENT CONTROLLED BY SLEEP SWITCH FOR LOW POWER APPLICATION**

00: -  
The present invention relates to leakage current controlled by sleep switch for low power application. The proposed circuit has a low-Vt PMOS sleep transistor which is employed between the power supply and the output node. The role of the transistor is to provide high voltage at the output node. The DC sleep signal is applied at the source of the pull-down network and source of the transistor.



21: 2022/09673. 22: 2022/08/30. 43: 2022/10/17  
51: A61L

71: HELIOS SHIELD LTD  
72: AUBERT, Andrew Clark Baird  
33: US 31: 62/984,360 32: 2020-03-03  
33: US 31: 63/019,534 32: 2020-05-04

**54: COMBINATION ULTRA-VIOLET A (UVA) AND ULTRA-VIOLET C (UVC) SYSTEM FOR REDUCTION AND INHIBITION OF GROWTH OF PATHOGENS**

00: -  
A UVA/UVC system for reducing levels, on a surface, and inhibiting further growth of at least one pathogen on said surface, wherein said system has no deleterious effects on a human, in particular on a human eye or epidermis and dermis, wherein said system includes: iv) at least one UVA light source; v) at least one UVC light source; and at least one controller connected to each of the at least one UVA

light source and the at least one UVC light source, for controlling at least one parameter of each of the UVA light source and UVC light source.

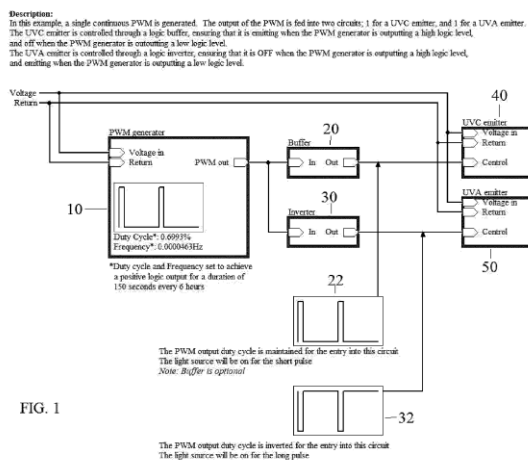


FIG. 1

21: 2022/09705. 22: 2022/08/31. 43: 2022/10/18  
51: A01N; A01P  
71: Weifang University of Science And Technology  
72: LIU, Yongguang, DAI, Huijie, XUE, Qiqin, LIU, Xiaoming, LI, Meiqin, XU, Youxin  
**54: ANTI-PLANT-VIRUS COMPOSITION, ANTI-PLANT-VIRUS AGENT AND APPLICATION THEREOF**

00: -  
The present invention provides an anti-plant-virus composition, an anti-plant-virus agent and an application thereof, and belongs to the technical field of prevention and treatment of viruses of plants. The composition of the present invention includes 10-30 parts of rhubarb extract, 10-30 parts of Radix isatidis extract and 15-35 parts of cottonseed extract. The present invention further provides an anti-plant-virus agent, including the anti-plant-virus composition. The anti-plant-virus agent provided by the present invention includes a soluble powder that can be used as a foliage fertilizer to prevent and treat infection of viruses of plants. The composition provided by the present invention can improve activities of defendant enzymes in plant bodies, enhance the disease resistance of plants, and effectively inhibit and resist infection of viruses. A better protection effect is realized with a small amount of anti-plant-virus composition.

21: 2022/09706. 22: 2022/08/31. 43: 2022/10/18



51: E02D

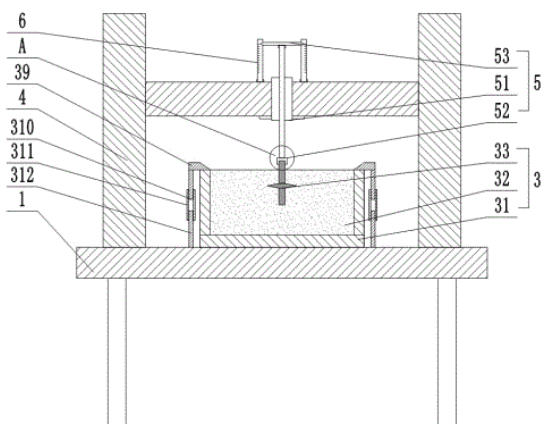
71: Jilin Jianzhu University

72: QIAN Yongmei, WANG Ruozhu, TIAN Wei, JIN Yujie, JIANG Xin, NIU Lei, CAI Jingwei, ZHU Chunfeng, XIE Xinying, XU Lina, WANG Ziyu

**54: DEVICE FOR TESTING PHYSICAL PROPERTIES OF PILE-SOIL INTERFACE OF SIMULATED PILE**

00: -

The application discloses a device for testing physical properties of pile-soil interface of simulated pile, which comprises a test platform, where the test platform is detachably connected with a sample component; the top surface of the test platform is fixedly provided with a loading component and a measuring component through a supporting component, and the loading component is detachably connected with the sample component; the sample component comprises a soil container detachably connected to the test platform, the soil container is used for holding the test soil, a simulated pile is embedded in the test soil, and the top end of the simulated pile extends out of the test soil and is detachably connected with the output end of the loading component; one side wall of the soil container is transparently arranged and painted with a plurality of positioning lines. The invention has the advantages of simple structure and convenient operation, can conveniently test the compressive and tensile properties of the simulated pile, intuitively observe the deformation of the soil around the pile, and provide more accurate and detailed data for studying the expanded pile.



21: 2022/09707. 22: 2022/08/31. 43: 2022/10/18

51: A01N

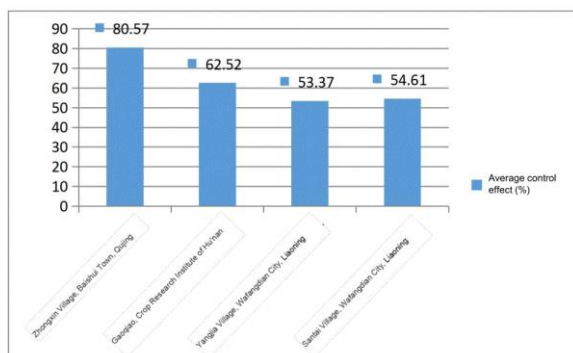
71: Shanghai Jiaotong University

72: Wang Xinhua, Chen Jie, Li Yaqian, Liu Peng, Wang Yongkun, Chen Lusheng, Wang Jing, Wang Caibo, Han Yi, Shi Junxian

**54: METHOD FOR INDUCING ZEA MAYS L. TO RESIST FUSARIUM EAR ROT BY USING TRICHODERMA AGENT**

00: -

The method of inducing Zea mays L. to resist Fusarium ear rot by using Trichoderma agent includes treating soil and Zea mays L. seeds at seedling stage and growth stage with Trichoderma agent, applying Trichoderma granules, seed coating and wettable powder to the soil at different growth stages of Zea mays L., forming dominant flora of Zea mays L. root system, continuously infecting Zea mays L. roots, symbiotically in Zea mays L. roots to induce Zea mays L. to produce resistant substances, inhibiting the infection of Fusarium and reducing the incidence of ear rot. In the invention, the control effect of Trichoderma asperellum GDSF1009 agent on Zea mays L. ear rot reaches 50-80%. The invention is environment-friendly, meets the requirements of organic ecological green agriculture, has the characteristics of easy mastering, low investment cost and good sustainability, and has an extremely broad application market.



21: 2022/09708. 22: 2022/08/31. 43: 2022/10/04

51: H04L

71: Prabina Pattanayak, Abhinaba Dey

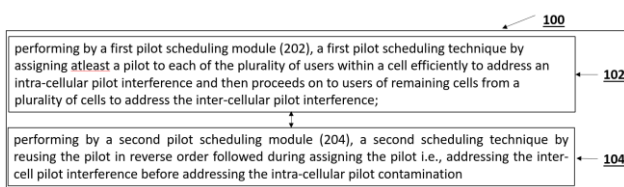
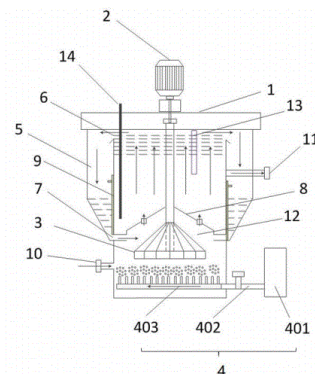
72: PRABINA PATTANAYAK, ABHINABA DEY

**54: A SYSTEM AND A METHOD FOR PILOT CONTAMINATION MITIGATION IN MASSIVE MIMO NETWORK**

00: -

A method (100) and system (200) for Pilot Contamination Mitigation in Massive MIMO Network, comprises of: performing by a first pilot scheduling module (202), a first pilot scheduling technique by

assigning atleast a pilot to each of the plurality of users within a cell efficiently to address an intra-cellular pilot interference and then proceeds on to users of remaining cells from a plurality of cells to address the inter-cellular pilot interference; and performing by a second pilot scheduling module (204), a second scheduling technique by reusing the pilot in reverse order followed during assigning the pilot i.e., addressing the inter-cell pilot interference before addressing the intra-cellular pilot contamination.



21: 2022/09709. 22: 2022/08/31. 43: 2022/10/18  
 51: B03B; B03D  
 71: Central South University  
 72: LIU, Runqing, WANG, Changtao, SUN, Wei, ZHAI, Qilin, HU, Yuehua, LIN, Shangyong, JING, Nianwen

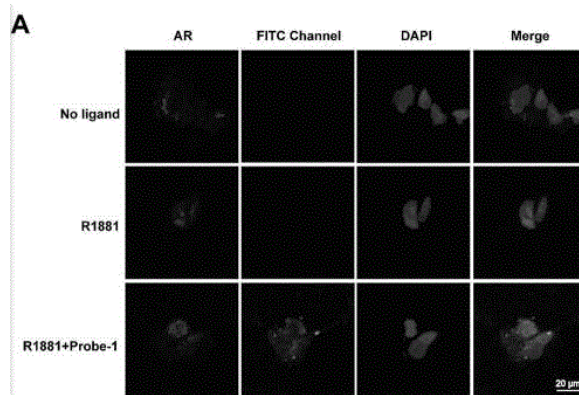
**54: METHOD FOR PRETREATING HIGH PYRRHOTITE-CONTAINING COPPER ORE**

00: -  
 The present invention discloses a method for pretreating high pyrrhotite-containing copper ore, including: performing ball grinding and grading treatment on raw ore, and obtaining pulp with predetermined fineness after mixing; pretreating the pulp using air charging and agitating equipment; controlling the pretreated pulp to enter a flotation machine for copper separation. The equipment includes an agitating barrel body; a motor is arranged above the agitating barrel body and connected to an impeller agitator through a transmission device; a microbubble generation device is arranged below the impeller agitator; a side surface of the agitating barrel body is provided with an outer bubble circulation cavity surrounding an outer side of the agitating barrel body; a top of the outer bubble circulation cavity is communicated to the agitating barrel body through an overflow opening; a bottom of the outer bubble circulation cavity is communicated to the agitating barrel body through a circulation hole.

21: 2022/09710. 22: 2022/08/31. 43: 2022/10/18  
 51: C07D; C09K; G01N  
 71: Nanjing First Hospital  
 72: DU, Qianming, LIU, Chao, HU, Rong, BIAN, Jinlei, GU, Yanqing, YAO, Yiqin

**54: ANDROGEN RECEPTOR SMALL-MOLECULE FLUORESCENT PROBE AND PREPARATION METHOD AND APPLICATION THEREOF**

00: -  
 The present disclosure discloses an androgen receptor small-molecule fluorescent probe and a preparation method and an application thereof. A structural formula of the small-molecule fluorescent probe is shown in the formula (I). The androgen receptor small-molecule fluorescent probe has fluorescent characteristics and has good specific binding to an androgen receptor. The compound, as a fluorescence polarization probe, can achieve the screening of an androgen receptor antagonist or agonist and the evaluation of ligand affinity through a competitive binding method, thus providing a basis for subsequent androgen receptor-targeted drug design.



21: 2022/09711. 22: 2022/08/31. 43: 2022/10/18  
 51: G01N

71: National Institute of Metrology, China

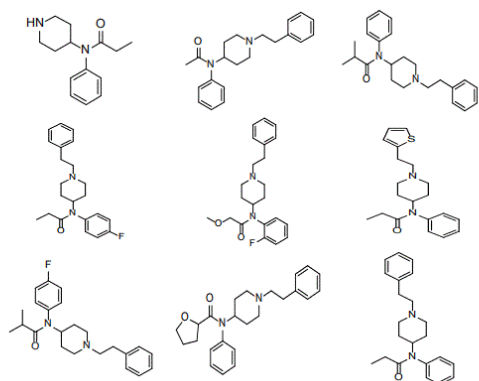
72: SU, Fuhai, WEI, Qi, LI, Hongmei

33: CN 31: 202210365077.3 32: 2022-04-07

**54: PREPARATION METHOD OF FENTANYL DRUG-CONTAINING HAIR REFERENCE MATERIAL AND APPLICATION THEREOF**

00: -

The present disclosure belongs to the technical field of analytical chemistry, and particularly relates to a preparation method of a reference material containing 9 fentanyl drugs in a hair sample and application thereof, and the preparation method includes the steps of collecting an adult hair sample, washing, drying, soaking, washing, drying and crushing the hair sample into dark brown powder, and the like. In the present disclosure, the reference material meets the requirements of forensic and clinical laboratories for the fentanyl drug-containing reference material. The preparation method is simple, and a determination method is high in sensitivity, accuracy and specificity, and can serve as a determination method of a fentanyl drug matrix-containing reference material in hair. The preparation method is used for developing the reference material and applied to forensic test of drug abuse, and quality control of the laboratories.



21: 2022/09712. 22: 2022/08/31. 43: 2022/10/18

51: G06K; G06T

71: Hainan University

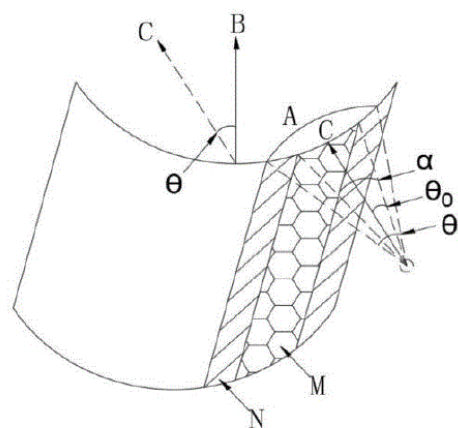
72: LIU, Debing

**54: MULTI-VIEW TARGET RECOGNITION METHOD AND SYSTEM BASED ON INTERNET OF THINGS**

00: -

The present disclosure discloses a multi-view target recognition method and system based on Internet of Things, and solves the problems of recognition

difference and poor reliability of the existing target recognition technology. The main points of the technical solution are: establishing an recognition contour curve and a recognition direction of a target object; calibrating a corresponding collection area on the recognition contour curve; calculating a primary recognition range in the collection area, and dividing the collection area into a primary recognition area and a secondary recognition area according to the primary recognition range; splicing the target image information into a primary recognition image and a secondary recognition image; performing fusion processing on the primary recognition image and the secondary recognition image with an intersection area; and performing recombination to form new target image information, and performing image recognition according to the new target image information.



21: 2022/09713. 22: 2022/08/31. 43: 2022/10/18

51: G01N

71: Jiangsu Institute of Poultry Sciences

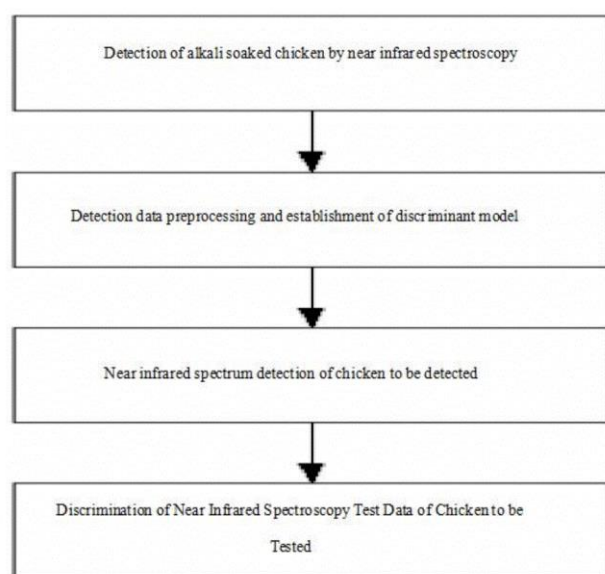
72: GAO Yushi, FAN Yanfeng, TANG Xiujun, SHEN Xiao, JIA Xiaoxu, LU Junxian, TANG Mengjun, ZHOU Qian, ZHANG Jing, CHEN Dawei

**54: RAPID IDENTIFICATION METHOD AND APPLICATION OF ALKALI SOAKED CHICKEN**

00: -

The invention disclose a rapid identification method and application of alkali soaked chicken, which comprise that following steps: 1, detecting the near infrared spectrum of the alkali soak chicken; 2, preprocessing the detection data and establishing a discrimination model; 3, detecting the near infrared spectrum of the chicken to be detected; and 4, discriminating the near infrared spectrum detection data of the chicken to be detected. According to the

invention, the near infrared spectrum discrimination model of alkali-soaked chicken is established and applied to the rapid detection of chicken varieties, and the accuracy rate is over 80%; meanwhile, the application proves that the near infrared spectrum technology can realize the rapid and accurate identification of alkali-soaked chicken, provides a useful detection method for the quality control of chicken and the standardization of the market, is suitable for popularization and application in inspection and detection institutions and market supervision, and has great potential commercial value.



21: 2022/09714. 22: 2022/08/31. 43: 2022/10/18  
51: E02D

71: Hefei University of Technology

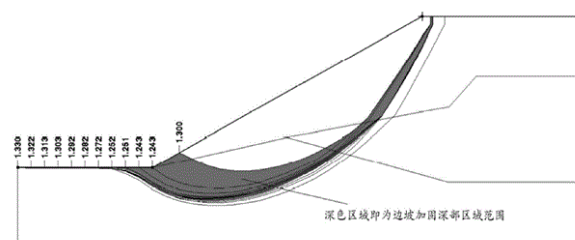
72: Kunlin Lu, Yang Yang, Juncai Wang, Feng Shi, Zhikai Yin

#### 54: METHOD FOR DETERMINING RANGE OF DEEP REGION OF SLOPE REINFORCEMENT

00: -

The invention belongs to the field of slope reinforcement, and in particular relates to a method for determining the range of a deep region of slope reinforcement, which is characterized by comprising the following steps: S1, explore the geometric shape, engineering geology and hydrogeological conditions of a slope to obtain the distribution conditions of all earth layers and underground water of the slope; S2, sample all earth layers of the slope to carry out a geotechnical test and obtain cohesive

force, internal friction angle, natural gravity and underground water level line of all earth layers of the slope; S3, determine each potential sliding surface of slope and the corresponding safety factor  $F_s$  thereof by using a global slope critical sliding field method; S4, find out a potential sliding surface the safety factor of which is less than an allowable safety factor  $F_s$  of the slope, wherein the sliding range is the deep region range of the slope reinforcement. The method can quickly, accurately and effectively find the potential deep sliding region of the slope, and is convenient for quickly and effectively taking effective measures to carry out reinforcement treatment in engineering practice.



21: 2022/09715. 22: 2022/08/31. 43: 2022/10/18  
51: E06B

71: Xinyu University

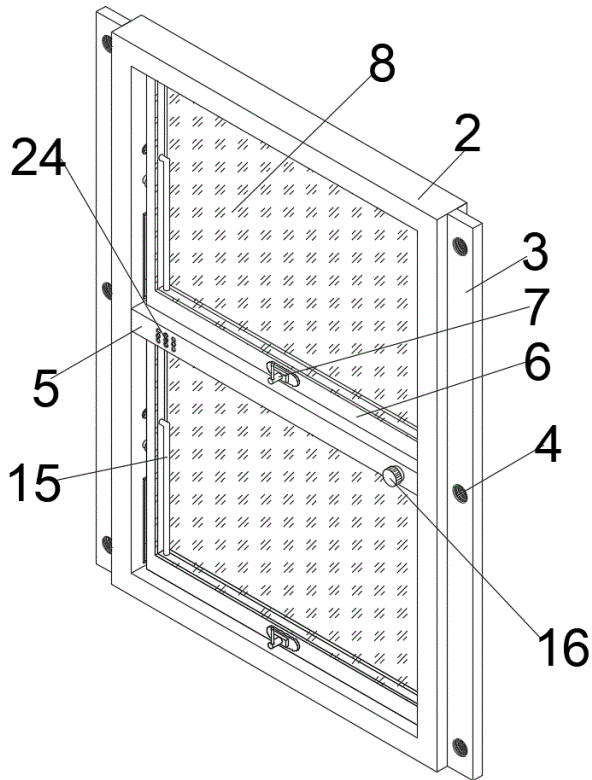
72: Pan Hongke, Peng Yujun, Zhou Linkai, Ying Chenwei, Jian Xiaosheng

#### 54: BUILDING ENERGY-SAVING DOOR AND WINDOW WITH GOOD AIR CIRCULATION EFFECT

00: -

The invention provides a building energy-saving door and window with a good air circulation effect, and relates to the technical field of building doors and windows. The energy-saving door and window comprises a room body, wherein the middle part of one side of the room body is provided with a mounting frame, the inner wall of the middle part of the mounting frame is fixedly connected with a reinforcing plate, the inner walls of the upper end and the lower end of the mounting frame are respectively hinged with a mounting frame, the inner walls of the mounting frames are fixedly connected with hollow glass, a water storage cavity and a mounting cavity are respectively formed in the reinforcing plate, The bottom surface of the mounting cavity is fixedly connected with a self-priming pump, and the inside of the front end of the mounting frame is provided with a two-way

connecting hole. Accord to that building energy-saving door and window with the good air circulation effect, the mount frames are hinged in the mounting frame, the hollow glass can be rotated by 45 degrees under the action of the friction hinges, the design conforms to the air exchange rule, and ventilation and air exchange can be more efficient and scientific when outdoor air is blown to a human body.



21: 2022/09716. 22: 2022/08/31. 43: 2022/10/18  
51: A61D

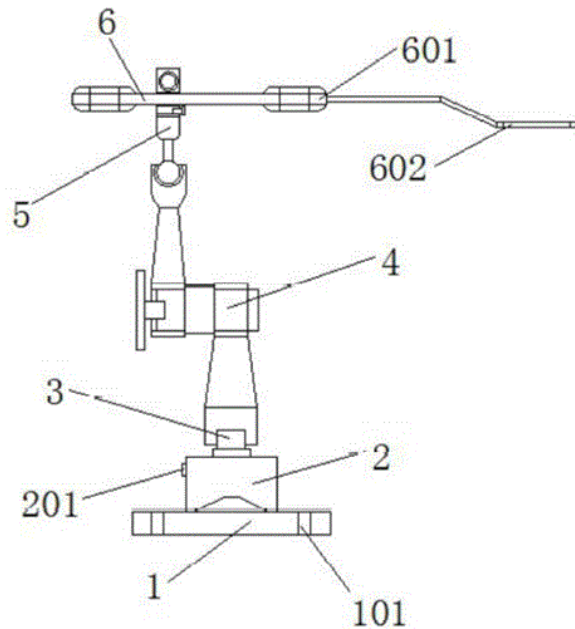
71: West China Hospital of Sichuan University  
72: Xiaofeng Zheng, Ye Zhou, Xinyue Zhu

**54: PRIMATE EYEBALL FIXATOR**

00: -

The utility model discloses a primate eyeball fixator which comprises an iron bottom plate. The electromagnet block is magnetically attracted above the iron bottom plate, a switch button is installed on the surface of the electromagnet block, a threaded column is fixedly connected to the upper surface of the electromagnet block, a universal rotating device is detachably connected to the upper portion of the threaded column, and the universal rotating device is detachably connected to the upper portion of the

universal rotating device. Each universal rotating device comprises a stand column, a threaded groove, a connecting rod, a second locking hand wheel, a supporting column and an arc shaped groove. One end of the connecting rod is sleeved with the top end of the stand column, the other end of the connecting rod is inserted into and movably connected with the bottom end of the supporting column, and the arc shaped groove is formed in the upper surface of the supporting column; the top end of the universal rotating device is fixedly connected with a clamping device. A handle is inserted into and fixedly connected with the surface of the clamping device, one end of the handle is spirally connected with a threaded rod, and the free end of the threaded rod is fixedly connected with an eyeball fixing ring. The universal rotating device is matched with the clamping device to adjust the angle of the eyeball fixing ring, and the applicability is wider.



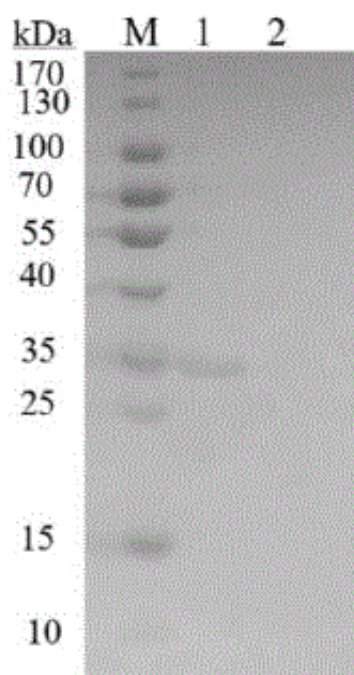
21: 2022/09718. 22: 2022/08/31. 43: 2022/10/18  
51: C12N

71: Zhaoqing Branch of Guangdong Provincial Laboratory of Lingnan Modern Agricultural Science and Technology, South China Agricultural University  
72: Dongsheng He, Kehui Deng, Weiyu Cai, Xiuwu Wang, Jiawei Niu, Jincheng Chen, Ruiai Chen

**54: KIT AND DETECTION METHOD FOR DETECTING TITER OF PRRSV-1 ANTIBODY**

00: -

The invention provides a nucleic acid molecule for encoding a PRRSV N antigen and an application thereof, and further provides a kit for detecting the titer of an European PRRSV antibody and a detection method. The detection kit provided by the invention is high in practicability, capable of realizing high-throughput operation, capable of saving the detection cost and convenient to use. Clinical detection results show that the indirect ELISA detection method established by taking the N protein as the coating antigen is strong in specificity, and lays a foundation for continuously researching the PRRSV-1.



21: 2022/09736. 22: 2022/08/31. 43: 2022/10/03  
51: E01D  
71: CHINA TIESIJU CIVIL ENGINEERING GROUP CO., LTD, THE FIRST ENGINEERING CO., LTD. OF CTCE GROUP

72: HU, Zhukui, HE, Hongsheng, RUI, Shicai, ZHANG, Bo, ZHANG, Guangxue, ZHANG, Jiasheng, WANG, Anhui, WANG, Ying

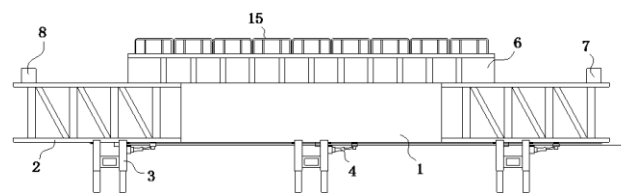
33: CN 31: 202110540620.4 32: 2021-05-18

**54: DOUBLE-SPAN MOVABLE FORMWORK OF LOWER BEARING TYPE AND CONSTRUCTION METHOD**

00: -

The present invention discloses a double-span movable formwork of lower bearing type and a

construction method. The formwork includes a main girder, a main bridging beam, a bracket, a propelling flat wagon, a cross beam, an outer shuttering, a front hanging beam and a rear hanging beam. Two main girders are provided, the main girders are connected through a plurality of pairs of cross beams, and the cross beams are in group in pairs with bottom ends thereof connected by bolts. The main bridging beam is fixedly connected to either end of the main girder, three pairs of brackets are provided at bottoms of the main girder and of the main bridging beam at either end of the main girder respectively, for supporting the main girder and the main bridging beam, each pair of brackets are connected through a connecting plate, and the propelling flat wagon is slidably connected to the top of the respective bracket. According to the present invention, through the arrangement of a close jointing apparatus, after the two parts of the outer shuttering are closed by the hydraulic device on the propelling flat wagon, the two cross beams of the same pair can be simultaneously fixed, and the top of the close jointing apparatus is embedded into the joint of the outer shuttering, so that a gap at the joint cannot be communicated up and down, preventing continuous leakage and improving safety.



21: 2022/09767. 22: 2022/09/01. 43: 2022/10/25  
51: F41H

71: NANTONG UNIVERSITY

72: CHEN, Hongxia, CAO, Haijian, YAN, Xuefeng, MA, Yan, HUANG, Xiaomei

33: CN 31: 202111395807.6 32: 2021-11-23

**54: BULLET-PROOF AND STAB-PROOF MATERIAL**

00: -

Provided is a bullet-proof and stab-proof material.

The bullet-proof and stab-proof material includes an impact-resistant layer and a cutting-resistant, bullet-proof and energy-absorbing layer, where the impact-resistant layer is one or more Kevlar fiber-based unidirectional (UD) sheets; and the cutting-resistant, bullet-proof and energy-absorbing layer is formed by stacking a plurality of the Kevlar fiber-based UD

sheets and/or a plurality of ultra-high-molecular-weight polyethylene (UHMWPE) fiber-based UD sheets, or by stacking a plurality of Kevlar/UHMWPE hybrid fiber-based UD sheets.

21: 2022/09768. 22: 2022/09/01. 43: 2022/10/25  
51: C05G

71: Guizhou Institute of Soil and Fertilizer  
72: HUANG, Xingcheng, ZHANG, Yarong, ZHU, Huaqing, YANG, Yehua, LI, Yu, LIU, Yanling, XIONG, Han, JIANG, Taiming

33: CN 31: 202210435088.4 32: 2022-04-24

**54: ROOT-PROMOTING TYPE SOIL  
CONDITIONER AND PREPARATION METHOD  
THEREOF**

00: -

The present disclosure belongs to the technical field of planting and discloses a root-promoting type soil conditioner and a preparation method thereof. The root-promoting type soil conditioner comprises the following components in parts by weight: 20-30 parts of biomass charcoal, 20-30 parts of coconut bran, 20-30 parts of edible fungi residue, 0-3 parts of chitosan, 1-3 parts of potassium fulvic acid, 0-3 parts of polyacrylamide, 0.3-0.7 part of Bacillus subtilis, 0.3-0.7 part of potassium dihydrogen phosphate, 0.01-0.1 part of sodium indolebutyrate, 0-2 parts alginic acid, 0.01-0.1 part of  $\gamma$ -polyglutamic acid, 0-0.5 part of stevioside, and 20-30 parts of water. The root-promoting type soil conditioner of the present disclosure can improve the physical structure of the soil rapidly, for example, significantly changing the soil aggregate structure, increasing soil porosity, etc. It can promote the root growth of *Actinidia Chinensis*, increase the root weight and total root length, and improve the yield.

21: 2022/09769. 22: 2022/09/01. 43: 2022/10/25  
51: G06F

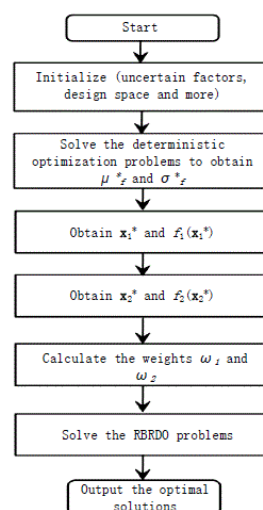
71: Shenyang University of Technology  
72: REN, Ziyang, ZHANG, Dianhai, SUN, Yuan, CHEN, Dezhi, ZHANG, Yanli

**54: OPTIMIZATION DESIGN METHOD FOR  
ELECTRICAL EQUIPMENT CONSIDERING BOTH  
ROBUSTNESS AND RELIABILITY**

00: -

The invention relates to the technical field of optimization design of electrical equipment under the influence of uncertain factors, and specifically to an optimization design method for electrical equipment

considering both robustness and reliability, which considers fully uncertain factors in the optimization design of electrical equipment. Wherein, the robustness is ensured by establishing a new objective function based on the original objective function, the first sub-function is the ratio of the objective function to the objective function value obtained from its deterministic optimization problem, and the second sub-function is the ratio of the standard deviation function of the objective function to the standard deviation value of the objective function corresponding to the optimal solution under deterministic optimization. The system reliability index is reflected by satisfying the constraint conditions for the optimization problems under a certain probability.



21: 2022/09770. 22: 2022/09/01. 43: 2022/10/25  
51: G06K

71: University of Electronic Science and Technology of China

72: Yun Zhang, Zhaowei Du, Yongguo Liu, Jiajing Zhu, Qiaoqin Li

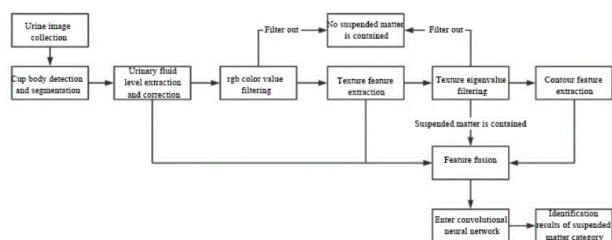
33: CN 31: 202210859399.3 32: 2022-07-21

**54: A METHOD AND DEVICE FOR IDENTIFYING  
SUSPENDED MATTER IN URINARY DIAGNOSIS  
OF TIBETAN MEDICINE**

00: -

The invention discloses a method and device for identifying suspended matter in urine diagnosis of Tibetan medicine, which is applied to the field of image processing. Aiming at solving the existing problem of poor interpretability of the identification results of urine suspended matter, the invention firstly proposes the methods of cup body detection

and segmentation and fluid level extraction and correction. It enables the model only focuses on the middle region of the image, which reduces the sliding scanning operation of the invalid region and improves the efficiency of the model. Secondly, in the fluid level area, the rgb color value is filtered by interval sampling, and the texture feature value is filtered by sub-region partition. It can efficiently make a pre-judgement on whether there is suspended matter. The process of most images entering convolutional neural network for operation is reduced. Finally, by RGB interval sampling and defining the evaluation parameters of suspended matter disturbance, it expresses the judgment process of suspended matter and improves the interpretability of the model.



21: 2022/09771. 22: 2022/09/01. 43: 2022/10/25

51: A01G

71: Heilongjiang Academy of Agricultural Machinery Sciences

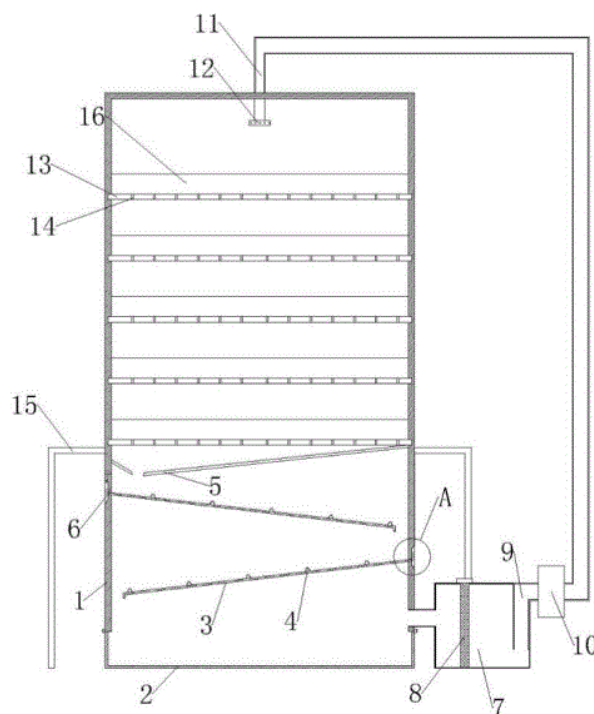
72: LI Jing, ZHAO Zhongliang, HAN Xiuhai, YAN Jingfeng, REN Hongchen, YIN Yuan, SUN Daming, YU Lei, XING Zhanqiang, SONG Wei, ZHANG Minghui, LI Jinshi, JIN Dehai, ZHENG Wei, TIAN Ye, DU Chuandong

#### 54: NUTRITIONAL FORTIFICATION DEVICE FOR SPROUT FOOD WITH RECYCLABLE WATER

00: -

The invention discloses a nutritional fortification device for sprout food with recyclable water, which comprises a spray assembly communicated with the top of a germination accelerating box, a supporting piece detachably connected in the germination accelerating box, a plurality of sand filters positioned below the supporting piece, and a plurality of sand filters arranged in the germination accelerating box from top to bottom in turn, one end of the sand filter is detachably connected with the inner wall of the germination accelerating box, and a gap exists between the other end of the sand filter and the inner wall of the germination accelerating box, and

the upper sand filter is connected with the top end of another sand filter adjacent to the lower one through the gap, and several sand filters cooperate with the inner wall of the germination accelerating box to form a sand washing channel; the sand collecting box is detachably connected to that bottom end of the germination accelerating box, and the sand collecting box is communicated with the inside of the germination accelerating box; the filter assembly is communicated with the germination accelerating box, the height of the top of the sand collecting box is lower than that of the water inlet end of the filter assembly, and the side of the filter assembly far away from the germination accelerating box is communicated with the spray assembly. The invention reduces the replacement frequency of the filter device, prolongs the service life of the filter screen, and improves the purification and filtration effect.



21: 2022/09772. 22: 2022/09/01. 43: 2022/10/25

51: A23K

71: Zhejiang Vegamax Bio-technology Co., Ltd.

72: LIU, Jinsong, LI, Hui, YANG, Biao, KONG, Suifei, NI, Zhibing

#### 54: ACID PLUS ESSENTIAL OIL COMPOUND PREPARATION AND PREPARATION METHOD THEREOF

00: -



The present disclosure discloses an acid plus essential oil compound preparation and a preparation method thereof. The acid plus essential oil compound preparation comprise the following raw materials in percentage by mass: organic acid raw materials: 20-30% of sorbic acid, 10-15% of citric acid, 8-15% of malic acid and 5-10% of fumaric acid; plant essential oil raw materials: 3-5% of any one of cinnamyl aldehyde, vanillin and carvacrol, and 5-8% of thymol; an adsorbent: 3-6% of any one of silicon dioxide, white carbon black or vermiculite or sepiolite; an adhesive: 4-6% of any one or more of dextrin lactose, gelatinized starch and cellulose; a lubricant: 1-3% of any one of white carbon black, talcum powder and magnesium stearate; a coating material: 10-20% of hydrogenated fat.

21: 2022/09774. 22: 2022/09/01. 43: 2022/10/25  
51: G06T

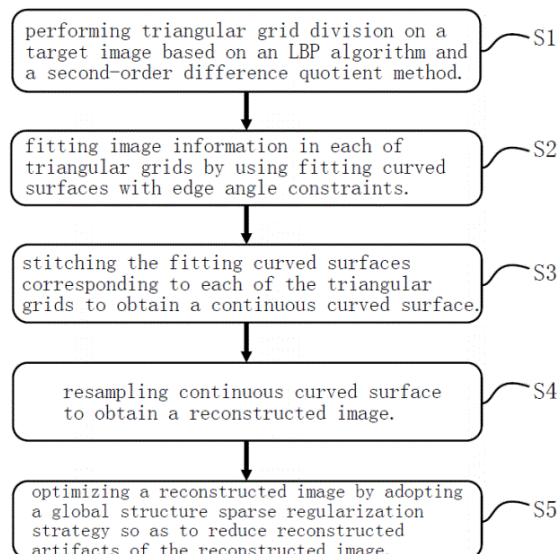
71: Shandong Institute of Commerce and Technology

72: YE, Caizeng, WANG, Jun, ZHU, Xugang

**54: CURVED SURFACE FITTING IMAGE MAGNIFICATION METHOD AND SYSTEM BASED ON TRIANGULAR GRID DIVISION**

00: -

The present invention relates to a curved surface fitting image magnification method and system based on triangular grid division, and belongs to the technical field of image processing. The method comprises: performing triangular grid division on a target image based on an LBP algorithm and a second-order difference quotient method; fitting image information in each of triangular grids by using fitting curved surfaces with edge angle constraints; stitching the fitting curved surfaces corresponding to each of the triangular grids to obtain a continuous curved surface; resampling the continuous curved surface to obtain a reconstructed image; and optimizing the reconstructed image by adopting a global structure sparse regularization strategy to reduce reconstructed artifacts of the reconstructed image. The present invention can improve the sharpness of the edges and textures of the magnified image and the quality of the magnified reconstructed image.



21: 2022/09775. 22: 2022/09/01. 43: 2022/10/25  
51: A01G

71: Crop Institute of Jiangxi Academy of Agricultural Sciences

72: Wu Wensheng, lan mengjiao, Sun Mingzhu, Xiao Manqiu, Ge Ruihua, Pan Hao, Hou Longying, Wu Xinming

**54: HORIZONTAL VINE-SOIL-PRESSING PLANTING METHOD OF EDIBLE SWEET POTATO WITH TWO CROPS A YEAR BASED ON AUTUMN SEEDLING OVERWINTERING METHOD**

00: -

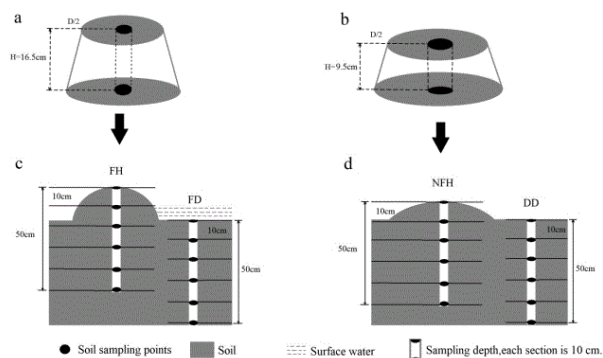
The invention discloses a horizontal vine-soil-pressing planting method of edible sweet potato with two crops a year based on autumn seedling overwintering method, which comprises the following steps: S1, selecting excellent varieties; S2, strictly selecting healthy seedlings: from September to October of the first year, introducing virus-free seedlings or healthy field seedlings; S3, double-film covering overwintering; S4, deep ploughing and sunning the field in winter; S5, early planting in spring; S6, finely managing the field and harvesting and marketing as early as possible; S7, picking vines for replanting autumn potatoes: selecting the stem-end seedlings with strong growth in the field as the second crop seedlings before the first crop sweet potatoes are harvested; the second crop seedlings are planted from the middle-late of July to the middle of August, and harvesting in batches from early October to early December; and S8, overwintering breeding of autumn vines. The invention can realize

the cultivation of edible sweet potatoes with two crops a year, meet the market demand of fresh sweet potatoes and improve the planting benefit.

21: 2022/09776. 22: 2022/09/01. 43: 2022/10/25  
 51: G01N  
 71: Qinghai University  
 72: Wu Guiling

**54: A METHOD FOR STUDYING THE MECHANISM OF SPATIAL HETEROGENEITY OF MICROHABITATS IN ALPINE MARSH WETLAND**

00: -  
 The invention provides a method for studying a mechanism of space heterogeneity of a microhabitat of a high-cold marsh wetland, and relates to the technical field of environmental engineering. The method for researching the space heterogeneity mechanism of the alpine marsh wetland microhabitat comprises the following steps: S1. Plot design 1) Three typical alpine marsh wetland plots with similar geographical conditions were selected, covering an area of 1 × 106 m<sup>2</sup>, and the same sampling procedure was carried out in two other alpine marsh wetlands at a distance of at least 5 km. The study of this method shows that the existence of thawing hill increases the spatial heterogeneity of microhabitat, promotes the plant diversity and soil fertility of Kobresia tibetica community, and with the deepening of soil, the difference of soil nutrients between wetland hill-depression and surrounding alpine meadow gradually decreases, so that the pattern of "fertile island" is formed in the hill-depression microhabitat of alpine marsh wetland. These results are helpful to improve people's understanding of the protection and restoration of alpine marsh wetland ecosystem.



21: 2022/09804. 22: 2022/09/02. 43: 2022/10/25

51: G01N  
 71: Ocean University of China, Northwest Institute of Plateau Biology, Chinese Academy of Sciences  
 72: SUN, Jiachen, LUO, Caiyun, ZHAO, Liang, ZHANG, Yukun, ZUO, Chao, PAN, Sichen, LI, Qi, CHEN, Dongdong, HE, Fuquan, ZHANG, Li, SHU, Min, HUO, Lili, KANG, Bin, MA, Shisheng, CHAO, Le, CHEN, Xin

**54: METHOD FOR EXPLORING MIGRATION AND TRANSFORMATION OF HEAVY METALS IN MULTIMEDIA ENVIRONMENT**

00: -  
 The present application provides a method for exploring the migration and transformation of heavy metals in a multimedia environment. Accurate monitoring and analysis on the migration and transformation of heavy metals in a multimedia environment can be achieved by determination of sampling sites, determination of sampling types, analysis of samples and data analysis.

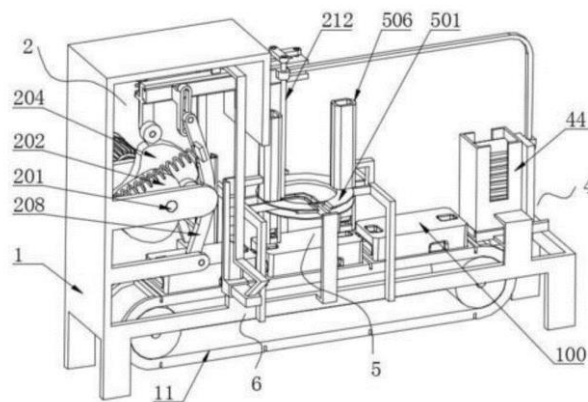


21: 2022/09805. 22: 2022/09/02. 43: 2022/10/25  
 51: G01J  
 71: Quanzhou Institute of Equipment Manufacturing  
 72: HUANG Huiling, HAN Jun

**54: DETECTION DEVICE AND DETECTION METHOD FOR DETECTING DISTRIBUTION UNIFORMITY OF TRANSPARENT MATERIALS**

00: -  
 The invention discloses a detection device for detecting distribution uniformity of photosensitive composite materials, which comprises a shading box, a photoelectric detection device for detecting the light transmittance of photosensitive composite materials, and a controller for processing and calculating signals transmitted by the photoelectric detection device; the photoelectric detection device comprises a light source, a signal processing unit and a plurality of photodetectors, wherein the light source is movably installed in the shading box, all photodetectors are installed at the bottom of the shading box, and all photodetectors are in the light source irradiation range of the light source; wherein,

the controller has a storage unit storing a minimum voltage threshold and a maximum voltage threshold; in this way, the photosensitive composite material can be detected, and the detection operation is simple. The invention also provides a method for detecting distribution uniformity of the photosensitive composite material.



21: 2022/09806. 22: 2022/09/02. 43: 2022/10/25  
51: H05K  
71: ANQING NORMAL UNIVERSITY  
72: CHEN Chunsheng, AI Liefu, HU Langtao, CHEN Jian, WANG Lingfang

#### 54: COMPONENTS ASSEMBLING DEVICE FOR COMPUTER MAINBOARD

00: -

The application discloses a components assembling device for computer mainboard, and specifically belongs to the field of computers technology, comprising a frame, where a conveying belt is arranged at the bottom of the frame, and a driving mechanism, a third assembling mechanism, a second assembling mechanism and a first assembling mechanism are sequentially arranged above the conveying belt; the driving mechanism comprises a main shaft, two ends of the main shaft are rotationally connected with the frame, a first cam and a second cam are fixedly connected on the main shaft, the first cam is provided with a first convex part, according to the application, through the arrangement of the driving mechanism, the first assembling mechanism, the second assembling mechanism and the third assembling mechanism, the first movable plate moves up and down, the second movable plate moves up from top to bottom and move around, and the movement path along the three sides of an arch/ a rectangle of the long rod and the cross pressing block, the first convex part and the second cam rotate for one circle, so that the assembly of the main plate, the first port, the second port and the third port which are positioned at different positions can be completed simultaneously, and it is more convenient when using.

21: 2022/09807. 22: 2022/09/02. 43: 2022/10/25  
51: C09K

71: YANGTZE UNIVERSITY

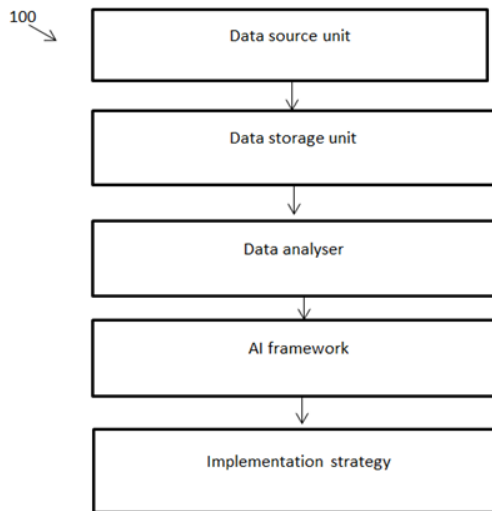
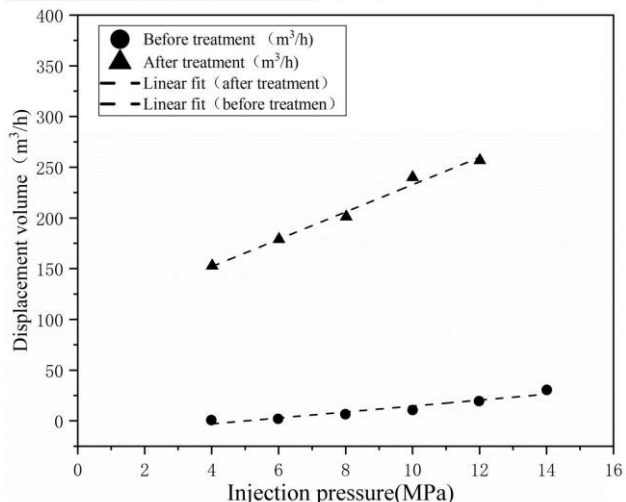
72: SHE, Yuehui, ZHANG, Fan, FENG, Qing, LI, Xiaonan, LI, Shengsheng

#### 54: METHOD FOR REDUCING PRESSURE AND INCREASING INJECTION BY CONTINUOUS OPERATION SYSTEM OF BIOLOGICAL ACID ACIDIFICATION AND NANO COATING

00: -

Disclosed is a method for reducing pressure and increasing injection by continuous operation system of biological acid acidification and nano coating, specifically including composition and preparation method of biological acidizing agent and nano coating agent. The method for reducing pressure and increasing injection by continuous operation system of biological acid acidification and nano coating of the present disclosure is able to effectively dredge the stratum water flow channel, reduce the water flow resistance, and achieve the effect of high-efficiency pressure reduction and injection increase of the water injection well.

Equation	$y = a + b \cdot x$	Equation	$y = a + b \cdot x$
Plot	After treatment	Plot	Before treatment
Weight	No Weighting	Weight	No Weighting
Intercept	$98.09156 \pm 7.23441$	Intercept	$-14.69435 \pm 4.24032$
Slope	$13.47176 \pm 0.8515$	Slope	$2.92444 \pm 0.44063$
Residual Sum of Squares	86.745	Residual Sum of Squares	54.51067
Pearson's r	0.99406	Pearson's r	0.95747
R-Square (COD)	0.98816	R-Square (COD)	0.91675
Adj. R-Square	0.98421	Adj. R-Square	0.89594



21: 2022/09817. 22: 2022/09/02. 43: 2022/11/03  
 51: G16H  
 71: Prof. Arun Kumar Ray, Kalinga Institute of Industrial Technology (KIIT), Prof. Sasmita Rani Samanta, Dr. Pradeep Kumar Mallick, Dr. Debasish Pahi

72: Prof. Sasmita Rani Samanta, Prof. Arun Kumar Ray, Dr. Pradeep Kumar Mallick, Dr. Debasish Pahi  
**54: LANGUAGE BARRIER IN SCHOOL EDUCATION OF INDIGENOUS STUDENTS AS PER NATIONAL EDUCATION POLICY 2020**

00: -  
 The present invention relates to novel method (100) for Language barrier in School education of indigenous students as per National Education Policy 2020. The method (100) comprising of data source unit configured to provide questionnaire for conducting survey, a data storage unit configured to stored data, a data analyzer examine the store data, an AI-based frameworks configured to measure psychological characteristics, an Implementation strategy configured to develop guidelines, policies, and action plans to integrate native language with regional, national, and worldwide languages. The method (100) has identified the necessary policy modifications for schools to enable tribal students to learn languages and seamlessly move from their native tongue to regional languages and beyond.

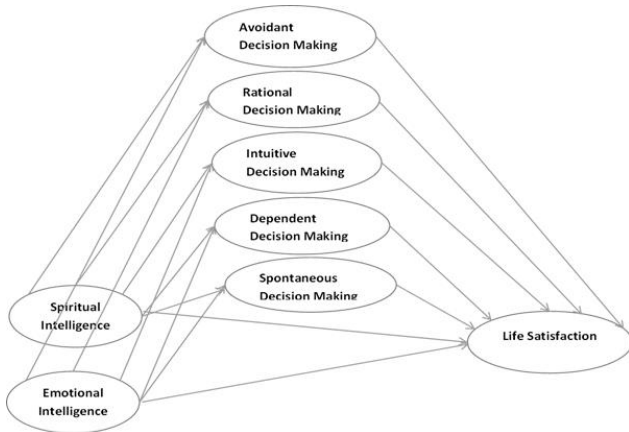
21: 2022/09818. 22: 2022/09/02. 43: 2022/11/03  
 51: G06Q

71: Kalinga Institute of Industrial Technology (KIIT), Prof. Sasmita Rani Samanta, Dr. Jyotirnanjan Gochhayat

72: Prof. Sasmita Rani Samanta, Dr. Jyotirnanjan Gochhayat

**54: IMPACT OF SPIRITUAL INTELLIGENCE AND EMOTIONAL INTELLIGENCE ON DECISION MAKING AND LIFE SATISFACTION**

00: -  
 The present invention relates to the study explored the influence of Spiritual Intelligence and emotional intelligence over Decision Making and Life satisfaction. It uses extant validated scale as the instrument by the help of structural equation modeling to test the proposed model. The study finds that spiritual intelligence and emotional intelligence have significant impact on three styles of decision making and life satisfaction. The novelty of research is that both emotional and spiritual intelligence can be developed to have better decision making and better life satisfaction. Moreover, the findings of the study can be useful to design curriculum that can in turn develop emotional and spiritual awareness among students, on the professional side training sessions with spiritual practices consequently reducing stress to help in better decision making and better life satisfaction.



21: 2022/09860. 22: 2022/09/05. 43: 2022/10/27  
51: A61K; C12N; A61P

71: LANZHOU VETERINARY RESEARCH  
INSTITUTE, CHINESE ACADEMY OF  
AGRICULTURAL SCIENCES

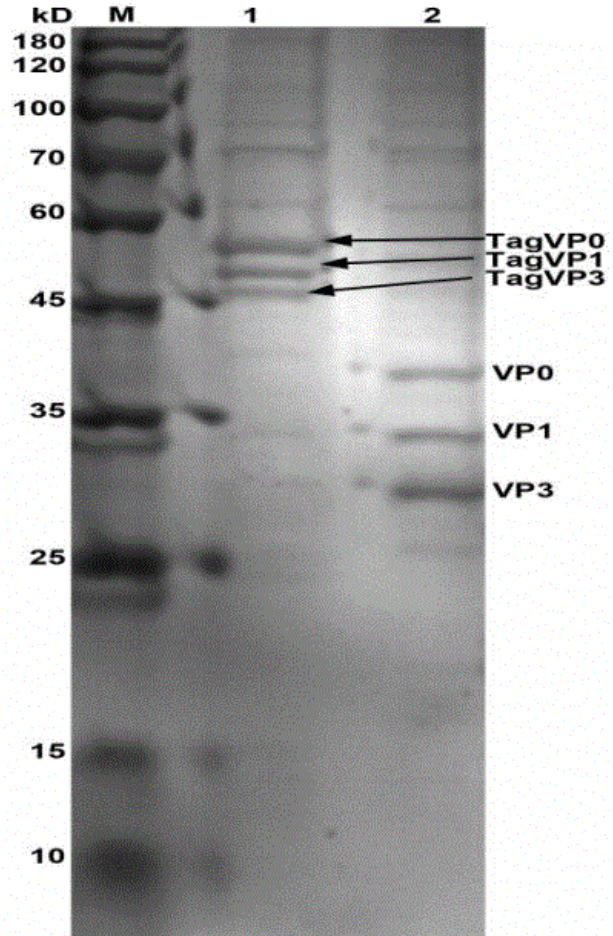
72: GUO, Huichen, SUN, Shiqi, DONG, Hu, MU,  
Suyu, BAI, Manyuan, HE, Rongze, ZHANG, Yun,  
WU, Jin'en, DING, Yaozhong, FENG, Xia, YIN,  
Shuanghui

33: CN 31: 202111641645.X 32: 2021-12-29

**54: VIRUS-LIKE PARTICLE (VLP), AND  
PREPARATION METHOD AND USE THEREOF**

00: -

The present disclosure provides a virus-like particle (VLP), and a preparation method and a use thereof, and belongs to the technical fields of agricultural science and animal husbandry and veterinary science. In the present disclosure, a small ubiquitin-like modifier (SUMO) is used as a tag protein to promote the correct folding of viral structural proteins VP0, VP1, and VP3 and ensure the structural stability of the proteins, the structural proteins are abundantly expressed, and then the three structural proteins are subjected to in vitro self-assembly to obtain a large number of VLPs with similar properties to natural viruses. According to immunogenicity test results, the VLP prepared by the present disclosure has high immunogenicity, and can be used as a reserve vaccine for preventing and controlling the spread of swine vesicular disease virus (SVDV) or foot-and-mouth disease virus (FMDV).



21: 2022/09861. 22: 2022/09/05. 43: 2022/10/27  
51: C12N; C12R

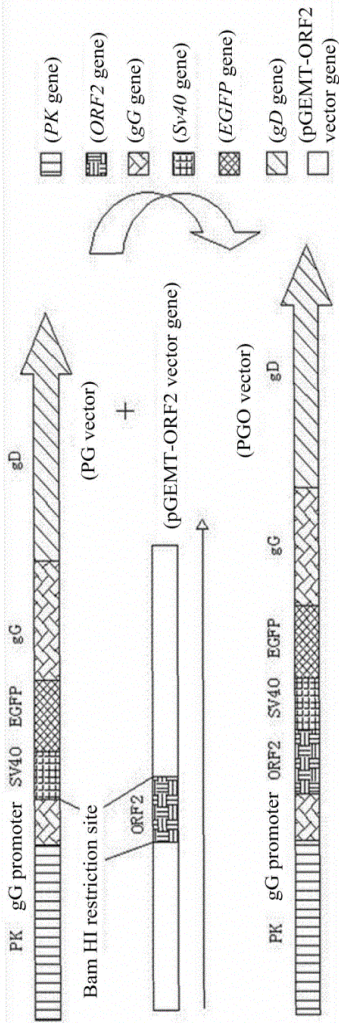
71: Henan Agricultural University

72: ZHENG, Lanlan, JIA, Yunfei, CHEN, Hongying,  
WEI, Zhanyong, ZHU, Qianlei

**54: PREPARATION METHOD OF RECOMBINANT  
PORCINE PSEUDORABIES VIRUS (PRV) STRAIN  
EXPRESSING PORCINE CIRCOVIRUS TYPE II  
(PCV2) ORF2 GENE**

00: -

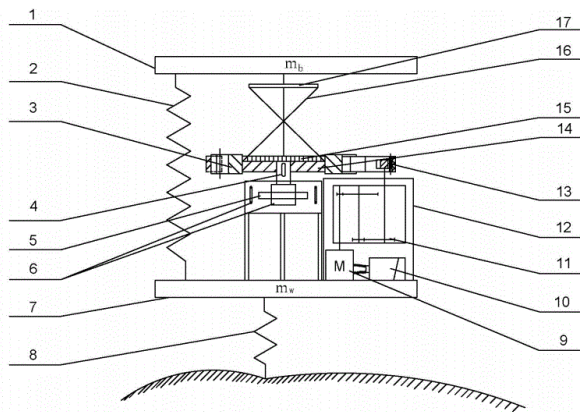
The present disclosure provides a recombinant porcine pseudorabies virus (PRV) strain expressing a porcine circovirus type II (PCV2) ORF2 gene, and a preparation method thereof.



21: 2022/09867. 22: 2022/09/05. 43: 2022/10/27  
 51: B60G; B60K  
 71: QINGDAO UNIVERSITY OF TECHNOLOGY  
 72: LIU, Jianze, WEI, Yunling, LI, Xiaogang, LI, Yang, QU, Zhaole, LIU, Jiang  
 33: CN 31: 202111310461.5 32: 2021-11-05  
**54: VEHICLE ENERGY-FEEDING TYPE INTELLIGENT SUSPENSION BASED ON 2-DOF PARALLEL MECHANISM**

00: -  
 The present invention provides a vehicle energy-feeding type intelligent suspension based on a 2-DOF parallel mechanism. The vehicle energy-feeding type intelligent suspension includes a suspension spring, connecting rods, an upper moving platform, a tire, a sprung module, an unsprung module, a support box, and an energy regeneration device. The energy regeneration device includes first wedged belt wheels, a second

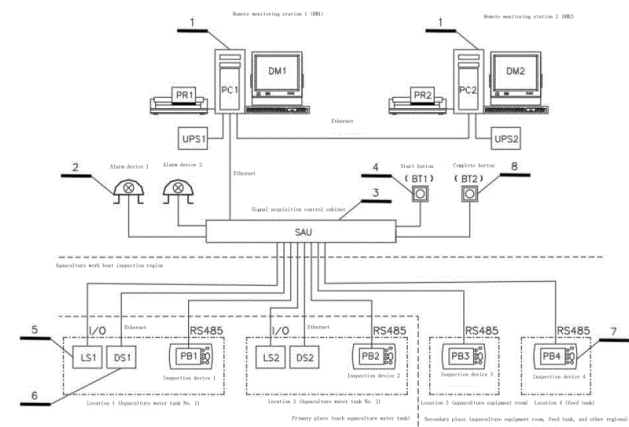
wedged belt wheel, a lower rotating platform, a wedged belt, a transmission shaft, and a power generation device. The first wedged belt wheels are fixed to both sides of the lower rotating platform and are connected to the power generation device downward through the transmission shaft. The intelligent suspension is simple in structure, enhanced in support stiffness, reduced in vibration, and capable of recovering energy efficiently, increases the energy conversion efficiency of conventional energy-feeding devices, and improves the riding comfort of vehicles.



21: 2022/09868. 22: 2022/09/05. 43: 2022/10/27  
 51: G07C; G08B; H04N  
 71: Fishery Machinery and Instrument Research Institute, Chinese Academy of Fishery Sciences  
 72: LI, Jianxun, WANG, Jing, CUI, Mingchao  
 33: CN 31: 202210145981.3 32: 2022-02-17  
**54: SAFETY INSPECTION SYSTEM AND METHOD FOR AQUACULTURE WORK BOAT OPERATING PERSONNEL**

00: -  
 The present invention discloses a safety inspection system and method for aquaculture work boat operating personnel, and aims to solve the following problems: An existing aquaculture work boat inspection method has high labor intensity and high safety risk for operating personnel; and inspection dangers are not handled timely. The key point of the technical solution is as follows: The safety inspection system includes a remote monitoring station, a signal acquisition control cabinet, a start button, an alarm device, an inspection device, a video camera, a watertight door limiting switch, and a complete button; the remote monitoring station is connected to the signal acquisition control cabinet; and the signal

acquisition control cabinet is connected to the start button, the alarm device, the inspection device, the video camera, the watertight door limiting switch, and the complete button.

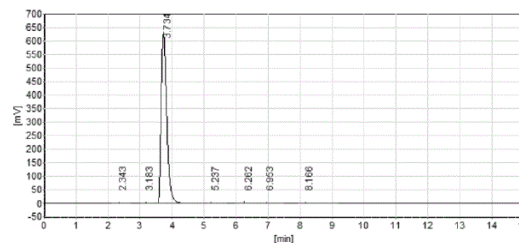


21: 2022/09869. 22: 2022/09/05. 43: 2022/10/27  
51: C07D

71: Shandong Holly Pharmaceutical Co.,Ltd  
72: LI, Lanhua, QIU, Yuenan, LIU, Zhiyuan, WU, Huaqiang, XUE, Yanjun, SUN, Kuankuan, GAI, Shuqiang

**54: METHOD FOR PREPARING DIMETHOXYDOPA**

00: -  
Disclosed is a method for preparing dimethoxydopa. The preparation method includes the following steps: mixing veratraldehyde, hydantoin and ammonia water for a condensation reaction to obtain a wet product of intermediate I; allowing the wet product of intermediate I and hydrogen for a hydrogenation and reduction reaction under the conditions of caustic soda liquid and catalyst to obtain a solution of intermediate II; allowing the solution of intermediate II for a hydrolysis reaction under the condition of caustic soda liquid to obtain a solution of intermediate III; and allowing the solution of intermediate III for acidification and crystallization successively to obtain dimethoxydopa. The synthetic method of the present invention does not require separating the product after the condensation reaction is completed, and the obtained wet product of intermediate I can be used for subsequent reactions directly to avoid unnecessary loss, and the yield of the target product is high.

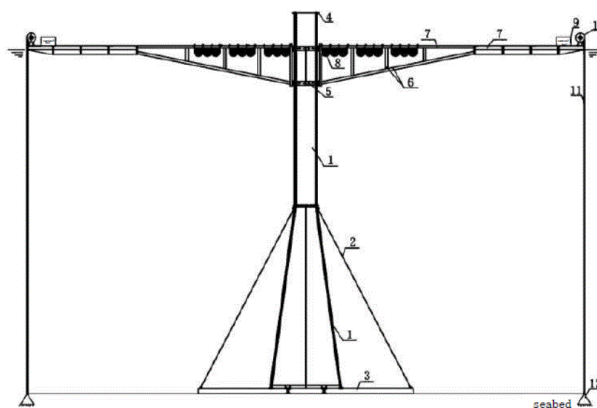


21: 2022/09870. 22: 2022/09/05. 43: 2022/10/27  
51: A01K

71: Fishery Machinery and Instrument Research Institute, Chinese Academy of Fishery Sciences  
72: WANG, Jing, LIU, Ping, LIU, Hwei

**54: HIGH-STRENGTH, TYPHOON-RESISTANT, AUTOMATED MARINE PASTURE BREEDING PLATFORM**

00: -  
The present invention relates to a high-strength, typhoon-resistant, automated marine pasture breeding platform comprising a central support column, a floating support structure, and an automatic retracting mechanism; wherein the central support column is erected on the seabed, and the top extends out of the sea surface; the floating support structure is sleeved on the central support column and can be locked and fastened with the central post; the automatic retracting mechanism is arranged around the floating support structure, and is connected to a rope fixing device on the seabed via a rope on the automatic retracting winch; a netting is fixedly arranged on the top of the floating support structure and on the rope. The present invention addresses the need in the marine fish farming industry to provide a high-strength, typhoon-resistant, mechanized, automated, humanized breeding net cage.



21: 2022/09871. 22: 2022/09/05. 43: 2022/10/27  
51: A01K

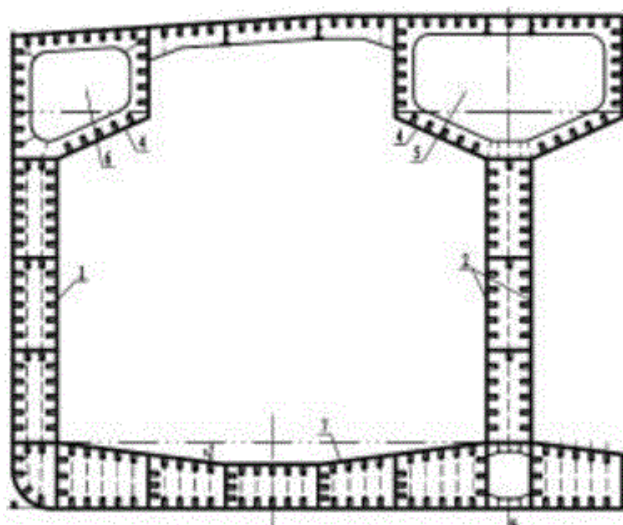
71: Fishery Machinery and Instrument Research  
Institute, Chinese Academy of Fishery Sciences

72: WANG, Jing, CUI, Mingchao, ZHAO, Xinying

**54: SHIP BREEDING TANK WITH OPTIMIZED  
STRUCTURE FOR HIGH SPACE UTILIZATION**

00: -

The present invention relates to a ship breeding tank with optimized structure for high space utilization, wherein a breeding tank is symmetrically arranged at left and right broadsides of the ship, the breeding tank comprises: a pair of transverse double-layer bulkheads, a double-layer funnel-type inner bottom bulkhead wall, a longitudinal double-layer middle longitudinal bulkhead provided along a central axis of the ship, and a longitudinal double-layer side longitudinal wall located at a broadside of the ship; the reinforcing ribs of the transverse double-layer bulkhead, the double-layer funnel type inner bottom bulkhead, the longitudinal double-layer middle longitudinal bulkhead, and the longitudinal double-layer side longitudinal bulkhead are installed only to the inner space of the respective double-layer bulkhead.



21: 2022/09873. 22: 2022/09/05. 43: 2022/10/27  
51: A01K

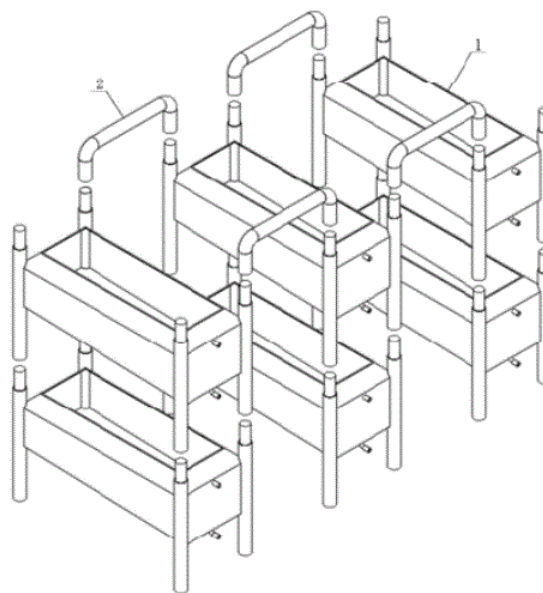
71: Fishery Machinery and Instrument Research  
Institute, Chinese Academy of Fishery Sciences  
72: ZHANG, Chuntao, HUANG, Wenyun, ZHANG,  
Yaoming

33: CN 31: 202210133470.X 32: 2022-02-14

**54: TURBOT OFFSHORE THREE-DIMENSIONAL  
AQUACULTURE UNIT**

00: -

The present invention provides a turbot offshore three-dimensional aquaculture unit, including at least two stacked aquaculture unit groups arranged side by side; each stacked aquaculture unit group includes at least two aquaculture units in the same number, and the aquaculture units are stacked along a vertical direction and are detachably connected; and the aquaculture units at tops of two adjacent stacked aquaculture unit groups are connected through two horizontal connectors. The turbot offshore three-dimensional aquaculture unit of the present invention achieves deep and far-sea shipborne intensive and three-dimensional aquaculture, which can breed shallow sea benthic turbot in deep-sea regions, make better use of far-sea resources, and reduce the pressure of offshore aquaculture environmental pollution.



21: 2022/09874. 22: 2022/09/05. 43: 2022/10/27  
51: A61B

71: The Third Affiliated Hospital of Shandong First  
Medical University(Affiliated Hospital of Shandong  
Academy of Medical Sciences)

72: Zhang Xikun, Xu Zhongfa, Li Shancheng, Zhong  
Feng, Wen Lijuan, Wang Jian

33: CN 31: 202220313571.0 32: 2022-02-16

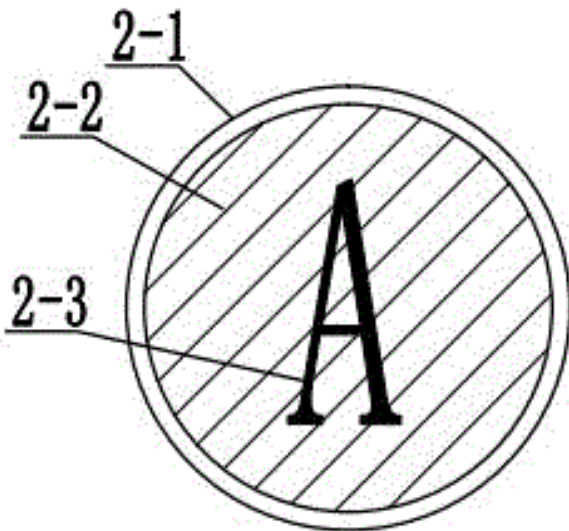
**54: CT GUIDED PUNCTURE POSITIONING GRID  
FOR EASY POSITIONING**

00: -

The utility model discloses a CT-guided puncture  
positioning grid which is easy to position. The CT-  
guided puncture positioning grid comprises two

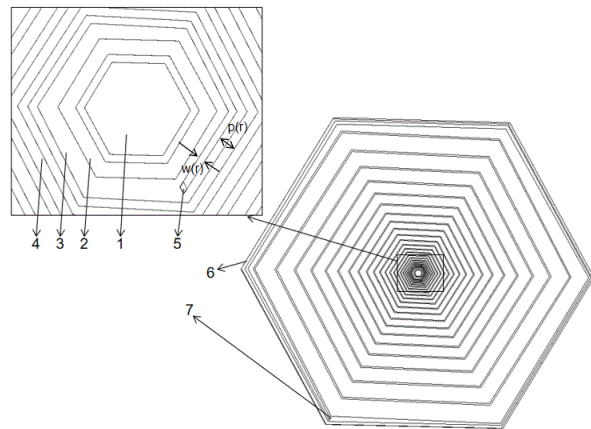


limiting strips and a plurality of CT developing and positioning wires, wherein the plurality of CT developing and positioning wires are arranged between the two limiting strips in parallel, two ends of each CT developing and positioning wire are respectively fixed with the two limiting strips, and a plurality of sections of developing core materials which are sequentially arranged are arranged in the CT developing and positioning wires. The section shape of each section of the developing core material is different, and the surface of the developing positioning wire is marked with a mark corresponding to the section of the developing core material. When the utility model is used, the limit strip is attached to the specific skin of a human body, when CT scanning is carried out, the developing core material is developed in a CT picture, the corresponding position on the positioning grid can be visually read according to the cross section shape displayed by the developing core material, the corresponding identification of the positioning grid can be read according to the position of tumor puncture, and a marking pen is used to make a mark on the skin at the corresponding identification position of the positioning grid. The positioning is more convenient and accurate than the existing positioning grid, and the time is saved.



**54: HELICAL SILICON DRIFT DETECTOR AND DESIGN METHOD THEREOF**

00: -  
 The invention discloses a spiral silicon drift detector, which comprises a matrix, wherein the front surface and the back surface of the matrix are the same regular hexagon and are aligned in parallel; the center of the front surface of the matrix is an anode for collecting electrons; the anode is surrounded by a spiral ring cathode which spirally extends outwards along a hexagonal track; the spiral ring cathode is positioned in a boundary ring at the edge of the matrix; and the back surface of the matrix is a back cathode. The invention also discloses a design method of the spiral silicon drift detector. The detector provided by the invention adopts the hexagonal matrix and the spiral ring cathode, and a uniform voltage gradient can be formed by applying bias on the hexagonal matrix and the spiral ring cathode, so that the electron distribution of an electron drift channel in the silicon substrate is ensured to be uniform, and the detection performance is improved.



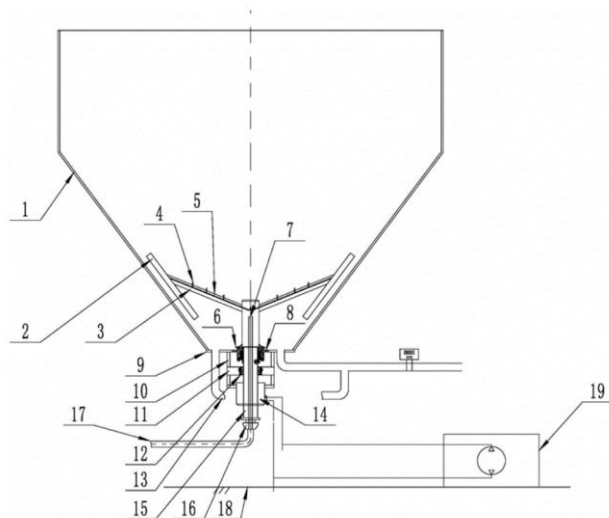
21: 2022/09875. 22: 2022/09/05. 43: 2022/10/27  
 51: G06F  
 71: Ludong University  
 72: Sun Jiexiong, Li Zheng, Li Xiaodan, Cai Xinyi, Tan Zewen, Li Xinqing

21: 2022/09876. 22: 2022/09/05. 43: 2022/10/27  
 51: B01D  
 71: Backfill Engineering Laboratory, Shandong Gold Mining Technology Co., Ltd., Shandong Gold Mining Technology Co., Ltd.  
 72: Zhaojun Qi, Yunpeng Kou, Yuliang Wang, Jianzhe Liu, Xiaodong Jing, Shiqun Xu, Gengjie Zhu, Yuhang Sheng, Jiguang Yang, Zaihai Wu, Zengjia Wang, Guangbo Li, Zepu Song, Jiaren Guo, Laifa Sang, Haibo Jia  
 33: CN 31: 202110781376.0 32: 2021-07-11

#### 54: HIGH-CONCENTRATION FINE FRACTION TAILINGS DEEP CONE THICKENER

00: -

The present invention discloses a high-concentration fine fraction tailings deep cone thickener. A bottom end of a thickener cone cylinder has a horizontally arranged thickener floor. The thickener floor is provided with a central hole, a sealing mechanism is mounted at the central hole, and the thickener floor is further provided with several slurry discharge holes surrounding the central hole. A main shaft is mounted in the sealing mechanism, an upper end of the main shaft is located in the thickener cone cylinder and is connected to a disturbance arm, and an outer end of the disturbance arm is connected to a disturbance scraper; the main shaft has a main shaft central tube, the disturbance arm has a water spray pipe in communication with the main shaft central tube, and the water spray pipe is connected to several slurrying nozzles; and a lower end of the main shaft is located below the thickener cone cylinder, and a power mechanism is connected to an exposed part of the main shaft. A reverse disturbance mechanism driven by power below a tailings bin and a rotary spraying activation process are used, which solves the problem of slurry hardening and wall hanging in the tailing discharging process at a bottom of the thickener, especially a high-concentration fine fraction tailings deep cone thickener, improving a volume utilization rate of the tailings bin on the one hand, and keeping continuous and stable tailings discharging concentration from beginning to end on the other hand.



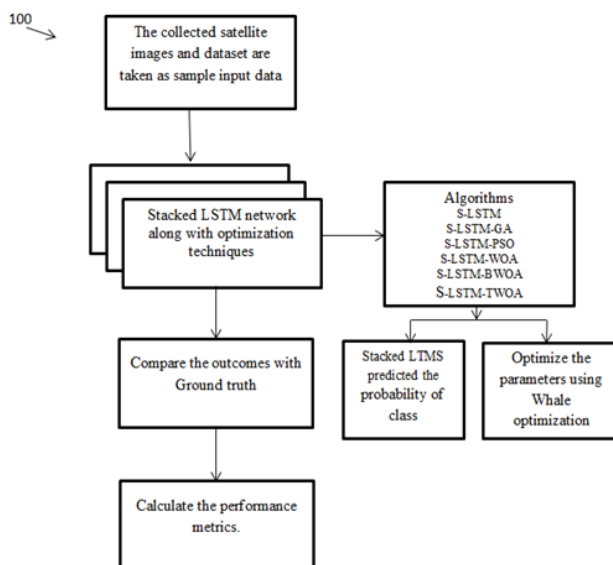
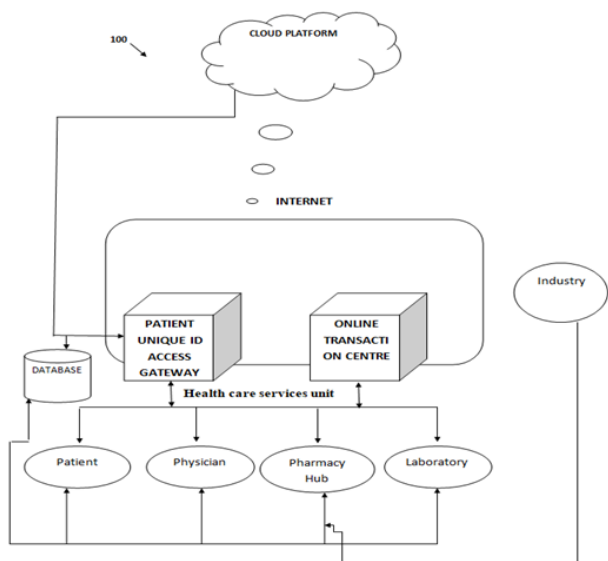
21: 2022/09877. 22: 2022/09/05. 43: 2022/10/27  
51: G16H

71: Dr. Manish Kumar Thimmaraju, Mrs. Divya Pingili, Dr. Sridhar Babu Gummadi, Dr. Raghava Doonaboyina, Dr. Shailee Vijay Tiwari  
72: Dr. Manish Kumar Thimmaraju, Mrs. Divya Pingili, Dr. Sridhar Babu Gummadi, Dr. Raghava Doonaboyina, Dr. Shailee Vijay Tiwari

#### 54: CLOUD BASED INTEGRATION OF HEALTH CARE SERVICES SYSTEM

00: -

The present invention relates to the cloud based integration of health care services system. The system (100) comprises a cloud based platform unit, health services unit, patient unique ID access gateway unit, online transaction centre unit and database unit. The cloud based unit is interconnected with internet and used for data storage. The health services unit is connected with patient unique ID access gateway unit, online transaction centre unit and database unit. The health services unit is configured to generate database of patient. The system (100) is configured to obtain ecofriendly platform, paperless process, help doctors to transfer patient histories easily, disease analytics based on demography and seasonal fluctuations, low-cost drug identification, reminder to patients to refill prescriptions, prevents drug abuse and dependence, identifies candidates for prospective clinical trials, helps pharmaceutical businesses produce demand-based formulations, and applies health insurance policies.



21: 2022/09878. 22: 2022/09/05. 43: 2022/10/27  
 51: G06T  
 71: Kalinga Institute of Industrial Technology (KIIT),  
 Dr. Pradeep Kumar Mallick, Prof. (Dr.) Sasmita Rani  
 Samanta, Dr. Jyotiranjana Gochhayat  
 72: Dr. Pradeep Kumar Mallick, Prof. (Dr.) Sasmita  
 Rani Samanta, Dr. Jyotiranjana Gochhayat

**54: A TUNED WHALE OPTIMIZATION BASED STACKED-LSTM NETWORK FOR DIGITAL IMAGE SEGMENTATION**

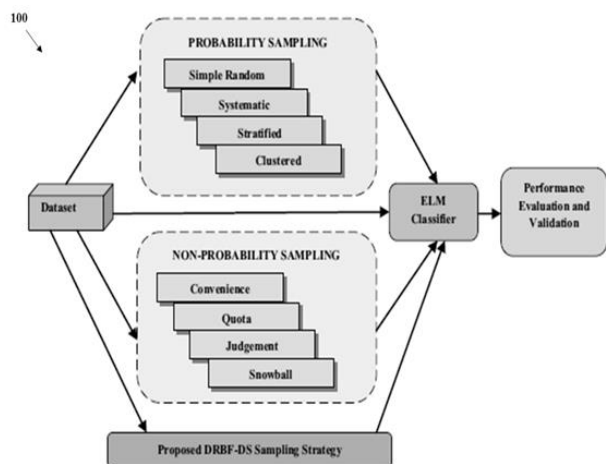
00: -  
 The present invention relates to the tuned whale optimization based stacked-LSTM system for digital image segmentation. This system (100) utilizes the collected images from satellite and BCN 20000 and RVC 2020 datasets. To obtain the system (100), the following steps may be performed: and substituting the training and testing data into the stacked LTMS, and adjusting parameters of the neural network model through a tuned whale optimization algorithm to enable the performance index of the neural network model and to reach a preset condition. The segmented images are compared to manual ground truth images. The developed system has been assessed for rate convergence, speed, and accuracy, compared to GA, PSO, WOA, and BWOA hybrids.

21: 2022/09879. 22: 2022/09/05. 43: 2022/10/27  
 51: G11B  
 71: Kalinga Institute of Industrial Technology (KIIT),  
 Dr. Pradeep Kumar Mallick, Prof. (Dr.) Sasmita Rani  
 Samanta, Dr. Jyotiranjana Gochhayat, Ms.  
 Subhashree Rout  
 72: Dr. Pradeep Kumar Mallick, Prof. (Dr.) Sasmita  
 Rani Samanta, Dr. Jyotiranjana Gochhayat, Ms.  
 Subhashree Rout

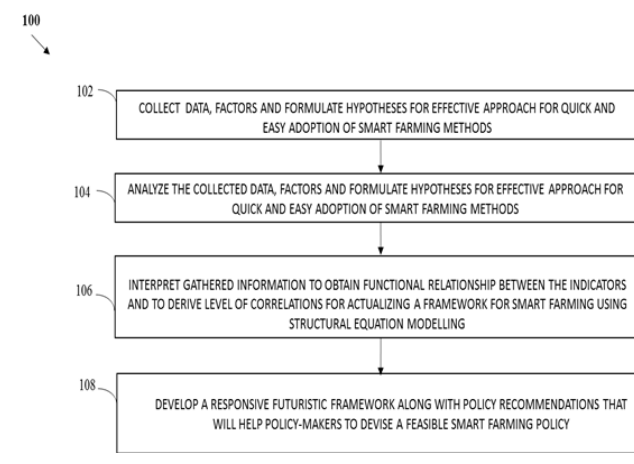
**54: DOUBLE RBF KERNEL-BASED DEEP SAMPLING WITH CNNs TO HANDLE COMPLEX IMBALANCED DATASETS**

00: -  
 The present invention relates a method (100) for double RBF kernel-based deep sampling with CNNs (DRBF-DS) to handle complex imbalanced datasets. The method (100) comprises steps: Initialize setting; rank the whole dataset's features to obtain the minimum and maximum ranks; deep sampling ranked datasets to obtain features of importance; Use CNN techniques to gather the similar features evolved from the above step and those features are ranked; assign a minority class to the majority class when the size of the minority class reaches nearer to the number of instances of the majority class; augment minority class into the original set of minority class at the instances in which the minority class qualifies the ranking condition; compare the efficiency of the DRBF-DS with both the probability and non-probability-based sampling strategies based on Extreme Learning Machine (ELM) classifier along with various performance and

statistical measures, and result output after comparison.



and processing unit. The display unit is configured to provide user interface.



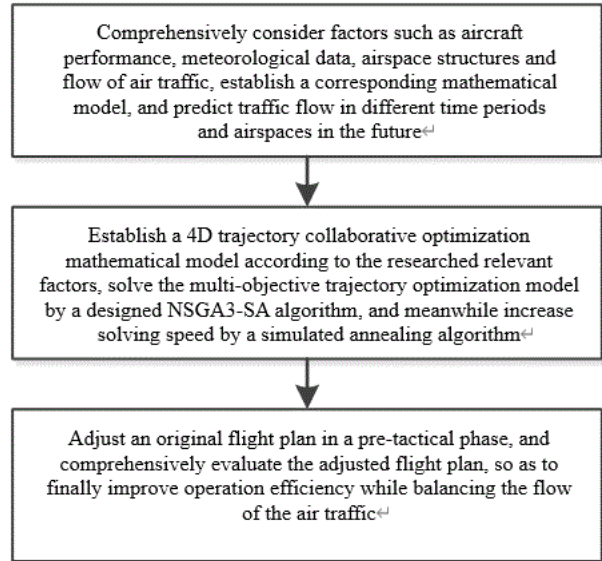
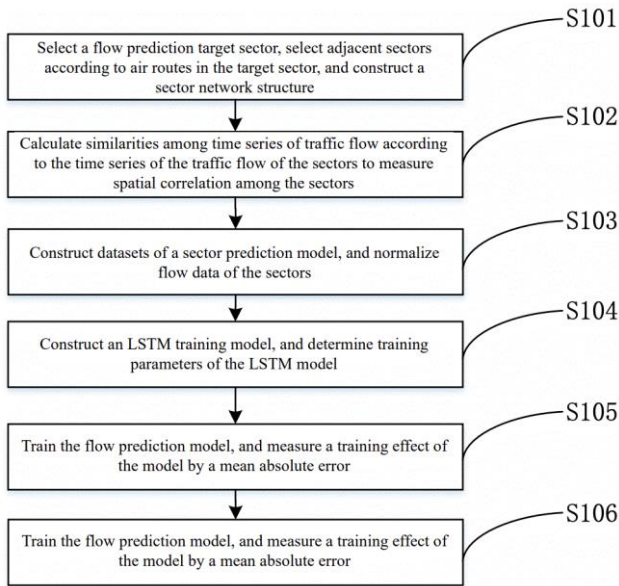
21: 2022/09880. 22: 2022/09/05. 43: 2022/10/27  
 51: H04L  
 71: Kalinga Institute of Industrial Technology (KIIT), Prof. Sasmita Rani Samanta, Prof. Arun Kumar Ray, Dr. Pradeep Kumar Mallick  
 72: Prof. Sasmita Rani Samanta, Prof. Arun Kumar Ray, Dr. Pradeep Kumar Mallick  
**54: AN IOT BASED SMART FARMING MANAGEMENT SYSTEM IN THE STATE OF ODISHA**

00: -  
 The present invention relates to an IoT based smart farming management system (100). The system (100) comprises a memory unit, a processing unit and a display. The memory unit is configured to store machine instruction. The processing unit is operationally connected with the memory unit. the processing unit configured to collect (102) data, factors and formulate hypotheses for effective approach for quick and easy adoption of smart farming methods; analyze (104) the collected data, factors and formulate hypotheses for effective approach for quick and easy adoption of smart farming methods; interpret (106) gathered information to obtain functional relationship between the indicators and to derive level of correlations for actualizing a framework for smart farming using structural equation modelling; develop (108) a responsive futuristic framework along with policy recommendations that will help policy-makers to devise a feasible smart farming policy. The display unit is operationally connected with the memory unit

21: 2022/09882. 22: 2022/09/05. 43: 2022/10/27  
 51: E04G  
 71: Nanjing University of Aeronautics and Astronautics

72: Honghai Zhang, Weikai Song, Junqiang Wan, Gang Zhong, Hao Liu  
**54: METHOD AND SYSTEM FOR PREDICTING SHORT TERM TRAFFIC FLOW OF SECTORS**

00: -  
 Disclosed are a method and a system for predicting short term traffic flow of sectors. The method includes: selecting a flow prediction-derived target sector, and constructing a sector network structure; calculating similarities among time series of the traffic flow of the sectors to measure spatial correlation among the sectors; constructing datasets of a sector prediction model, and normalizing flow data of the sectors; constructing an LSTM training model, and determining training parameters of the LSTM model; training the prediction model, and measuring a training effect of the model by a mean absolute error; and inputting real-time flow, before a to-be-predicted time period, of the sectors into the prediction model to obtain a prediction result. The present disclosure considers spatial-temporal correlation of the traffic flow, thereby effectively improving accuracy of flow prediction.



21: 2022/09883. 22: 2022/09/05. 43: 2022/10/27  
 51: E04G  
 71: Nanjing University of Aeronautics and Astronautics  
 72: Honghai Zhang, Wenquan Liu, Jinlun Zhou, Jia Yi, Gang Zhong

**54: MULTI-FLIGHT 4D TRAJECTORY COLLABORATIVE OPTIMIZATION METHOD**

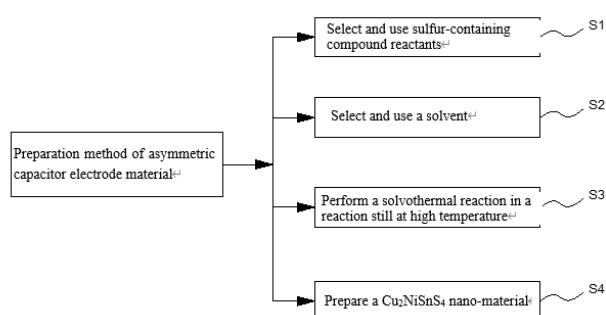
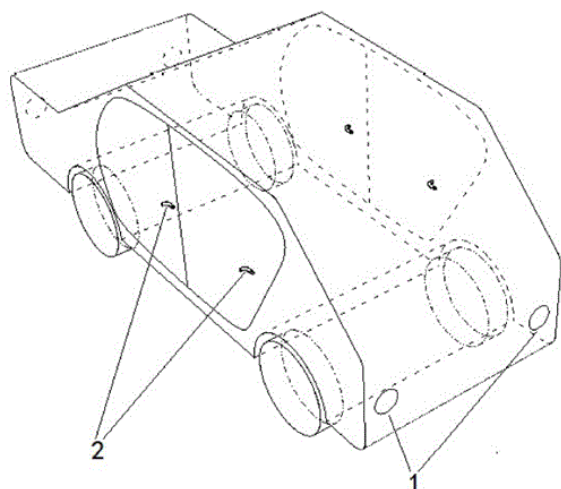
00: -  
 Disclosed is an aircraft 4D trajectory collaborative optimization method. The present disclosure establishes a 4D trajectory optimization model comprehensively considering airspace structures, airplane performance, flight distances, airspace congestion, fuel consumption and airplane conflicts and proposes the concept of flow density used for evaluating an airspace congestion degree. An NSGA3-SA algorithm is designed aiming at the multi-objective and multi-flight trajectory optimization model and considering the airspace congestion degree, and continuous variables are iteratively optimized by a simulated annealing algorithm, thereby improving the global searching ability of the algorithm. The model and the algorithm thereof can be used for adjusting an original flight plan in a pre-tactical phase, which can reduce fuel consumption of these flights and improve operation efficiency while balancing flow of air traffic.

21: 2022/09884. 22: 2022/09/05. 43: 2022/10/27  
 51: B60Q  
 71: Hunan University of Science and Technology  
 72: Jun Fang, Zhensheng Yang, Yongshun Han, Wentao Yang

**54: VEHICLE DOOR OPENING SIGNAL INDICATING SYSTEM**

00: -  
 The invention aims to solve the problem of how to prompt the rear part of a vehicle when a vehicle door is opened. A vehicle door opening signal indicating system is characterized by comprising a power source, a door opening indicating lamp and a touch switch, the power source, the door opening indicating lamp and the touch switch form a loop, the touch switch controls the door opening indicating lamp to be turned on and turned off, and the door opening indicating lamp is located behind or on the side face of a vehicle. The touch switch is located on the surface of the automobile door inner handle. The vehicle door opening signal indicating system has the advantages that the door opening indicating lamp is turned on when a hand touches the surface of the vehicle door inner handle, light prompt is given to the rear portion of a vehicle before the door is opened, enough reaction time is reserved for the rear vehicle, door opening killing can be effectively avoided, and door opening killing can be effectively prevented even on the premise that the rear condition is not observed before the door is opened. In addition, during unmanned driving, a driver cannot

supervise passengers to slowly open the door to get off, and the system is more useful at the moment.



21: 2022/09885. 22: 2022/09/05. 43: 2022/10/27  
51: E04G

71: Anhui Polytechnic University

72: Xianfu Li, Yujie Li, Tong Wu, Wenrui Wu, Xing Wang

#### 54: PREPARATION METHOD OF ASYMMETRIC CAPACITOR ELECTRODE MATERIAL

00: -

The present disclosure provides a preparation method of an asymmetric capacitor electrode material. The preparation method of the asymmetric capacitor electrode material includes the following steps: S1, selecting and using sulfur-containing compound reactants; S2, selecting and using a solvent; S3, performing a solvothermal reaction in a reaction still at high temperature; and S4, preparing a  $\text{Cu}_2\text{NiSnS}_4$  nano-material. The preparation method of the asymmetric capacitor electrode material provided by the present disclosure has the advantages of being beneficial to increase of surface area and diffusion and transmission of electrolyte ions and good in dispersity, and the nano-material has high application potential and economic value in the fields such as capacitors, electrode materials and electrocatalysis.

21: 2022/09892. 22: 2022/09/05. 43: 2022/10/27  
51: A61B; A61L; E04H

71: FU, Jinting, LI, Juxuan, WANG, Ang

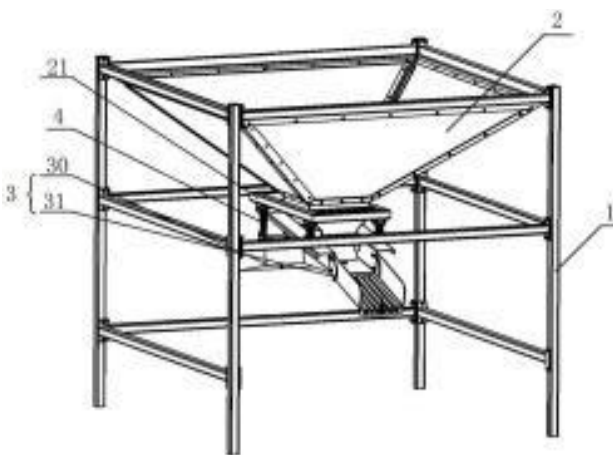
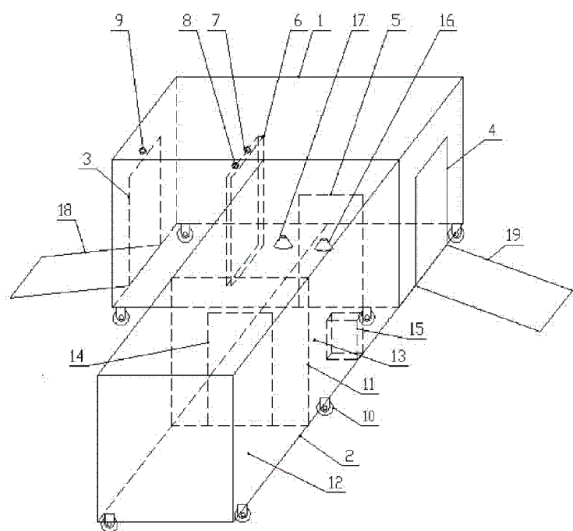
72: FU, Jinting, LI, Juxuan, WANG, Ang

33: CN 31: 202010152015.5 32: 2020-03-06

#### 54: CABIN FOR EPIDEMIC PREVENTION AND CONTROL DETECTION AND PRELIMINARY VIRUS SCREENING

00: -

A cabin for epidemic prevention and control detection and preliminary virus screening includes a biosafety detection cabin and a negative pressure isolation cabin, both of which are cuboid shape. The left and right sides of the biosafety detection cabin are respectively provided with an entrance door and an exit door. The rear side of the negative pressure isolation cabin is connected with the front side of the biosafety detection cabin near the exit door and communicated through the side door. The rear side of the negative pressure isolation cabin and the biosafety detection cabin form an L-shaped structure, the inside of the biosafety detection cabin is provided with a portal frame adjacent to the entrance door. The portal frame is provided with an inductive body temperature detection device and an abnormal body temperature alarm device. The present disclosure has scientific principle, novel design, simple and compact structure. By using information technology and biotechnology, it provides a technical means for the society to strictly control hazard sources and ensure the safety of normal social activities, which has very important social and economic value.

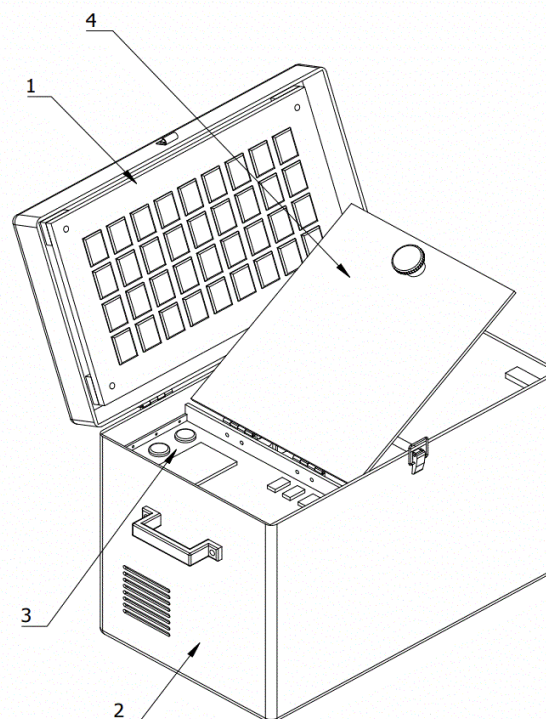
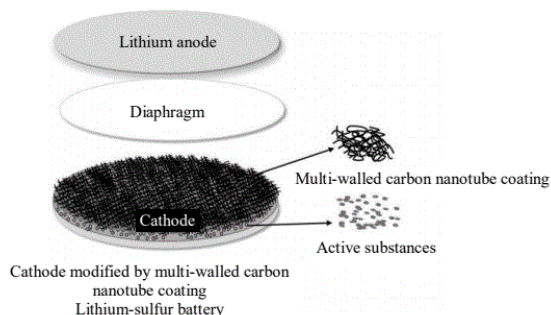


21: 2022/10001. 22: 2022/09/08. 43: 2022/10/25  
 51: B07B  
 71: HARBIN FORESTRY MACHINERY RESEARCH  
 INSTITUTE, STATE FORESTRY AND  
 GRASSLAND ADMINISTRATION  
 72: TANG, Jingyu, WANG, Dong, KOU, Xin, XIAO,  
 Bing, QU, Zhenxing, FAN, Zhiyuan, XIANG, Wenbo,  
 WANG, Dezhu  
 33: CN 31: 202210134408.2 32: 2022-02-14  
**54: SCREENING LOADING APPARATUS FOR  
 FRUITS OF CAMELLIA OLEIFERA**

00: -  
 The present invention relates to the technical field of  
 loading apparatuses, and discloses a screening  
 loading apparatus for fruits of *Camellia oleifera*,  
 which includes a stander, a charging hopper and a  
 vibrating feeding mechanism; the stander is a hollow  
 structure; the vibrating feeding mechanism includes  
 a receiving channel component and a vibrating  
 feeding component; the bottom of the charging  
 hopper is abutted against and communicated with a  
 receiving channel and is elastically connected with  
 the receiving channel through a tension spring; one  
 side of the bottom of the charging hopper is provided  
 with an adjusting plate; the vibrating feeding  
 component is arranged on an outer wall of the  
 receiving channel; the vibration of the vibrating  
 feeding component provides a driving force to the  
 loading apparatus, which ensures the loading  
 uniformity and efficiency.

21: 2022/10008. 22: 2022/09/08. 43: 2022/10/27  
 51: H01M  
 71: Hebei Normal University of Science and  
 Technology  
 72: WANG, Lijiang, HAN, Lina, LI, Zemin, LI, Bowen,  
 LEI, Zijie  
 33: CN 31: 202111048082.3 32: 2021-09-08  
**54: PREPARATION METHOD OF LITHIUM-  
 SULFUR BATTERY CATHODE WITH DUAL  
 PROTECTION FROM BIOCARBON AND  
 COATING**

00: -  
 The present disclosure relates to a preparation  
 method of a lithium-sulfur battery cathode with dual  
 protection from biocarbon and a coating. The  
 biocarbon is prepared from fibrilia biomass selected  
 as a raw material; sulfur is loaded on the biocarbon  
 by a melt diffusion method to synthesize a  
 biocarbon-based cathode composite material; and  
 the coating is prepared on a surface of a cathode of  
 a biocarbon-based lithium-sulfur battery by multi-  
 walled carbon nanotubes (MWCNTs). The battery is  
 assembled from the novel lithium-sulfur battery  
 cathode with dual protection from the hemp-based  
 biocarbon and the MWCNT coating, a rate  
 performance test is carried out, and the specific  
 capacity of the battery is higher than that of a  
 charcoal/sulfur cathode not modified by a coating by  
 46.8-209.7 mAh·g<sup>-1</sup> when the rate is gradually  
 increased from 0.1 C to 1 C and then returns to 0.1  
 C.



21: 2022/10012. 22: 2022/09/08. 43: 2022/09/29  
51: F26B

71: Jiangsu Cancer Hospital

72: Yan Dan, Xu Silu, Zheng Xiao

### 54: A DEVICE FOR QUICKLY DRYING PLANT SPECIMENS IN FIELD

00: -

The invention relates to the technical field of plant specimens making, in particular to a device for quickly drying plant specimens in the field, which comprises an upper cover assembly, a box body assembly, an electric control mechanism, a heating mechanism and a presser bar mechanism, wherein the upper cover assembly is rotatably installed on the box body assembly, and a heat insulation board is fixedly arranged in the box body assembly, the electric control mechanism is fixedly installed inside the box body assembly and located at one side of the heat insulation board, the heating mechanism is fixedly installed inside the box body assembly and located at the other side of the heat insulation board, and the presser bar mechanism is fixedly installed above the heating mechanism. The invention solves the problems of long manufacturing cycle and complicated manufacturing process in the traditional plant specimen manufacturing process. What's more, the heating and ventilation device is designed, which also solves the influence of continuous rainy days on the plant specimens manufacturing and prevents the plant specimens from being moldy and putrefied.

21: 2022/10102. 22: 2022/09/12. 43: 2022/11/04  
51: A23L

71: A kishore Babu, Dr. SUNIL KUMAR KADIRI, Dr. Kommu Pradeep, Dr. Chadalawada Arun Kumar, Dr. cheepurupalli prasad, Dr. Kotaiah Silakabattini, Dr. Krupavaram, Dr. M Venkata Ramana, Dr. D.V.R.N.Bhikshapathi, Dr. Rajiv Rajpal kukkar  
72: A kishore Babu, Dr. SUNIL KUMAR KADIRI, Dr. Kommu Pradeep, Dr. Chadalawada Arun Kumar, Dr. cheepurupalli prasad, Dr. Kotaiah Silakabattini, Dr. Krupavaram, Dr. M Venkata Ramana, Dr. D.V.R.N.Bhikshapathi, Dr. Rajiv Rajpal kukkar

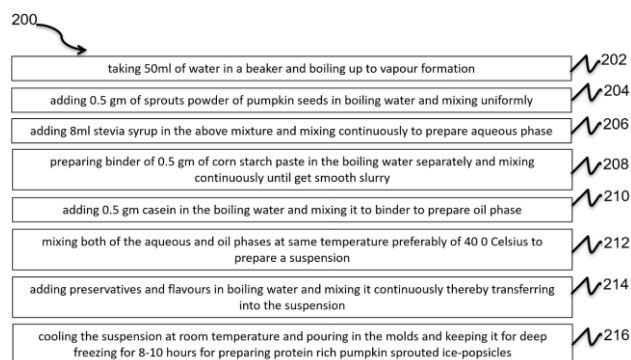
### 54: A PROCESS AND COMPOSITION FOR PREPARING PROTEIN RICH PUMPKIN SPROUTED ICE-POPSICLES

00: -

The present invention generally relates to a process for preparing protein rich pumpkin sprouted ice-popsicles comprises taking 50ml of water in a beaker and boiling up to vapour formation; adding 0.5 gm of sprouts powder of pumpkin seeds in boiling water and mixing uniformly; adding 8ml stevia syrup in the above mixture and mixing continuously to prepare aqueous phase; preparing binder of 0.5 gm of corn starch paste in the boiling water separately and mixing continuously until get smooth slurry; adding 0.5 gm casein in the boiling water and mixing it to binder to prepare oil phase; mixing both



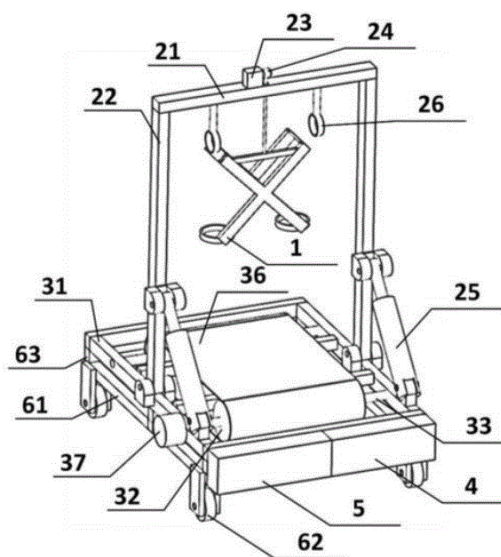
of the aqueous and oil phases at same temperature preferably of 40 0 Celsius to prepare a suspension; adding preservatives and flavours in boiling water and mixing it continuously thereby transferring into the suspension; and cooling the suspension at room temperature and pouring in the molds and keeping it for deep freezing for 8-10 hours for preparing protein rich pumpkin sprouted ice-popsicles.



21: 2022/10236. 22: 2022/09/15. 43: 2022/11/04  
 51: A61H; A63B  
 71: HENAN UNIVERSITY OF CHINESE MEDICINE  
 72: JIN, Xiaoqin, LI, Yanjie, FENG, Xiaodong, QIN, Hwei, MENG, Changhai, LIU, Bin, XU, Guofang, MAO, Fuqiang, LIU, Haoyuan, HUA, Xiaoqiong, GUO, Ning

**54: REHABILITATION TRAINING MACHINE**

00: -  
 The present invention discloses a rehabilitation training machine, comprising a safety belt and a training machine fixedly connected to the safety belt. The training machine comprises a lifting device, a training device, a control device, a hydraulic power source, and a support device; the control device is fixedly mounted to the side surface of the training device; the training device is fixedly mounted to the top surface of the support device; the hydraulic power source is fixedly mounted to the side surface of the support device; the lifting device is provided on the top surface of the training device; the rehabilitation training can be performed for a patient whose leg muscles need to be restored so that the patient can be directly pulled up from a ward or a wheelchair, which reduces the labor intensity of a nurse and avoids the harm to the patient due to improper support.



21: 2022/10237. 22: 2022/09/15. 43: 2022/11/04  
 51: A01N  
 71: Shandong Academy of Pesticide Sciences  
 72: HAN Jintao, HAO Zesheng, WANG Yingxiu, ZHANG Xiaokang, LIU Jun, ZUO Bojun  
**54: ARYLOXYANILINE ACYL COMPOUND WITH HERBICIDAL ACTIVITY**

00: -  
 This invention discloses an aryloxyaniline acyl compound with herbicidal activity, and relates to the technical field of herbicides. This invention obtains the aryloxyaniline acyl compound with herbicidal activity by dropping compound 2 into a mixture of compound 4, triethylamine and chloroform for reaction, extracting the organic phase after the reaction, drying the organic phase in turn, filtering, removing the solvent under reduced pressure, and recrystallizing. In this invention, a series of aryloxyaniline acyl compounds with herbicidal activity are synthesized. The compounds not only exhibit herbicidal activity to barnyard grass and *Setaria viridis*, but also exhibit herbicidal activity to *Abutilon theophrasti* and zinnia. Compared with acetochlor, the aryloxyaniline acyl compounds prepared by the invention have broad-spectrum herbicidal activity.

21: 2022/10238. 22: 2022/09/15. 43: 2022/11/04  
 51: G06Q  
 71: Hunan University of Arts and Science  
 72: Wang Shaohua, Yang Ting, Niu Panxin

#### 54: LANDSCAPING RESIDUE STATISTICAL INVESTIGATION METHOD

00: -

The invention discloses a statistical investigation method for landscaping remainders, which comprises the following steps of: 1, performing data statistical summary design according to the generation, collection and utilization conditions of the landscaping remainders; 2, design a data acquisition scheme; Taking urban greening teams, urban parks, forest parks, forest farms, forestry stations, orchards, nursery bases and residue recycling units as the objects of statistical investigation, a monthly statistical questionnaire for residues was designed. The statistical indicators are divided into ecological indicators, theoretical indicators, actual indicators, infrastructure indicators, human resources indicators, benefit indicators, efficiency indicators, fixed assets investment indicators and new fixed assets investment indicators. 3, design that content of the statistical index; Step 4. Index calculation. The invention provides a practical, concrete and operable statistical investigation method for the statistics of the greening residue amount, and can provide a data base and a method support for the resource management of the landscaping residues.

21: 2022/10239. 22: 2022/09/15. 43: 2022/11/04  
51: G01D

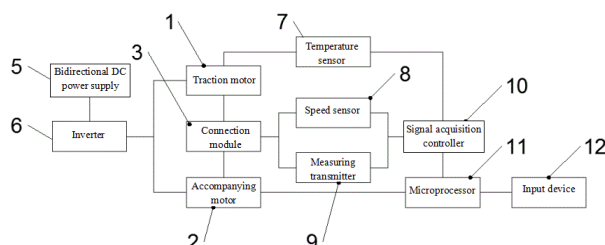
71: Hunan Hugong Electric Co., Ltd., Hunan Institute of Engineering, Hunan Tianshun Metro Technology Co., Ltd., Hunan Electrical College of Technology  
72: LIU Wantai, HUANG Zhonghua, LIU Lixin, XIE Ya, LIAN Honghai, CHEN Zhengrong, HU Xiaozhou

#### 54: PERFORMANCE TEST DEVICE OF METRO TRACTION MOTOR

00: -

The invention discloses a performance test device of metro traction motor, which comprises a system body, a base, a bidirectional DC power supply and an inverter, wherein the center of the upper end face of the base is provided with a connection module, one side of the connection module is connected with a traction motor through a rotating shaft, the other side of the connection module is connected with an accompanying measuring motor through the rotating shaft, and one end of the connection module is connected with a speed sensor and a measuring transmitter through wires; the other side of the speed sensor and measuring transmitter is connected with

the signal acquisition controller through Ethernet; one side of the signal acquisition controller is provided with a microprocessor, and the other side of the microprocessor is provided with an input device; the system body includes a data acquisition module, a data transmission module, a data processing module, a display module and a data output module. The invention has novel design, simple and convenient operation, and can effectively improve the accuracy of the performance test results of the iron traction motor.



21: 2022/10240. 22: 2022/09/15. 43: 2022/11/04  
51: A01G

71: Shijiazhuang academy of agricultural and Forestry Sciences

72: Shi Jianhua, Tian Guoying, Wang Dandan, Qi Lianfen, Zhang Qingyin, Li Yan, Liu Na, Wang Zifan, Geng Xiaobin, Liu Qiong, Pang Yongchao, Yan Kaijie, Bai Chunmei, Chang Zhen

#### 54: A CULTIVATION TECHNOLOGY FOR PREVENTING BASAL STALK ROT OF SOLANACEOUS VEGETABLES

00: -

The invention discloses a cultivation technology for preventing basal stalk rot of solanaceous vegetables, which relates to the technical field of solanaceous vegetables cultivation. The method comprises the following steps: planting solanaceous vegetables seedlings after 16 o'clock in cloudy or sunny days in high temperature season, irrigating with drip irrigation, covering dry soil, replenishing water, loosening soil and earthing up, replenishing water, and earthing up for the second time. The invention takes the place of chemical control, greatly reduces the incidence rate of solanaceous vegetables basal stalk rot and does not cause any damage to seedlings by standardizing the irrigation amount of seedlings after solanaceous vegetables are planted and carrying out field operation measures. This cultivation technology saves the expenditure of chemical agents, has the

characteristics of safety and environmental protection. And it is convenient for cutting expenditure and stabilizing output in the production of solanaceous vegetables. And it meets the needs of people's lives, realizes the new concept of green agriculture, and has good social and economic benefits.

21: 2022/10241. 22: 2022/09/15. 43: 2022/11/04

51: A61N

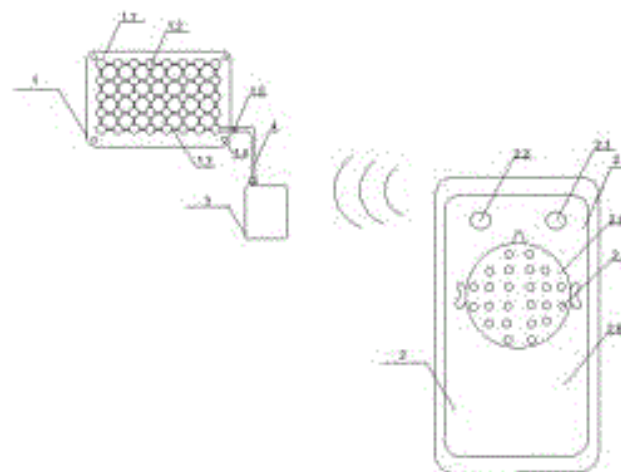
71: The First Hospital of Shanxi Medical University

72: Duan Hubin, Hao Chunyan

#### **54: ELECTRIC FIELD DEVICE FOR TREATING TUMORS**

00: -

The invention belongs to medical field, and particularly relates to an electric field device for treating tumors. The technical scheme of the invention is as follows: an electric field device for treating tumors, which is composed of an electric field therapeutic apparatus, a connecting lead, a power supply and an electric field therapeutic apparatus controller; the electric field therapeutic apparatus is connected with the power supply through the connecting lead, and the electric field therapeutic apparatus and the electric field therapeutic apparatus controller receive and transmit through wireless signals. The invention mainly solves the problem of carrying device for a long time in the treatment of brain tumor, and also improves the patient's compliance; because of the 24-hour uninterrupted work, the tumor inhibition effect is greatly improved, during the use, hair shaving is unnecessary, and skin allergy is rare; before the use, it only needs to be installed once, without changing the patch repeatedly during the use, thus greatly reducing the treatment cost.



21: 2022/10242. 22: 2022/09/15. 43: 2022/11/04

51: G06Q

71: Union Hospital, Tongji Medical College, Huazhong University of Science and Technology

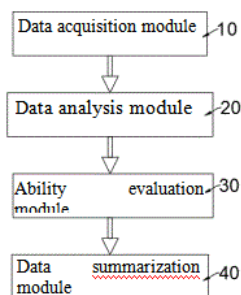
72: Wu JianCai, Zhang YingCong, Wu QingSong, Wang ZhiHui, Chen Shi, Xiang Can, Luo Fei, Ma Ming, Wang Zheng, Jin Yang

#### **54: HOSPITAL DISCIPLINE EVALUATION METHOD AND SYSTEM**

00: -

Disclosed is a hospital discipline evaluation method, which relates to the technical field of discipline evaluation. The method comprises the following steps: acquiring information about healthcare workers in a department by means of a public channel, and establishing a document data set; determining document themes and subdivision fields on the basis of an output document data set; determining a hospital department participating in evaluation, and scoring doctors belonging to the hospital department; summarizing comprehensive scientific research scores and comprehensive working scores of all healthcare workers in the department to form total comprehensive scores; establishing a document data set by means of a data acquisition module, and determining document themes and subdivision fields by means of a data analysis module; and an ability evaluation module; and a data summarization module for summarizing the comprehensive scientific research scores and the comprehensive scores of all the healthcare workers in the department. By acquiring original data from a public channel, setting a weight and performing two-level evaluation processing, compared with existing evaluation methods, the present disclosure has higher controllability, can also

reduce external interference manually when performing adjustments, and has more practicality.



21: 2022/10244. 22: 2022/09/15. 43: 2022/11/04

51: C05F; C05G

71: Sanya Institute of Henan University, Henan Agricultural University, Henan University of Technology

72: Jingong GUO, Yuchen MIAO, Rui XU, Ran WANG, Chen DONG, Kun LI, Shuwen GAO, Mengxin SHEN, Yu ZHANG

#### 54: GGPPS DIRECTED SINGLE-SITE MUTANT PROTEIN GGPPS-233

00: -

This application belongs to the field of tobacco genetic engineering technology, specifically related to the patent application of GGPPSP directed mutant protein. The three sites 154, 161 and 218 of the existing GGPPS protein are located in the catalytic pocket of the enzyme, and the two sites 209 and 233 are located on the surface of the enzyme; based on these five sites, this application provides the GGPPS family of directed mutant proteins, which includes: series of single site mutant proteins, double-site mutant proteins, three-site mutant proteins, four-site mutant proteins, and five-site mutant proteins. The inventor used CAST technology to construct a "small but fine" mutant library. Through further screening and based on the need of directed evolution, the inventor made a detailed analysis of the amino acid mutation types at specific sites. Preliminary experimental results showed that beta-carotene synthesis was significantly increased after amino acid mutation at specific sites, which laid a certain technical foundation for further cultivation of new crop varieties.

21: 2022/10272. 22: 2022/09/16. 43: 2022/11/04

51: F16H

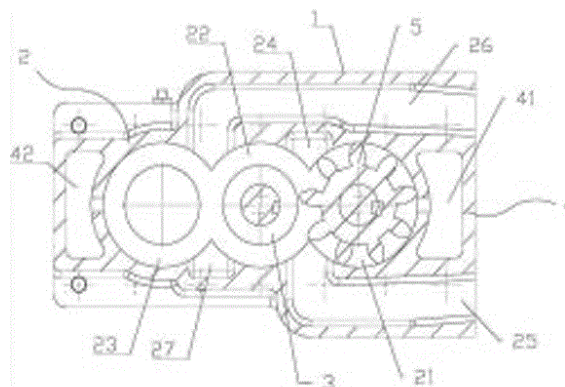
71: Hebei Ficson Coal Mine Machinery Manufacturing Co., Ltd.

72: Pengfei Zhang

#### 54: A THREE-GEAR AIR MOTOR

00: -

The utility model belongs to the technical field of pneumatic mechanical devices, and proposes a three-gear air motor, which comprises a casing, which encloses a gear chamber, a first upper chamber, a first lower chamber, a second upper chamber, and a second lower chamber and exhaust chamber. The gear chamber includes a first gear chamber, a second gear chamber and a third gear chamber which are connected in sequence, a main gear is arranged in the second gear chamber, and both the first gear chamber and the third gear chamber are equipped with secondary gear that is meshed with the main gear. The top connecting end of the first gear chamber and the second gear chamber is connected with the first upper chamber, and the bottom connecting end is connected with the first lower chamber. The top connecting end of the second gear chamber and the third gear chamber is connected with the second upper chamber, the bottom connecting end is connected with the second lower chamber, and the first gear chamber and the third gear chamber are also connected with two exhaust chambers respectively. The utility model has an ingenious design, and solves the technical problem that existing air motor is generally equipped with double gears and can only provide torque.



21: 2022/10273. 22: 2022/09/16. 43: 2022/11/04

51: E21F

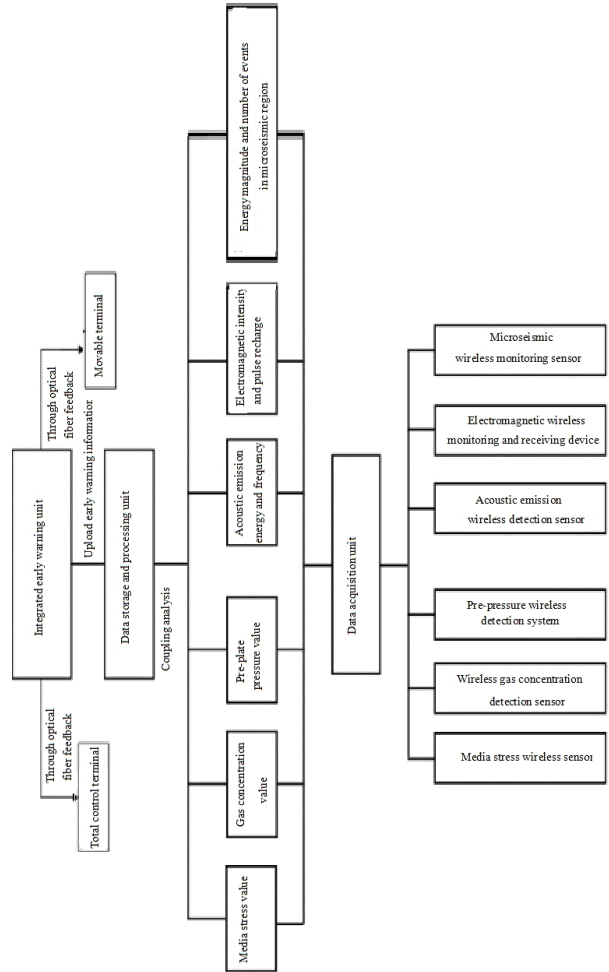
71: SHANXI INSTITUTE OF TECHNOLOGY, FAN Penghong

72: FAN Penghong, LI Dan, XING Aohui, LI Shuai, WANG Defeng

**54: WIRELESS MONITORING SYSTEM AND METHOD OF COAL AND ROCK DYNAMIC DISASTER BASED ON 5G COMMUNICATION**

00: -

The invention discloses a wireless monitoring system and method for coal and rock dynamic disasters based on 5G communication. The system comprises a data acquisition unit, a data storage and processing unit and a comprehensive early warning unit. Based on the advantage of a brand-new wireless digital communication system that supports high-precision positioning and wireless access capability in a closed special environment by means of the Internet of Things and original communication technology, the invention is based on the physical signals of coal bodies in working faces, The underground gas concentration sensor, coal stress gauge, roof pressure monitoring system, acoustic emission monitoring system, electromagnetic radiation monitoring system, microseismic system and their sensors are wirelessly connected with 5G communication technology, and relevant equipment for underground wireless monitoring and early warning is developed. The wireless and multi-parameter identification method and identification index of coal-rock gas power disasters are established, forming a wireless multi-parameter remote monitoring and early warning system for coal-rock gas power disasters, and developing a comprehensive wireless multi-parameter remote monitoring and early warning platform for coal-rock gas power disasters.



21: 2022/10274. 22: 2022/09/16. 43: 2022/11/04  
51: B60W

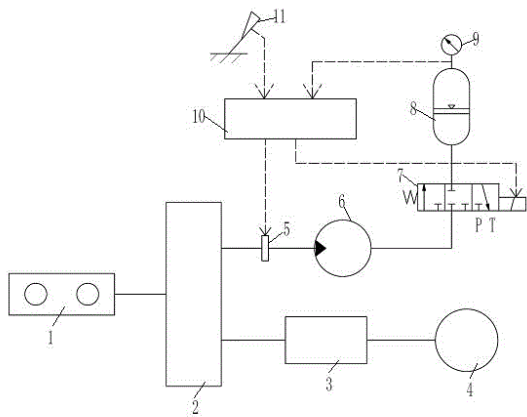
71: Hunan Institute of Engineering  
72: HUANG Zhonghua, XIE Ya

**54: AUTOMOBILE POWER PERFORMANCE IMPROVING SYSTEM**

00: -

The invention discloses an automobile power performance improvement system, which comprises an engine, a power splitter, a reduction box, an electromagnetic clutch, a compressor, an energy accumulator, an electromagnetic valve and a controller. The power input end of the power splitter is connected with the power output end of the engine; the power input end of the reduction gearbox is connected with the power splitter; the power output end of the gearbox and the power output end of the gear are connected with the wheels of the automobile; one end of the clutch is connected with the reducer, and the other end is connected with the

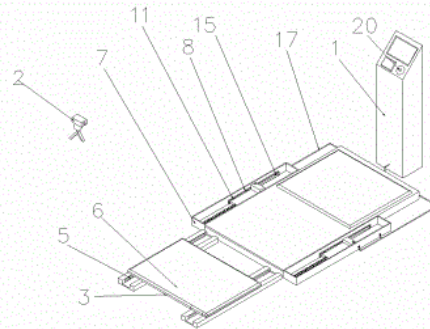
compressor; one end of the electromagnetic valve is connected with the output end of the compressor, and the other end is connected with an energy accumulator; the controller is connected with the accelerator pedal of the automobile, and is connected with the solenoid valve and clutch. By recovering the output power of the automobile engine in idle operation, the dynamic performance of the automobile is improved, and the purpose of improving the dynamic performance of the automobile is achieved without increasing the displacement of the engine. The gas thrust generated by the high-speed airflow released from the energy storage directly acts on the automobile body, thus avoiding the wheel slipping caused by the direct power acting on the automobile wheels.



21: 2022/10275. 22: 2022/09/16. 43: 2022/11/04  
 51: A63B  
 71: Shenyang University of Technology  
 72: GUO, Hui, HUANG, Fu, LI, Zhuoran, ZHANG, Ming, SUN, Feng, ZHANG, Yimin, LI, Qiang, XU, Fangchao, SUN, Ping, WANG, Lei, JIA, Xiao, YU, Jingjing, ZHAO, Meng  
 33: CN 31: 202210309472.X 32: 2022-03-28  
**54: SIT-UP TRAINING TESTING DEVICE**

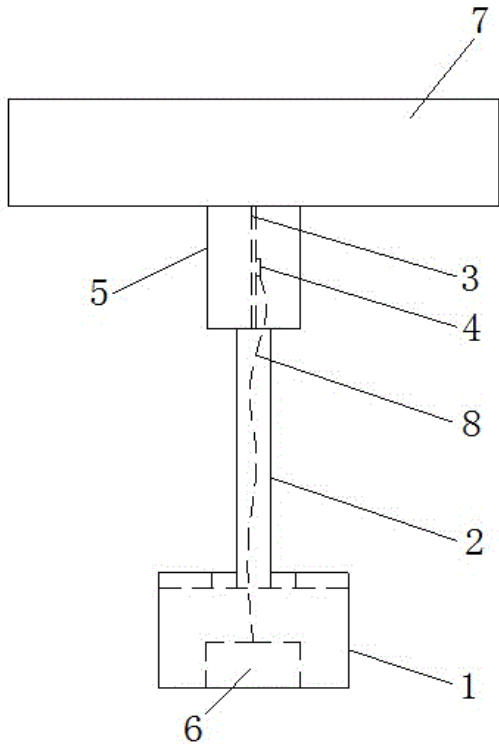
00: -  
 Disclosed is a sit-up training testing device. The device includes a host, a camera and a counting mechanism, the counting mechanism is provided with a lower limb supporting plate, and a back bearing mechanism is arranged at one end of the lower limb supporting plate; and a foot pressure induction pad is arranged on an upper side wall of the lower limb supporting plate, retaining frames are symmetrically arranged on two sides of the lower

limb supporting plate, hand holders are arranged in the retaining frames, magnetic labels are installed on the hand holders, two magnetic induction sensors are installed in each retaining frame, and the magnetic labels fit in with the magnetic induction sensors. By arranging a lying trunk forward bend training device, the device can accurately and rapidly assess whether actions of a participant are standard or not.

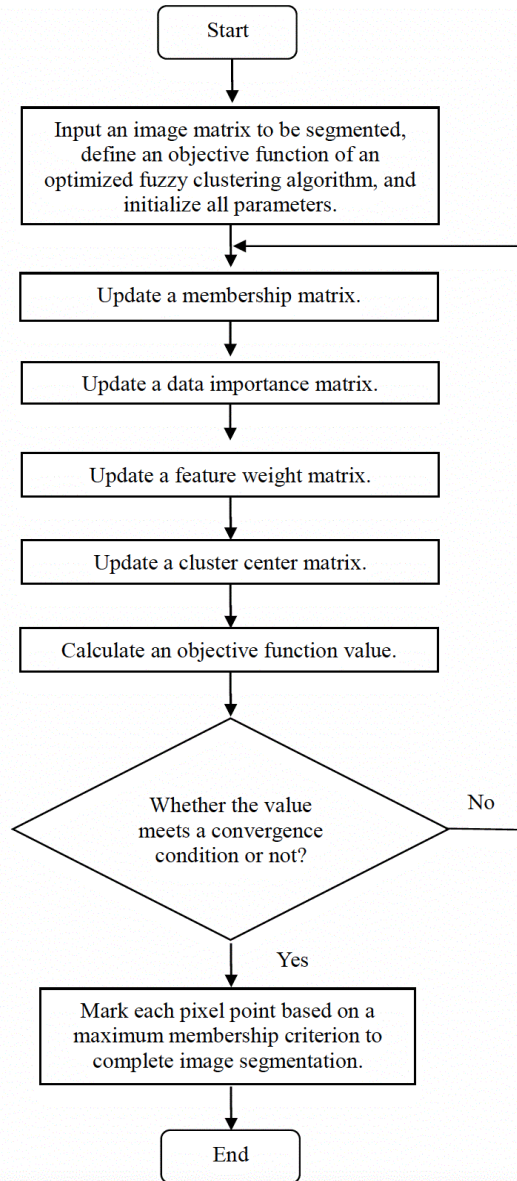


21: 2022/10276. 22: 2022/09/16. 43: 2022/11/04  
 51: F03D; G01P  
 71: Hunan Institute of Engineering  
 72: HUANG Zhonghua, XIE Ya  
**54: WIND SPEED MEASURING DEVICE OF LARGE-SCALE FAN**

00: -  
 The invention discloses a wind speed measuring device of a large-scale fan, which comprises a base, a bracket, an elastic beam, a strain gauge, a wind measuring duct for protecting the elastic beam and the strain gauge, a controller for collecting signals of the strain gauge and calculating the wind speed, and a guide vane for making the wind measuring duct face the wind direction, wherein the wind measuring duct is arranged at the upper part of the bracket, the elastic beam is arranged in the wind measuring duct, and the strain gauge is arranged on the elastic beam; and the invention has the advantages of simple structure, accurate wind speed measurement, long-term stable and reliable work, etc.



and marking each pixel point according to a maximum membership criterion if “yes” to complete image segmentation.



21: 2022/10277. 22: 2022/09/16. 43: 2022/11/04  
 51: A61K; D21C; A61P  
 71: Wuhu Technology and Innovation Research Institute, AHUT  
 72: WU, Ziheng, WANG, Bing, ZHAO, Yuan, WANG, Wenyan, GUO, Hongzhe

**54: IMAGE SEGMENTATION METHOD BASED ON WEIGHTED ROBUST FCM CLUSTERING**

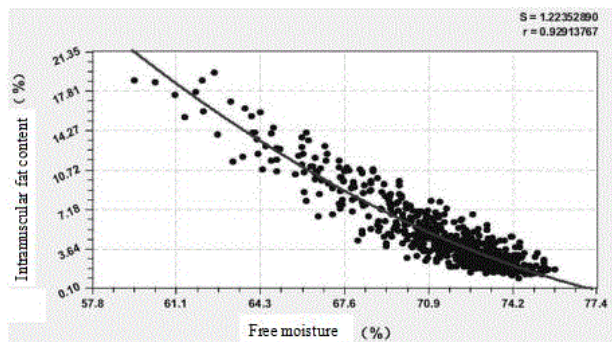
00: -  
 The present disclosure provides an image segmentation method based on weighted robust fuzzy C-means (FCM) clustering, and belongs to the field of electronic information engineering. The image segmentation method includes the following steps: Step 1, inputting an image matrix to be segmented, defining an objective function of weighted robust FCM fuzzy clustering for image segmentation, and initializing all parameters in the objective function of an optimized fuzzy clustering algorithm; Step 2, calculating and updating a fuzzy membership matrix, a feature weight matrix, a data importance matrix and a cluster center matrix based on objective function minimization; and Step 3, judging whether the optimized fuzzy clustering algorithm meets iterative stop conditions or not, continuing iterating and going on to Step 2 if “not”;

21: 2022/10278. 22: 2022/09/16. 43: 2022/11/04  
 51: G01N  
 71: Institute of Animal Science and Veterinary Medicine, Shandong Academy of Agricultural Sciences

72: WANG Jiying, WANG Yanping, ZHAO Xueyan, LI Jingxuan, WANG Huaizhong, HU Hongmei, WANG Cheng, CHENG Jianguo

**54: METHOD FOR QUICKLY EVALUATING INTRAMUSCULAR FAT CONTENT OF PORK USING WATER CONTENT**

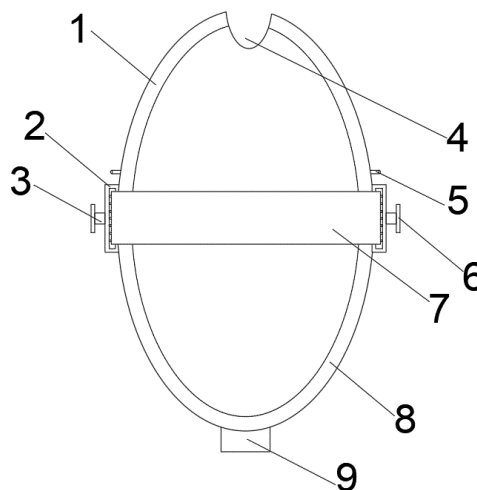
00: -  
 The invention discloses a method for quickly evaluating the intramuscular fat content of pork using water content. The method firstly determined the water and intramuscular fat content of a large pork samples, and established a regression equation of the water content and predicted value of intramuscular fat content through statistical analysis of the relationship between them. Then it integrated the obtained regression equation into a processing software (such as a plug-in made based on Excel macro function or mobile phone APP ). Finally, the intramuscular fat content can be predicted through inputting the water content of the pork to be measured into the software. This method is simple to operate, convenient to use at any time, and can quickly predict the content of intramuscular fat pf pork, providing a basis for pork quality grading and improving the price of pork products.



21: 2022/10279. 22: 2022/09/16. 43: 2022/11/04  
 51: A61M  
 71: Tangdu Hospital, the Fourth Military Medical University, Shaanxi Normal University  
 72: Wang Bin, Li Yang, Li Kai, Qin Haonan  
**54: PORTABLE MASK FOR MOUTH AND NOSE OF NON-INVASIVE VENTILATOR**

00: -  
 The utility model relates to the field of medical appliances, and discloses an oronasal mask of a portable non-invasive respirator, which comprises a first mask, a second mask and a wearing rope, wherein the lower surface of the first mask is fixedly connected with a placement column, both sides of the placement column are provided with clamping grooves, the upper surface of the second mask is provided with a placement groove, The outer walls on both sides of the upper end of the second mask are provided with movable cavities. In the utility

model, through the first clamping column and the second clamping column, when the oronasal mask is used, the wearing rope is tightly clamped by the first clamping column and the second clamping column, and when the wearing rope is damaged or produces stains, the fixing plate is moved by the connecting rod through toggling the connecting rod, so that the first clamping column and the second clamping column are separated, The first clamping column and the second clamping column are separated so that the wearing rope falls off, thereby achieving the purpose of conveniently replacing the wearing rope and avoiding the problem that the conventional oronasal mask is inconvenient to replace.

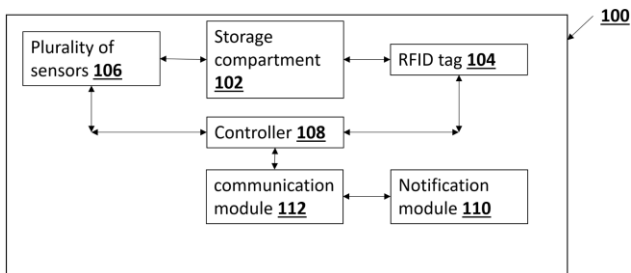


21: 2022/10282. 22: 2022/09/16. 43: 2022/11/04  
 51: G06N  
 71: Devesh Mishra, Amrees Pandey, Aditya Kumar Singh, Saiyed Salim Sayeed, H Shree Kumar  
 72: Devesh Mishra, Amrees Pandey, Aditya Kumar Singh, Saiyed Salim Sayeed, H Shree Kumar  
**54: A SYSTEM AND A METHOD FOR MONITORING GRAIN STORAGE BAGS THROUGHOUT A SUPPLYCHAIN**

00: -  
 A system (100) and a method (200) for monitoring grain storage bags throughout a supplychain, comprises of: a plurality of storage container (102) for storing atleast a type of grain; a plurality of RFID tag (104) for acquiring details of the grain stored in the container and tracks real-time location of the storage container throughout the supply chain; a plurality of sensors (106) for monitoring real time condition of the grain stored throughout the supply



chain; a controller (108) for generating command signals if reading obtained from plurality of sensors (106) exceed beyond a threshold value to protect the stored grain from damage; and a notification module (110) to inform concerned incharge of a nearest hub about the real-time condition of the stored grains based on command signal received from the controller (108) and take necessary steps for reducing the damage.



21: 2022/10283. 22: 2022/09/16. 43: 2022/11/04  
51: G06Q

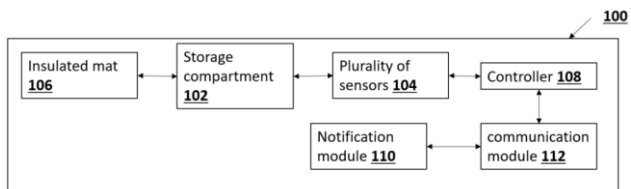
71: Devesh Mishra, Aditya Kumar Singh, Amrees Pandey, Saiyed Salim Sayeed, Sweta Singh

72: Devesh Mishra, Aditya Kumar Singh, Amrees Pandey, Saiyed Salim Sayeed, Sweta Singh

**54: A SYSTEM AND A METHOD FOR GRAIN STORAGE MANAGEMENT**

00: -

A system (100) and a method (200) for grain storage management, comprises of: a storage compartment (102) for storing atleast a type of grain, wherein the storage compartment comprises of an inner wall and an outer wall and a bottom sealed plate; a plurality of sensors (104) for monitoring real time condition of the grain stored; an insultaed mat (106) for maintaining temperature inside the storage compartment; a controller (108) for generating command signals if reading obtained from plurality of sensors (104) exceed beyond a threshold value to protect the stored grain from damage; and a notification module (110) to inform a user about the real-time condition of the stored grains based on command signal received from the controller (108).



21: 2022/10286. 22: 2022/09/16. 43: 2022/11/04

51: B01D; B03C; E21F

71: The First Engineering Co.,Ltd of China Railway Beijing Engineering Group, Xi'an University of Architecture and Technology, The 5th Engineering Co., Ltd. of China Railway Construction Bridge Engineering Bureau Group

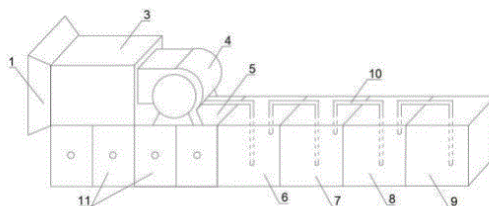
72: YANG, Pengtao, GUO, Desai, PAN, Hongwei, XU, Leilei, XU, Wangliang, ZHANG, Yijia, JIN, Zhouhao, PAN, Huiyu, JIN, Diyuan, ZHAO, Xin, SONG, Zhanping, ZHANG, Yuwei, LIU, Naifei, TIAN, Song

33: CN 31: 202210269815.4 32: 2022-03-18

**54: ABSORPTION AND PURIFICATION SYSTEM FOR DUST AND HARMFUL GAS OF TUNNEL CONSTRUCTION**

00: -

The present disclosure discloses an absorption and purification system for the dust and harmful gas of tunnel construction, comprising a dust collecting box. An electric power equipment box, a catalyst box, an alkaline reagent box, a drying agent box, and a gas collecting box are successively and adjacently provided on the outer side of the dust collecting box; an air inlet hopper is communicated with the side face of the dust collecting box, and multiple layers of vertical electrostatic dust removal grids are provided at intervals inside the dust collecting box; the top of the electric power equipment box is provided with an exhaust fan, the exhaust fan and the electrostatic dust removal grid are both electrically connected to the electric power equipment box, and the air inlet of the exhaust fan is in communication with the dust collecting box.



21: 2022/10287. 22: 2022/09/16. 43: 2022/11/04  
51: G01V

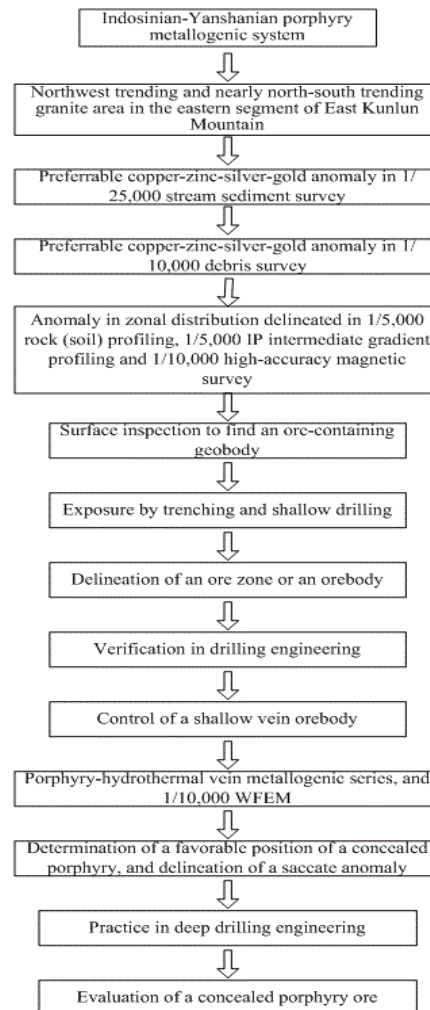
71: The Third Geological Exploration Institute of Qinghai Province

72: MA, Zhongyuan, MA, Qiang, YAN, Zhengjun, MA, Fusheng, ZHANG, Daming

**54: EXPLORATION METHOD OF PORPHYRY-EPIHYDROTHERMAL-SKARN METALLOGENIC SYSTEM IN COLLISION OROGENIC ENVIRONMENT**

00: -

The present disclosure provides an exploration method of a porphyry-epihydrothermal-skarn metallogenic system in a collision orogenic environment. The present disclosure pushes forward a prospecting method combined with the "metallogenic system+stream sediment survey+debris survey+large-scale geophysical and geochemical profiling/high-accuracy magnetic survey+engineering verification", and makes a huge breakthrough in prospecting. The combination method can effectively avoid restrictions of shallow covered conditions on conventional geological mapping, and can quickly shrink the prospecting target in a quaternary covered area to spatially position the mineralized alteration zone and the ore-bearing geobody, thereby improving the prospecting success rate. The method has the advantages of a short exploration period, a high efficiency and a low exploration cost, and is applied to exploring shallow vein copper-lead-zinc-silver-gold ores and skarn iron-copper ores.



21: 2022/10288. 22: 2022/09/16. 43: 2022/11/04  
51: G01V

71: The Third Geological Exploration Institute of Qinghai Province

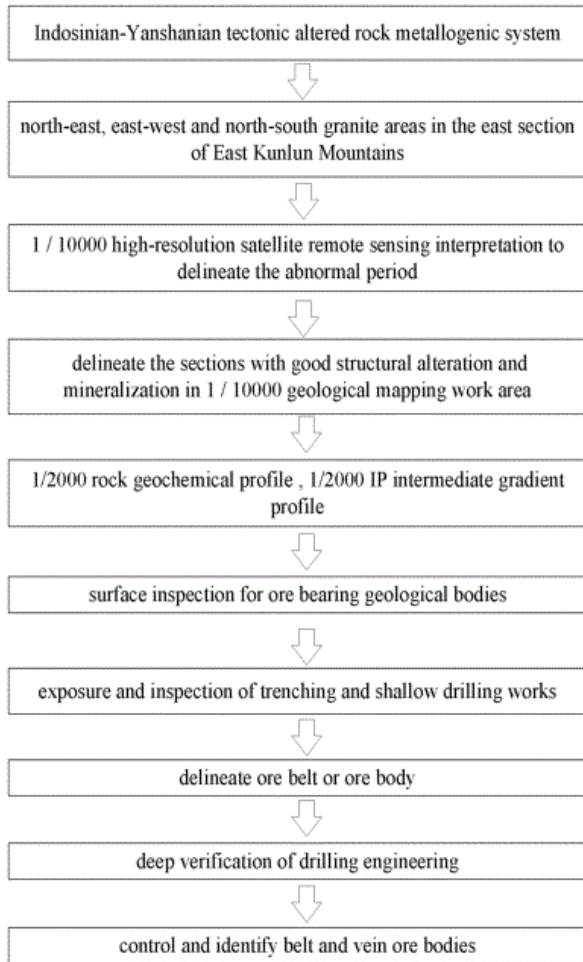
72: ZHANG, Daming, ZHAO, Jianpeng, MA, Zhongyuan, ZHANG, Jianping, SU, Shengshun

**54: COMPREHENSIVE EXPLORATION METHOD FOR GOLD DEPOSITS IN PLATEAU BEDROCK AREA**

00: -

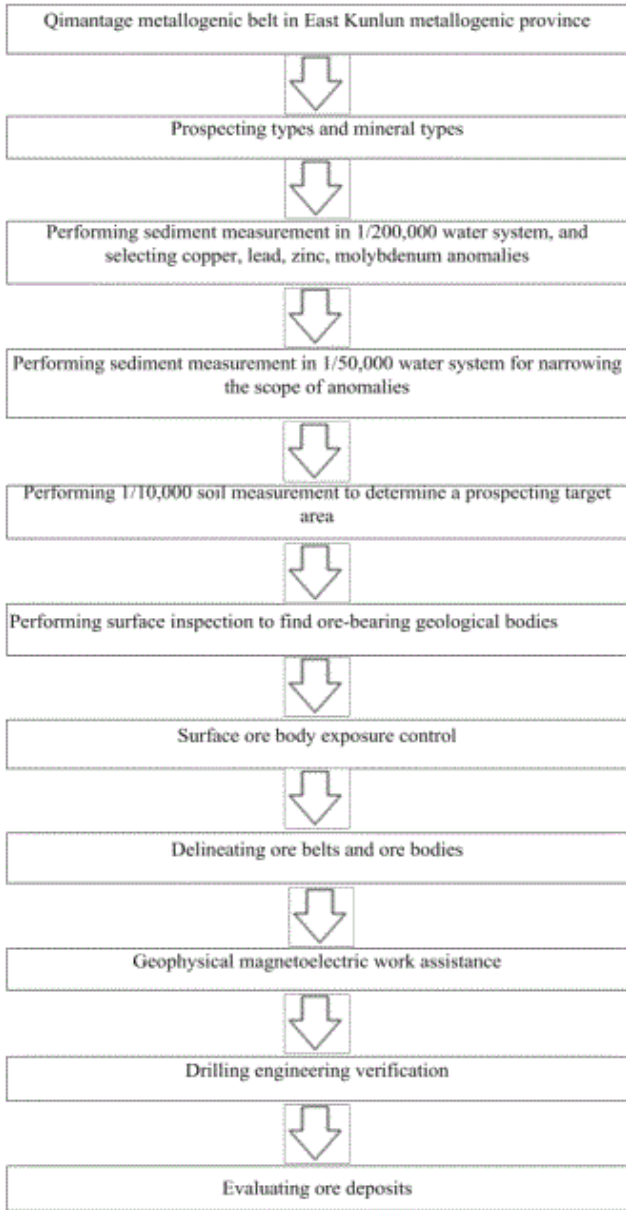
The present disclosure discloses a comprehensive prospecting method for gold deposits in bedrock area of the Qinghai Tibet Plateau, and proposes an integrated prospecting method of "large-scale remote sensing + geological mapping + large-scale geophysical and geochemical prospecting profile + engineering verification", which has made a great breakthrough in prospecting. The implementation of the combination method can effectively avoid the limitation of traditional stream sediment survey

method in exploration of gold deposits on the plateau, rapidly reduce the prospecting target area in the exposed bedrock area, realize the spatial positioning of mineralized alteration zones and ore bearing geological bodies, and thus improve the prospecting success rate, which has the advantages of short exploration period, high efficiency and low exploration cost, and is suitable for the exploration of banded and veined tectonic altered lithologic gold deposits.

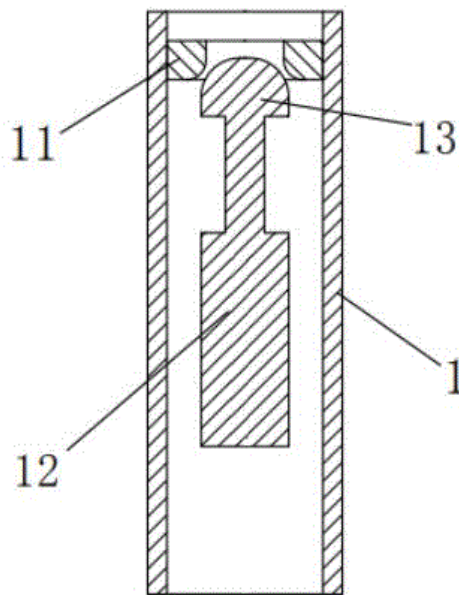


The present disclosure discloses a comprehensive exploration method for polymetallic ores in plateau loess coverage areas, and proposes an integrated prospecting method of “metallogenic belt + stream sediment survey + soil survey + surface inspection and prospecting for ore bearing geological bodies + trenching exposure + geophysical exploration aided judgment of structures and ore bearing geological bodies + engineering verification + metallogenic research”, which has made a great breakthrough in the prospecting process. The implementation of the combination method can effectively avoid the limitation of shallow coverage conditions on conventional prospecting methods, rapidly narrow the prospecting range in shallow coverage areas, realize the spatial positioning of ore (mineralization) bodies, and thus improve the prospecting success rate, which has the advantages of short exploration period, high efficiency and low exploration cost, and is suitable for the exploration of polymetallic ores in shallow coverage areas.

21: 2022/10289. 22: 2022/09/16. 43: 2022/11/04  
 51: G01V  
 71: The Third Geological Exploration Institute of Qinghai Province  
 72: MA, Zhongyuan, LIN, Gui, ZHAO, Yongliang, ZHANG, Daming, LIU, Guoyan  
**54: COMPREHENSIVE EXPLORATION METHOD FOR POLYMETALLIC ORES IN PLATEAU LOESS COVERAGE AREAS**  
 00: -



flow limiting rings are uniformly arranged inside the pulse generator nipple, an actuator capable of passing through each of the flow limiting rings is movably arranged inside the pulse generator nipple, one end of the actuator remote from a valve core has a mushroom-shaped valve head, and each of the flow limiting rings can be in surface contact with a valve head to block a slurry passage inside the pulse generator nipple. The wireless measurement while drilling provided by the invention can improve the slurry blocking effect so as to generate an obvious pulse pressure.



21: 2022/10290. 22: 2022/09/16. 43: 2022/11/04  
51: E21B

71: Beijing Research Institute of Chemical Engineering and Metallurgy  
72: YANG, Lizhi, LI, Po, LI, Zhaokun, LI, Jianhua, HU, Baishi, CUI, Yufeng, DU, Zhiming, LIU, Zhengbang, QIN, Hao

**54: WIRELESS MEASUREMENT WHILE DRILLING**

00: -  
The invention discloses a wireless measurement while drilling, and relates to the technical field of drilling engineering, comprising a pulse generator nipple, a probe tube nipple and a battery cartridge nipple connected in sequence, wherein a plurality of

21: 2022/10291. 22: 2022/09/16. 43: 2022/11/04  
51: G01V

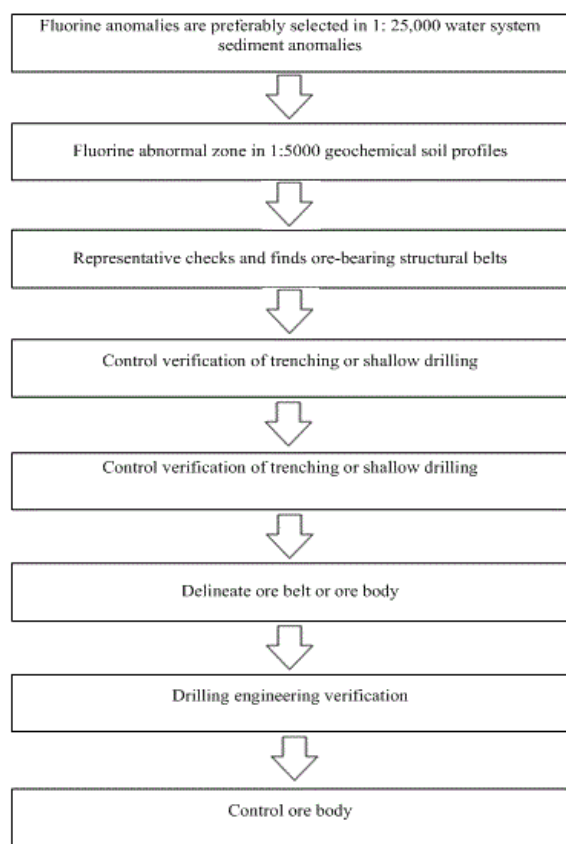
71: The Third Geological Exploration Institute of Qinghai Province

72: ZHANG, Daming, WANG, Zongsheng, MA, Zhongyuan, HAN, Shengrong, DING, Zhaobin

**54: COMPREHENSIVE EXPLORATION METHOD FOR FLUORITE ORES IN SHALLOW COVERAGE AREAS**

00: -  
The present disclosure discloses a comprehensive exploration method for fluorite ores, and proposes an integrated prospecting method of “water system sediment measurement + large-scale geochemical exploration profile + engineering verification”, which achieves a huge prospecting breakthrough in the prospecting process. By means of the implementation of the combined method, the

limitations of shallow coverage conditions on conventional geological mapping can be effectively avoided, a prospecting target area can be quickly reduced in the Quaternary coverage area, and the spatial positioning of mineralized alteration zones and ore-bearing geological bodies is realized, thereby the success rate of prospecting is improved. The combined method has the advantages of short exploration period, high efficiency and low exploration cost, and is suitable for the exploration of shallow vein fluorite ores.



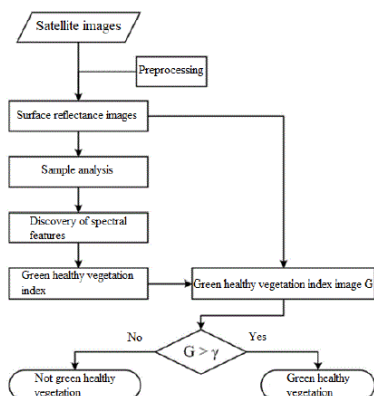
21: 2022/10292. 22: 2022/09/16. 43: 2022/11/04  
 51: A23G  
 71: Xuzhou Institute of Agricultural Sciences of the Xuhuai District  
 72: YUE Ruixue, SUN Jian, NIU Fuxiang, ZHANG Yi, ZHU Hong, XU Fei, ZHANG Wenting, MA Chen, DENG Shaoying  
**54: PURPLE SWEET POTATO ICE CREAM POWDER WITH HIGH DIETARY FIBER AND APPLICATION THEREOF**  
 00: -  
 A purple sweet potato ice cream powder with high dietary fiber and its application belong to the

technical field of deep processing of agricultural products. In order to enrich the types of ice cream, the invention provides a preparation method of purple sweet potato ice cream powder with high dietary fiber. The method comprises the following steps of: weighing skim milk powder, superfine powder of sweet potato dietary fiber, superfine powder of purple sweet potato, white granulated sugar, beta-cyclodextrin, emulsifier, compound stabilizer, food antioxidant and organic acid according to the formula. Then mix that weighed raw material with water, uniformly stirring, homogenizing, sterilize and aging to obtain ice cream mixture, and then filling and hardening to obtain purple sweet potato ice cream powder with high dietary fiber. According to the invention, sweet potato dietary fiber and superfine powder of purple sweet potato are added into the ice cream, so that the ice cream is rich in a large amount of bioactive substances anthocyanin and dietary fiber, meanwhile, the original nutritional ingredients of purple sweet potato are retained, the product is endowed with special flavor, the nutritional value of the ice cream is improved, and people's pursuit of health food is met.

21: 2022/10293. 22: 2022/09/16. 43: 2022/11/04  
 51: G06K  
 71: Henan University  
 72: TIAN, Haifeng, QIAO, Jiajun, QIN, Yaochen, WANG, Zihua, YANG, Mengdan, QUAN, Shu, WANG, Shuai, WANG, Yongjiu  
 33: CN 31: 202210156692.3 32: 2022-02-21  
**54: METHOD FOR CONSTRUCTING GREEN HEALTHY VEGETATION INDEX FOR REMOTE SENSING IDENTIFICATION**  
 00: -

Provided is a method for constructing a green healthy vegetation index for remote sensing identification, including the following steps: obtaining surface reflectance images from optical satellite images via a cloud platform, and acquiring spectral information of green healthy vegetation, withered deciduous vegetation and other ground object samples by using spectral acquisition software; analyzing spectral differences of green healthy vegetation from withered deciduous vegetation and other ground objects in the satellite images, drawing a conclusion that green healthy vegetation exhibits a high reflectance in a near-infrared band, and a low

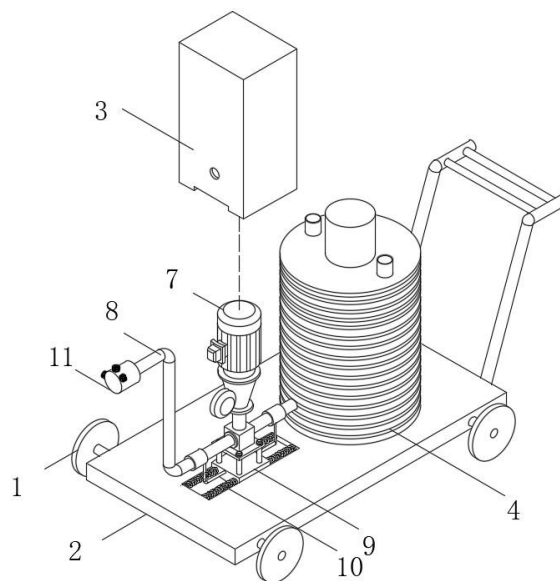
reflectance in a red band and a short-wave infrared band, establishing a green healthy vegetation index algorithm for remote sensing on this basis, and determining a threshold of a green healthy vegetation index for identifying green healthy vegetation. Technical solutions and theoretical support are provided for realizing spatial distribution mapping of green healthy vegetation, pest and disease monitoring, etc.



21: 2022/10387. 22: 2022/09/20. 43: 2022/10/25  
 51: A01B  
 71: NINGXIA NONGKEN WARM SPRING FARM CO., LTD.  
 72: CUI, Yongtao, MA, Xianjun, ZHANG, Wanyou, CHEN, Ningdu, YU, Jun, LI, Xuehong, RUAN, Mengbing

**54: WEEDING-SPRAYING MACHINE SET FOR STRIP COMPOUND PLANTING OF CORNS AND SOYBEANS**

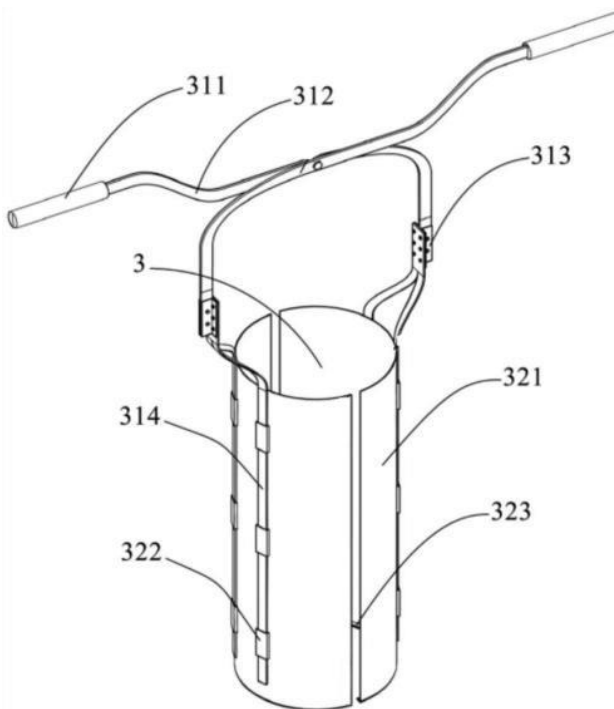
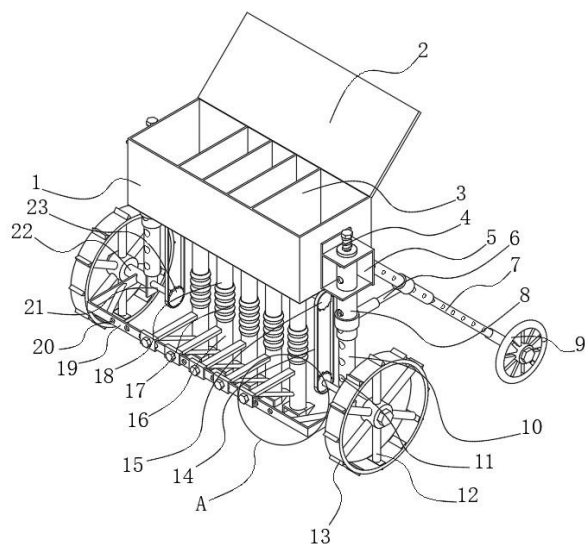
00: -  
 The present invention discloses a weeding-spraying machine set for strip compound planting of corns and soybeans, which belongs to the technical field of spraying equipment. The weeding-spraying machine set comprises a chassis; wheels are rotatably mounted at the outer sides of the chassis by rotating shafts; a pushing handle is fixedly mounted on the outer wall of one side of the chassis; a protective cover and a herbicide storage tank are fixedly mounted at the top of the chassis; a mounting top groove is formed in the top surface of the chassis; a base component is arranged in the mounting top groove; and a herbicide pump is fixedly mounted at the top of the base component.



21: 2022/10388. 22: 2022/09/20. 43: 2022/10/25  
 51: A01C  
 71: NINGXIA NONGKEN WARM SPRING FARM CO., LTD.  
 72: ZHANG, Wanyou, CUI, Yongtao, MA, Xianjun, CHEN, Ningdu, YU, Jun, LI, Xuehong, RUAN, Mengbing

**54: INTEGRATED SEEDING DEVICE FOR MIXED CROPPING OF SILAGE CORNS AND SOYBEANS**

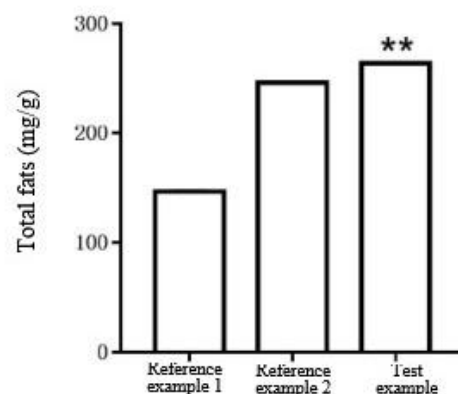
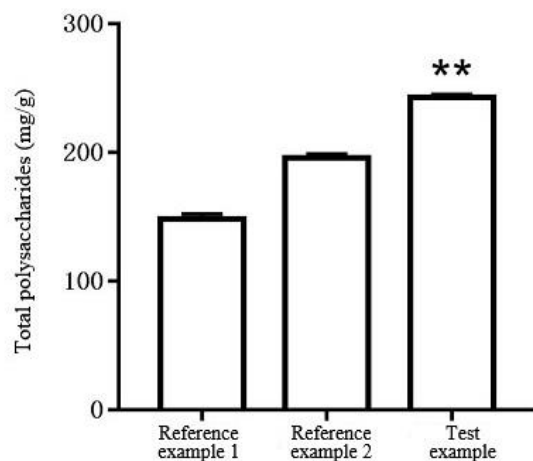
00: -  
 The present invention discloses an integrated seeding device for mixed cropping of silage corns and soybeans, comprising a box body, wherein brackets are fixedly mounted at two sides of the box body; the interior of each bracket is fixedly sleeved with a support cylinder; the interior of the support cylinder is movably sleeved with an inner column; adjusting holes are formed in the interiors of the inner column and the support cylinder; the interior of a top end of the support cylinder is in threaded connection with a screw rod; the outer side of a bottom end of the screw rod is movably sleeved with a shaft seat; a telescopic rod is mounted at one side of the bracket; and a supporting wheel is movably mounted at the other end of the telescopic rod.



21: 2022/10445. 22: 2022/09/21. 43: 2022/10/25  
 51: G01N  
 71: INSTITUTE OF WATER RESOURCES FOR PASTORAL AREA, MINISTRY OF WATER RESOURCES  
 72: TANG, Guodong, GUO, Jianying, ZHENG, Ying, YANG, Zhenqi, ZHANG, Tiegang  
 33: CN 31: 202111115672.3 32: 2021-09-23  
**54: UNDISTURBED SOIL SAMPLER FOR GRASSLAND AREA**

00: -  
 The present invention discloses an undisturbed soil sampler for a grassland area, which belongs to the field of soil sampling equipment, and includes a soil sampling casing pipe, a soil sampling shovel and an undisturbed soil sampling lifting apparatus. The soil sampling casing pipe includes an outer cylinder and an inner cylinder. The outer cylinder is sleeved outside the inner cylinder. The undisturbed soil sampling lifting apparatus includes force application arms, and the number of the force application arms is two. When the present invention is in use, the outer cylinder is first punched into the soil; then the inner cylinder is inserted into the outer cylinder; then the inner cylinder is also punched into the soil; after an upper end of the inner cylinder is flush with an upper end of the outer cylinder, the soil sampling shovel is used for taking out the soil.

21: 2022/10489. 22: 2022/09/21. 43: 2022/10/25  
 51: C12N; C12Q  
 71: YANG, Manjun  
 72: YANG, Manjun  
 33: CN 31: 202111401727.7 32: 2021-11-19  
**54: DNA BARCODE FOR SCREENING FLOCCULARIA LUTEOVIRENS WITH HIGH TOTAL POLYSACCHARIDE CONTENT**  
 00: -  
 The present invention discloses a DNA barcode for screening *Floccularia luteovirens* with high total polysaccharide content, belonging to the technical field of screening of edible fungi germplasm resources. Compared with a traditional breeding method and other existing DNA barcode technologies, the present invention has the advantages of time saving, labor saving, money saving, accuracy and high efficiency, plays a positive role in genetic breeding of high-quality *Floccularia luteovirens*, and also provides an effective method for identification and protection of germplasm resources.



21: 2022/10490. 22: 2022/09/21. 43: 2022/10/25

51: C12N; C12Q

71: YANG, Manjun

72: YANG, Manjun

33: CN 31: 202111401641.4 32: 2021-11-19

**54: DNA BARCODE FOR SCREENING FLOCCULARIA LUTEOVIRENS WITH HIGH TOTAL FAT CONTENT**

00: -

The present invention discloses a DNA barcode for screening *Floccularia luteovirens* with high total fat content, belonging to the technical field of screening of edible fungi germplasm resources. Compared with a traditional breeding method and other existing DNA barcode technologies, the present invention has the advantages of time saving, labor saving, money saving, accuracy and high efficiency, plays a positive role in genetic breeding of high-quality *Floccularia luteovirens*, and also provides an effective method for identification and protection of germplasm resources.

21: 2022/10756. 22: 2022/09/29. 43: 2022/11/16

51: G06F; H04L

71: ZHEJIANG GONGSHANG UNIVERSITY

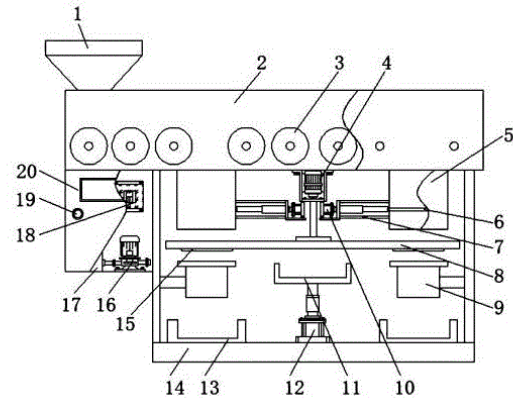
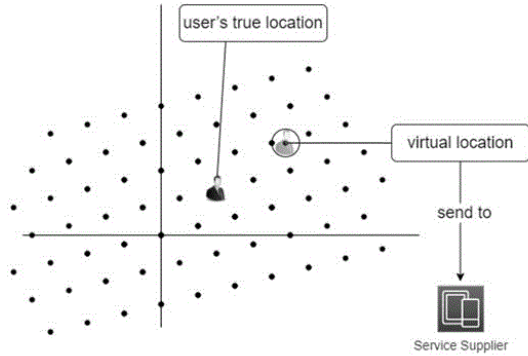
72: XIE, Mande, MA, Xuyu, YU, Jun

**54: A LOCATION PRIVACY PROTECTION MECHANISM BASED ON LEARNING WITH ERRORS IN LATTICE CRYPTOGRAPHY**

00: -

In recent years, with the construction of location-based systems and the increasing number of geographic location application scenarios, some security issues regarding geographic location privacy have also emerged. Some companies may arbitrarily or illegally collect and profit from users' geographic location information. Fortunately, many researchers have proposed many privacy-preserving schemes in the field of cryptography. Lattice cryptography has the geometric properties of geographic location conversion, and at the same time has high security, which can resist quantum algorithms attacks. However, there is currently no relevant lattice cryptographic scheme to protect geographic location privacy. Therefore, this patent fills the gap in the application of lattice cryptography and firstly apply lattice cryptography to geographic location privacy protection. Firstly, this scheme combines lattice cryptography with geographic location privacy protection and propose a location privacy protection mechanism based on LWE problem in lattice cryptography. Then, this patents proposes a new definition of geographic indistinguishability based on the LWE problem, and prove that our scheme has strong security and resistance to quantum algorithms attacks. Finally, this patents provides some parameter options that can improve performance and efficiency while ensuring the security.





21: 2022/10813. 22: 2022/09/30. 43: 2022/11/16  
51: B65B

71: Tarim University

72: LIU, Yang, ZHANG, Yongcheng, LI, Shiyuan, TANG, Yurong, LI, Zhanbiao, WANG, Xingyu

**54: BAGGING AND PACKAGING MACHINE FOR FRAGRANT PEARS**

00: -

The invention discloses a bagging and packaging machine for fragrant pears, which comprises a machine body, wherein the top of the machine body is fixedly connected with a material selecting box by bolts, the top of the material selecting box is fixedly connected with a feed hopper by bolts, one end of one side outer wall of the material selecting box which is fixedly connected with a second motor by bolts is rotatably connected with a material selection roller by a rotating shaft, the bottom of the material selecting box is fixedly connected with a first motor, a discharge cylinder and an electric control box by bolts, and the first motor is positioned between the discharge cylinder and the electric control box. And one end of the first motor is rotatably connected with a rotating ring through a rotating shaft, and the bottom of the rotating ring is provided with an adhesive layer. On the one hand, the invention improves the bagging and packaging efficiency of the fragrant pear by automatically bagging the fragrant pear, and reduces the time and effort of manual bagging; on the other hand, it reduces the contact between operators and the fragrant pear, reduces the contact damage of the fragrant pear, ensures the integrity of the fragrant pear skin, and prolongs the storage time.

21: 2022/10814. 22: 2022/09/30. 43: 2022/11/16  
51: A01B; E02D; G01B

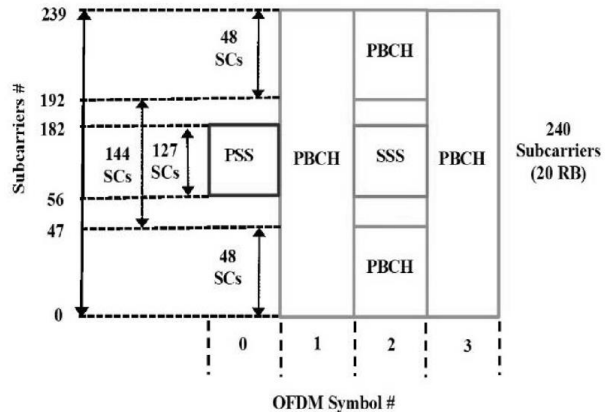
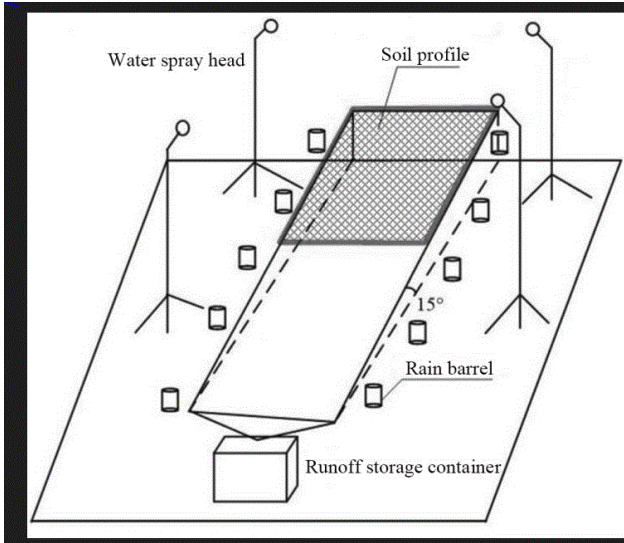
71: SICHUAN AGRICULTURAL UNIVERSITY

72: WANG, Yong, XU, Haichao, ZHANG, Jianhui, ZHANG, Zehong, HU, Chunyang, WANG, Gang, PU, Shangrao, HUANG, Xiong, SUN, Zhipeng

**54: METHOD FOR MEASURING INFLUENCE OF TILLAGE EROSION ON UPHILL WATER EROSION OF SLOPING LAND**

00: -

The invention discloses a method for measuring the influence of tillage erosion on uphill water erosion of sloping land. On the uphill slope, soil thicknesses of different depths are designed to represent different tillage erosion intensities, and the smaller the soil thickness, the greater the tillage erosion intensity. The runoff yield and sediment yield of runoff plots under different tillage intensities are measured to measure the influence of tillage erosion on water erosion. The method has the advantages of solving the problem of measuring the influence of tillage erosion on water erosion, and providing a measuring method for the research of preventing and controlling soil erosion on sloping farmland, maintaining soil fertility, improving land productivity and the like.



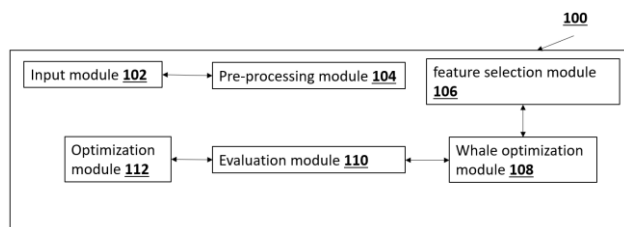
21: 2022/10820. 22: 2022/09/30. 43: 2022/11/09  
 51: H04W  
 71: DR.VISHWANATH KARAD MIT WORLD PEACE UNIVERSITY, PATEL, Vibha, WARHADE, Krishna  
 72: PATEL, Vibha, WARHADE, Krishna  
**54: A NOVEL CONVOLUTIONAL NEURAL NETWORK BASED CARRIER FREQUENCY OFFSET ESTIMATOR FOR MIMO OFDM IN 5G**

00: -  
 In 5G New Radio (NR), it is estimated that data traffic would increase rapidly. It becomes difficult for conventional communication systems to perform exceptionally well due to limited block type structure. Recently, deep learning methods gain attention specifically at the Physical layer of communication systems. In addition to that, in 5G NR, the defined carrier frequencies are very high that may result in large timing and frequency offsets. This results in loss of synchronization which deteriorates the performance of the system as well as decreases throughput. Estimating and compensating these offsets at the receiver side improves the performance as well as throughput. Conventional Maximum Likelihood algorithm has been extensively used to estimate carrier frequency offsets. But this is based on conventional block structure communication systems. Here, Deep learning based estimation is investigated for Multiple Input Multiple Output (MIMO)-Orthogonal Frequency Division Multiplexing (OFDM) under 5G channel model i.e. Tapped Delay Line (TDL). Simulation results showed that the proposed CNN based estimator performs exceptionally well in all delay profiles of TDL.

21: 2022/10821. 22: 2022/09/30. 43: 2022/11/09  
 51: G01N

71: Dr. Sandeep Samantaray, Dr. Soumendra Kumar Mohanty, Abinash Sahoo, Chinmayee Biswakalyani, Dr. Deba Prakash Satapathy  
 72: Dr. Sandeep Samantaray, Dr. Soumendra Kumar Mohanty, Abinash Sahoo, Chinmayee Biswakalyani, Dr. Deba Prakash Satapathy  
**54: A SYSTEM FOR PREDICTING SUSPENDED SEDIMENT CONCENTRATION USING HYBRID APPROACH AND METHOD THEREOF**

00: -  
 A system (100) and a method (200) for predicting suspended sediment concentration, comprises of: an input module (102) for preparing a dataset based on a plurality of parameters collected over a defined interval of time; a pre-processing module (104) for enhancing the prepared dataset; a feature selection module (106) for selecting a plurality of features essential to predict suspended sediment concentration, wherein the plurality of features are selected by a whale optimization module (108); an evaluation module (110) for training and evaluating a support vector machine based on a training dataset, wherein the fitness of the training dataset is evaluated; and an optimization module (112) for optimizing a support vector machine parameter and a feature subset obtained from the whale optimization module and the evaluation module to accurately predict the suspended sediment concentration.



21: 2022/10828. 22: 2022/09/30. 43: 2022/11/09

51: A61B

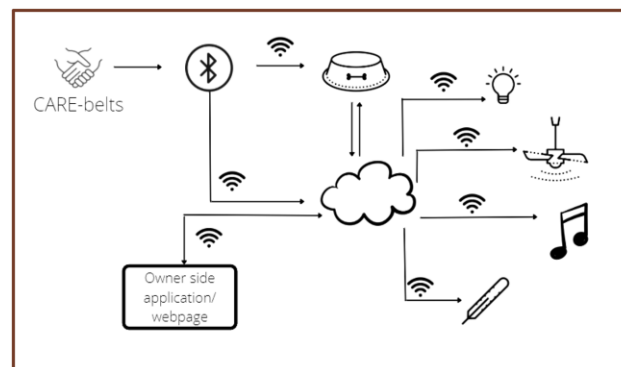
71: DR.VISHWANATH KARAD MIT WORLD PEACE UNIVERSITY, PATIL, Seema Jitendra, JAGTAP, Vandana Swapnil, BAVISKAR, Dipali Prashant

72: SINGH, Muskan, PATADE, Rushikesh, AGGARWAL, Era, CHELLANI, Jatin, KAMTIKAR, Monish

#### 54: AN INTELLIGENT WEARABLE BAND FOR HEALTH MONITORING AND TRACKING

00: -

The present invention is based on tracking the main vitals of any family member or pet who might need medical or basic monitoring attention in the absence of an able guardian. The vitals of these individuals would be tracked through health-tracking Carebelts which would generate an aggregate health or comfort index both in real-time and overtime of the being which needs to be taken care of. This shall allow alerts to be generated on the guardian's phone in-case their health aggregate falls outside the normal range taken into account through the application software. These alerts would allow the consumer to be able to cater to their children, pets or elderly family members in every possible way by a few clicks on their phone. This is alongside making their homes smart and efficient. They are actually going to be able to control all their home's electronics like fans, thermistors, ACs, lightbulbs, speakers and literally any centralized electronics through the concerned IoT based configurations. It would actually enable the guardian's virtual presence next to their loved ones at home even when they are not. The set-up could be tailored as per the needful person/animal which needs the catering by inculcating their normal vital range as standard inputs and adding subsidiary micro technologies of speed dials to hospitals, schools as well as custom-tailored hardware like pet-feeders and many more.



21: 2022/10862. 22: 2022/10/03. 43: 2022/11/16

51: C04B

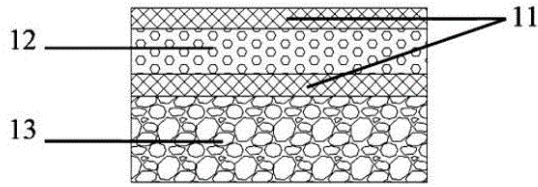
71: TAISHAN UNIVERSITY

72: WANG, Qing, MAO, Junheng, ZHANG, Rui

#### 54: PREPARATION METHOD OF WATER-PERMEABLE AND OIL-RESISTANT CONCRETE

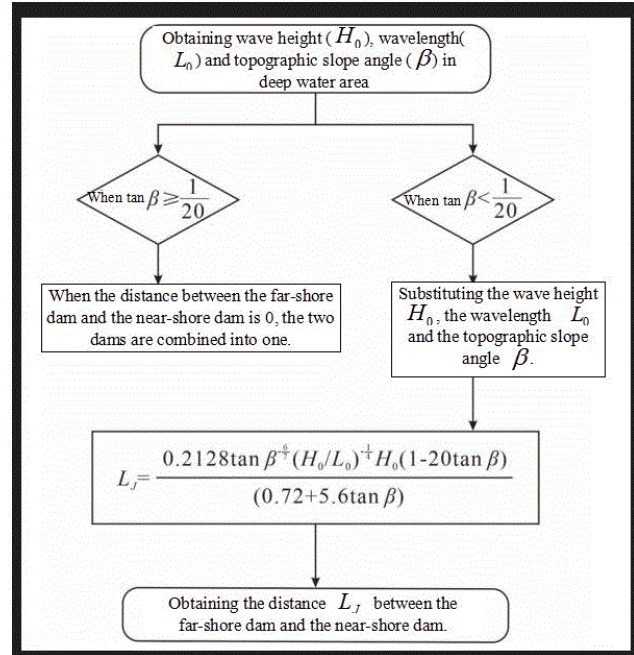
00: -

The invention discloses a preparation method of water-permeable and oil-resistant concrete, which comprises the following steps: (1) selecting ceramic polishing waste as aggregate to prepare ceramic polishing aggregate water-permeable concrete; (2) heating the copper net in the air with flame, immersing it in cement slurry after heating, and taking it out at a speed of 0.1 m/s after 30 s to obtain the water-permeable and oil-resistant modified copper net; placing the water-permeable and oil-resistant modified copper net on the upper surface of the ceramic polishing aggregate water-permeable concrete prepared in the step (1); (3) preparing modified ceramic polishing powder water-permeable and oil-resistant concrete, pouring the modified ceramic polishing powder water-permeable and oil-resistant concrete on the modified copper net, and laying a layer of water-permeable and oil-resistant modified copper net on the upper surface of the modified ceramic polishing powder water-permeable and oil-resistant concrete to obtain the water-permeable and oil-resistant concrete. The water-permeable and oil-resistant concrete prepared by the invention can achieve the purpose of water-permeable and oil-resistant at the same time of oil-water separation, which can supplement groundwater and prevent oil pollution.



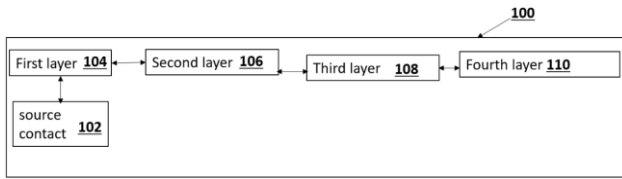
21: 2022/10863. 22: 2022/10/03. 43: 2022/11/16  
 51: E02B  
 71: XINJIANG UNIVERSITY  
 72: HU, Chenlin, HAN Changcheng  
**54: METHOD FOR CALCULATING DISTANCE BETWEEN FAR-SHORE DAM AND NEAR-SHORE DAM ON LAKESHORE**  
 00: -

The invention discloses a method for calculating distance between far-shore dam and near-shore dam on lakeshore, which comprises the following steps: step 1, measuring the data of wave height, wavelength and topographic slope angle Beta in deep water area; step 2, determining the wave height at the breaking point of the lake; step 3, determining the water depth of the breaking point; step 4, determining the water depth of the wave breaking point; and step 5, determining the distance between the far-shore dam and the near-shore dam according to the thickness difference between the sand bodies of the far-shore dam and the near-shore dam. The problem that the distance between the far-shore dam and the near-shore dam cannot be accurately measured is solved.



21: 2022/10999. 22: 2022/10/07. 43: 2022/11/09  
 51: C01B  
 71: Dr. Brinda Bhowmick, Zohmingliana, Dr. Bijit Choudhury  
 72: Dr. Brinda Bhowmick, Zohmingliana, Dr. Bijit Choudhury  
**54: A DEVICE FOR DESIGNING AND ANALYZING DOUBLE GATE DUAL MATERIAL GATE GRAPHENE NANORIBBON VTFET**

00: -  
 A device (100) for designing and analyzing double gate dual material gate graphene nanoribbon VTFET (DG-DMG-GNR-VTFET), wherein the device (100) comprises of: a source contact (102); a first layer (104) made up of silicon material; a second layer (106) formed on a distal end of the first layer (104) made up of a p-doped layer forming a source; a third layer (108) formed on the distal end of the second layer (106) made up of a double gate for boosting a conduction current and reducing a short channel effects (SCEs), wherein the third layer (108) comprises of at least two different metal gate forming a graphene n-channel; and a fourth layer (110) formed on the distal end of the third layer (108) forming a n-doped drain, wherein a dielectric material is sandwiched between the fourth layer (110) and the third layer (108) with a defined oxide thickness forming a gate oxide.



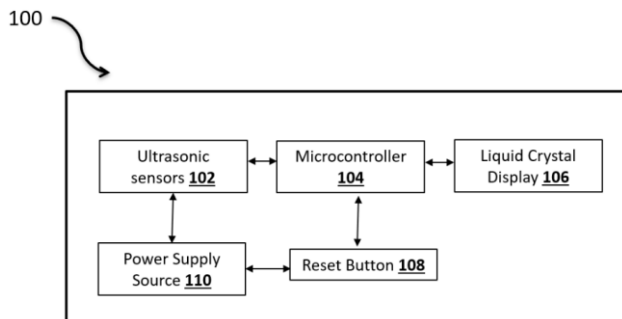
21: 2022/11000. 22: 2022/10/07. 43: 2022/11/09  
51: A63B

71: Rumi Iqbal Doewes, Gunathevan Elumalai, Siti Hartini Azmi

72: Rumi Iqbal Doewes, Gunathevan Elumalai, Siti Hartini Azmi

**54: SENSOR-INTEGRATED FUTSAL DRIBBLE TIMER**

00: -  
Basically, the assessment of the athlete's quality is determined by various factors in the form of dribbling, passing, and shooting. One of the factors that affect the quality of athletes is the athlete's speed when dribbling the ball. In general, the athlete's dribble speed calculation uses a conventional tool in the form of a stopwatch. However, the use of a stopwatch to calculate the athlete's dribble speed still has problems with the accuracy of the time calculation. This is because pressing the start and stop button on the stopwatch is still done manually. Then the accuracy of the time calculation is different from the original. From the problems mentioned above, the idea emerged to create an innovative timer that is integrated with a microcontroller and sensor.

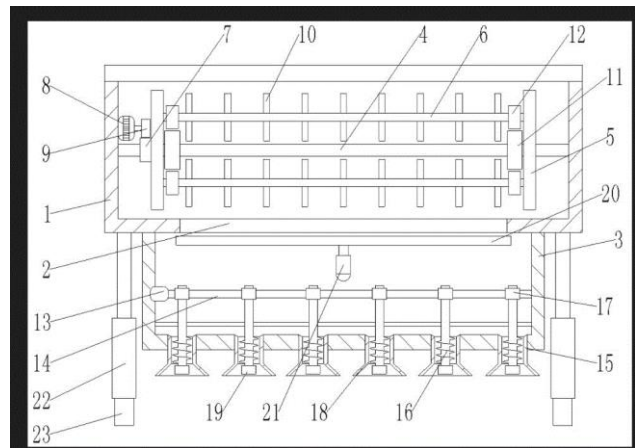


21: 2022/11092. 22: 2022/10/11. 43: 2022/11/16  
51: A01C

71: HUAIYIN INSTITUTE OF AGRICULTURAL SCIENCES OF XUHUAI REGION IN JIANGSU  
72: LI, Chuanzhe, CHEN, Chuan, ZHUANG, Chun, ZHANG, Ankang, SHAO, Wenqi, Ji, Li, ZHANG, Miao, XIE, Changyan, FENG, Bing

**54: AN IMPROVED SEEDER FOR PLANT ASH OF BIOMASS POWER GENERATION**

00: -  
The invention discloses an improved seeder for plant ash of biomass power generation, which comprises a mixing mechanism and a sowing mechanism. The bottom of the mixing mechanism is fixedly connected with the sowing mechanism. The mixing mechanism contains a mixing box and a mixing part is arranged in the mixing box. There is a discharge hole located at the bottom of the mixing box, which is the passageway linking to the sowing mechanism. And an opening and closing assembly is arranged on the discharge hole. Moreover, there is a box cover at the top of the mixing box. The sowing mechanism comprises a sowing box, which is connected with the mixing box. The bottom of the sowing box is arranged with a plurality of mounting holes at equal intervals. There are sowing parts installed in the mounting holes and driving assemblies installed in the sowing box. And all the sowing parts match with the driving assemblies in a transmission way. Chemical fertilizer and plant ash can be stirred by the mixing part in the mixing box, and then the mixture is evenly spread on the soil surface by the sowing part to improve the structure of soil aggregates and nutrition content in the soil.



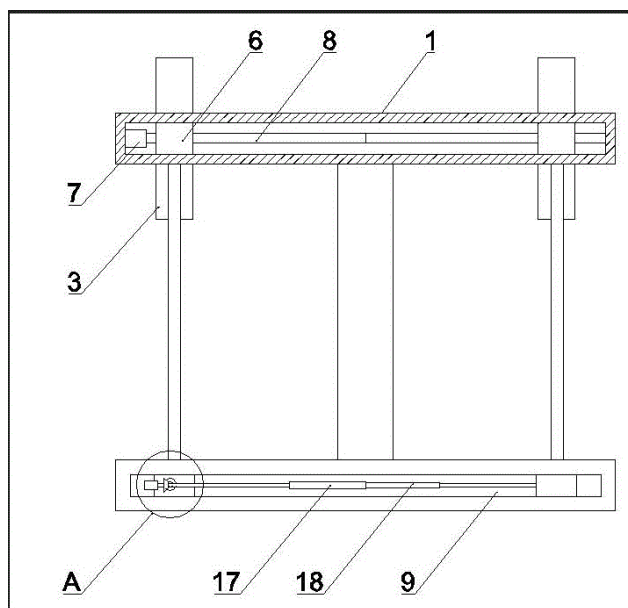
21: 2022/11093. 22: 2022/10/11. 43: 2022/11/16  
51: A01B; A01M

71: HEILONGJIANG ACADEMY OF AGRICULTURAL MACHINERY SCIENCES  
72: LI, Cunbin

**54: INTER-ROW TILLAGE WEEDING MACHINE**

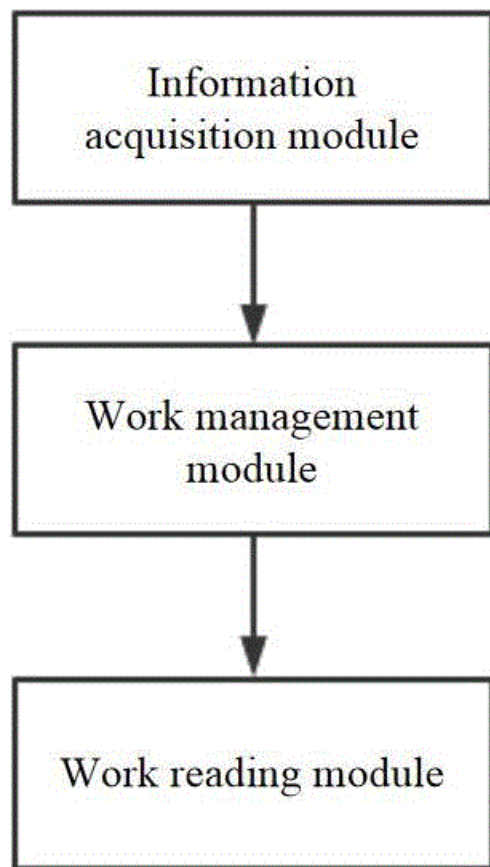
00: -  
The invention discloses an inter-row tillage weeding machine, which comprises a frame installed at the tail end of a tractor; two support frames are arranged

at the bottom of one side of the frame close to the tractor; the bottom end of the support frame is provided with moving wheels, and two moving wheels are arranged in parallel; the frame is provided with a moving component; the support frame is slidably connected with the frame through the moving assembly; one side of the frame far away from the tractor is provided with two adjusting components; the two adjusting assemblies are respectively fixedly connected with the two support frames through connecting rods, and the two adjusting assemblies are in transmission connection; A weeding shovel is arranged at the bottom end of the adjusting assembly; the weeding shovel is detachably connected with the bottom end of the adjusting component through a connecting component. The weeding device is simple in structure, convenient to operate, suitable for weeding in the intertillage with different inter-row intervals and different depths, ensures the effect and efficiency of weeding in the intertillage, reduces the agricultural planting cost, and is convenient to popularize.



The invention discloses a management system of contemporary literary works, and relates to the technical field of literary works reading management. The management system includes an information acquisition module, a work management module and a work reading module, wherein the information acquisition module, the work management module and the work reading module are connected in sequence; the information acquisition module is used for acquiring content information and transaction information of contemporary literary works; the work management module is used for storing and managing the content information and the transaction information through the blockchain, wherein the content information and the transaction information are matched; and the work reading module is used for counting the transaction information, obtaining the transaction volume of contemporary literary works, determining the reading price of contemporary literary works according to the transaction volume, and realizing the reading management of contemporary literary works according to the reading price. The invention enables students and teachers to obtain the content information of contemporary literary works through various channels, and provides more appropriate reading prices for students and teachers.

21: 2022/11094. 22: 2022/10/11. 43: 2022/11/16  
 51: G06F; G06Q  
 71: YANCHENG TEACHERS UNIVERSITY  
 72: ZHOU, Yinyin, YAO, Hongbing  
 54: MANAGEMENT SYSTEM OF  
 CONTEMPORARY LITERARY WORKS  
 00: -



21: 2022/11207. 22: 2022/10/13. 43: 2022/11/03  
 51: A23K  
 71: INSTITUTE OF ANIMAL SCIENCE,  
 GUANGDONG ACADEMY OF AGRICULTURAL  
 SCIENCES  
 72: JIN, Chenglong, CHEN, Wei, ZHAI, Zhenya,  
 WANG, Shuang, ZHENG, Chuntian, XIA, Weiguang  
**54: LAYING DUCK FEED FOR IMPROVING  
 FRESHNESS OF DUCK EGGS DURING  
 STORAGE PERIOD AND REPRODUCTIVE  
 PERFORMANCE OF LAYING DUCKS AND  
 APPLICATION THEREOF**  
 00: -  
 The present invention discloses a laying duck feed  
 for improving freshness of duck eggs during a  
 storage period and reproductive performance of  
 laying ducks. The feed comprises the following raw  
 materials in parts by weight: 400-600 parts of corn,  
 50-100 parts of soybean meal, 50-100 parts of  
 cotton meal, 50-100 parts of rapeseed meal, 40-90  
 parts of stone powder, 20-50 parts of fish meal, 10-  
 20 parts of vegetable oil, 10-15 parts of calcium  
 hydrogen phosphate, 3-5 parts of amino acids, 2-3

parts of edible salt, 1-2 parts of choline chloride, 1-2  
 parts of plant extract, 1-2 parts of complex  
 microelements, 0.5-0.8 part of multivitamins, 0.5-0.8  
 part of complex enzyme preparation and 0.2-0.5 part  
 of soy isoflavone.

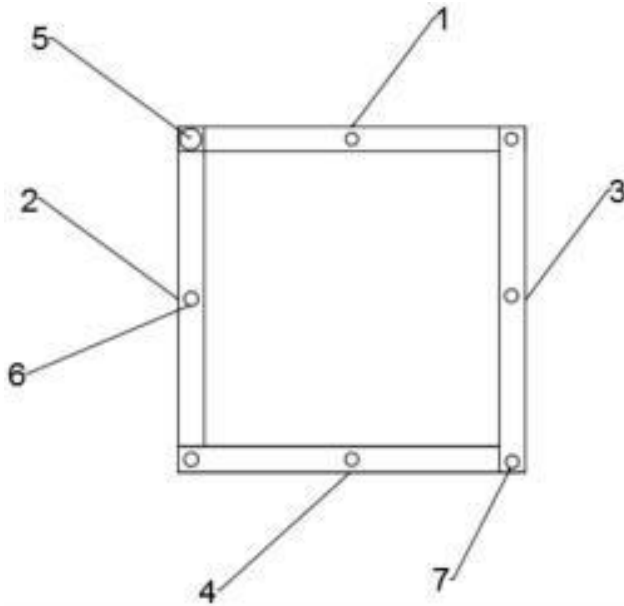
21: 2022/11208. 22: 2022/10/13. 43: 2022/11/03  
 51: G01N

71: INSTITUTE OF WATER RESOURCES FOR  
 PASTORAL AREA, MWR

72: GE, Nan, WANG, Jian, CHEN, Xiaoyang, ABIAS,  
 MIAO, Henglu, CHENG, Bo, YUCHI, Wensi, HAN,  
 Yanlong, ZHANG, Jing, BAI, Xiliang, BATU, SHI,  
 Hongbiao

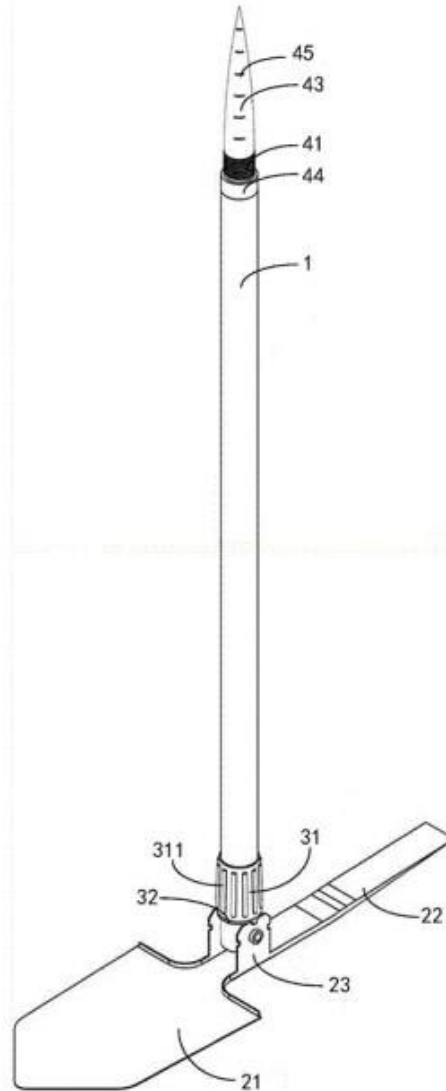
**54: SAMPLING DEVICE FOR GRASS QUADRAT**  
 00: -

The present invention relates to a sampling device  
 for a grass quadrat, which belongs to the technical  
 field of botany. The sampling device for the grass  
 quadrat includes a first fixed rod, a second fixed rod,  
 a first sliding rod and a second sliding rod. One end  
 of the first fixed rod is hinged with one end of the  
 second fixed rod; one end of the first sliding rod and  
 one end of the second sliding rod are movably  
 connected; the other end of the first sliding rod is  
 slidably connected with the second fixed rod; the  
 other end of the second sliding rod is slidably  
 connected with the first fixed rod; and the second  
 fixed rod and the first sliding rod, and the first fixed  
 rod and the second sliding rod are all locked by  
 locking devices.



21: 2022/11209. 22: 2022/10/13. 43: 2022/11/03  
 51: A01B  
 71: INSTITUTE OF WATER RESOURCES FOR PASTORAL AREA, MINISTRY OF WATER RESOURCES  
 72: WANG, Wenjun, YANG, Zhenqi, GUAN, Jing, WU, Yingjie, ZHOU, Quancheng, YIN, Hang, YAO, Zhenyu  
 33: CN 31: 202211217097.2 32: 2022-10-01  
**54: AFFORESTATION TOOL USED IN HARSH ENVIRONMENTS**

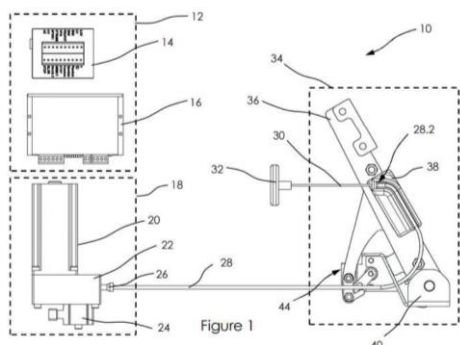
00: -  
 Disclosed is an afforestation tool used in harsh environments, comprising a handle, a seedling root hole-digging device, an excavation device, a positioning device; two ends of the handle are respectively a first end and a second end; the seedling root hole-digging device is detachably connected with the first end of the handle; a middle part of the excavation device is rotationally connected with the second end of the handle; and the positioning device is mounted on the handle and used for positioning the excavation device when the excavation device is rotated to a preset position. The seedling root hole-digging device and the excavation device are respectively arranged at the two ends of the handle, so that the afforestation tool has a hole-digging function and an excavation function, is convenient to excavate seedling planting platforms and planting holes on soft rock slopes, and improves the afforestation survival rate and working efficiency.



21: 2022/11297. 22: 2022/10/14. 43: 2022/10/19  
 51: B60T; B60W  
 71: REDPRO Global (Pty) Ltd  
 72: CLAASSEN, Daniël Gerhardus  
 33: ZA 31: 2021/08596 32: 2021-11-04  
**54: VEHICLE CONTROL CONVERSION SYSTEM**  
 00: -  
 The invention relates to a control conversion system 10 for converting a vehicle, that includes a control assembly 34 comprising at least one vehicle control lever 36, into a more autonomous vehicle. The control conversion system 10 comprises a processing assembly 12, a motive power assembly 18 and a mechanical control interface 146. The mechanical interface 146 is configured for interfacing with the vehicle control assembly 34. The motive



power assembly 18 includes a motor 20 interconnected with the mechanical control interface 146. The processing assembly 12 comprises a sensor subsystem and a programmable logic subsystem programmed, in operation, to control the motive power assembly 18 to impart a predetermined motion to the vehicle control lever 36 by means of the mechanical control interface 146.



21: 2022/11336. 22: 2022/10/17. 43: 2022/11/03  
51: A61K; C08B

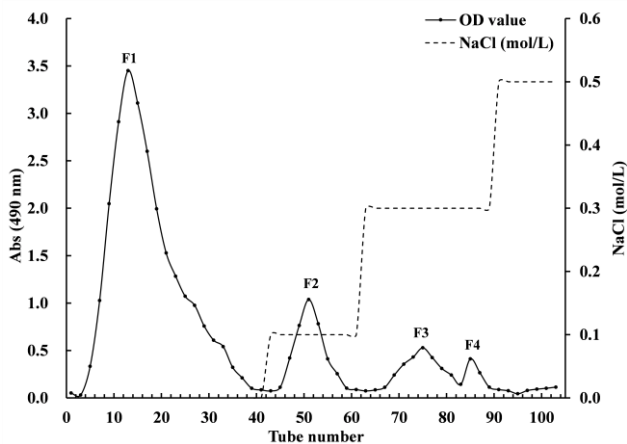
71: WEST ANHUI UNIVERSITY  
72: HE, Yanfei, JIANG, Ping, XU, Guangpei, SHE, Deyong, HUANG, Lin

**54: DENDROBIUM OFFICINALE POLYSACCHARIDE WITH ANTI-TUMOR EFFECT, AND PREPARATION METHOD AND APPLICATION THEREOF**

00: -

The present invention discloses a Dendrobium officinale polysaccharide with an anti-tumor effect, which specifically comprises the following steps: (1) sequentially performing water extraction by alcohol sedimentation, deproteinization, dialysis and drying of Dendrobium officinale to obtain a Dendrobium officinale total polysaccharide; (2) eluting the Dendrobium officinale total polysaccharide by a gel chromatography column, collecting an eluent, and sequentially concentrating, desalting and drying to obtain a Dendrobium officinale crude polysaccharide; and (3) eluting the Dendrobium officinale crude polysaccharide by the gel chromatography column again, collecting an eluent, and sequentially concentrating, desalting and drying to obtain a Dendrobium officinale polysaccharide with an anti-tumor effect. The Dendrobium officinale polysaccharide obtained by the present invention can enhance organism immunity and inhibit tumor

growth, and has important significance in promoting development of anti-tumor drugs and promoting research of modern pharmacological effects of Dendrobium officinale.



21: 2022/11366. 22: 2022/10/17. 43: 2022/10/27  
51: A01G

71: ARS CORPORATION

72: TOUDOU Kazuhiro

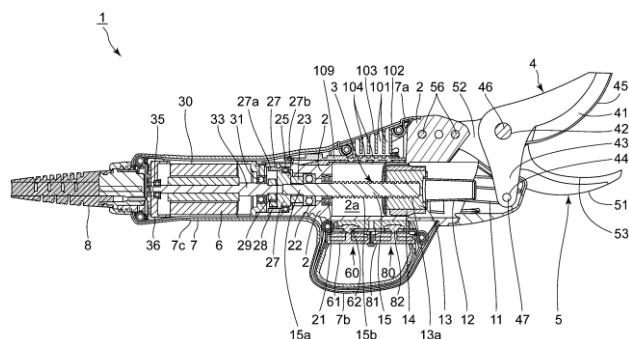
33: JP 31: 2020-075652 32: 2020-04-21

**54: ELECTRIC PRUNING SHEARS**

00: -

Electric pruning shears include: a first blade including a first blade portion that cuts an object to be cut and a first support base portion extended in a direction different from the first blade portion as viewed from the pivot portion; and the second blade including a second blade portion that cuts the object to be cut by sandwiching the object to be cut together with the first blade portion and a second support base portion extended in a direction different from the second blade portion as viewed from the pivot portion. The first blade portion is a convex curved blade with an intermediate portion from the pivot portion side to a distal end convexed, and the second blade portion is a concave curved blade with an intermediate portion from the pivot portion side to a distal end concaved. A bevel angle of the second blade portion gradually becomes obtuse from the pivot portion side to the distal end. At least one of the first support base portion and the second support base portion is connected to a power transmitter that transmits power from a drive source that is electrically driven. With this configuration, electric pruning shears capable of satisfactorily performing cutting without blade slippage even when the object

to be cut is a thick branch, thereby making it possible to improve user's satisfaction.



21: 2022/11446. 22: 2022/10/19. 43: 2022/10/27

51: B25J

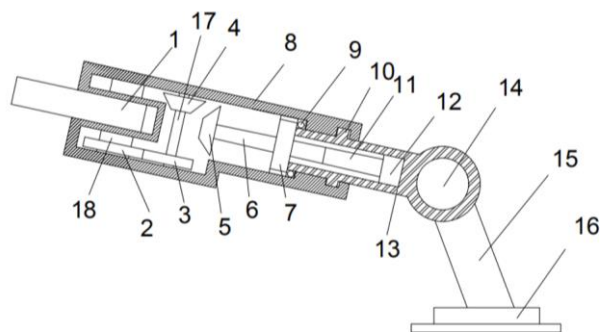
71: CHENGDU VOCATIONAL AND TECHNICAL COLLEGE OF INDUSTRY

72: XIONG Baoyu, JIAN Qingping

#### 54: A STRUCTURAL DEVICE FOR INDUSTRIAL ROBOTS

00: -

The present invention discloses a structural device for industrial robots, which belongs to the technical field of industrial robots and comprises a first motion joint, a second motion joint and a third motion joint; wherein the first motion joint and the second motion joint are connected through a transmission shaft II, a drive assembly is disposed in the second motion joint, the second motion joint is sleeved on the third motion joint, an output shaft is disposed in the third motion joint, one end of the output shaft close to the third motion joint is fixedly connected with a controllable hydraulic telescopic rod, and the other end of the controllable hydraulic telescopic rod is fixedly connected with a motor I, the other end of the output shaft is connected with the transmission shaft II through the drive assembly, the output shaft is connected with splines through keys, and the inner wall of the second motion joint is disposed with a groove that can cooperate with the splines. The present invention reduces the number of motors while ensuring the degree of freedom of the manipulator arms. Multi-purpose use of the motor is realized through splines, thus reducing energy consumption and making the device simpler and easier to install.



21: 2022/11447. 22: 2022/10/19. 43: 2022/10/27

51: A01H

71: TROPICAL CROPS GENETIC RESOURCES INSTITUTE, CHINESE ACADEMY OF TROPICAL AGRICULTURAL SCIENCES

72: CHEN, Xiaolu, CHEN, Zhenxia, SHEN, Wanyun, LUO, Xueting, XIAO, Yongfeng, LI, Yulan, LI, Xingfei, CHEN, Yinghua, YU, Ping, ZHANG, Yingying, YUAN, Chao, WANG, Dan, GUAN, Lingliang, WANG, Kai, HUANG, Mei, HU, Xuan, JIANG, Qian, XIE, Xiaoli, YU, Fulai

#### 54: A METHOD FOR OBTAINING ADVENTITIOUS BUDS OF TETRAPLOID BLUMEA BALSAMIFERA (L.) DC.

00: -

The present invention discloses a method for obtaining adventitious buds of tetraploid *Blumea balsamifera* (L.) DC., which comprises the following steps: 1) select a root segment of diploid *Blumea balsamifera* (L.) DC. as an explant; 2) culture in a doubling medium containing 0.025-0.1mg of NAA per liter, 1.0-2.0mg of 6-BA per liter and 90-150mg of colchicine per liter; and 3) induce somatic cells of the explant to reduplicate chromosomes and differentiate adventitious buds simultaneously. The present invention fills the blank of using the root of *Blumea balsamifera* (L.) DC. as an explant, and offers an additional source of effective explants in the process of propagation, proliferation and biotechnology breeding of *Blumea balsamifera* (L.) DC. More importantly, with the present invention, root cells of *Blumea balsamifera* (L.) DC. directly differentiate into adventitious buds at the same time of doubling chromosomes, without the process of callus formation. In this way, the technical links are simplified and the variation of regeneration buds and the generation of chimeras reduced. Therefore, the present invention can be applied to the breeding of *Blumea balsamifera* (L.) DC. as it can help

significantly save time and labor costs, and improve work efficiency.

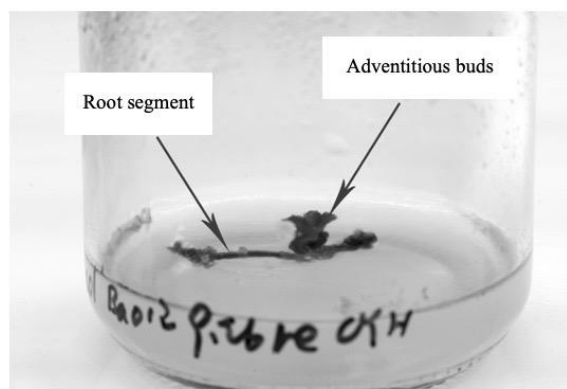


21: 2022/11448. 22: 2022/10/19. 43: 2022/10/27  
51: A01H  
71: TROPICAL CROPS GENETIC RESOURCES  
INSTITUTE, CHINESE ACADEMY OF TROPICAL  
AGRICULTURAL SCIENCES  
72: CHEN, Xiaolu, CHEN, Zhenxia, LUO, Xueting,  
XIAO, Yongfeng, LI, Yulan, ZHANG, Yingying,  
SHEN, Wanyun, LI, Xingfei, YUAN, Chao, WANG,  
Dan, GUAN, Lingliang, ZHANG, Yingbo, WANG,  
Kai, JIANG, Qian, HU, Xuan, HUANG, Mei, XIE,  
Xiaoli, YU, Ping, CHEN, Yinghua, YU, Fulai  
**54: A ONE-STEP CULTURE METHOD FOR  
INDUCING THE DIFFERENTIATION OF BLUMEA  
BALSAMIFERA (L.) DC. ROOT CELLS TO  
PRODUCE ADVENTITIOUS BUDS**

00: -  
The present invention provides a one-step culture method for inducing the differentiation of *Blumea balsamifera* (L.) DC. root cells to produce adventitious buds, which selects root segments of *Blumea balsamifera* (L.) DC. as an explant for culture, and an adventitious bud induction medium is designed, which can be used only to induce the explant to directly differentiate adventitious buds.

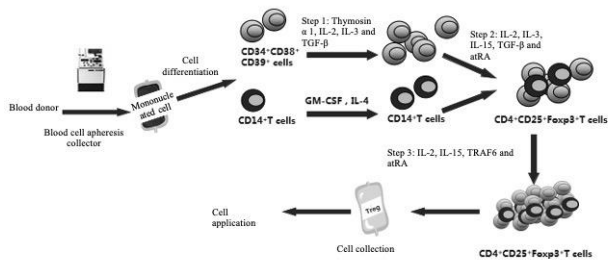
The present invention fills the blank of using the root of *Blumea balsamifera* (L.) DC. as an explant, and offers an additional source of effective explants in the process of propagation and proliferation of *Blumea balsamifera* (L.) DC. Further, in the present invention, root cells of *Blumea balsamifera* (L.) DC. directly differentiate into adventitious buds without the process of callus formation. In this way, the technical links are simplified, the variation of regeneration buds and the generation of chimeras reduced, and the accuracy of targeted mutagenesis

or genetic transformation of *Blumea balsamifera* (L.) DC. is improved. Therefore, the present invention can be applied to the breeding of *Blumea balsamifera* (L.) DC. as it can significantly save time and labor costs, and improve work efficiency.



21: 2022/11512. 22: 2022/10/20. 43: 2022/10/27  
51: C12N  
71: CELL VALLEY (NANJING) BIOTECHNOLOGY  
CO  
72: LV, Ling, GU, Jian  
33: CN 31: 202110308242.7 32: 2021-03-23  
**54: AN IN VITRO METHOD FOR INDUCING THE  
DIFFERENTIATION OF HSCS INTO TREGS**

00: -  
This invention provides an in vitro method for inducing the differentiation of hematopoietic stem cell (HSCs) into T regulatory cell (Tregs). Concrete procedures are shown as follows: Step 1: The blood is collected; Step 2: The blood is separated and sorted to obtain CD34+, CD38+ and CD39+; Step 3: Remaining cells as stated in Step 2 are selected for preparation of DC cell; Step 4: The cell obtained through the sorting at Step 2 undergoes the first induction; Step 5: The second induction is made; Step 6: The third induction is made to obtain Tregs of CD4+, CD25+ and Foxp3+. This invention makes the following beneficial effect: CD34+, CD38+ and CD39+ cells separated from human peripheral blood are adopted; Thymosin a 1, IL-2, IL-3, IL-15, TGF- $\beta$ , all-trans-retinoic acid (atRA), TRAF6 and irradiated DC cell are added; finally, human HSCs is induced into Tregs with function of immunosuppression.



21: 2022/11519. 22: 2022/10/21. 43: 2022/10/27  
 51: B22F  
 71: TIANJIN RESEARCH INSTITUTE OF WATER TRANSPORT ENGINEERING, MINISTRY OF TRANSPORT

72: LI, Shina, ZHAO, Yingjie, MA, Ruixin  
**54: METHOD FOR PREPARING HIGH-PURITY SPHERICAL METALLIC TITANIUM AND TITANIUM ALLOY POWDER FOR 3D PRINTING**  
 00: -

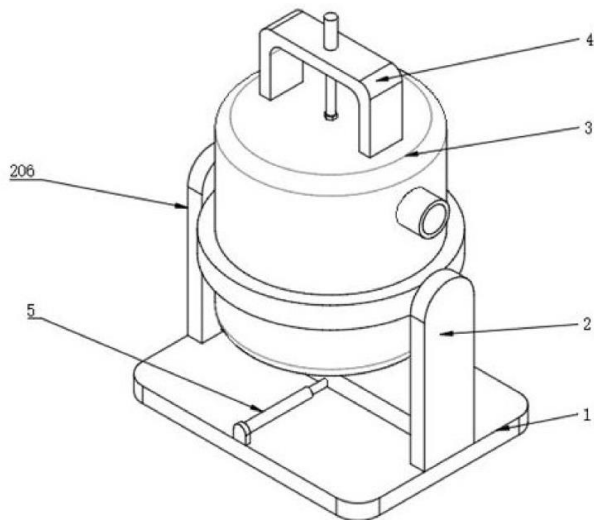
The present invention relates to the technical field of 3D printing materials, in particular to a method for preparing high-purity spherical metallic titanium and titanium alloy powder for 3D printing. The present invention discloses a method for preparing high-purity spherical metallic titanium and titanium alloy powder for 3D printing, which adopts the one-step method of reducing gaseous titanium tetrachloride by gaseous calcium to prepare spherical metallic titanium and titanium alloy powder for 3D printing. The method is low in cost, green and environment-friendly, and the obtained titanium powder has high purity, good sphericity and fluidity, and uniform particle size distribution.

21: 2022/11578. 22: 2022/10/24. 43: 2022/10/27  
 51: B01F  
 71: BACKFILL ENGINEERING LABORATORY, SHANDONG GOLD MINING TECHNOLOGY CO., LTD., SHANDONG GOLD MINING TECHNOLOGY CO., LTD.

72: Zhaojun QI, Gengjie ZHU, Yunpeng KOU, Xiaodong JING, Jiafa DU, Zepu SONG, Laifa SANG, Yuhang SHENG, Zaihai WU, Yuliang WANG  
 33: CN 31: 202210370967.3 32: 2022-04-11  
**54: STIRRING AND MIXING DEVICE FOR PRODUCTION OF MINE FILLING MATERIAL**  
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The present invention discloses a stirring and mixing device for production of a mine filling material, and relates to the technical field of mine filling material production. The stirring and mixing device comprises

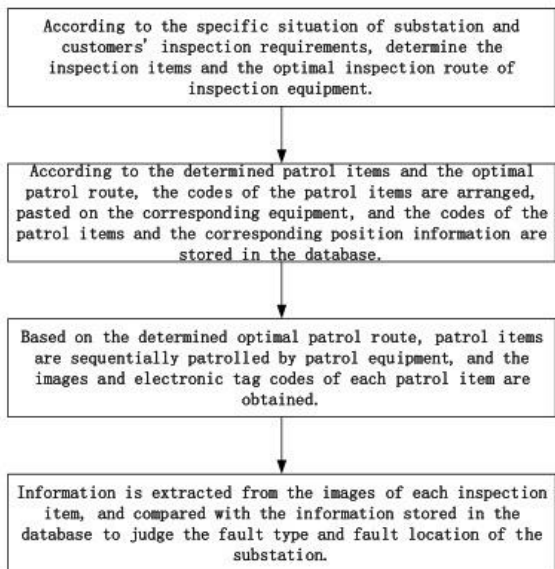
a base, wherein two supports are fixedly connected to an outer wall of the top of the base, a pivot is rotatably connected to each of outer walls of opposite sides of the two supports, a fixing ring is fixedly connected to each of outer walls of opposite sides of the two pivots, a stirring assembly is fixedly connected to an arc-shaped inner wall of the fixing ring, the stirring assembly comprises a stirring tank fixedly connected to the arc-shaped inner wall of the fixing ring, and a drive plate is rotatably provided on an inner wall of the top of the stirring tank. In the present invention, a prism exits a polygonal groove in a screw rod and then enters polygonal holes of the stirring tank and the drive plate. In this case, the drive plate maintains stationary relative to the stirring tank by means of the prism, and then stirring paddles cause a pressing plate to be stationary. In this case, with the rotation of the screw rod, the pressing plate is lowered, and an inner wall of the stirring tank is cleaned during the lowering of the pressing plate.



21: 2022/11618. 22: 2022/10/25. 43: 2022/11/08  
 51: G06Q  
 71: ELECTRIC POWER RESEARCH INSTITUTE OF STATE GRID ZHEJIANG ELECTRIC POWER CO., LTD, ZHEJIANG UNIVERSITY OF SCIENCE AND TECHNOLOGY  
 72: HAN, Rui, MEI, Bingxiao, LIU, Li, WANG, Wenhao, ZHENG, Yiming, JIANG, Xiongwei, SHEN, Jian, QIAN, Shaofeng, DAI, Zheren, WU, Xuxiang, LIANG, Suning, JIANG, Kaihua, LEI, Jingsheng, SHI, Wenbin, YANG, Shengying

**54: INTELLIGENT INSPECTION SYSTEM AND METHOD OF SUBSTATION BASED ON IMAGE RECOGNITION**

00: -  
 The invention discloses an intelligent inspection system and method of substation based on image recognition, which relates to the technical field of substation operation and maintenance, including: according to the specific situation of substation and the inspection requirements of customers, determining the inspection items and the optimal inspection lines of the inspection equipment, arranging the codes of the inspection items, pasting the codes on the corresponding equipment, and storing the codes of the inspection items and the corresponding position information in a database; Based on the determined optimal patrol route, patrol items are sequentially patrolled by patrol equipment, and images and electronic tag codes of each patrol item are obtained; Information is extracted from the images of each inspection item, and compared with the information stored in the database to judge the fault type and fault location of the substation. The method can obtain accurate substation inspection results, effectively reduce the labor intensity of manual inspection, reduce the operation and maintenance cost of the substation, and improve the automation and intelligence level of inspection operation and management.



21: 2022/11671. 22: 2022/10/26. 43: 2022/11/08

51: G06Q  
 71: SHANDONG INSTITUTE OF COMMERCE AND TECHNOLOGY  
 72: ZHANG, Jiong, LIU, Yue  
**54: COLD CHAIN LOGISTICS WISDOM DATA SYSTEM**

00: -  
 The present invention relates to the field of cold chain logistics, and in particular to a cold chain logistics wisdom data system. The system builds a cold chain logistics integration information platform based on "artificial intelligence + blockchain", and gradually forms a cold chain logistics data chassis; the system researches and develops process specifications and standards of key categories and engineering equipment that are related to the cold chain logistics wisdom data chassis; and the system completes analysis and measurement of the cold chain logistics wisdom data chassis to provide real-time big data support for wisdom cold chain logistics. The present solution acquires fresh food information during a cold chain logistics process by using modern science and technology means such as an information acquisition technology, constructs a cold chain information data acquisition model fusing big data with Internet of Things IoT+5G, builds a cold chain information platform based on blockchain information sharing, constructs a classified agricultural product safety detection database based on a safety index detection result of main quality of three major categories of agricultural products: fruit and vegetable, livestock and poultry, and aquatic products, and constructs a safety traceability system in combination with a RFID technology to implement safety traceability and information searching of the quality of agricultural products during the cold chain logistics process.

21: 2022/11672. 22: 2022/10/26. 43: 2022/11/08  
 51: G01N  
 71: SHANDONG INSTITUTE OF COMMERCE AND TECHNOLOGY  
 72: LIU, Yue, ZHANG, Jiong  
**54: NONDESTRUCTIVE DETECTION SYSTEM FOR AGRICULTURAL PRODUCT FRUIT AND VEGETABLE BASED ON AI TECHNOLOGY**

00: -  
 The present invention relates to the field of agricultural product fruit and vegetable detection, and particularly discloses a nondestructive detection

system for agricultural product fruit and vegetable based on artificial intelligence (AI) technology, where the system includes: a power supply circuit design, a synchronous dynamic random access memory (SDRAM) circuit, a video graphics array (VGA) circuit design, a camera circuit design, a serial port circuit design, and a field programmable gate array (FPGA) minimum system circuit design, where the above-mentioned circuits are connected to each other, a power supply voltage divider is used to perform a voltage division operation on an input voltage, thereby generating a power supply circuit design method for system design; the function of the SDRAM circuit is to store the acquired image data; and the efficacy of the VGA circuit is to enable the display of processed image information on a liquid crystal display screen. The present invention obtains an image and related information of fruit and vegetable by using another information obtaining device, external information and internal features of a detected object are input, by an image obtaining device at a high speed, into a computer for processing, analyzing, and recognizing, and fruit and vegetable are nondestructively detected and analyzed by using an artificial intelligence algorithm and related technologies.

21: 2022/11673. 22: 2022/10/26. 43: 2022/11/08  
51: C04B

71: DALIAN UNIVERSITY OF TECHNOLOGY  
72: WANG, Baomin, LI, Tianru, AI, Hongmei, HAN, Junnan, HAN, Xiao, FAN, Chengcheng, WANG, Wanli, XING, Yunqing, ZHANG, Xiong, CAO, Yuting  
33: CN 31: 202210136729.6 32: 2022-02-15

**54: A MATERIAL TO SOLIDIFY HEAVY METALS IN MUNICIPAL SOLID WASTE INCINERATION FLY ASH BASED ON NANO ALUMINA AND ITS PREPARATION METHOD**

00: -

The present invention belongs to the field of solid waste treatment and ecological environmental materials, and provides a material to solidify heavy metals in municipal solid waste incineration fly ash ("MSWI fly ash" for short below) based on nano alumina and its preparation method, wherein the raw materials of the said material to solidify heavy metals comprise 100-400 fractions of MSWI fly ash, 10-50 fractions of sodium hydroxide, 50-300 fraction of water glass, 5-15 fractions of nano alumina, 250-400 fractions of mixing water, in which nano alumina is  $\gamma$  Phase, hydrophilic and has a particle size of 10nm.

In the present invention, solid waste is employed as the raw material, contributing to a green, environmental-friendly and simple operation process. Meanwhile, by making full use of the nano size, large specific surface area, strong adsorption capacity and high activity of nano alumina, heavy metal ions in MSWI fly ash can be effectively solidified, and therefore, the leaching rate of harmful heavy metal ions is reduced and excellent mechanical properties are obtained, thus helping recycle MSWI fly ash.

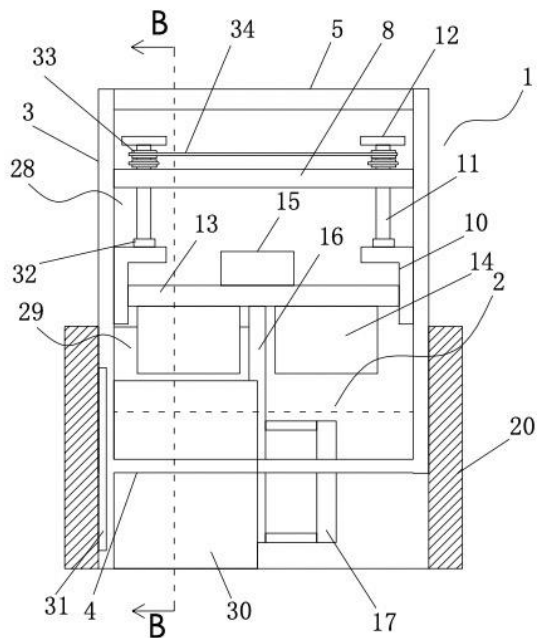
21: 2022/11674. 22: 2022/10/26. 43: 2022/11/08  
51: F03B

71: SUN Renjie, DU Yan, HU Xiaying, XIONG Lili, CUI Jingjin, LI Xinzhu, LEI Yongquan  
72: SUN Renjie, DU Yan, HU Xiaying, XIONG Lili, CUI Jingjin, LI Xinzhu, LEI Yongquan

**54: A HYDROELECTRIC INSTALLATION**

00: -

The present invention discloses a hydroelectric installation, which comprises a supporting mechanism, wherein a power generation mechanism is disposed on the said supporting mechanism; the said power generation mechanism comprises a generator; a rotating shaft vertically extending downward is disposed and installed on the said generator; a vertical shaft turbine is disposed and installed at the lower end of the said rotating shaft; a regulating mechanism is disposed and installed on the said supporting mechanism; the said regulating mechanism comprises a bearing bar, regulating screw rods and sliding seats; the said bearing bar is slidably disposed and installed on the said supporting mechanism, and the said regulating screw rods are installed on the said bearing bar through screw-thread fitting. The present invention is a hydroelectric installation with a simple structure and high safety, which can adjust the height of the turbine according to the river water level and achieve a high energy utilization rate.



21: 2022/11734. 22: 2022/10/27. 43: 2022/11/08  
51: A61L

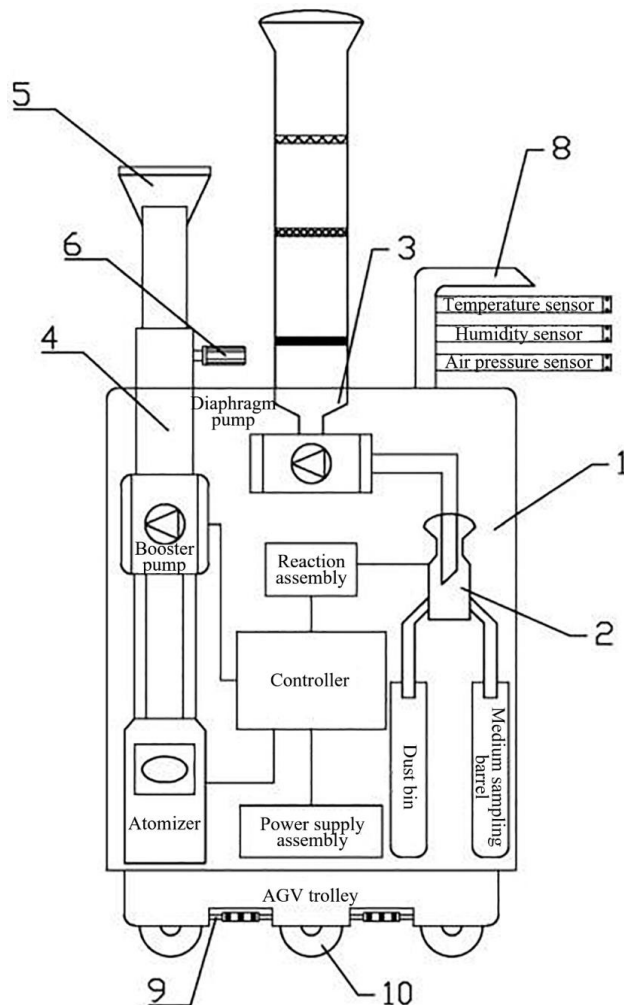
71: SHANDONG NORMAL UNIVERSITY  
72: Guanliu YU, Lei CHEN, Hua LI, Guiwen YANG, Zhicheng SONG

**54: INTELLIGENT DISINFECTION ROBOT FOR PM2.5 MICROBIOLOGICAL AEROSOL**

00: -

An intelligent disinfection robot for a PM2.5 microbiological aerosol, including a shell, wherein a collecting bottle is arranged in the shell, a hierarchical acquisition assembly is connected to the shell, a fluorescence reaction assembly is arranged on an acquisition pipeline, a disinfection assembly is also arranged on the shell, a detection assembly is arranged at a top of the shell, the detection assembly is used to detect environment parameters of hospital departments, and the detection assembly includes a temperature sensor, a humidity sensor and an air pressure sensor that are in fit setting; a power supply assembly is arranged at a bottom inside the shell, a controller is also arranged in the shell, the controller is connected to a luminoscope, a spray nozzle and a tilt motor through an actuator, the controller is connected to a booster pump and a diaphragm pump through a trigger, the controller is connected to an upper computer through a wireless transceiver so as to realize remote control, and the controller is connected to the detection assembly through an AD converter; and an AGV trolley is

arranged at the bottom of the shell, so as to drive a disinfection robot to move.



21: 2022/11775. 22: 2022/10/28. 43: 2022/11/08  
51: H01L

71: TIANJIN UNIVERSITY, TIANJIN UNIVERSITY OF COMMERCE

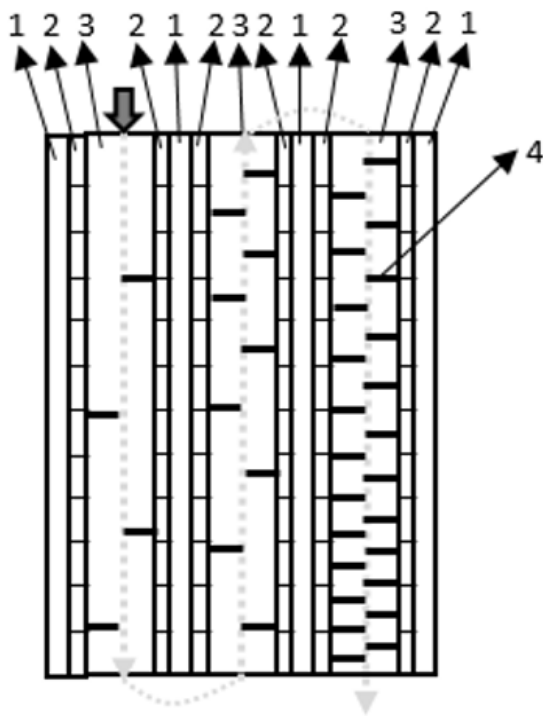
72: HE, Wei, ZHU, Yu, GUO, Rui, LIU, Shengchun, YANG, Yurong, LI, Jiamei, LI, Shenming

**54: A NON-UNIFORM ENHANCED FINNED THERMOELECTRIC GENERATOR BASED ON SEMICONDUCTOR CHARACTERISTICS OF THERMOELECTRIC MATERIAL**

00: -

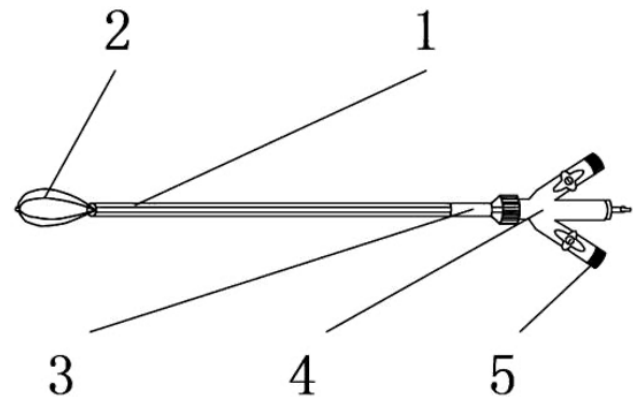
The present invention discloses a non-uniform enhanced finned thermoelectric generator based on semiconductor characteristics of thermoelectric material, which employs the semiconductor thermoelectric generation technology to recover residual heat energy in automobile exhaust. The high-temperature exhaust passes through the

exhaust channel of the cooling fins, the heat transfer fins on the inner wall of the composite heat transfer fin exhaust channel are disposed in an increasingly dense manner, the heat transfer effect between the high-temperature exhaust and the thermal end face of the semiconductor thermoelectric module is gradually enhanced along the direction, and finally, the surface temperature of the thermal end face of the semiconductor thermoelectric modules changes within a narrow range along the direction. In this way, it is ensured that the thermoelectric material works in an optimal working range, the thermoelectric conversion efficiency is improved, and the output power increased. The present invention provides a solution to the low thermoelectric conversion efficiency in the process of thermoelectric conversion and utilization of residual heat of high-temperature exhaust.



21: 2022/11827. 22: 2022/10/31. 43: 2022/11/08  
 51: A61M  
 71: XIANGYA HOSPITAL CENTRAL SOUTH UNIVERSITY  
 72: Fujun LI, Shuyan LI, Honghui YI  
**54: NOVEL PUNCTURE AND DRAINAGE TUBE**  
 00: -

The present disclosure provides a novel puncture and drainage tube, including an outer drainage tube body, wherein an inner surface of one side of the outer drainage tube body is provided with a shuttle-shaped steel wire structure, and an outer surface of one side of the outer drainage tube body is provided with a connecting tube; a catheter tail is arranged on an outer surface of one side of the connecting tube, and a branch opening is formed in an outer surface of one side of the catheter tail; and the shuttle-shaped steel wire structure includes a shuttle-shaped structure, a puncture needle and a steel wire tail end, the puncture needle is set on an outer wall of the steel wire tail end, and the steel wire tail end is set on one side of the shuttle-shaped structure. The novel puncture and drainage tube provided by the present disclosure is provided with the shuttle-shaped steel wire structure, which can improve the treatment safety and effectiveness of patients, avoid some possible risks, and ensure the safety of the puncture operation and also the smoothness of the puncture and drainage tube and avoid the slippage of the drainage tube, so the operation is simpler.



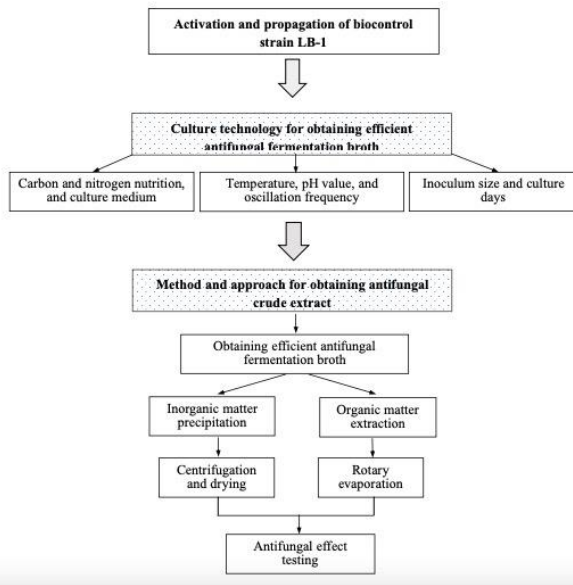
21: 2022/11836. 22: 2022/10/31. 43: 2022/11/08  
 51: F02B  
 71: CHEN, Xiaohui  
 72: CHEN, Xiaohui  
 33: CN 31: 202010764619.5 32: 2020-07-25  
**54: TWO-DIMENSIONAL ENGINE**  
 00: -

Abstract: The present invention discloses a two-dimensional engine, including a driving device, a two-dimensional gas compressor, a gas outlet pipe, a refueling device, a safety device, an electric ignition device, an axial-flow gas compressor, and a crank connecting rod mechanism, wherein the





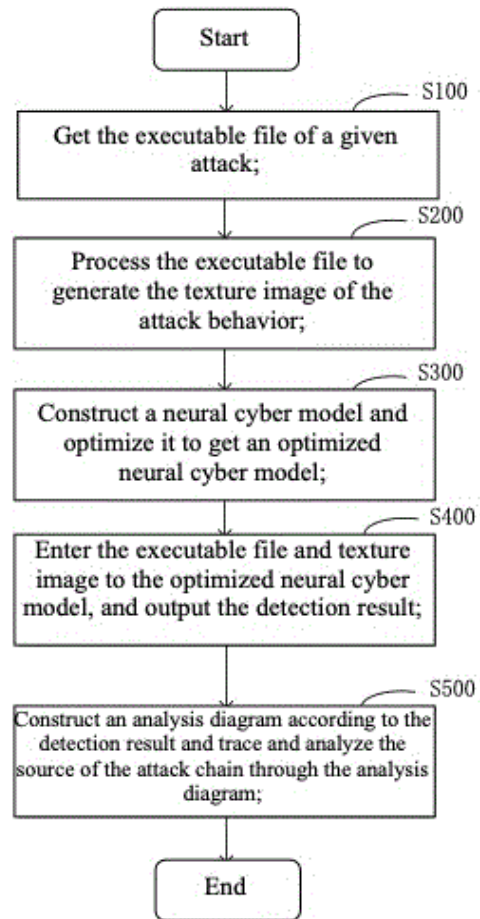
strain LB-1 comprises: an optimal culture medium, an appropriate culture temperature, an appropriate pH value, an appropriate inoculum size, and optimal culture days; and a process of a method for obtaining an efficient antifungal crude extract of a biocontrol strain LB-1 comprises: concentrating the efficient antifungal fermentation broth, and performing extraction with n-butanol and rotary evaporation. The biocontrol strain LB-1 fermentation broth and the antifungal crude extract thereof disclosed by the present disclosure have an inhibition effect on various plant pathogenic fungi of *Exserohilum turcicum*, *Fusarium oxysporum*, *Botrytis cinerea*, *Alternaria solani*, etc. and can provide raw materials and new ideas for research and development of a biocontrol agent for plant disease control in field application.



21: 2022/11995. 22: 2022/11/03. 43: 2022/11/21  
 51: G06F  
 71: EAST CHINA UNIVERSITY OF TECHNOLOGY  
 72: HE, Linlin, HE, Yueshun  
**54: A METHOD, SYSTEM AND STORABLE MEDIUM FOR CYBER ATTACK ATTRIBUTION**  
 00: -

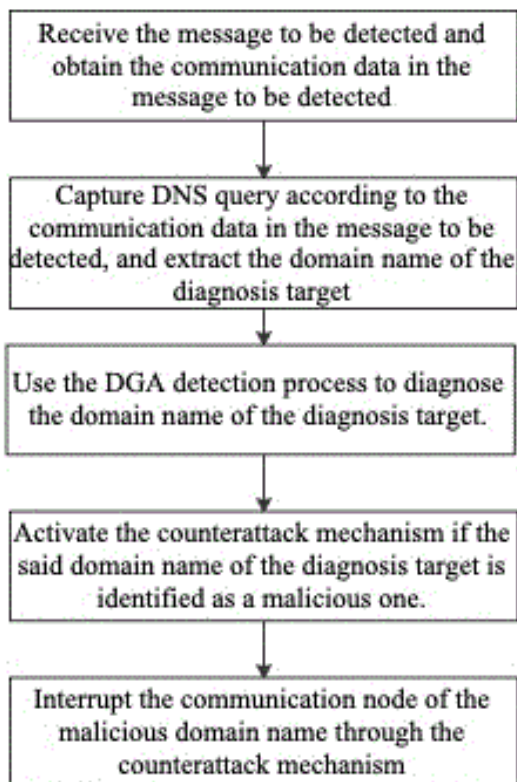
The present invention disclose a method, system and storable medium for cyber attack attribution, belonging to the technical field of cyber security technology and comprising the following steps: 1) get the executable file of a given attack; 2) process the executable file to generate the texture image of the attack behavior; 3) construct a neural cyber

model and optimize it to get an optimized neural cyber model; 4) enter the executable file and texture image to the optimized neural cyber model, and output the detection result; 5) construct an analysis diagram according to the detection result and trace and analyze the source of the attack chain through the analysis diagram. The present invention can efficiently complete the homology comparison and then effectively identify malicious code variants. Therefore, with the present invention, malicious DNS identification problems related to a single network or protection target network can be addressed, so as to better improve the traceability of cyber security attacks and ensure the security of cyberspace.



21: 2022/11996. 22: 2022/11/03. 43: 2022/11/21  
 51: G06F  
 71: EAST CHINA UNIVERSITY OF TECHNOLOGY  
 72: HE, Yueshun, HE, Linlin, LI, Weidong  
**54: A METHOD, A SYSTEM AND A STORABLE MEDIUM FOR PRECISE COUNTERATTACK FOR CYBERSPACES IN BIG DATA ENVIRONMENT**

00: -  
 The present invention discloses a method, a system and a storable medium for precise counterattack for cyberspaces in big data environment, and relates to the field of network security. The present invention comprises the following steps: 1) receive the message to be detected and obtain the communication data in the message to be detected; 2) capture DNS query according to the communication data in the message to be detected, and extract the domain name of the diagnosis target; 3) use the DGA detection process to diagnose the domain name of the diagnosis target; 4) activate the counterattack mechanism if the said domain name of the diagnosis target is identified as a malicious one; 5) interrupt the communication node of the malicious domain name through the counterattack mechanism. The present invention can better improve the counterattack capability against network security attacks and ensure the security of cyberspace.

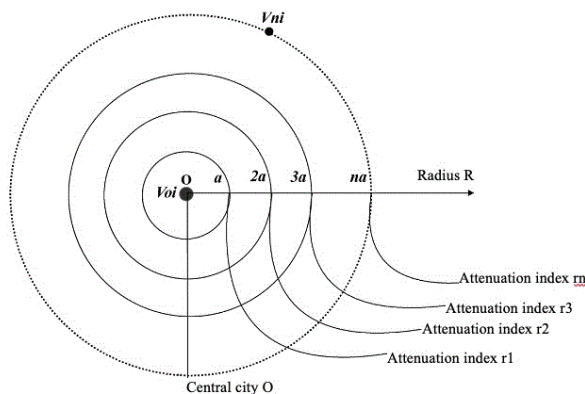


21: 2022/12068. 22: 2022/11/04. 43: 2022/11/21  
 51: G06F  
 71: INSTITUTE OF MOUNTAIN HAZARDS AND ENVIRONMENT, CAS

72: FANG, Yiping, ZHU, Ran, ZHANG, Yike

**54: AN ISOMETRIC ATTENUATION INDEX SCALE FOR URBAN ECONOMIC CIRCLES**

00: -  
 The present invention discloses an isometric attenuation index scale for urban economic circles, comprising the following steps: S1. Establish a conceptual model of the relationship between an urban isometric ring and variable attenuation; S2. Construct a quantitative expression of attenuation indexes with composite functions between the relative ratio of main variables and corresponding variables of a central city, and between center distances; S3. Count main variables of different economic circles by category; S4. Calculate the attenuation index of different variables and layers one by one; S5. Make the attenuation index change curve of different urban centers and different variables through S1, S2, S3 and S4; characterize the attenuation characteristics of the same central city and different variables with an illustrative diagram, and depict the attenuation differences of different central cities and the same variable.

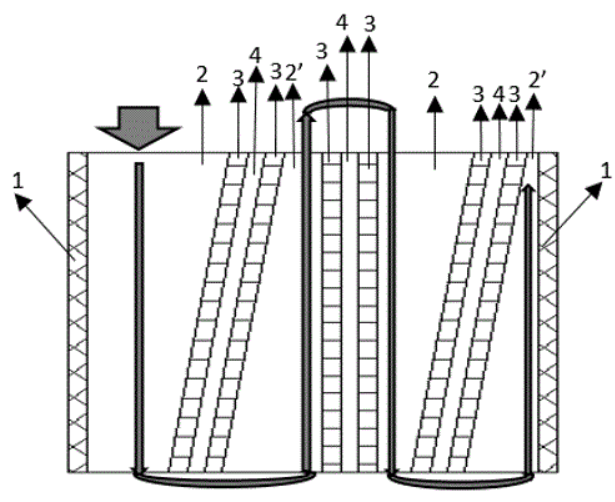


21: 2022/12069. 22: 2022/11/04. 43: 2022/11/21  
 51: H01L  
 71: TIANJIN UNIVERSITY OF COMMERCE, TIANJIN UNIVERSITY

**54: A COMPOSITE THERMOELECTRIC GENERATOR WITH NON-UNIFORM FLOW RATE BASED ON THE TEMPERATURE DEPENDENCE OF THERMOELECTRIC MATERIAL**

00: -  
 The present invention discloses a composite thermoelectric generator with non-uniform flow rate based on the temperature dependence of

thermoelectric material, which employs the semiconductor thermoelectric generation technology to recover residual heat energy in the automobile exhaust. Specifically, the high-temperature exhaust passes through a composite variable cross-section exhaust channel, then, the heat transfer coefficient between the exhaust and the thermal end face of the semiconductor thermoelectric module by gradually reducing the cross-sectional area of the high-temperature exhaust along the direction, and in the end, a small gradient change of the surface temperature of the semiconductor thermoelectric module in the direction of fluid flow is realized through the change of the heat transfer resistance. In this way, the thermoelectric material works in an optimal working area, thereby improving the thermoelectric conversion efficiency and increasing the output power. The present invention provides a solution to the low thermoelectric conversion efficiency in the process of thermoelectric conversion and utilization of residual heat of high-temperature exhaust.



21: 2022/12071. 22: 2022/11/04. 43: 2022/11/21  
51: C99Z

71: JINZHOU MEDICAL UNIVERSITY

72: Hong JIANG, Hongjun WANG, Hongying LI, Yiya SUN, Xinguo LI, Tiezhong ZHOU

**54: PREPARATION METHOD OF COMPOUND TRADITIONAL CHINESE MEDICINE DAHUANG QINYU EFFERVESCENT TABLETS**

00: -

Provided is a preparation method of compound traditional Chinese medicine Dahuang Qinyu effervescent tablets. The preparation method

includes: step 1, preparing acidic particles, and drying for later use; step 2, preparing basic particles, and drying for later use; and step 3, uniformly mixing the acidic particles and the basic particles, and pressing into tablets, i.e., Dahuang Qinyu effervescent tablets. The effervescent tablets of the present invention can be rapidly disintegrated in water, and pharmaceutical ingredients can be quickly dispersed in the water body, which can directly act on a diseased region of a fish to exert a local therapeutic effect, and can also enter the fish body through the mouth to exert a systemic therapeutic effect.

21: 2022/12121. 22: 2022/11/07. 43: 2022/11/21  
51: C12Q

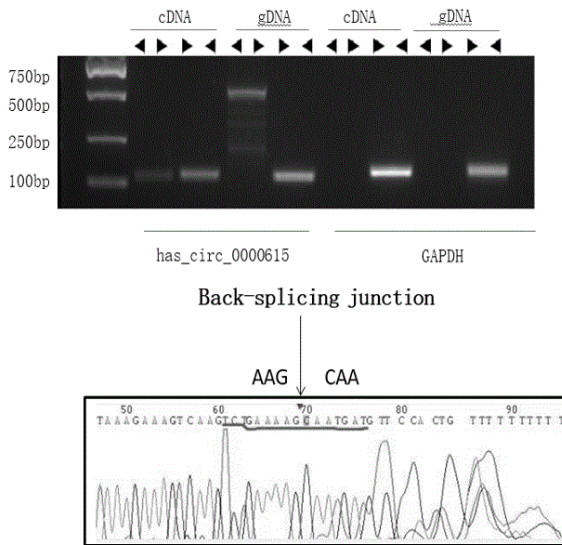
71: THE FIRST AFFILIATED HOSPITAL OF XINXIANG MEDICAL UNIVERSITY

72: Jiateng ZHONG, Yuhan HU, Shuang DING, Yao ZHAO, Xinyu ZHANG, Wei SU, Qingzu GAO

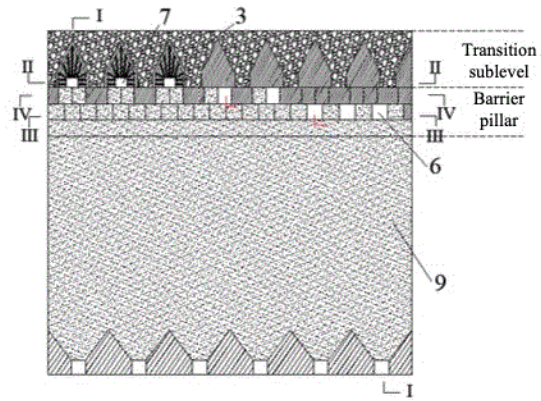
**54: AN APPLICATION OF RNA circ\_0000615 AS A MARKER IN THE PREPARATION OF CRC DETECTION KIT**

00: -

The present invention belongs to the technical field of molecular markers, and provides an application of RNA circ\_0000615 as a marker in the preparation of colorectal cancer (CRC) detection kit. The nucleotide sequence of the RNA circ\_0000615 as described in the present invention is as shown in SEQ ID NO.1. The research results of the present invention suggest that the expression level of the RNA circ\_0000615 is negatively correlated with colorectal cancer. It is an RNA that is significantly down regulated in CRC tissue and can be used as a diagnostic marker of cancer. Meanwhile, the RNA circ\_0000615 overexpression can significantly inhibit the proliferation of CRC, and the occurrence and development of cancer. Therefore, it can be applied as a potential way to treat cancer.



the present disclosure improves the ore recovery rate, and promotes the sustainable development of mines.



21: 2022/12169. 22: 2022/11/08. 43: 2022/11/21  
 51: E21C  
 71: UNIVERSITY OF SCIENCE AND TECHNOLOGY BEIJING  
 72: TAN, Yuye, ZHU, Fenghao, SONG, Weidong, FU, Jianxin

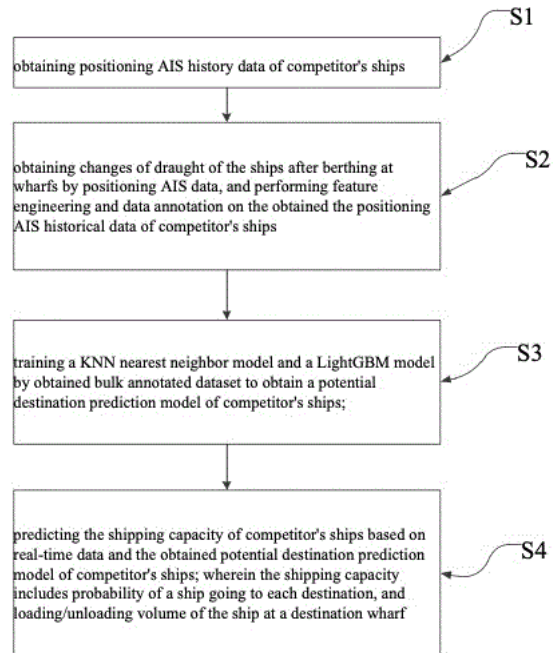
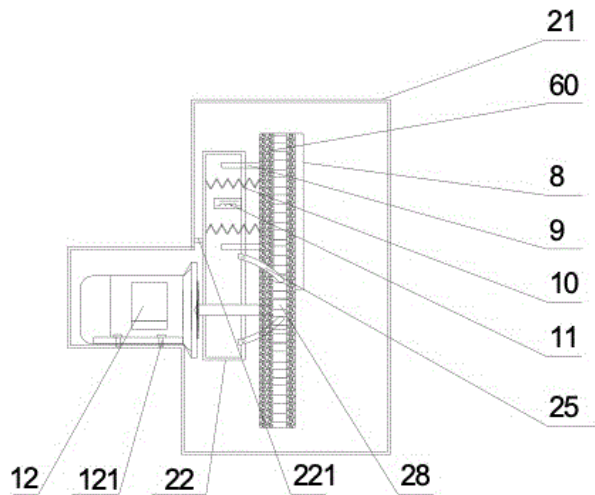
33: CN 31: 202210120191.X 32: 2022-02-07  
**54: COMBINED MINING METHOD FOR TRANSITION SUBLEVELS AND BARRIER PILLARS FROM CAVING TO FILLING**

00: -  
 The present disclosure provides a combined mining method for transition sublevels and barrier pillars from caving to filling, and belongs to the technical field of mining. The combined mining method sequentially stopes three slices with an upward drift cemented filling method. A level haulage roadway is arranged out of a vein, and connected to an ore body through crossheadings. Gateways are arranged along a strike of the ore body. Barrier pillars are stoped according to an "every other" sequence. Ores are hauled to draw shafts through a scraper, and filling is performed timely. After a filling body has an enough strength, peach-shaped pillars are stoped with a retreating caving method. Sublevel haulage roadways are arranged out of the vein. Drilling roadways are arranged in middles of the peach-shaped pillars through the crossheadings. After anchor rods are used for supporting, fan-shaped holes are drilled with the retreating caving method. With combination of a retreating caving method and an upward drift cemented filling method,

21: 2022/12282. 22: 2022/11/10. 43: 2022/11/21  
 51: B08B  
 71: CHENGDU VOCATIONAL AND TECHNICAL COLLEGE OF INDUSTRY  
 72: YU, Dong

**54: A DEFOGGING DEVICE FOR AUTOMOBILE FRONT WINDSHIELD**

00: -  
 The present invention relates to the technical field of automobile auxiliary devices, and provides a defogging device for automobile front windshield. The technical scheme of the present invention is a defogging device for automobile front windshield, comprising a housing, a defogging assembly and a driving component, wherein the said defogging assembly is disposed in the said housing, and the bottom of the said housing is provided with a first through hole to support the said defogging assembly; the said defogging assembly comprises a defogging component, the said driving component is used to drive the said defogging component to extend out of or extend into a housing, and the said driving component is also used to drive the said defogging component to swing. The present invention can automatically defog the automobile front windshield, avoid damaging the structure in the automobile, and is convenient and quick to install.



21: 2022/12329. 22: 2022/11/11. 43: 2022/11/21  
 51: G06Q  
 71: COSCO SHIPPING TECHNOLOGY (BEIJING) CO., LTD.

72: ZHAN, Haolin

33: CN 31: 202211035116.X 32: 2022-08-26

**54: METHOD FOR PREDICTING SHIPPING CAPACITY OF COMPETITORS, COMPUTER-READABLE MEDIUM**

00: -

A method for predicting shipping capacity of competitors comprises: S1: obtaining positioning AIS historical data of competitor's ships; S2: obtaining changes of draught of the ships after berthing at wharfs by positioning AIS data, and performing feature engineering and data annotation on the obtained the positioning AIS historical data of competitor's ship; S3: training a KNN nearest neighbor model and a LightGBM model by obtained bulk annotated dataset to obtain a potential destination prediction model of competitor's ships; and S4: predicting the shipping capacity of competitor's ship based on real-time data and the obtained potential destination prediction model of competitor's ship; wherein the shipping capacity includes probability of a ship going to each destination, and loading/unloading volume of the ship at a destination wharf. The prediction model can monitor and predict the direction of competitors' shipping capacity in real time and effectively with low misjudgment rate, short time consuming, saving manpower and improving monitoring efficiency.

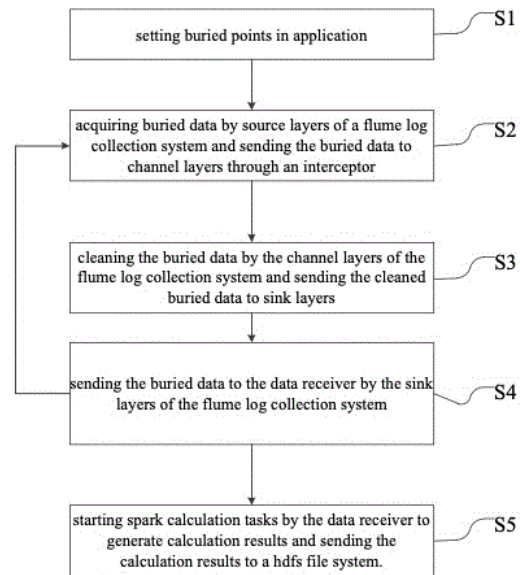
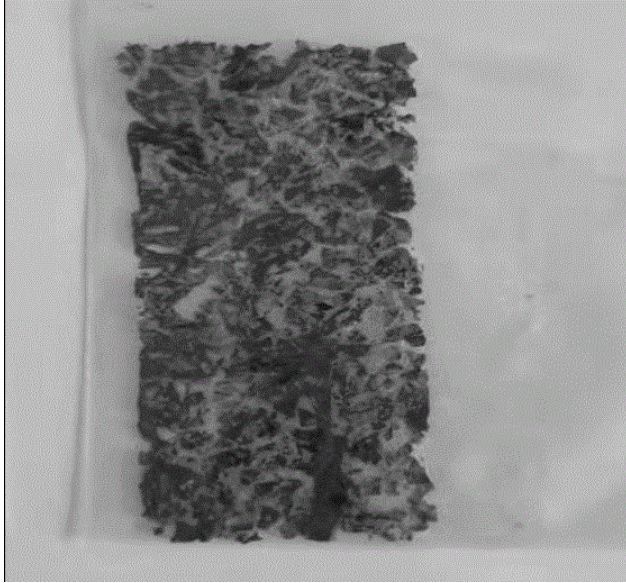
21: 2022/12331. 22: 2022/11/11. 43: 2022/11/21  
 51: A01N

71: JILIN AGRICULTURAL UNIVERSITY  
 72: WANG, Liyan, JIANG, Guochuan, TU, Huajie

**54: A BLACK FUNGUS SEA SEDGE AND PROCESSING METHOD THEREOF**

00: -

The present invention discloses a black fungus sea sedge and processing method thereof, which is composed of the following raw materials in parts by weight: 100-200 parts of black fungus, 50-100 parts of laver, 20-40 parts of kelp, 10-20 parts of baking soda, 5-10 parts of sesame, 2-10 parts of flaxseed powder, 5-10 parts of white granulated sugar, 5-10 parts of salt, 2-10 parts of hot spices, 2-10 parts of monosodium glutamate, 2-10 parts of peanut oil and 3-10 parts of sodium carboxymethyl cellulose. The present invention further provides a processing method of the black fungus sea sedge. The black fungus sea sedge prepared by the method not only has reasonable material combination, but also has the effects of lowering blood fat and blood sugar, antitumor and tonifying kidney and nourishing heart. And it has a similar taste to that of the sea sedge on the market, is a kind of leisure food with great potential.



21: 2022/12336. 22: 2022/11/11. 43: 2022/11/21  
 51: G06F  
 71: COSCO SHIPPING TECHNOLOGY (BEIJING) CO., LTD.  
 72: ZHUANG, Li, YU, Yang, ZHANG, Libin, YANG, Bin  
 33: CN 31: 202211035102.8 32: 2022-08-26  
**54: BURIED DATA COLLECTION METHOD BASED ON SPARK AND FLUME**

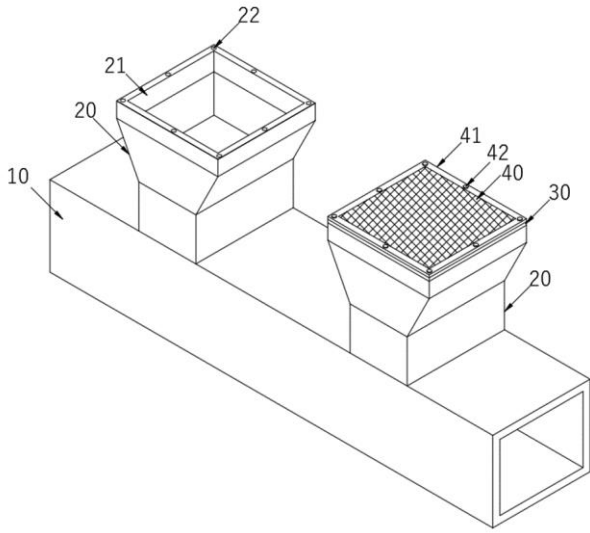
00: -  
 A buried data collection method based on Spark and Flume includes: S1, setting buried points in application; S2, acquiring buried data by source layers of a flume log collection system and sending the buried data to channel layers through an interceptor; S3, cleaning the buried data by the channel layers of the flume log collection system and sending the cleaned buried data to sink layers; S4, sending the buried data to the data receiver by the sink layers of the flume log collection system; S5, starting spark calculation tasks by the data receiver to generate calculation results and sending the calculation results to a hdfs file system. The present invention greatly improves the speed and cleaning accuracy of data cleaning and reduce the equipment cost, supports multiple data sources, meets the data collection and cleaning tasks of multiple scenarios and industries, thereby increasing the performance of buried data computing by 100%, increasing the accuracy of buried data cleaning by 39%, and increasing the efficiency by 42%

21: 2022/12383. 22: 2022/11/14. 43: 2022/11/21  
 51: E01C  
 71: ZUNYI HIGHWAY ADMINISTRATION BUREAU OF GUIZHOU PROVINCE, CHONGQING JIAOTONG UNIVERSITY  
 72: ZHENG, Shilun, LIANG, Xuzhi, LIU, Bin, WANG, Yunjin, MENG, Yunwei, LI, Shibao, CHEN, Kang, GONG, Weiyong

**54: ANTI-BLOCKING CONCEALED DRAINAGE STRUCTURE OF ROAD SUBGRADE**

00: -  
 The present invention relates to the technical field of highway facilities, in particular to an anti-blocking concealed drainage structure of a road subgrade, which comprises drainage pipelines, wherein the drainage pipelines are hidden at the two sides of the road subgrade for discharging rainwater and sewage to a sewage treatment station; water collecting buckets, wherein the number of the water collecting buckets is several groups, and the bottoms of the water collecting buckets are all communicated with the drainage pipeline; an anti-blocking device used for filtering large impurities in rainwater or sewage, and comprising a filter bucket, wherein the bottom of the filter bucket is provided with a mesh plate with a plurality of uniformly and equidistantly arranged water holes, and the filter bucket is filled with a pebble filter layer for concealment. According to the present invention, with the aid of the anti-blocking device arranged on the water collecting bucket, the impurities in rainwater or sewage can be filtered, the

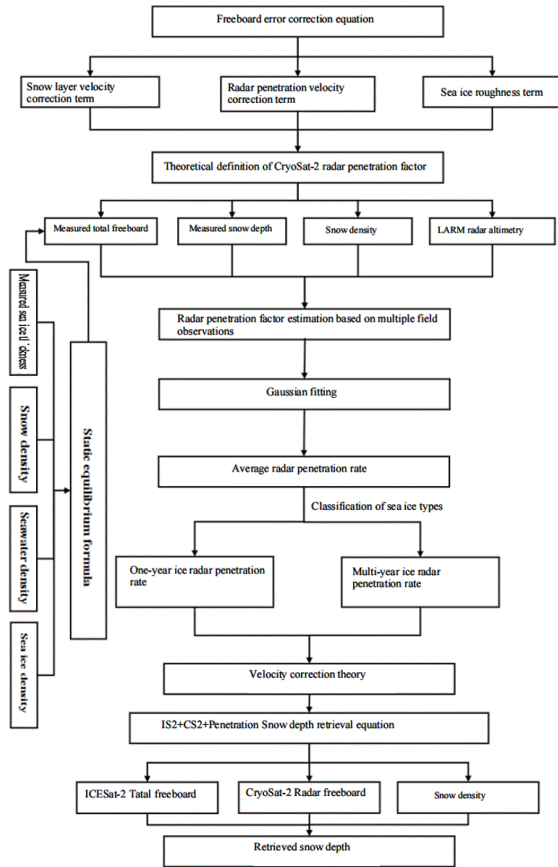
protective net cover can not only filter, but also protect pebbles in the pebble filter layer, and pebbles and mesh plates in the pebble filter layer can be filtered in the second stage to prevent blocking.



21: 2022/12385. 22: 2022/11/14. 43: 2022/11/21  
 51: G01V  
 71: SHANGHAI OCEAN UNIVERSITY  
 72: Zhang, Yu, Zhou, Yi  
**54: A METHOD FOR JOINT RETRIEVAL OF ARCTIC SEA ICE SNOW DEPTH BY FIELD OBSERVATION AND SATELLITE REMOTE SENSING**

00: -  
 The present invention discloses a method for joint retrieval of Arctic sea ice snow depth by field observation and satellite remote sensing, which belongs to the technical field of satellite remote sensing snow depth retrieval. Following steps are comprised: downloading satellite remote sensing data and field observation data and establishing corresponding databases, and reconstruct the polar grid; obtaining calculation formula of radar penetration factor based on freeboard error correction equation; substituting a variety of field observation data and satellite altimetry data into the formula, and deriving radar penetration rate of one-year and multi-year Arctic ice through Gaussian fitting; constructing snow depth retrieval equation based on the radar penetration rate and velocity correction theory; introducing the data into the snow depth retrieval equation to obtain the snow depth. The snow depth retrieval equation constructed by

the present invention can effectively improve accuracy of retrieving the snow depth on the Arctic sea ice using the satellite remote sensing, and concurrently the retrieval data has a wider space-time coverage.

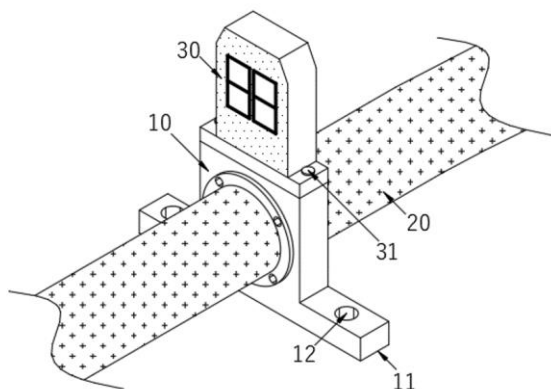


21: 2022/12386. 22: 2022/11/14. 43: 2022/11/21  
 51: E02D  
 71: CHONGQING JIAOTONG UNIVERSITY, ZUNYI HIGHWAY ADMINISTRATION BUREAU OF GUIZHOU PROVINCE  
 72: MENG, Yunwei, LI, Shibao, CHEN, Kang, GONG, Weiyong, ZHENG, Shilun, LIANG, Xuzhi, LIU, Bin, WANG, Yunjin  
**54: SPLICED CONCEALED DRAINAGE PIPELINE FOR SUBGRADE**

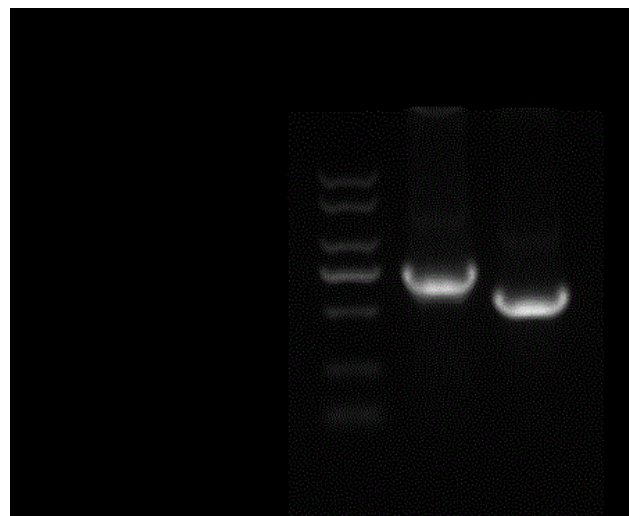
00: -  
 The present invention relates to the technical field of highway facilities, in particular to a spliced concealed drainage pipeline for a subgrade, which comprises a drainage pipe, wherein the drainage pipe is embedded under a subgrade and used for drainage, and splicing seats are arranged at both ends of the drainage pipe; a pre-embedded connecting seat



used for connecting two adjacent drainage pipes; a highway milestone used to display the mileage of the highway and is provided every 1km, wherein the highway milestone is provided at the top of the pre-embedded connecting seat and on the subgrade on both sides of the highway. According to the present invention, the drainage pipes on both sides can be spliced through the pre-embedded connecting seats, which is convenient to install or maintain; and the top of the pre-embedded connecting seats is provided with a road milestone for displaying the mileage of the road, one for every 1km, and each drainage pipe can be set to 1km, which is convenient to use.



target gene, but also can control the expression of linamarin target gene, regulate the synthesis of linamarin and the content of cyanogenic glycosides in leaves. For example, if they are transfected into cassava, the relative expressions of the key genes for cyanoside synthesis are declined, and the synthesis of linolenin in cassava leaves is significantly inhibited, but no significant impact on the synthesis of thymoside. The content of linolenin decreases significantly, the content of thymoside had no significant difference, and the content of cyanoside also decreases significantly.



21: 2022/12387. 22: 2022/11/14. 43: 2022/11/21  
51: C12N  
71: TROPICAL CROPS GENETIC RESOURCES  
INSTITUTE, CHINESE ACADEMY OF TROPICAL  
AGRICULTURAL SCIENCES  
72: AN, Feifei, XIAO, Xinhui, CAI, Jie, CHEN,  
Songbi, LUO, Xiuqin, XUE, Jingjing, WEI, Zhuowen  
33: CN 31: 202210541272.7 32: 2022-05-17

**54: CASSAVA TRANSCRIPTION FACTORS  
MEBHLH72, MEBHLH114 AND THEIR  
APPLICATION IN LINAMARIN SYNTHESIS**

00: -

The present disclosure provides a cassava transcription factor encoding gene, wherein the transcription factor encoding gene is *MebHLH72* gene, its nucleotide sequence is shown in SEQ ID NO: 1; or the transcription factor encoding gene is *MebHLH114* gene, and its nucleotide sequence is shown in SEQ ID NO: 2. a VIGS silencing system constructed by the *MebHLH72* gene and the gene segment of *MebHLH114* not only can silence the

**HYPOTHECATIONS**

No records available

**JUDGMENTS**

No records available

**OFFICE PRACTISE NOTICES**

Change in address of address for service for patent, trademark, design and copyright filings. As from **1 December 2022**, Smit & Van Wyk, Inc will relocate to new offices situated at:

**Sanlynn Office Park  
East Block, 2nd Floor  
c/o Alkantrand & Sanlam Street  
Lynnwood Manor  
Pretoria  
0081**

Their postal address (P O Box 111, Innovation Hub, Pretoria 0087) and docex address (Docex 111, Brooklyn) remain unchanged.

# 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 2022/10/24 -

F2022/01339 - Amos Phologe TABANE Class 8. LIFELINE MOUNT

F2022/01343 - DE VILLIERS, Marius de Wet Class 10. LATCH STRIKE PLATE

F2022/01340 - Amos Phologe TABANE Class 26. LIFELINE MOUNT

A2022/01344 - Thabo Leew, xoliswa mafutha Class 02. TORPSY INNERS AND SNEAKER SOL&#39;S

A2022/01342 - DE VILLIERS, Marius de Wet Class 10. LATCH STRIKE PLATE

F2022/01341 - Amos Phologe TABANE Class 29. LIFELINE MOUNT

- APPLIED ON 2022/10/26 -

A2022/01348 - CHUSILP GROUP TRADING CO., LTD. Class 12. FRONT BUMPER

F2022/01349 - Prinro Decking (Pty) Ltd Class 25. BUILDING ELEMENTS

A2022/01346 - LG ELECTRONICS INC. Class 14. AV RECEIVER

F2022/01345 - OLIVER, Fred, Abraham Class 8. A WHEEL LIFTING DEVICE

A2022/01347 - LG ELECTRONICS INC. Class 14. AV RECEIVER

- APPLIED ON 2022/10/27 -

A2022/01357 - LIEBHERR-MINING EQUIPMENT COLMAR SAS Class 15. EXCAVATOR TOOTH

A2022/01355 - LIEBHERR-MINING EQUIPMENT COLMAR SAS Class 15. EXCAVATOR TOOTH

A2022/01353 - LIEBHERR-MINING EQUIPMENT COLMAR SAS Class 15. EXCAVATOR TOOTH

A2022/01350 - NEO MATTHEWS MIDAKA Class 12. TRAILER REVERSING ADAPTER

A2022/01354 - LIEBHERR-MINING EQUIPMENT COLMAR SAS Class 15. EXCAVATOR TOOTH

A2022/01358 - LIEBHERR-MINING EQUIPMENT COLMAR SAS Class 15. EXCAVATOR TOOTH

A2022/01351 - LIEBHERR-MINING EQUIPMENT COLMAR SAS Class 15. EXCAVATOR TOOTH

A2022/01352 - LIEBHERR-MINING EQUIPMENT COLMAR SAS Class 15. EXCAVATOR TOOTH

A2022/01356 - LIEBHERR-MINING EQUIPMENT COLMAR SAS Class 15. EXCAVATOR TOOTH

F2022/01360 - THREE NIGHT OWLS (PTY) LTD Class 20. A DISPLAY DEVICE

A2022/01359 - THREE NIGHT OWLS (PTY) LTD Class 20. A DISPLAY DEVICE

- APPLIED ON 2022/10/28 -

A2022/01371 - HANSGROHE SE Class 23. TOILET BOWL

A2022/01366 - STAEDTLER MARS GMBH & CO. KG Class 19. PENCIL

A2022/01363 - FIRE PUZZLE (PTY) LTD Class 07. FIREPLACE

A2022/01361 - ROPER, JASON Class 13. A MODULAR ELECTRICAL CONNECTING APPARATUS

A2022/01375 - HANSGROHE SE Class 23. HAND SHOWER

A2022/01373 - HANSGROHE SE Class 23. TOILET BOWL

A2022/01367 - STAEDTLER MARS GMBH & CO. KG Class 19. PENCIL

A2022/01364 - SMART CART (PTY) LTD Class 20. A MERCHANDISE DISPLAY

A2022/01376 - ONKE LUAZI GQIBA Class 02. SHOE

A2022/01369 - STAEDTLER MARS GMBH & CO. KG Class 19. PENCIL

A2022/01365 - STAEDTLER MARS GMBH & CO. KG Class 19. PENCIL

F2022/01362 - FIRE PUZZLE (PTY) LTD Class 07. FIREPLACE

A2022/01374 - HANSGROHE SE Class 23. TOILET BOWL

A2022/01370 - STAEDTLER MARS GMBH & CO. KG Class 19. PENCIL

A2022/01368 - STAEDTLER MARS GMBH & CO. KG Class 19. PENCIL

A2022/01372 - HANSGROHE SE Class 23. TOILET BOWL

- APPLIED ON 2022/10/31 -

A2022/01377 - Monicafernsolutions Class 11. DESIGN

A2022/01378 - MONOSI MOVEMENTS (PTY) LTD Class 02. SHOE

A2022/01379 - SMART CART (PTY) LTD Class 20. A MERCHANDISE DISPLAY

- APPLIED ON 2022/11/01 -

A2022/01384 - Crocs, Inc. Class 2. FOOTWEAR

A2022/01382 - Crocs, Inc. Class 2. FOOTWEAR

A2022/01385 - Crocs, Inc. Class 2. FOOTWEAR

F2022/01381 - LANCE EGON SKELLY Class 08. FASTENING, SUPPORTING OR MOUNTING DEVICES

A2022/01383 - Crocs, Inc. Class 2. FOOTWEAR

A2022/01386 - Crocs, Inc. Class 2. FOOTWEAR AND SOLES FOR FOOTWEAR

A2022/01380 - LANCE EGON SKELLY Class 08. FASTENING, SUPPORTING OR MOUNTING DEVICES

- APPLIED ON 2022/11/02 -

F2022/01387 - Louis Wilken Class 8. PLANT HOLDER

- APPLIED ON 2022/11/03 -

A2022/01388 - Caterpillar Inc. Class 15. FLANGES

A2022/01439 - LULAMA JONATHAN YOYO Class 02. VENOM JEANS CHESS DESIGN

A2022/01446 - LULAMA JONATHAN YOYO Class 02. VENOM GHOST DESIGNS

A2022/01445 - LULAMA JONATHAN YOYO Class 02. VENOM JEANS NOTES DESIGNS

A2022/01444 - LULAMA JONATHAN YOYO Class 02. VENOM JEANS TECHNIC TRAIL

A2022/01442 - LULAMA JONATHAN YOYO Class 02. VENOM JEANS MOTIFS AND FLOWER MIX

A2022/01441 - LULAMA JONATHAN YOYO Class 02. ELEMENT ARMOUR COLOUR DESIGNS

A2022/01443 - LULAMA JONATHAN YOYO Class 02. VENOM JEANS MOTIFS MAIZE

A2022/01440 - LULAMA JONATHAN YOYO Class 02. VENOM JEANS MOTIFS DESIGN

A2022/01438 - LULAMA JONATHAN YOYO Class 02. VENOM JEANS START FRAME DESIGN

A2022/01437 - LULAMA JONATHAN YOYO Class 02. VENOM JEANS & FAFUKU COLAB BLUE

- APPLIED ON 2022/11/04 -

A2022/01401 - Bayerische Motoren Werke Aktiengesellschaft Class 12. MOTOR VEHICLES

A2022/01394 - Skechers U.S.A., Inc. II Class 02. FOOTWEAR

A2022/01400 - Scania CV AB Class 12. PANELS FOR VEHICLES

F2022/01389 - Mpact Limited Class 09. CONTAINER

A2022/01397 - Scania CV AB Class 12. PANELS FOR VEHICLES

A2022/01392 - Sameul Class 32. THE OFFICIAL CHURCH DESIGN

F2022/01390 - CONSORT SOLUTIONS (PTY) LTD Class 23. FLUID DISTRIBUTION DEVICE

A2022/01402 - Bayerische Motoren Werke Aktiengesellschaft Class 12. MOTOR VEHICLES

A2022/01398 - Scania CV AB Class 12. PANELS FOR VEHICLES

A2022/01393 - Skechers U.S.A., Inc. II Class 02. FOOTWEAR

A2022/01396 - Scania CV AB Class 12. PANELS FOR VEHICLES

A2022/01403 - Crocs, Inc. Class 2. FOOTWEAR

A2022/01399 - Scania CV AB Class 12. PANELS FOR VEHICLES

A2022/01395 - Crocs, Inc. Class 2. FOOTWEAR

A2022/01391 - Louis Wilken Class 8. PLANT HOLDER

. - APPLIED ON 2022/11/08 -

A2022/01407 - La Marzocco S.r.l. Class 31. COFFEE MACHINES

A2022/01408 - La Marzocco S.r.l. Class 31. COFFEE MACHINES

A2022/01405 - MPACT LIMITED Class 9. PUNNET WITH HANDLE

A2022/01404 - DART INDUSTRIES INC. Class 31. PORTABLE DRINK BLENDER

A2022/01409 - La Marzocco S.r.l. Class 31. COFFEE MACHINES

F2022/01406 - MPACT LIMITED Class 9. BLANK FOR A PUNNET WITH HANDLE

. - APPLIED ON 2022/11/09 -

A2022/01417 - Caterpillar Inc. Class 15. CYLINDERS

F2022/01410 - Motion Adspace (Pty) Ltd Class 20. SCOOTER OR MOTOR BIKE TOP BOX WRAP

A2022/01415 - Caterpillar Inc. Class 15. CYLINDERS

A2022/01418 - ZITHANDE ENTERPRISES (PTY) LTD Class 09. PACKAGING

F2022/01412 - CRAMER, Brent Class 08. LOCKING DEVICE

A2022/01416 - Bayerische Motoren Werke Aktiengesellschaft Class 12. MOTOR VEHICLES

F2022/01411 - ROPER, JASON Class 13. A MODULAR ELECTRICAL CONNECTING APPARATUS

A2022/01414 - Caterpillar Inc. Class 15. BACK-UP RINGS

A2022/01462 - ZITHANDE ENTERPRISES (PTY) LTD Class 32. A TWO-DIMENSIONAL GRAPHIC DESIGN FOR APPLICATION TO PACKAGING

A2022/01420 - ZITHANDE ENTERPRISES (PTY) LTD Class 24. A SANITARY PAD

F2022/01419 - ZITHANDE ENTERPRISES (PTY) LTD Class 24. A SANITARY PAD

A2022/01413 - HONDA MOTOR CO., LTD. Class 12. MOTORCYCLE

. - APPLIED ON 2022/11/10 -

F2022/01436 - BETRAM (PROPRIETARY) LIMITED Class 25. TANK STANDS

A2022/01424 - Milestone Scientific, Inc. Class 24. MEDICAL APPARATUS

A2022/01426 - HANSGROHE SE Class 23. WASHBASIN

A2022/01430 - HANSGROHE SE Class 23. WASHBASIN

A2022/01434 - HANSGROHE SE Class 23. WASHBASIN

A2022/01421 - Milestone Scientific, Inc. Class 24. MEDICAL APPARATUS

A2022/01425 - HANSGROHE SE Class 23. WASHBASIN

A2022/01427 - HANSGROHE SE Class 23. WASHBASIN

A2022/01431 - HANSGROHE SE Class 23. WASHBASIN

A2022/01432 - HANSGROHE SE Class 23. WASHBASIN

A2022/01435 - BETRAM (PROPRIETARY) LIMITED Class 25. TANK STANDS

A2022/01422 - Milestone Scientific, Inc. Class 24. MEDICAL APPARATUS

A2022/01423 - Milestone Scientific, Inc. Class 24. MEDICAL APPARATUS

A2022/01433 - HANSGROHE SE Class 23. WASHBASIN

A2022/01428 - HANSGROHE SE Class 23. WASHBASIN

A2022/01429 - HANSGROHE SE Class 23. WASHBASIN

. - APPLIED ON 2022/11/11 -

A2022/01449 - Eli Lilly and Company Class 9. BLANKS FOR BOXES

A2022/01452 - Eli Lilly and Company Class 20. LABELS



A2022/01455 - Eli Lilly and Company Class 9. BOXES

A2022/01458 - Eli Lilly and Company Class 20. LABELS

A2022/01460 - Eli Lilly and Company Class 24. MEDICAL DEVICES

A2022/01453 - Eli Lilly and Company Class 20. LABELS

A2022/01454 - Eli Lilly and Company Class 9. BLANKS FOR BOXES

A2022/01456 - Eli Lilly and Company Class 9. BOXES

A2022/01459 - Eli Lilly and Company Class 20. LABELS

A2022/01461 - Eli Lilly and Company Class 24. MEDICAL DEVICES

F2022/01447 - BYLEVELD, Ryan Class 23. SACRIFICIAL ANODE WITH EXHAUSTION INDICATION AND WITHOUT WELDED CORE

F2022/01448 - BYLEVELD, Ryan Class 23. SACRIFICIAL ANODE WITH EXHAUSTION INDICATION AND WELDED CORE

A2022/01450 - Eli Lilly and Company Class 20. LABELS

A2022/01451 - Eli Lilly and Company Class 32. LOGOS

A2022/01457 - Eli Lilly and Company Class 20. LABELS

. - APPLIED ON 2022/11/14 -

A2022/01465 - WHEEL PROS, LLC Class 12. BEADLOCK

A2022/01463 - WHEEL PROS, LLC Class 12. WHEEL

A2022/01464 - WHEEL PROS, LLC Class 12. WHEEL

. - APPLIED ON 2022/11/15 -

A2022/01473 - LG ELECTRONICS INC. Class 14. TELEVISION RECEIVER

A2022/01469 - LG ELECTRONICS INC. Class 14. TELEVISION RECEIVER

A2022/01468 - LG ELECTRONICS INC. Class 14. TELEVISION RECEIVER

A2022/01466 - Philips Domestic Appliances Holding B.V. Class 07. AIR FRYER

A2022/01474 - LG ELECTRONICS INC. Class 14. TELEVISION RECEIVER

A2022/01475 - LG ELECTRONICS INC. Class 14. ARM FOR A TELEVISION RECEIVER

A2022/01472 - LG ELECTRONICS INC. Class 14. TELEVISION RECEIVER

A2022/01471 - LG ELECTRONICS INC. Class 14. TELEVISION RECEIVER

A2022/01467 - Philips Domestic Appliances Holding B.V. Class 07. AIR FRYER

A2022/01470 - LG ELECTRONICS INC. Class 14. TELEVISION RECEIVER

. - APPLIED ON 2022/11/16 -

A2022/01482 - BLUESUN CONSUMER BRANDS, S.L. Class 23. DEODORANT HOLDER

A2022/01476 - Polyoak Packaging (Pty) Ltd Class 07. TUB

A2022/01481 - BLUESUN CONSUMER BRANDS, S.L. Class 23. DEODORANT HOLDER

A2022/01480 - BLUESUN CONSUMER BRANDS, S.L. Class 23. DEODORANT HOLDER

A2022/01484 - BLUESUN CONSUMER BRANDS, S.L. Class 26. DEODORANT HOLDER

A2022/01483 - BLUESUN CONSUMER BRANDS, S.L. Class 23. DEODORANT HOLDER

A2022/01479 - BLUESUN CONSUMER BRANDS, S.L. Class 23. DEODORANT HOLDER

F2022/01477 - Polyoak Packaging (Pty) Ltd Class 07. TUB

A2022/01478 - PETROLIAM NASIONAL BERHAD (PETRONAS) Class 09. CONTAINER FOR LUBRICANTS

. - APPLIED ON 2022/11/17 -

F2022/01501 - STYLE IN STAINLESS CC T/A STEELCRAFT Class 07. BARBEQUE STAND

F2022/01490 - Polyoak Packaging (Pty) Ltd Class 09. BOTTLE

A2022/01491 - PETROLIAM NASIONAL BERHAD (PETRONAS) Class 09. CONTAINER FOR LUBRICANTS

A2022/01494 - STYLE IN STAINLESS CC T/A STEELCRAFT Class 07. OIL STRAINER

A2022/01493 - Crocs, Inc. Class 2. FOOTWEAR

A2022/01498 - STYLE IN STAINLESS CC T/A STEELCRAFT Class 07. SHAFT SHACKLE

A2022/01489 - Polyoak Packaging (Pty) Ltd Class 09. BOTTLE

F2022/01488 - Polyoak Packaging (Pty) Ltd Class 09. BOTTLE

A2022/01492 - PETROLIAM NASIONAL BERHAD (PETRONAS) Class 09. CONTAINER FOR LUBRICANTS

A2022/01485 - Polyoak Packaging (Pty) Ltd Class 09. BOTTLE

A2022/01487 - Polyoak Packaging (Pty) Ltd Class 09. BOTTLE

F2022/01499 - STYLE IN STAINLESS CC T/A STEELCRAFT Class 07. SHAFT SHACKLE

A2022/01500 - STYLE IN STAINLESS CC T/A STEELCRAFT Class 07. BARBEQUE STAND

F2022/01497 - STYLE IN STAINLESS CC T/A STEELCRAFT Class 07. OIL STRAINER

A2022/01496 - PETROLIAM NASIONAL BERHAD (PETRONAS) Class 09. CONTAINER FOR LUBRICANTS

F2022/01486 - Polyoak Packaging (Pty) Ltd Class 09. BOTTLE

A2022/01495 - SMART CART (PTY) LTD Class 20. A MERCHANDISE DISPLAY

. - APPLIED ON 2022/11/21 -

A2022/01505 - Japan Cash Machine Co., Ltd. Class 19. DOCUMENT VALIDATORS

F2022/01506 - SEWNATH, Rajin Class 25. RETAINING WALL BLOCK

A2022/01503 - Philips Domestic Appliances Holding B.V. Class 07. BLENDER

A2022/01502 - Philips Domestic Appliances Holding B.V. Class 07. BLENDER

A2022/01504 - Philips Domestic Appliances Holding B.V. Class 07. BLENDER

. - APPLIED ON 2022/11/22 -

F2022/01511 - John William Cussons Class 25. DUAL AXIS SOLAR TRACKING ARRAY FRAME

A2022/01509 - Automobili Lamborghini S.p.A. Class 12. VEHICLES

A2022/01508 - Chery Automobile Co., Ltd. Class 12. CARS

A2022/01507 - BRITA SE Class 23. WATER FILTER CARTRIDGE

A2022/01510 - Automobili Lamborghini S.p.A. Class 21. SCALE MODEL VEHICLES

. - APPLIED ON 2022/11/23 -

A2022/01520 - Caterpillar Inc. Class 15. WING SHROUDS

A2022/01521 - THULANE FREKIE MAVIMBELA Class 07. HOUSEHOLD GOODS UTENSILS, HOME WARE

A2022/01518 - Caterpillar Inc. Class 15. WING SHROUDS

F2022/01515 - JOZISCAPE (PTY) LTD Class 25. A SUPPORT FOR A ROCK BOLT

F2022/01513 - SCHEWITZ, Larry Class 23. A WATER FILTER

A2022/01519 - Caterpillar Inc. Class 15. WING SHROUDS

A2022/01512 - SCHEWITZ, Larry Class 23. A WATER FILTER

A2022/01517 - Caterpillar Inc. Class 15. WING SHROUDS

A2022/01516 - MALLEN B.V. Class 23. DRINKING FOUNTAIN

F2022/01514 - JOZISCAPE (PTY) LTD Class 25. A SUPPORT FOR A ROCK BOLT

- APPLIED ON 2022/11/24 -

F2022/01522 - John William Cussons Class 25. SOLAR TRACKING ARRAY FRAME

A2022/01523 - YAMABIKO CORPORATION Class 15. ENGINE WELDER

F2022/01524 - PLASTIC INNOVATIONS (PTY) LTD Class 8. A DETONATOR HOLDER

### 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

No records available

### 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.)

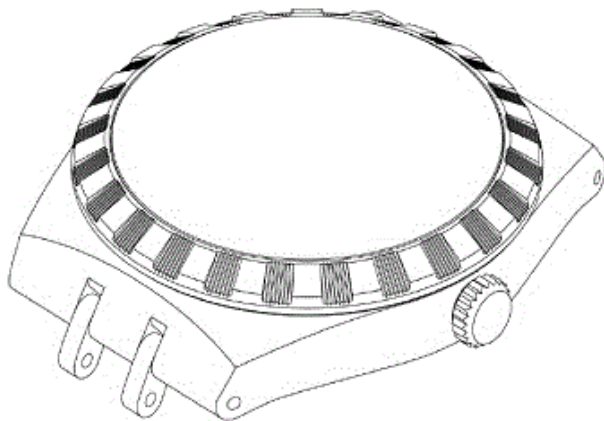
The numerical references denote the following: **(21)** Number of application. **(22)** Date of lodgement. **(23)** release date (if applicable). **(DR)** Date of registration. **(52)** Class. **(24)** Type of design. **(71)** Name(s) of applicant(s). **(33)** Country. **(31)** Number and. **(32)** Date 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.

21: A2020/01074 22: 2020-08-05 23:  
43: 2022-09-12  
52: Class 10. 24: Part A  
71: MONTRES TUDOR SA  
33: CH 31: 145201 32: 2020-03-17

**54: Watch Case**

57: The design relates to a watch case. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.



FRONT BOTTOM RIGHT PERSPECTIVE VIEW



21: A2020/01387 22: 2020-10-23 23:  
43: 2022-10-10  
52: Class 12 24: Part A  
71: CLEARVIEW TOWING MIRRORS PTY LTD  
33: AU 31: 202012426 32: 2020-04-23

**54: VEHICLE MIRROR ASSEMBLY**

57: The design is applied to a vehicle mirror assembly. The features of the design for which protection is claimed are those of the shape and/or configuration of the vehicle mirror assembly, substantially as illustrated in the accompanying representation. The features of the vehicle mounting portion of the vehicle mirror assembly do not form part of the design and are disclaimed. Colour forms no part of the design and is also disclaimed.

21: A2020/01386 22: 2020-10-23 23:  
43: 2022-10-10  
52: Class 12 24: Part A  
71: CLEARVIEW TOWING MIRRORS PTY LTD  
33: AU 31: 202012425 32: 2020-04-23

**54: VEHICLE MIRROR ASSEMBLY**

57: The design is applied to a vehicle mirror assembly. The features of the design for which protection is claimed are those of the shape and/or configuration of the vehicle mirror assembly, substantially as illustrated in the accompanying representation. The features of the vehicle mounting portion of the vehicle mirror assembly do not form part of the design and are disclaimed. Colour forms no part of the design and is also disclaimed.



21: A2020/01466 22: 2020-11-11 23:  
43: 2022-10-10  
52: Class 25 24: Part A  
71: PAGE, Colin

**54: COLUMN BASE OR CAPITAL**

57: The design is applied to column base or capital. 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 column base or capital, substantially as illustrated in the accompanying representations.

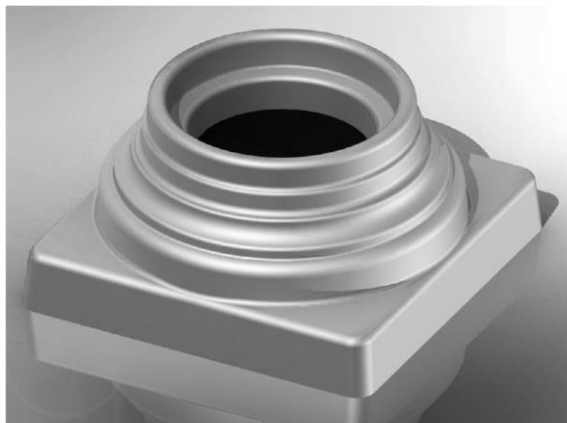


FIG. 1: THREE-DIMENSIONAL VIEW

21: A2021/00439 22: 2021-04-23 23:  
43: 2022-05-19

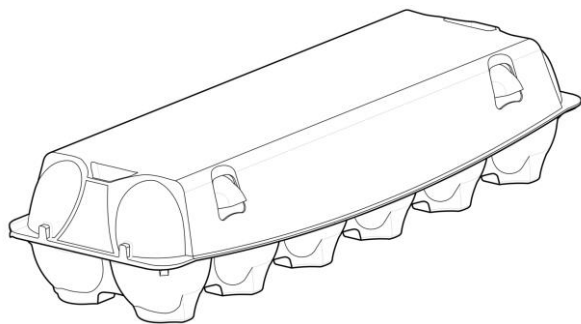
52: Class 09 24: Part A

71: Huhtamaki Molded Fiber Technology B.V.

33: WO 31: WIPO099062 32: 2020-11-02

**54: EGG CARTON**

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: A2021/00441 22: 2021-04-23 23:  
43: 2022-03-10

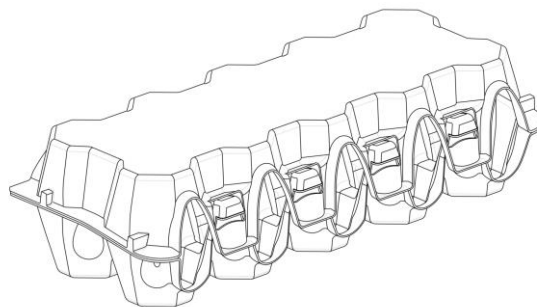
52: Class 09 24: Part A

71: Huhtamaki Molded Fiber Technology B.V.

33: WO 31: WIPO99062 32: 2020-11-02

**54: EGG CARTON**

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: A2021/00494 22: 2021-05-12 23:

43: 2022-10-10

52: Class 12 24: Part A

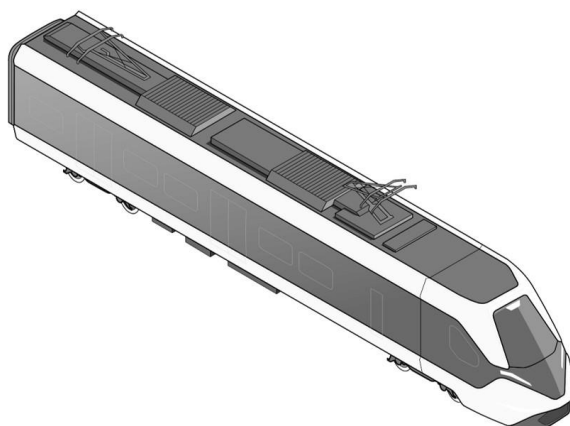
71: JOINT STOCK COMPANY

«TRANSMASHHOLDING»

33: RU 31: 2020505594 32: 2020-11-18

**54: CONTROL CAR OF AN ELECTRIC MULTIPLE UNIT**

57: The design is applied to a control car of an electric multiple unit. 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 control car of an electric multiple unit, substantially as illustrated in the accompanying representation. Shading and colour do not form part of the design and are disclaimed.



21: A2021/00867 22: 2021-07-26 23:

43: 2022-02-22

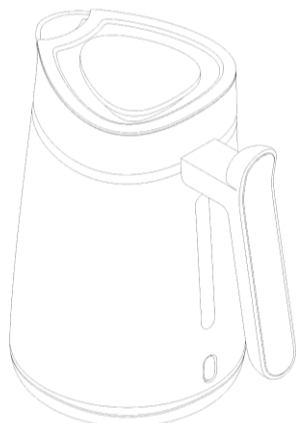
52: Class 07 24: Part A

71: KONINKLIJKE PHILIPS N.V.

33: EU 31: 008413520-0001 32: 2021-01-26

**54: KETTLE**

57: The article of the design consists substantially of a kettle. The features of the design for which protection is claimed reside in the shape and/or configuration of the kettle substantially as shown in the accompanying representations.



21: A2021/00868 22: 2021-07-26 23:  
43: 2022-03-03

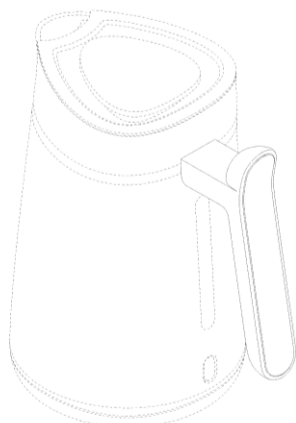
52: Class 07 24: Part A

71: KONINKLIJKE PHILIPS N.V.

33: EU 31: 008413520-0002 32: 2021-01-26

**54: KETTLE**

57: The article of the design consists substantially of a kettle. The features of the design for which protection is claimed reside in the shape and/or configuration of the kettle substantially as shown in the accompanying representations irrespective of the appearance of the features in dashed lines.



21: A2021/00869 22: 2021-07-26 23:  
43: 2022-03-03

52: Class 07 24: Part A

71: KONINKLIJKE PHILIPS N.V.

33: EU 31: 008414767-0001 32: 2021-01-26

33: EU 31: 008414767-0004 32: 2021-01-26

**54: COFFEE MAKER**

57: The article of the design consists substantially of a coffee maker. The features of the design for which protection is claimed reside in the shape and/or configuration of the coffee maker substantially as shown in the accompanying representations.



21: A2021/00870 22: 2021-07-26 23:

43: 2022-02-22

52: Class 07 24: Part A

71: KONINKLIJKE PHILIPS N.V.

33: EU 31: 008414767-0002 32: 2021-01-26

**54: POT**

57: The article of the design consists substantially of a pot. The features of the design for which protection is claimed reside in the shape and/or configuration of the pot substantially as shown in the accompanying representations.



21: A2021/00871 22: 2021-07-26 23:

43: 2022-02-22

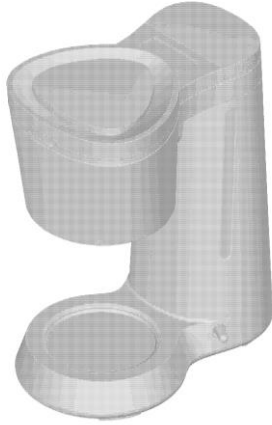
52: Class 07 24: Part A

71: KONINKLIJKE PHILIPS N.V.

33: EU 31: 008414767-0003 32: 2021-01-26

**54: COFFEE MAKER**

57: The article of the design consists substantially of a coffee maker. The features of the design for which protection is claimed reside in the shape and/or configuration of the coffee maker substantially as shown in the accompanying representations.



21: A2021/00872 22: 2021-07-26 23:  
43: 2022-02-22

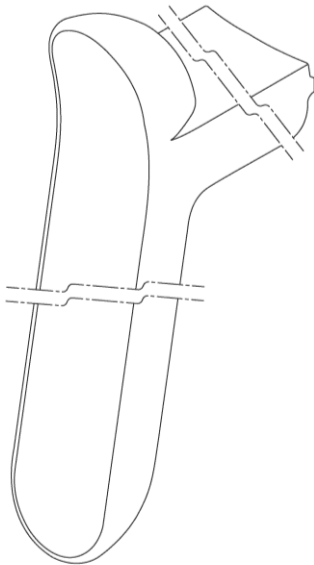
52: Class 07 24: Part A

71: KONINKLIJKE PHILIPS N.V.

33: EU 31: 008414767-0007 32: 2021-01-26

**54: POT**

57: The article of the design consists substantially of a pot. The features of the design for which protection is claimed reside in the shape and/or configuration of the pot substantially as shown in the accompanying representations irrespective of the appearance of the features in dashed lines.



21: A2021/00873 22: 2021-07-26 23:  
43: 2022-02-22

52: Class 07 24: Part A

71: KONINKLIJKE PHILIPS N.V.

33: EU 31: 008415285-0001 32: 2021-01-26

**54: TOASTER**

57: The article of the design consists substantially of a toaster. The features of the design for which protection is claimed reside in the shape and/or configuration of the toaster substantially as shown in the accompanying representations.



21: A2021/00874 22: 2021-07-26 23:

43: 2022-02-22

52: Class 07 24: Part A

71: KONINKLIJKE PHILIPS N.V.

33: EU 31: 008415285-0002 32: 2021-01-26

**54: TOASTER**

57: The article of the design consists substantially of a toaster. The features of the design for which protection is claimed reside in the shape and/or configuration of the toaster substantially as shown in the accompanying representations.



21: A2021/00890 22: 2021-07-27 23:

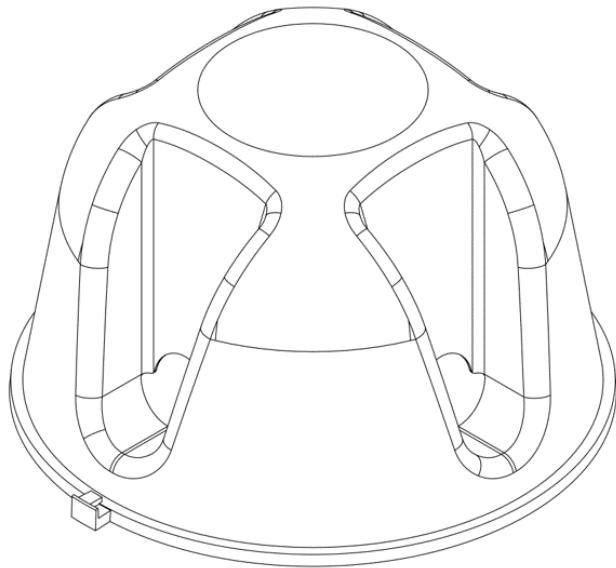
43: 2022-10-10

52: Class 22 24: Part A



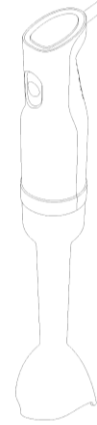
71: SEDQ HEALTHY CROPS, S.L.  
 33: EU 31: 008415913 32: 2021-01-27  
**54: INSECT TRAP**

57: The design is applied to an insect trap. 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 insect trap, substantially as illustrated in the accompanying representation.



21: A2021/00936 22: 2021-08-03 23:  
 43: 2022-06-22  
 52: Class 31 24: Part A  
 71: KONINKLIJKE PHILIPS N.V.  
 33: EU 31: 008427587-0001 32: 2021-02-08  
**54: BLENDER**

57: The article of the design consists substantially of a blender. The features of the design for which protection is claimed reside in the shape and/or configuration of the blender substantially as shown in the accompanying representations.



21: A2021/00968 22: 2021-08-16 23:  
 43: 2022-09-12  
 52: Class 32. 24: Part A  
 71: THE ADDAX AND ORYX GROUP PLC  
**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.



**PLAN VIEW**

21: A2021/01023 22: 2021-09-03 23:  
 43: 2021-03-03  
 52: Class 13 24: Part A  
 71: Clearvue Technologies Ltd  
 33: AU 31: 202111182 32: 2021-03-03  
**54: PANELS WITH SOLAR CELL BORDERS**

57: The design relates to a glass panel that incorporates an inset solar cell around its border. The solar cell is incorporated into the glass panel during manufacture. When incorporated into a window, the glass panel enables the window to act as a solar panel.

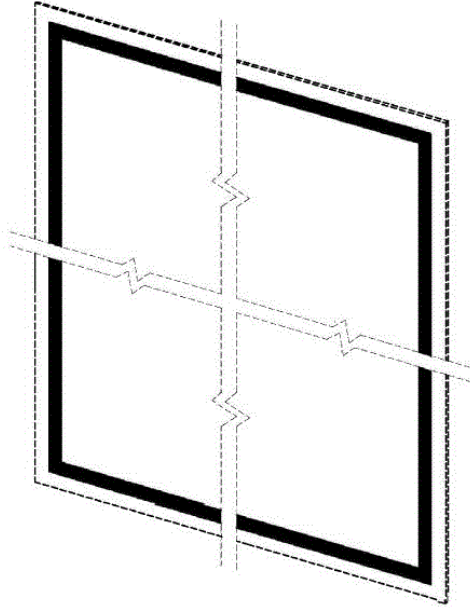


Figure 1

Three-dimensional view

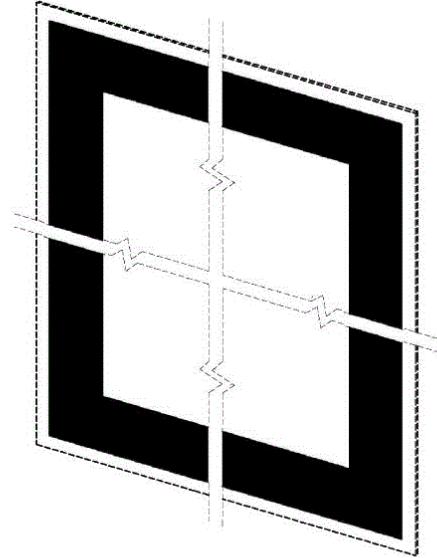


Figure 1

Three-dimensional view

21: A2021/01024 22: 2021-09-03 23:

43: 2021-03-03

52: Class 13 24: Part A

71: Clearvue Technologies Ltd

33: AU 31: 202111191 32: 2021-03-03

**54: PANELS WITH SOLAR CELL BORDERS**

57: The design relates to a glass panel that incorporates an inset solar cell around its border. The solar cell is incorporated into the glass panel during manufacture. When incorporated into a window, the glass panel enables the window to act as a solar panel.

21: A2021/01053 22: 2021-09-09 23:

43: 2022-10-10

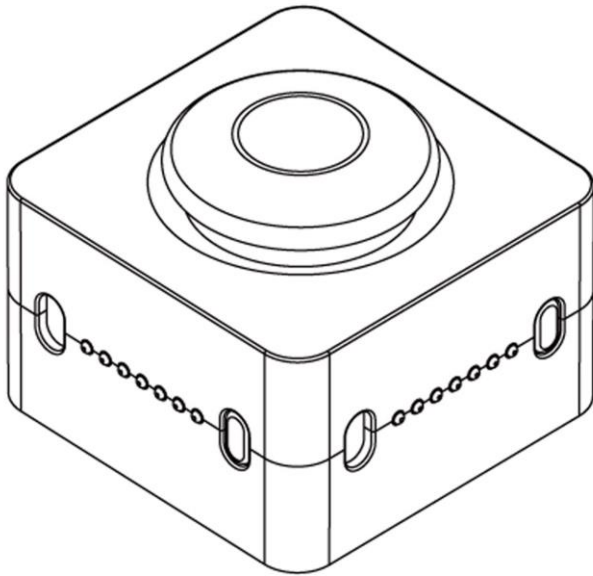
52: Class 14 24: Part A

71: LUXROBO CORPORATION

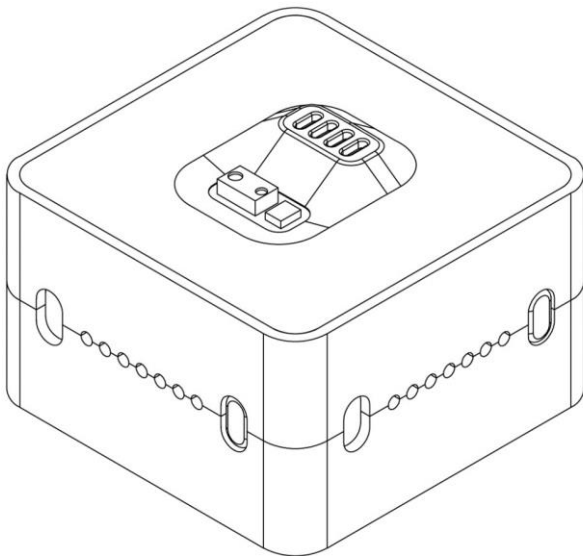
33: KR 31: 30-2021-0011378 32: 2021-03-09

**54: JOYSTICK MODULE FOR ELECTRONIC DEVICES**

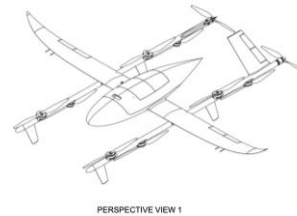
57: The design is applied to a joystick module for electronic devices. The features of the design for which protection is claimed are those of the shape and/or configuration and/or pattern and/or ornamentation of the joystick module for electronic devices, substantially as illustrated in the accompanying representation.



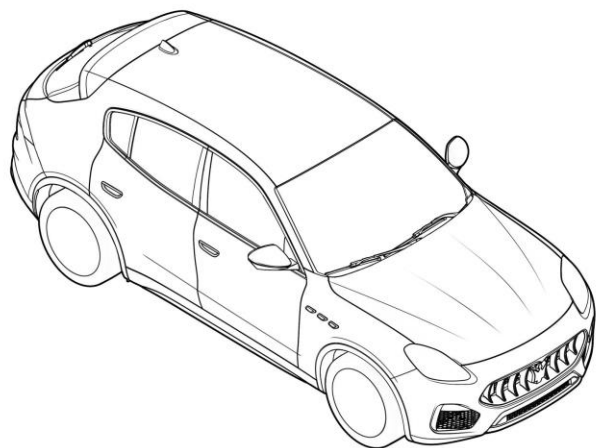
21: A2021/01056 22: 2021-09-09 23:  
 43: 2022-10-10  
 52: Class 10 24: Part A  
 71: LUXROBO CORPORATION  
 33: KR 31: 30-2021-0011380 32: 2021-03-09  
**54: ENVIRONMENTAL SENSOR MODULE FOR ELECTRONIC DEVICES**  
 57: The design is applied to an environmental sensor module for electronic devices. The 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 environmental sensor module for electronic devices, substantially as illustrated in the accompanying representation.



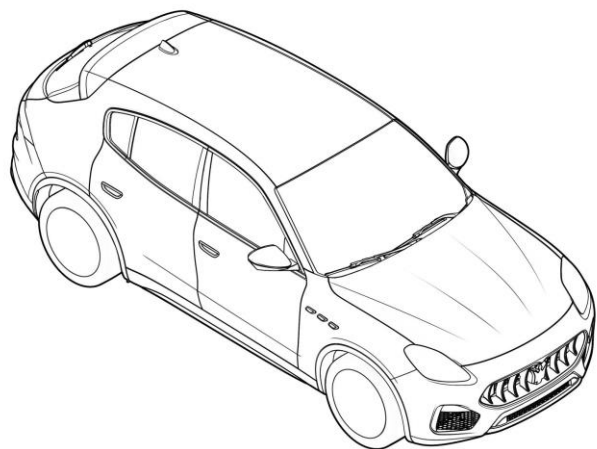
21: A2021/01160 22: 2021-09-23 23:  
 43: 2022-09-14  
 52: Class 12 24: Part A  
 71: KOOKABURRA AEROSPACE PTY LTD  
 33: AU 31: 202111675 32: 2021-03-24  
**54: REMOTELY PILOTED AIRCRAFTS**  
 57: The design is for a remotely piloted aircraft. The aircraft includes a main body having two wing portions that extend transversely therefrom. Disposed on each of the wing portions are flaps, a winglet and a landing support member which landing support member is at a right angle to the wing portions such that the landing support member is located parallel to the main body of the aircraft. The aircraft further includes a plurality of propellers positioned on both a top and bottom surface of each of the landing support members with an additional propeller positioned at ends of the landing support members. The landing support members each also include fins and a tail portion, which fins, and tail portion are respectively located on the top and bottom surface of the landing support members with the tail portion located towards the ends of thereof.



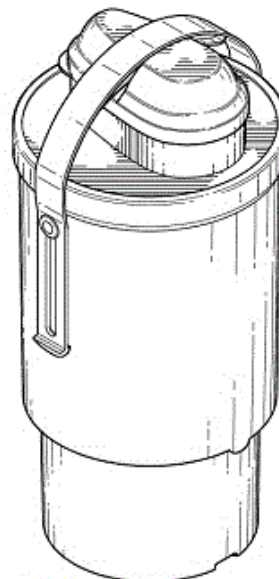
21: A2021/01317 22: 2021-10-22 23:  
 43: 2022-11-16  
 52: Class 12 24: Part A  
 71: MASERATI S.P.A.  
 33: WO 31: WIPO104181 32: 2021-04-23  
**54: CAR**  
 57: The design is for a car in the form of a five door sports utility vehicle.



21: A2021/01318 22: 2021-10-22 23:  
43: 2022-11-16  
52: Class 21 24: Part A  
71: MASERATI S.P.A.  
33: WO 31: WIPO104184 32: 2021-04-23  
**54: SCALE CAR MODEL**  
57: The design is for a scale car model in the form of a five door sports utility vehicle.

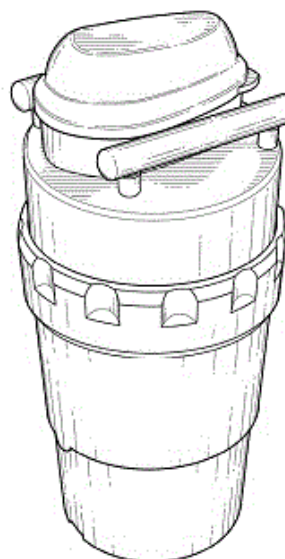


21: A2021/01401 22: 2021-11-10 23:  
43: 2022-09-14  
52: Class 24. 24: Part A  
71: BWXT ISOTOPE TECHNOLOGY GROUP, INC.  
33: US 31: 29/782,907 32: 2021-05-10  
**54: Elution Generator Canister Assembly**  
57: The design relates to an elution generator canister assembly. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.



PERSPECTIVE VIEW

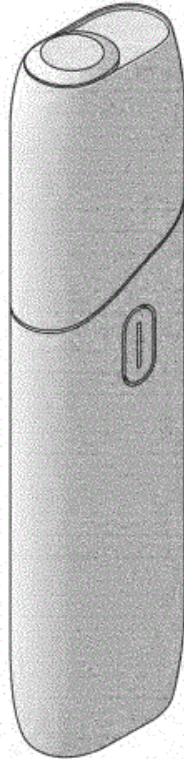
21: A2021/01402 22: 2021-11-10 23:  
43: 2022-09-14  
52: Class 24. 24: Part A  
71: BWXT ISOTOPE TECHNOLOGY GROUP, INC.  
33: US 31: 29/782,909 32: 2021-05-10  
**54: Elution Generator Canister Assembly**  
57: The design relates to an elution generator canister assembly. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.



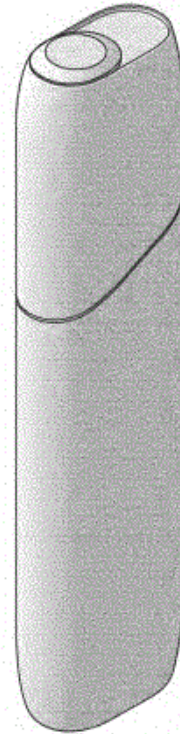
PERSPECTIVE VIEW

21: A2022/00047 22: 2022-01-17 23:  
43: 2022-08-15

52: Class 27 24: Part A  
 71: PHILIP MORRIS PRODUCTS S.A.  
 33: EU 31: 008626345-0005 32: 2021-07-21  
**54: AEROSOL GENERATING DEVICE, IN PARTICULAR TOBACCO HEATING DEVICE**  
 57: The design is to be applied to an aerosol generating device, in particular tobacco heating device. The features for which protection is claimed are those of shape and/or configuration, substantially as shown in the representations.



PERSPECTIVE VIEW



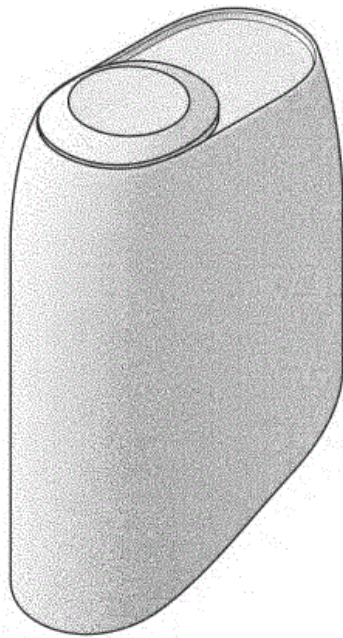
PERSPECTIVE VIEW

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21: A2022/00048 22: 2022-01-17 23:  
 43: 2022-08-15  
 52: Class 27 24: Part A  
 71: PHILIP MORRIS PRODUCTS S.A.  
 33: EU 31: 008626345-0006 32: 2021-07-21  
**54: AEROSOL GENERATING DEVICE, IN PARTICULAR TOBACCO HEATING DEVICE**  
 57: The design is to be applied to an aerosol generating device, in particular tobacco heating device. The features for which protection is claimed are those of shape and/or configuration, substantially as shown in the representations.

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21: A2022/00049 22: 2022-01-17 23:  
 43: 2022-08-15  
 52: Class 27 24: Part A  
 71: PHILIP MORRIS PRODUCTS S.A.  
 33: EU 31: 008626345-0007 32: 2021-07-21  
**54: AEROSOL GENERATING DEVICE, IN PARTICULAR TOBACCO HEATING DEVICE**  
 57: The design is to be applied to an aerosol generating device, in particular tobacco heating device. The features for which protection is claimed are those of shape and/or configuration, substantially as shown in the representations.



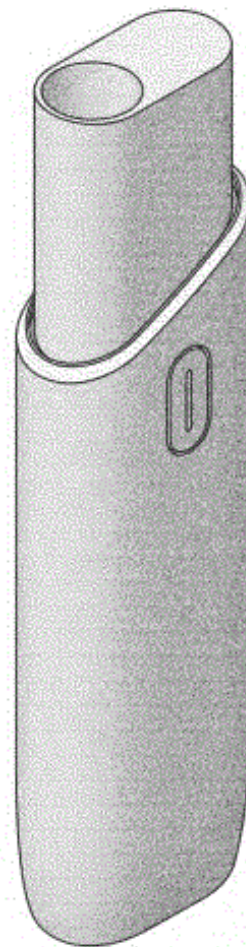
PERSPECTIVE VIEW

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21: A2022/00050 22: 2022-01-17 23:  
43: 2022-08-15  
52: Class 27 24: Part A  
71: PHILIP MORRIS PRODUCTS S.A.  
33: EU 31: 008626345-0008 32: 2021-07-21

**54: AEROSOL GENERATING DEVICE, IN PARTICULAR TOBACCO HEATING DEVICE**

57: The design is to be applied to an aerosol generating device, in particular tobacco heating device. The features for which protection is claimed are those of shape and/or configuration, substantially as shown in the representations.



PERSPECTIVE VIEW

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21: A2022/00124 22: 2022-02-09 23:  
43: 2022-09-02  
52: Class 21 24: Part A  
71: TRINH NGUYEN KHANH LE  
33: US 31: 29803323 32: 2021-08-12

**54: FOLDING EXERCISE STAND FRAME**

57: The design relates to a Folding Exercise Stand Frame. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.

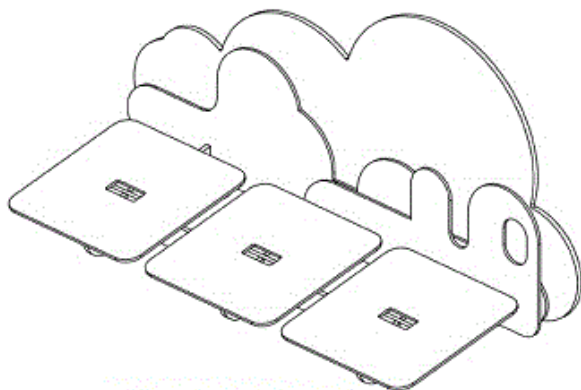


21: A2022/00129 22: 2022-02-10 23:  
43: 2022-09-01  
52: Class 20. 24: Part A  
71: ETA SA MANUFACTURE HORLOGÈRE  
SUISSE

33: IB 31: WIPO109280 32: 2021-10-08

**54: Display Stand for Watches**

57: The design relates to a display stand for watches. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.



**FRONT PERSPECTIVE VIEW**

21: A2022/00177 22: 2022-02-21 23:  
43: 2022-09-15  
52: Class 09 24: Part A  
71: DEXOWL société anonyme  
33: EU 31: 008668701-0010 32: 2021-08-31

**54: BOTTLE**

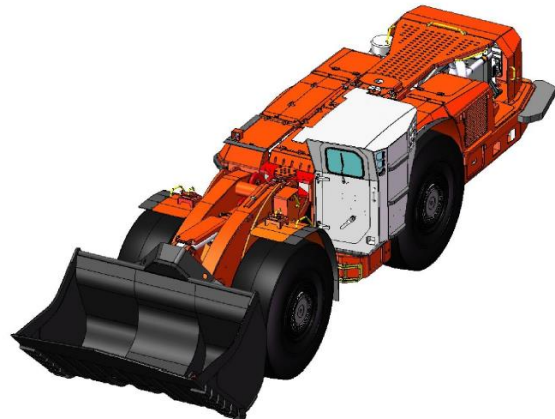
57: The design is in respect of a bottle which functions in use to contain a fluid.



21: A2022/00178 22: 2022-02-22 23:  
43: 2022-09-15  
52: Class 15 24: Part A  
71: YANTAI XINGYE MACHINERY CO., LTD.  
33: CN 31: 202130550494.1 32: 2021-08-23

**54: A LOADING-HAULING-DUMPING (LHD) MACHINE**

57: 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 loading-hauling-dumping (LHD) machine substantially as shown in the accompanying representations.



**Figure 2 – Another perspective view**

21: A2022/00179 22: 2022-02-22 23:  
43: 2022-09-02  
52: Class 15 24: Part A  
71: YANTAI XINGYE MACHINERY CO., LTD.  
33: CN 31: 202130549991.X 32: 2021-08-23  
**54: A REAR COVER FOR A LOADING-HAULING-DUMPING (LHD) MACHINE**

57: 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 cover substantially as shown in the accompanying representations. The cover may be used as a rear cover for a loading-hauling-dumping (LHD) machine as well as in other machines or vehicles.

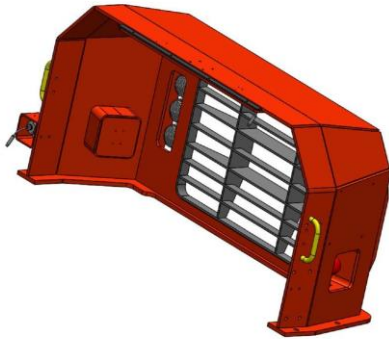


Figure 2 – Another perspective view



PERSPECTIVE VIEW

21: A2022/00182 22: 2022-02-22 23:  
43: 2022-09-15  
52: Class 26. 24: Part A  
71: SNGLS HOLDING & MANAGEMENT OÜ  
33: EM 31: 008858344-0002 32: 2022-02-11  
**54: Lighting Apparatus**

57: The design relates to a lighting apparatus. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.

21: A2022/00180 22: 2022-02-22 23:  
43: 2022-09-15  
52: Class 12. 24: Part A  
71: GREAT WALL MOTOR COMPANY LIMITED  
33: CN 31: 202130548190.1 32: 2021-08-23  
**54: Automobile**

57: The design relates to an automobile. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.



FRONT PERSPECTIVE VIEW



PERSPECTIVE VIEW

21: A2022/00181 22: 2022-02-22 23:  
43: 2022-09-15  
52: Class 26. 24: Part A  
71: SNGLS HOLDING & MANAGEMENT OÜ  
33: EM 31: 008858344-0001 32: 2022-02-11  
**54: Lighting Apparatus**

57: The design relates to a lighting apparatus. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.

21: A2022/00183 22: 2022-02-22 23:  
43: 2022-09-02  
52: Class 15 24: Part A  
71: YANTAI XINGYE MACHINERY CO., LTD.  
33: CN 31: 202130549993.9 32: 2021-08-23  
**54: A CAB FOR A LOADING-HAULING-DUMPING (LHD) MACHINE**

57: 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 cab substantially as shown in the accompanying representations. The cab may be employed in a



loading-hauling-dumping (LHD) machine as well as in other machines or vehicles.

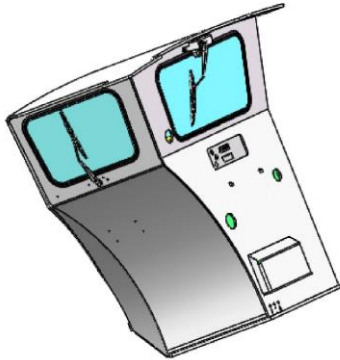


Figure 2 – Another perspective view

21: A2022/00186 22: 2022-02-23 23:  
43: 2022-09-01  
52: Class 7. 24: Part A  
71: STASHER, INC.  
33: US 31: 29/806,416 32: 2021-09-02

**54: Container**

57: The design relates to a container. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.



**TOP, FRONT AND RIGHT  
SIDE PERSPECTIVE VIEW**

21: A2022/00187 22: 2022-02-23 23:  
43: 2022-09-01  
52: Class 7. 24: Part A  
71: STASHER, INC.  
33: US 31: 29/806,416 32: 2021-09-02  
**54: Container**

57: The design relates to a container. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.



**TOP, FRONT AND RIGHT SIDE  
PERSPECTIVE VIEW**

21: A2022/00190 22: 2022-02-24 23:  
43: 2022-09-15  
52: Class 2. 24: Part A  
71: PUMA SE  
33: US 31: 29/815,161 32: 2021-11-11

**54: Shoe Midsole**

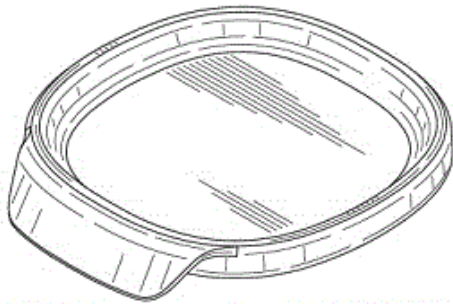
57: The design relates to a shoe midsole. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.



**PERSPECTIVE VIEW**

21: A2022/00209 22: 2022-02-28 23:  
43: 2022-09-01  
52: Class 7. 24: Part A  
71: DART INDUSTRIES INC.  
33: US 31: 29/814,609 32: 2021-11-08  
**54: Storage Container Seal**

57: The design relates to a storage container seal. The features of the design are those of shape and/or configuration and/or ornamentation.

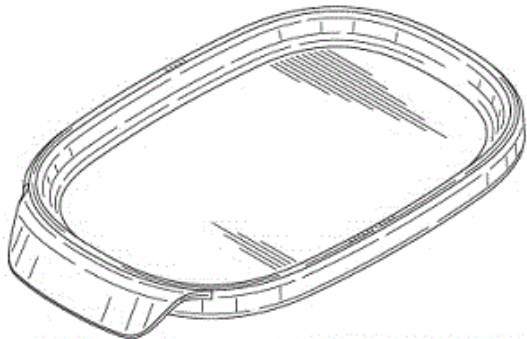


TOP, FRONT AND LEFT SIDE PERSPECTIVE VIEW

21: A2022/00210 22: 2022-02-28 23:  
43: 2022-09-01  
52: Class 7. 24: Part A  
71: DART INDUSTRIES INC.  
33: US 31: 29/814,609 32: 2021-11-08

**54: Storage Container Seal**

57: The design relates to a storage container seal. The features of the design are those of shape and/or configuration and/or ornamentation.

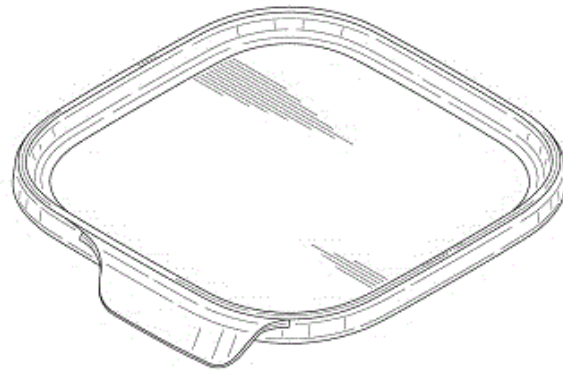


TOP, FRONT AND LEFT SIDE PERSPECTIVE VIEW

21: A2022/00211 22: 2022-02-28 23:  
43: 2022-09-01  
52: Class 7. 24: Part A  
71: DART INDUSTRIES INC.  
33: US 31: 29/814,609 32: 2021-11-08

**54: Storage Container Seal**

57: The design relates to storage container seal. The features of the design are those of shape and/or configuration and/or ornamentation.



TOP, FRONT AND LEFT SIDE PERSPECTIVE VIEW

21: A2022/00212 22: 2022-02-28 23:  
43: 2022-09-01  
52: Class 7. 24: Part A  
71: DART INDUSTRIES INC.  
33: US 31: 29/814,609 32: 2021-11-08

**54: Storage Container Seal**

57: The design relates to storage container seal. The features of the design are those of shape and/or configuration and/or ornamentation.



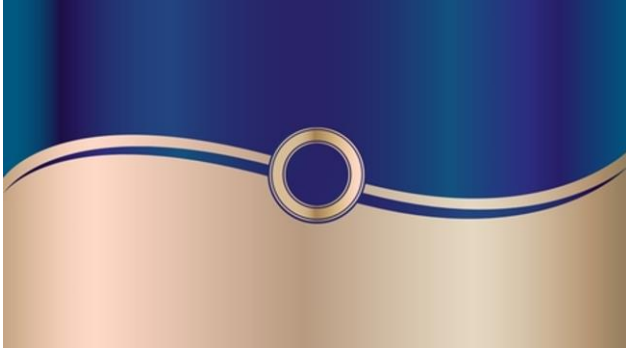
TOP, FRONT AND LEFT SIDE PERSPECTIVE VIEW

21: A2022/00216 22: 2022-02-28 23:  
43: 2022-09-01  
52: Class 09 24: Part A  
71: CHOCOLADEFABRIKEN LINDT & SPRÜNGLI AG

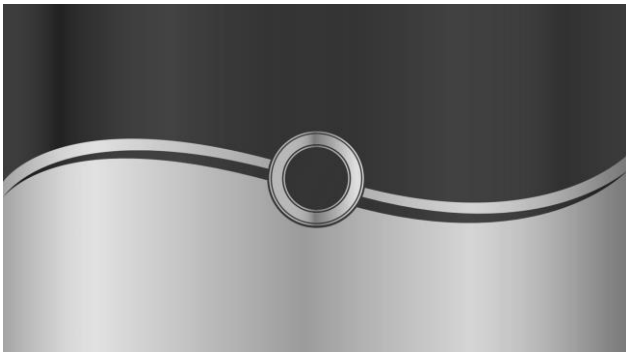
33: WO 31: DM/216282 32: 2021-09-06

**54: PACKAGING FOR FOODSTUFFS**

57: The design is applied to packaging for foodstuffs. The features of the design for which protection is claimed are those of the shape and/or configuration and/or ornamentation of the packaging for foodstuffs, substantially as illustrated in the accompanying representation.



21: A2022/00217 22: 2022-02-28 23:  
 43: 2022-09-01  
 52: Class 09 24: Part A  
 71: CHOCOLAFABRIKEN LINDT & SPRÜNGLI  
 AG  
 33: WO 31: DM/216282 32: 2021-09-06  
**54: PACKAGING FOR FOODSTUFFS**  
 57: The design is applied to packaging for foodstuffs.  
 The features of the design for which protection is  
 claimed are those of the shape and/or configuration  
 and/or ornamentation of the packaging for  
 foodstuffs, substantially as illustrated in the  
 accompanying representation.



21: A2022/00218 22: 2022-02-28 23:  
 43: 2022-09-01  
 52: Class 09 24: Part A  
 71: CHOCOLAFABRIKEN LINDT & SPRÜNGLI  
 AG  
 33: WO 31: DM/216282 32: 2021-09-06  
**54: PACKAGING FOR FOODSTUFFS**  
 57: The design is applied to packaging for foodstuffs.  
 The features of the design for which protection is  
 claimed are those of the shape and/or configuration  
 and/or ornamentation of the packaging for  
 foodstuffs, substantially as illustrated in the  
 accompanying representation.



21: A2022/00219 22: 2022-02-28 23:  
 43: 2022-09-01  
 52: Class 09 24: Part A  
 71: CHOCOLAFABRIKEN LINDT & SPRÜNGLI  
 AG  
 33: WO 31: DM/216282 32: 2021-09-06  
**54: PACKAGING FOR FOODSTUFFS**  
 57: The design is applied to packaging for foodstuffs.  
 The features of the design for which protection is  
 claimed are those of the shape and/or configuration  
 and/or ornamentation of the packaging for  
 foodstuffs, substantially as illustrated in the  
 accompanying representation.



21: A2022/00220 22: 2022-02-28 23:  
 43: 2022-09-01  
 52: Class 09 24: Part A  
 71: CHOCOLADEFABRIKEN LINDT & SPRÜNGLI  
 AG  
 33: WO 31: DM/216282 32: 2021-09-06  
**54: PACKAGING FOR FOODSTUFFS**  
 57: The design is applied to packaging for foodstuffs.  
 The features of the design for which protection is  
 claimed are those of the shape and/or configuration  
 and/or ornamentation of the packaging for  
 foodstuffs, substantially as illustrated in the  
 accompanying representation.

21: A2022/00233 22: 2022-03-07 23:  
 43: 2022-09-15  
 52: Class 12 24: Part A  
 71: C&G Bodyworks  
**54: FENDER FLARES**  
 57: The design is for a fender flare, capable of being  
 fitted onto a rim portion of vehicle's rear wheel well.  
 The fender comprises of an arched shaped body  
 being laterally curved, which curvature allows for the  
 body to match the vehicle's profile proximate the rim  
 portion of the wheel well. Furthermore, an inner  
 edge of the body comprises of a curved profile in its  
 entirety, whereas the external edge comprises of a  
 curved profile extending from a lower portion of a  
 first end upwards towards an apex of the body,  
 followed by a straight profile extending downwards  
 towards a lower portion of a second end. The fender  
 includes a grip mounting means located on a lower  
 portion of both ends, which grip mounting means  
 comprises of a substantially U-shaped bend and  
 extends radially therefrom, thereby allowing the  
 fender flares to be mountable onto the vehicle's  
 body shell.



Three-dimensional illustrative view of a fender flare for the left rear wheel well of a vehicle

21: A2022/00235 22: 2022-03-07 23:  
43: 2022-09-15  
52: Class 12 24: Part A  
71: C&G Bodyworks

**54: FENDER FLARES**

57: The design is for a fender flare, capable of being fitted onto a rim portion of vehicle's front wheel well. The fender comprises of an arched shaped body being laterally curved, which curvature allows for the body to match the vehicle's profile proximate the rim portion of the wheel well. Furthermore, both an inner edge and an outer edge of the body comprise of a substantially U-shaped profile, of which a lower portion of a first end of the body includes a toe. The fender includes a grip mounting means located on a lower portion of both the first end and a second end of the body, which grip mounting means comprises of a substantially U-shaped bend and extends radially therefrom, thereby allowing the fender flares to be mountable onto the vehicle's body shell.

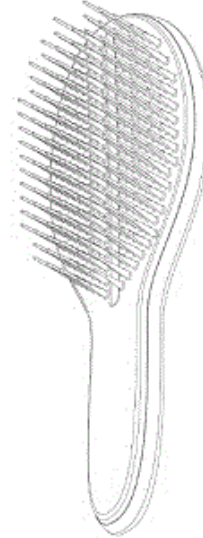


Three-dimensional illustrative view of a fender flare for the left front wheel well of a vehicle

21: A2022/00238 22: 2022-03-09 23:  
43: 2022-09-15  
52: Class 4. 24: Part A  
71: TANGLE TEEZER LIMITED

33: GB 31: 6160313 32: 2021-09-09  
33: GB 31: 6160311 32: 2021-09-09  
**54: Hair Brush**

57: The design relates to a hair brush. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.

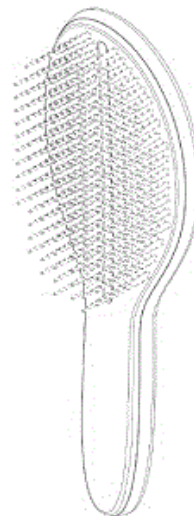


FIRST FRONT PERSPECTIVE VIEW

21: A2022/00239 22: 2022-03-09 23:  
43: 2022-09-15  
52: Class 4. 24: Part A  
71: TANGLE TEEZER LIMITED  
33: GB 31: 6160312 32: 2021-09-09

**54: Part of a Hair Brush**

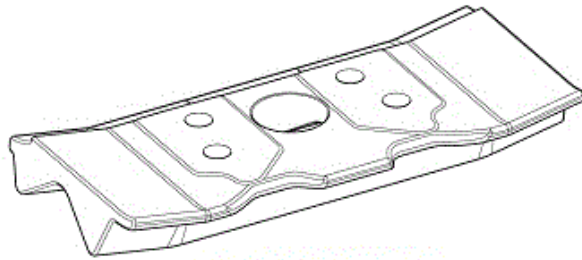
57: The design relates to a part of a hair brush. The features of the design are those of shape and/or configuration and/or ornamentation.



FIRST FRONT PERSPECTIVE VIEW

21: A2022/00241 22: 2022-03-10 23:  
 43: 2022-09-12  
 52: Class 15. 24: Part A  
 71: EPIROC DRILLING SOLUTIONS, LLC  
**54: Track Shoe and Track Assembly for Tracked Vehicles**

57: The design relates to track shoe and track assembly for tracked vehicles. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.



PERSPECTIVE VIEW

21: A2022/00242 22: 2022-03-10 23:  
 43: 2022-02-09  
 52: Class 9 24: Part A  
 71: Courvoisier S.A.S.  
 33: US 31: 29/826,133 32: 2022-02-09

**54: BOTTLES**

57: The design is for a bottle which is axially symmetrical and has a body and neck. The body has a wide circular base and a sidewall which gradually diverges upwardly between the base and a continuous shoulder of the body. The shoulders merge continuously with the neck terminating in an upwardly open round mouth. The body is relatively wide, having a diameter about 80% its height. The neck is nearly as tall as the body is. A circular protrusion (an exception to the axial symmetry) is provided on a portion of the shoulder and is about the same size as the mouth.

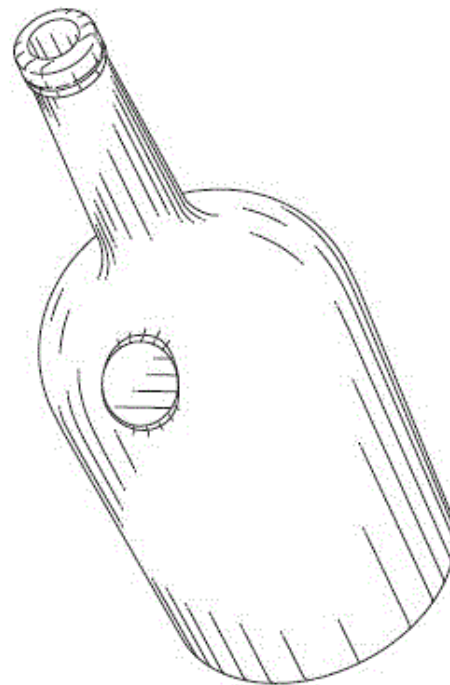


Figure 1

Three-dimensional view

21: A2022/00243 22: 2022-03-10 23:  
 43: 2022-02-09  
 52: Class 9 24: Part A  
 71: Courvoisier S.A.S.  
 33: US 31: 29/826,136 32: 2022-02-09

**54: BOTTLES**

57: The design is for a bottle which is axially symmetrical and has a body and neck. The bottle has a circular base and an upright sidewall which extends between the base and a continuous shoulder of the body. The shoulder gently curves upwardly inwardly towards an upright, elongate cylindrical neck. A mouth defining an opening is provided at the end of the neck. The body is about three times a height of the neck. A circular protrusion (an exception to the axial symmetry) is provided on a portion of the shoulder and is about the same size as the mouth.

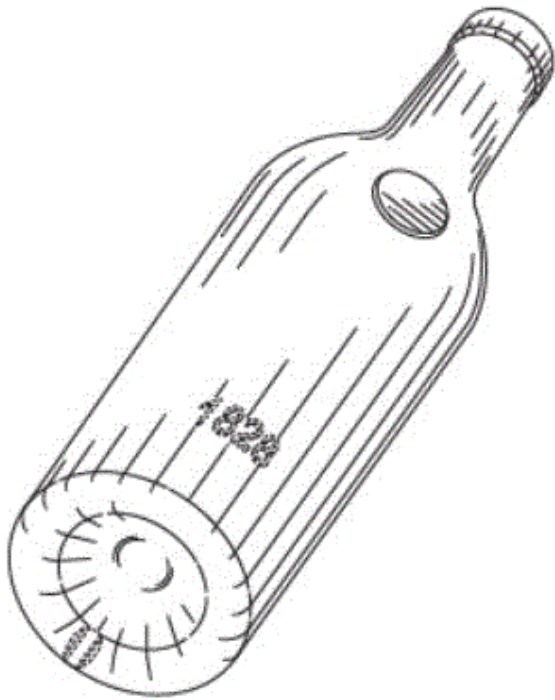


Figure 1

Three-dimensional view

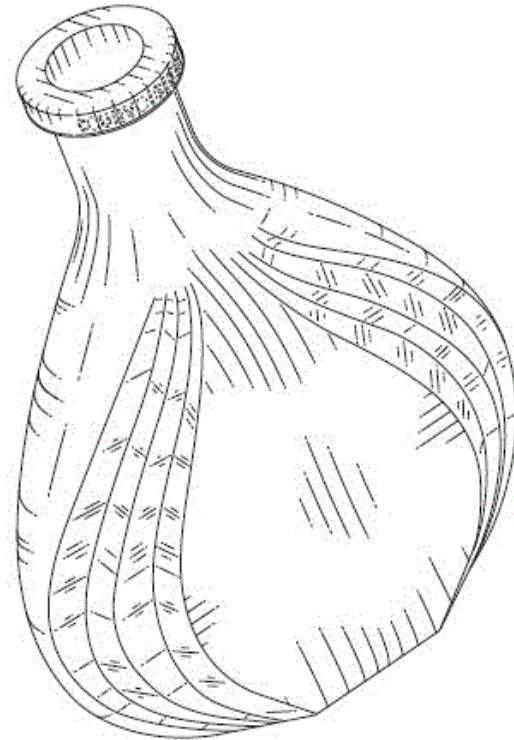


Figure 1

Three-dimensional view

21: A2022/00244 22: 2022-03-10 23:  
43: 2022-02-09  
52: Class 9 24: Part A  
71: Courvoisier S.A.S.  
33: US 31: 29/826,137 32: 2022-02-09

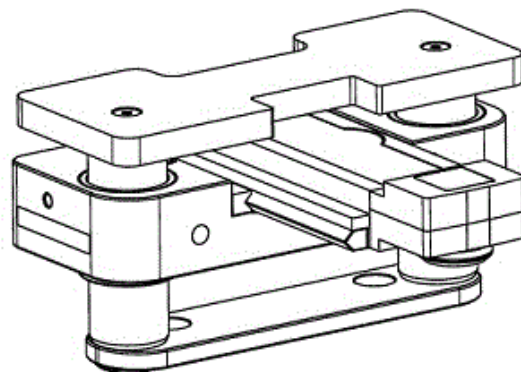
**54: BOTTLES**

57: The design is for a bottle which is teardrop-shaped and flattened from front to back; it is symmetrical about an upright plane. The bottle has a hexagonal base with opposite rounded vertices. Flat front and rear faces and outwardly curved, ornate sidewalls extend between the base and a neck of the bottle. A series of laterally spaced outwardly curved recesses or large flutes are provided on sidewalls and follow the overall shape of the bottle. The bottle gently curves shoulderlessly towards a short cylindrical neck. A mouth having a flanged rim is provided atop the neck.

21: A2022/00251 22: 2022-03-11 23:  
43: 2022-09-15  
52: Class 15. 24: Part A  
71: S.B. PATENT HOLDING APS  
33: GB 31: 6160986 32: 2021-09-13

**54: Yaw Brake Disc Resurfacing Tool**

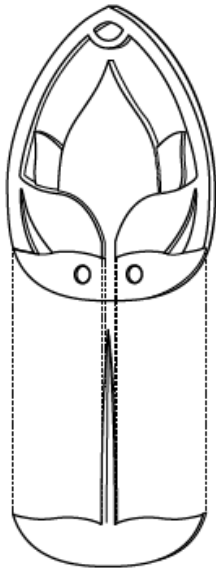
57: The design relates to a yaw brake disc resurfacing tool. The features of the design are those of shape and/or configuration.



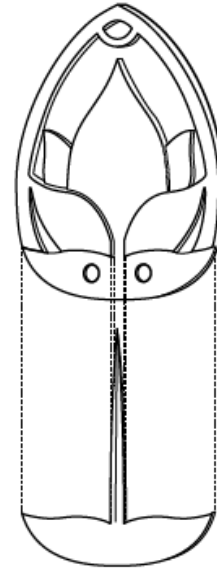
FIRST PERSPECTIVE VIEW

21: A2022/00254 22: 2022-03-11 23:  
 43: 2022-04-04  
 52: Class 11 24: Part A  
 71: NIXED JEWELLERY (PTY) LTD  
**54: PENDANT**

57: The features of the design for which novelty is claimed are the shape and / or configuration and / or pattern and / or ornamentation of a PENDANT as shown in the accompanying representations.



EXPLODED PERSPECTIVE VIEW



EXPLODED PERSPECTIVE VIEW

21: A2022/00256 22: 2022-03-11 23:  
 43: 2022-04-04  
 52: Class 22 24: Part A  
 71: NIXED JEWELLERY (PTY) LTD  
**54: PENDANT**

57: The features of the design for which novelty is claimed are the shape and / or configuration and / or pattern and / or ornamentation of a PENDANT as shown in the accompanying representations.

21: A2022/00260 22: 2022-03-14 23:  
 43: 2021-09-30  
 52: Class 16 24: Part A  
 71: Blaser Group GmbH  
 33: EM(DE) 31: 008710446-0001 32: 2021-09-30  
**54: CAMERAS**

57: The design is for a camera, and in particular a thermal imaging camera, comprising a cylindrical body having a first and a second round end defining a circular recess accommodating a lens, and a wall extending therebetween. The first end includes a zoom ring with a ridged surface and a focussing ring with spaced-apart trapezoid extensions. A top surface of the wall includes a capsule-shaped raised member housing three operating buttons. A first and second square-shaped member with curved edges is positioned at opposite sides of the wall with a top section slanting inwardly towards the wall. The first member includes a three-sided frame defining a recess housing a lever. The second member includes a square cover attached by an oval clasp. The cover includes an oval element. The second end includes a plurality of concentric rings leading to the lens. A ring with spaced-apart rectangular recesses is positioned towards the second end.



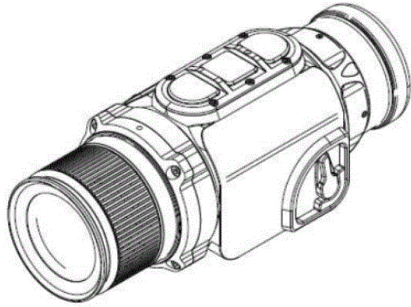


Figure 1

Three-dimensional view

21: A2022/00263 22: 2022-03-15 23:  
43: 2022-09-14  
52: Class 12. 24: Part A  
71: SUMITOMO RUBBER INDUSTRIES, LTD.  
33: JP 31: 2022-000113 32: 2022-01-06

**54: Tire for an Automobile**

57: The design relates to a tire for an automobile.  
The features of the design are those of shape and/or  
configuration and/or pattern.



FRONT VIEW

21: A2022/00303 22: 2022-03-24 23:  
43: 2022-10-07

52: Class 24 24: Part A

71: CIPLA LIMITED

33: IN 31: 355741-001 32: 2021-12-29

33: IN 31: 355742-001 32: 2021-12-29

**54: INHALER DEVICE**

57: The design is applied to an inhaler device. 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 inhaler device,  
substantially as illustrated in the accompanying  
representation. Neither colour nor shading form part  
of the design and are disclaimed.



FRONT VIEW

21: A2022/00264 22: 2022-03-15 23:  
43: 2022-09-14

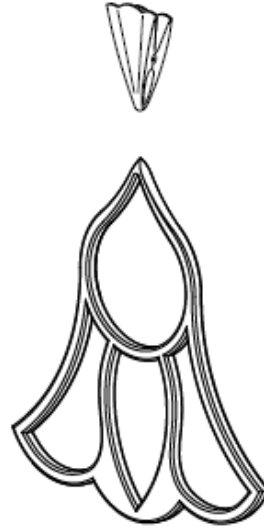
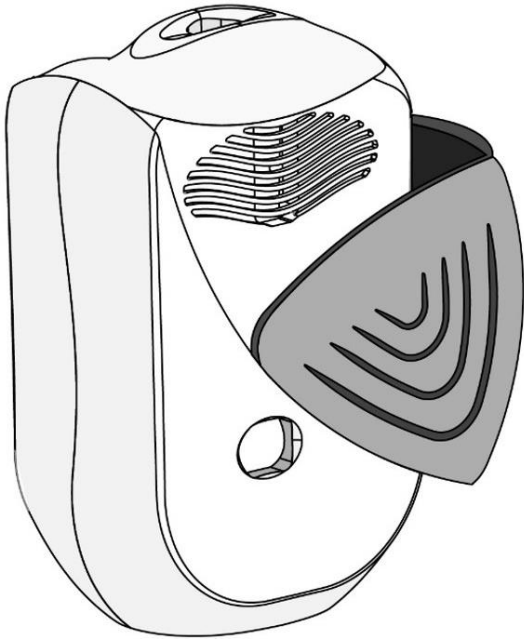
52: Class 12. 24: Part A

71: SUMITOMO RUBBER INDUSTRIES, LTD.

33: JP 31: 2022-000114 32: 2022-01-06

**54: Tire for an Automobile**

57: The design relates to a tire for an automobile.  
The features of the design are those of shape and/or  
configuration and/or pattern.



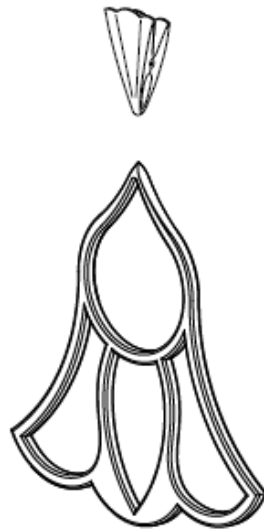
**EXPLODED PERSPECTIVE VIEW**

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21: A2022/00329 22: 2022-03-30 23:  
43: 2022-10-07  
52: Class 11 24: Part A  
71: NIXED JEWELLERY (PTY) LTD  
**54: PENDANT**  
57: The features of the design for which novelty is claimed are the shape and / or configuration and / or pattern and / or ornamentation of a PENDANT as shown in the accompanying representations.

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21: A2022/00330 22: 2022-03-30 23:  
43: 2022-10-07  
52: Class 22 24: Part A  
71: NIXED JEWELLERY (PTY) LTD  
**54: PENDANT**  
57: The features of the design for which novelty is claimed are the shape and / or configuration and / or pattern and / or ornamentation of a PENDANT as shown in the accompanying representations.



**EXPLODED PERSPECTIVE VIEW**

21: A2022/00333 22: 2022-03-30 23:  
43: 2022-10-07  
52: Class 11 24: Part A  
71: NIXED JEWELLERY (PTY) LTD

**54: PENDANT**

57: The features of the design for which novelty is claimed are the shape and / or configuration and / or pattern and / or ornamentation of a PENDANT as shown in the accompanying representations.



EXPLODED PERSPECTIVE VIEW

21: A2022/00334 22: 2022-03-30 23:  
43: 2022-10-07  
52: Class 22 24: Part A  
71: NIXED JEWELLERY (PTY) LTD

**54: PENDANT**

57: The features of the design for which novelty is claimed are the shape and / or configuration and / or pattern and / or ornamentation of a PENDANT as shown in the accompanying representations.

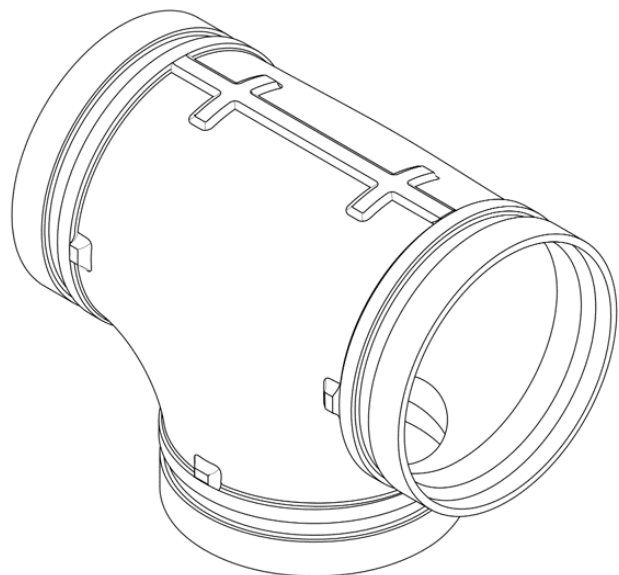


EXPLODED PERSPECTIVE VIEW

21: A2022/00340 22: 2022-03-31 23:  
43: 2022-10-07  
52: Class 23 24: Part A  
71: VICTAULIC COMPANY

**54: TEE FITTING**

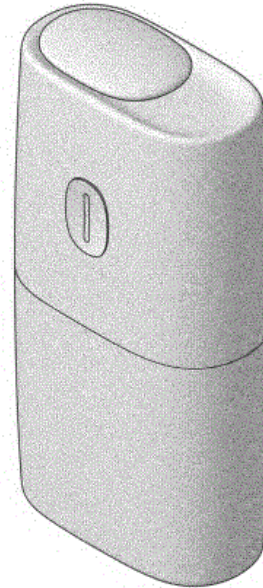
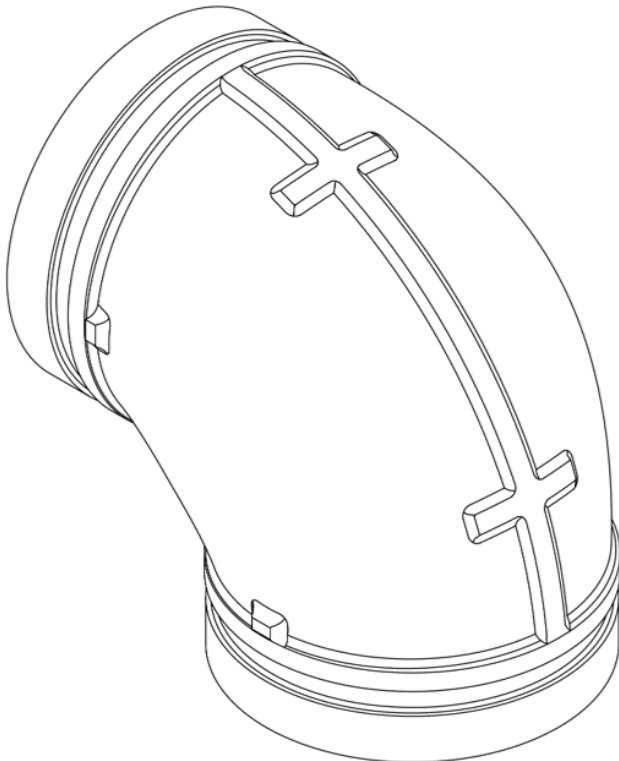
57: The design is applied to a tee fitting. The features of the design for which protection is claimed are those of the shape and/or configuration and/or pattern and/or ornamentation of the tee fitting, substantially as illustrated in the accompanying representation.



21: A2022/00342 22: 2022-03-31 23:  
 43: 2022-10-07  
 52: Class 23 24: Part A  
 71: VICTAULIC COMPANY  
 33: US 31: 29/814,058 32: 2021-11-03

**54: ELBOW FITTING**

57: The design is applied to an elbow fitting. 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 elbow fitting, substantially as illustrated in the accompanying representation.



PERSPECTIVE VIEW

21: A2022/00353 22: 2022-04-05 23:  
 43: 2022-10-19  
 52: Class 27 24: Part A  
 71: PHILIP MORRIS PRODUCTS S.A.  
 33: EU 31: 008728265-0006 32: 2021-10-15

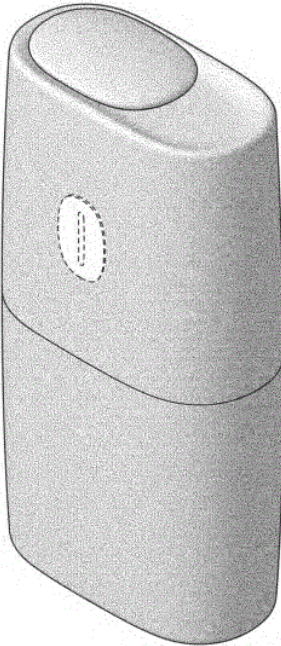
**54: AEROSOL GENERATING DEVICE, IN PARTICULAR TOBACCO HEATING DEVICE**

57: The design is to be applied to an aerosol generating device, in particular tobacco heating device. The features for which protection is claimed are those of shape and/or configuration, substantially as shown in the representations. The broken lines are for illustrative purposes only and form no part of the claimed design

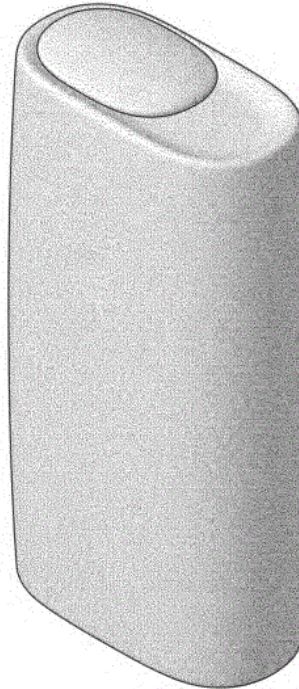
21: A2022/00352 22: 2022-04-05 23:  
 43: 2022-10-19  
 52: Class 27 24: Part A  
 71: PHILIP MORRIS PRODUCTS S.A.  
 33: EU 31: 008728265-0005 32: 2021-10-15

**54: AEROSOL GENERATING DEVICE, IN PARTICULAR TOBACCO HEATING DEVICE**

57: The design is to be applied to an aerosol generating device, in particular tobacco heating device. The features for which protection is claimed are those of shape and/or configuration, substantially as shown in the representations.



PERSPECTIVE VIEW



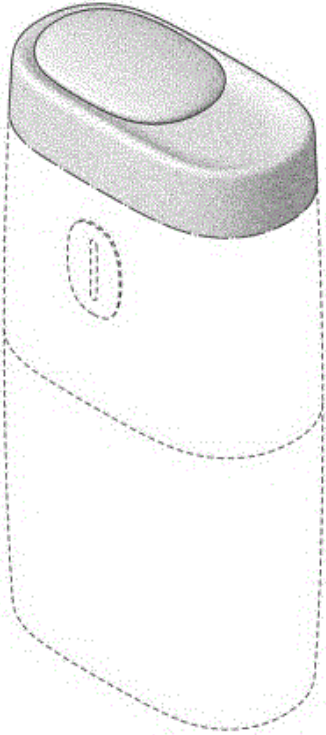
PERSPECTIVE VIEW

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21: A2022/00354 22: 2022-04-05 23:  
43: 2022-10-19  
52: Class 27 24: Part A  
71: PHILIP MORRIS PRODUCTS S.A.  
33: EU 31: 008728265-0007 32: 2021-10-15  
**54: AEROSOL GENERATING DEVICE, IN PARTICULAR TOBACCO HEATING DEVICE**  
57: The design is to be applied to an aerosol generating device, in particular tobacco heating device. The features for which protection is claimed are those of shape and/or configuration, substantially as shown in the representations.

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21: A2022/00355 22: 2022-04-05 23:  
43: 2022-10-19  
52: Class 27 24: Part A  
71: PHILIP MORRIS PRODUCTS S.A.  
33: EU 31: 008728265-0008 32: 2021-10-15  
**54: AEROSOL GENERATING DEVICE, IN PARTICULAR TOBACCO HEATING DEVICE**  
57: The design is to be applied to an aerosol generating device, in particular tobacco heating device. The features for which protection is claimed are those of shape and/or configuration, substantially as shown in the representations. The broken lines are for illustrative purposes only and form no part of the claimed design



PERSPECTIVE VIEW



21: A2022/00358 22: 2022-04-05 23:  
43: 2022-09-26  
52: Class 11 24: Part A  
71: Ezra Misonne Du Preez

**54: BRACELET DESIGN 3**

57: The design relates to a Bracelet design 3. The features of the design are those of pattern and/or shape and/or configuration and/or ornamentation.

21: A2022/00356 22: 2022-04-05 23:  
43: 2022-10-18  
52: Class 25 24: Part A  
71: NXT Building System Pty Ltd  
33: AU 31: 202116154 32: 2021-10-06

**54: BUILDING TOWER**

57: The design relates to a Building tower. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.



21: A2022/00359 22: 2022-04-05 23:  
43: 2022-09-26  
52: Class 11 24: Part A  
71: Ezra Misonne Du Preez

**54: BRACELET DESIGN 2**

57: The design relates to a Bracelet design 2. The features of the design are those of pattern and/or shape and/or configuration and/or ornamentation.



21: A2022/00385 22: 2022-04-11 23:  
43: 2022-09-26  
52: Class 11 24: Part A  
71: Ezra Misonne Du Preez

**54: BRACELET**

57: The design relates to a Bracelet . The features of the design are those of pattern and/or shape and/or configuration and/or ornamentation.

57: The design relates to a Bracelet. The features of the design are those of pattern and/or shape and/or configuration and/or ornamentation.



21: A2022/00390 22: 2022-04-12 23:  
43: 2022-10-19  
52: Class 09 24: Part A  
71: SALUS Haus Dr. med. Otto Greither Nachf.  
GmbH & Co. KG  
33: EU 31: 008730071-0005 32: 2021-10-19

**54: PACKAGING**

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: A2022/00386 22: 2022-04-11 23:  
43: 2022-09-26  
52: Class 11 24: Part A  
71: Ezra Misonne Du Preez

**54: BRACELET**



21: A2022/00392 22: 2022-04-12 23:

43: 2022-10-19  
 52: Class 09 24: Part A  
 71: SALUS Haus Dr. med. Otto Greither Nachf. GmbH & Co. KG  
 33: EU 31: 008730071-0006 32: 2021-10-19

**54: PACKAGING**

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).

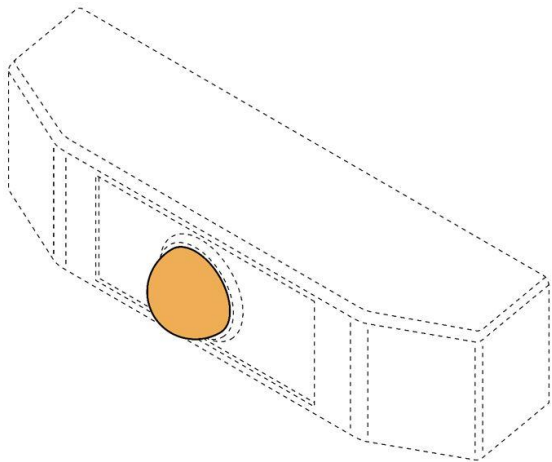


21: A2022/00397 22: 2022-04-13 23:  
 43: 2022-10-19

52: Class 10 24: Part A  
 71: DE VILLIERS, Marius de Wet

**54: ALARM ACTIVATION INDICATOR**

57: The design is applied to an alarm activation indicator. The features of the design for which protection is claimed are those of the ornamentation of the alarm activation indicator including an amber light, substantially as illustrated in the accompanying representation.

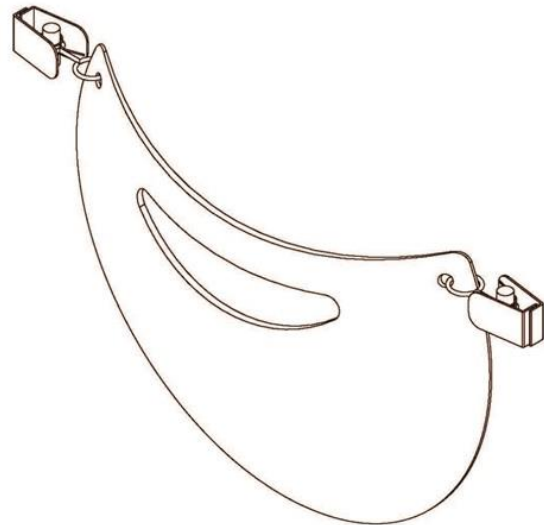


21: A2022/00405 22: 2022-04-19 23:

43: 2022-10-12  
 52: Class 02 24: Part A  
 71: BUBS IN ARMS PTY LTD  
 33: AU 31: 202116463 32: 2021-10-19

**54: NURSING SCREEN**

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).



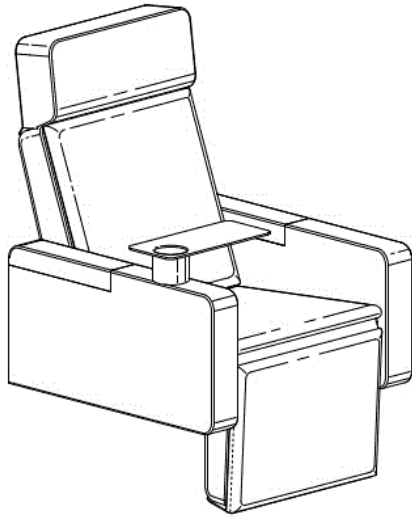
21: A2022/00438 22: 2022-04-25 23:  
 43: 2022-11-03

52: Class 6 24: Part A  
 71: BRAVO GROUP MANUFACTURING (PTY) LIMITED

**54: CHAIR**

57: The design relates to a chair. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.





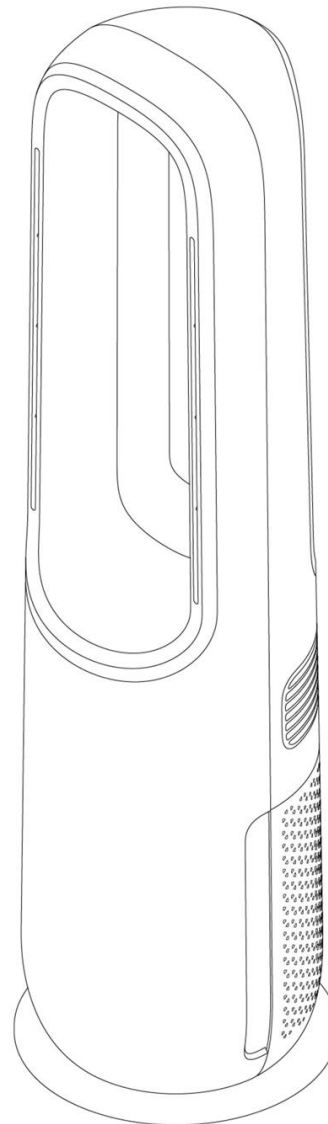
FRONT PERSPECTIVE VIEW

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21: A2022/00485 22: 2022-05-09 23:  
43: 2022-11-14  
52: Class 23 24: Part A  
71: Philips Domestic Appliances Holding B.V.  
33: EU 31: 008756878-0001 32: 2021-11-11

**54: AIR PURIFIER**

57: The design is for an air purifier. The air purifier has a generally cylindrical body that is slightly tapered in front and rear view and mounted on a round base. An upper part of the body is provided with a generally rounded rectangular recessed aspect window. The rear of the body is provided with a ventilation grid and a patterned surface that wrap around the rear of the body.



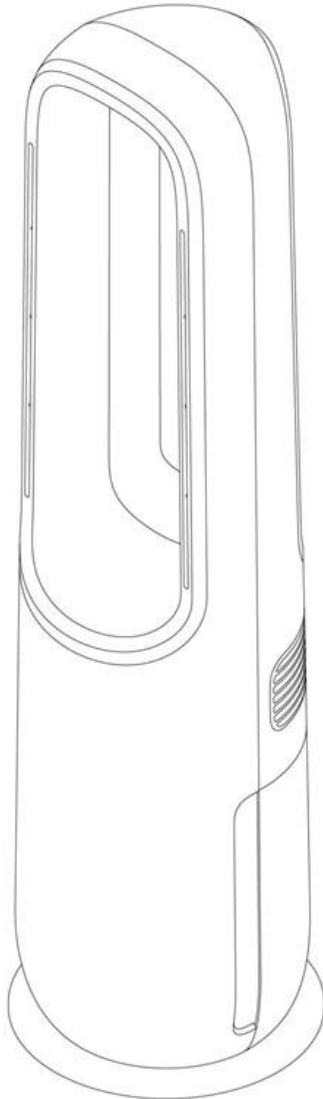
Perspective view

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21: A2022/00488 22: 2022-05-09 23:  
43: 2022-11-14  
52: Class 23 24: Part A  
71: Philips Domestic Appliances Holding B.V.  
33: EU 31: 008756878-0003 32: 2021-11-11

**54: AIR PURIFIER**

57: The design is for an air purifier. The air purifier has a generally cylindrical body that is slightly tapered in front and rear view and mounted on a round base. An upper part of the body is provided with a generally rounded rectangular recessed aspect window. The rear of the body is provided with a ventilation grid that wraps around the rear of the body.



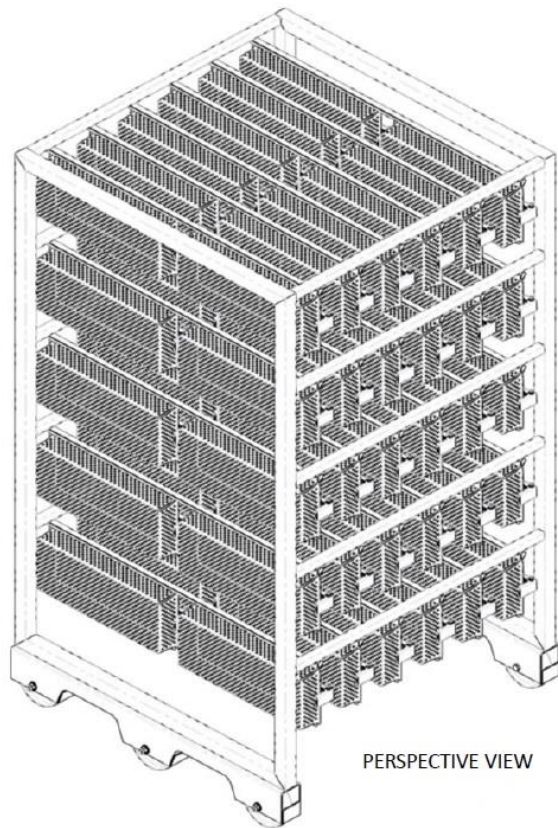
Perspective view



21: F2016/01920 22: 2016-12-14 23:  
43: 2022-10-10  
52: Class 31 24: Part F  
71: JASON BARRY DESIGNS CC

**54: FOOD PROCESSING EQUIPMENT**

57: The design relates to food processing equipment. The features of the design for which protection is claimed reside in the shape and/or configuration of food processing equipment as illustrated in the accompanying representations.



PERSPECTIVE VIEW

21: A2022/00606 22: 2022-05-31 23:  
43: 2022-09-26  
52: Class 11 24: Part A  
71: Ezra Misonne Du Preez

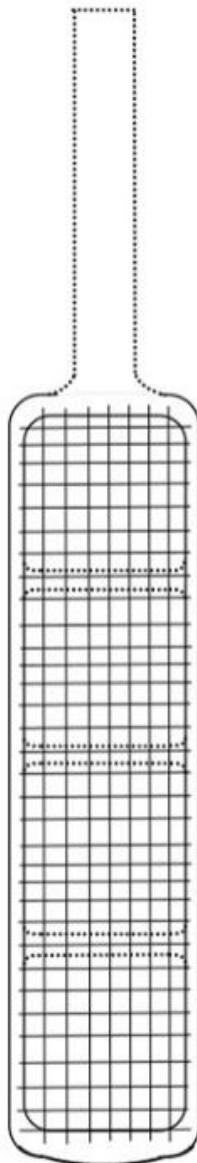
**54: UNIQUE DESIGN**

57: The design relates to a Unique design . The features of the design are those of pattern and/or shape and/or configuration and/or ornamentation.

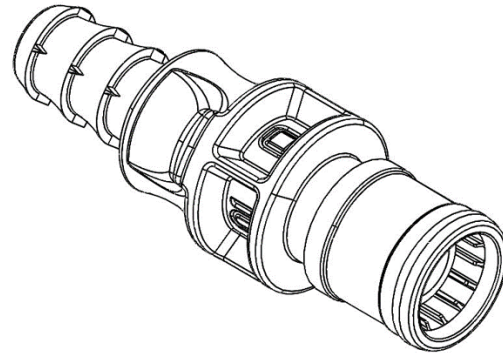
21: F2021/00241 22: 2021-03-08 23:  
 43: 2022-10-10  
 52: Class 21 24: Part F  
 71: WYLDE-BROWNE, Blair  
 33: AU 31: 202014959 32: 2020-09-09

**54: RACKET**

57: The design is applied to a racket. The features of the design for which protection is claimed are those of the shape and/or configuration and/or pattern of the racket, substantially as illustrated in the accompanying representation. Features shown in broken lines do not form part of the design and are disclaimed.



43: 2022-10-10  
 52: Class 24 24: Part F  
 71: ARJO IP HOLDING AB  
 33: IB 31: DM/214021 32: 2021-04-19  
**54: CONNECTOR FOR A MEDICAL DEVICE**  
 57: The design is applied to a connector for a medical device. The features of the design for which protection is claimed are those of the shape and/or configuration and/or pattern of the connector for a medical device, substantially as illustrated in the accompanying representation.

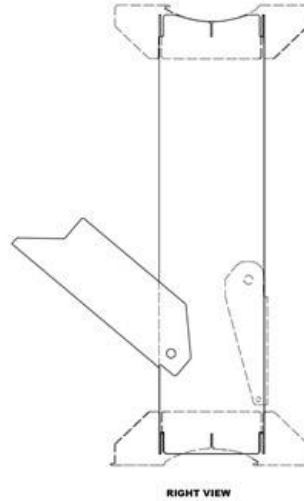
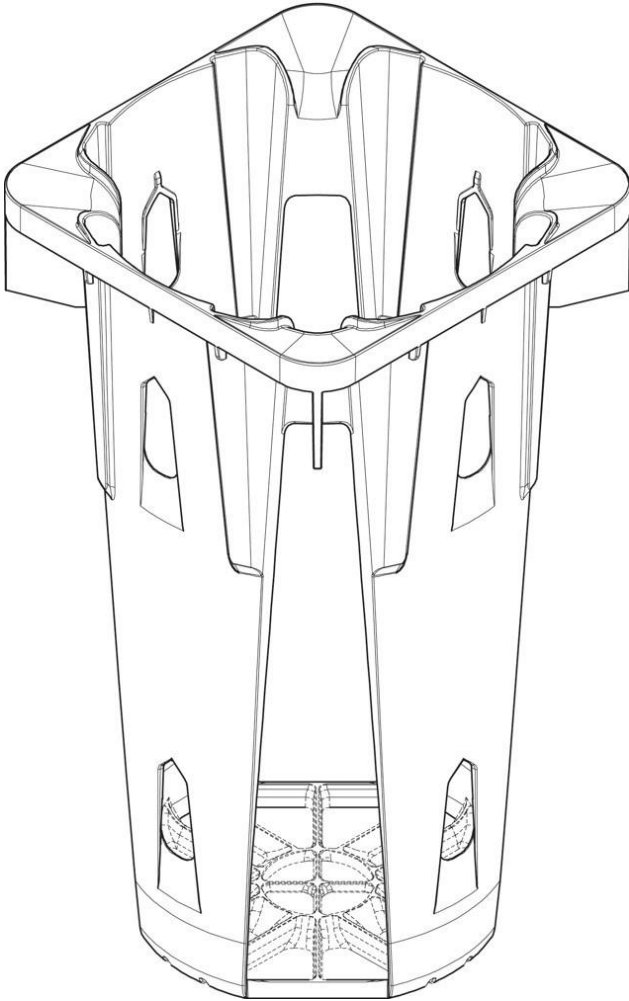


21: F2021/00784 22: 2021-07-01 23:  
 43: 2022-10-10  
 52: Class 09 24: Part F  
 71: INTERNATIONAL PLANT PROPAGATION  
 TECHNOLOGY LIMITED  
 33: GB 31: 6145337 32: 2021-06-25

**54: PLANT-GROWING POT**

57: The design is applied to a plant-growing pot. 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 pot, substantially as illustrated in the accompanying representation. Features shown in broken lines do not form part of the design and are disclaimed.

21: F2021/00754 22: 2021-06-25 23:



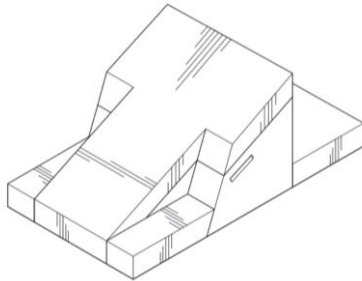
21: F2021/00930 22: 2021-08-02 23:  
43: 2022-10-03  
52: Class 07 24: Part F  
71: TURNKEY COMMERCE (PTY) LTD  
**54: HEATING DEVICE**

57: The features of the design for which novelty is claimed are the shape and / or configuration of a HEATING DEVICE as shown in the accompanying representations, irrespective of the features shown in broken lines.

21: F2021/01011 22: 2021-08-30 23:  
43: 2022-09-14  
52: Class 06 24: Part F  
71: SHAI, Sechaba

**54: PRONE POSITIONING ASSISTANCE DEVICES**

57: The design is for a device to support a person in a prone position, specifically to support the person's upper body when in a knee-elbow position, thereby forming a triangular void between the person's upper body and a surface. The device comprises of a right triangular prism shaped body, manoeuvrable within the triangular void, of which a supporting surface of the body, used to support the person's upper body, includes two parallel elongated shoulder width cut-out portions on opposing peripheral sides thereof, from an operative front end towards a rear end of the body. Furthermore, the body includes two handles, adjacent a rear end of the cut-out portions, each comprising of two apertures orientated at right angles relative to each other. Furthermore, the device includes a plurality of contoured cushions, capable of being placed on all contact surfaces of the body, providing comfort for the person supported on the device.



Three-dimensional view

21: F2021/01161 22: 2021-09-23 23:  
43: 2022-09-14

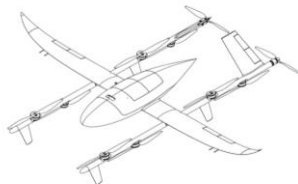
52: Class 12 24: Part F

71: KOOKABURRA AEROSPACE PTY LTD

33: AU 31: 202111675 32: 2021-03-24

**54: REMOTELY PILOTED AIRCRAFTS**

57: The design is for a remotely piloted aircraft. The aircraft includes a main body having two wing portions that extend transversely therefrom. Disposed on each of the wing portions are flaps, a winglet and a landing support member which landing support member is at a right angle to the wing portions such that the landing support member is located parallel to the main body of the aircraft. The aircraft further includes a plurality of propellers positioned on both a top and bottom surface of each of the landing support members with an additional propeller positioned at ends of the landing support members. The landing support members each also include fins and a tail portion, which fins, and tail portion are respectively located on the top and bottom surface of the landing support members with the tail portion located towards the ends of thereof.



PERSPECTIVE VIEW 1

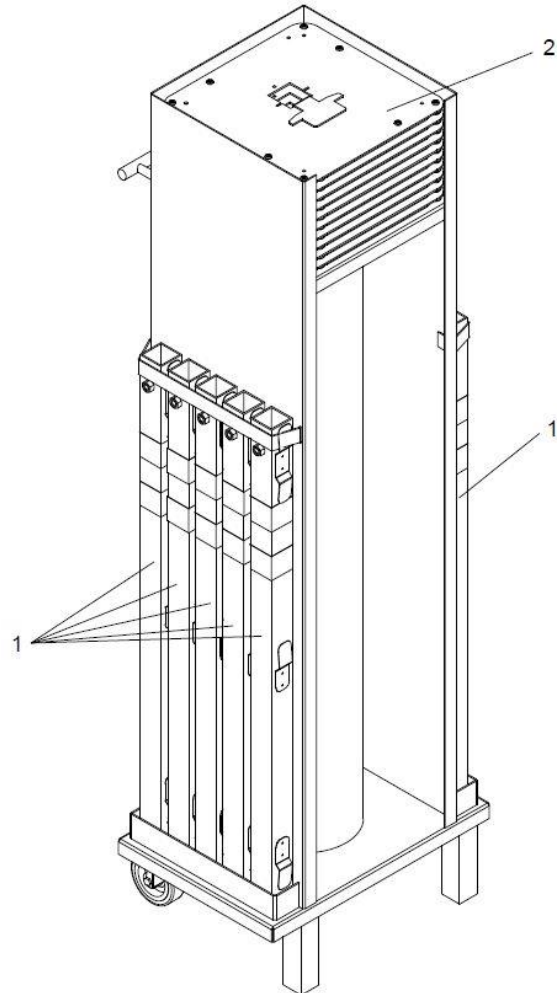
21: F2021/01225 22: 2021-10-06 23:  
43: 2022-10-10

52: Class 25 24: Part F

71: SIGNCRAFT AFRICA (PTY) LTD

**54: BARRICADE SYSTEM**

57: The design is applied to a barricade system. The features of the design for which protection is claimed are those of the shape and/or configuration of the barricade system, substantially as illustrated in the accompanying representation.



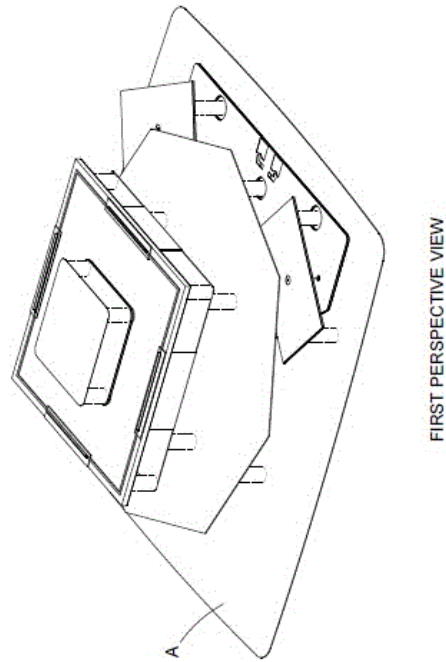
21: F2021/01305 22: 2021-10-18 23:  
43: 2022-11-16

52: Class 25 24: Part F

71: SUN CONTROL LLC

**54: BRACKET**

57: The design is for a brackets that is cut from rectangular tubing for use in construction.

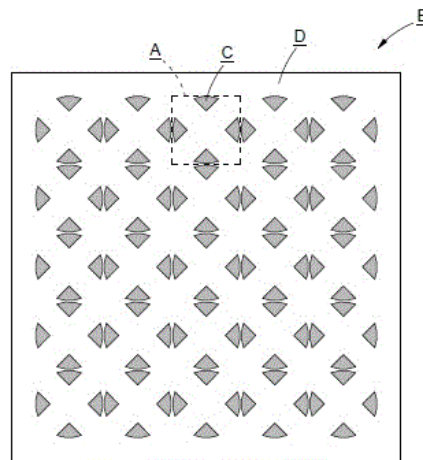


21: F2022/00090 22: 2022-01-31 23:  
43: 2022-11-16  
52: Class 14 24: Part F  
71: POYNTING ANTENNAS (PTY) LIMITED  
**54: ANTENNA ASSEMBLY**

57: The features of the design for which protection is claimed comprise the shape and/or configuration of an antenna assembly substantially as shown in the accompanying representations, irrespective of the shape of support structure A and the shape and/or position of the items in broken lines.

21: F2022/00091 22: 2022-01-31 23:  
43: 2022-11-16  
52: Class 14 24: Part F  
71: POYNTING ANTENNAS (PTY) LIMITED  
**54: UNIT CELL OF METAMATERIAL BODY FOR ANTENNA**

57: The features of the design for which protection is claimed comprise the configuration and/or pattern of a unit cell A of a body of metamaterial B comprising conductive elements C on a substrate D, substantially as shown in the accompanying diagrams.

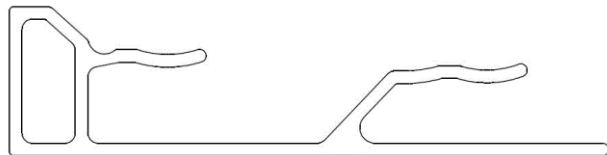


TOP VIEW

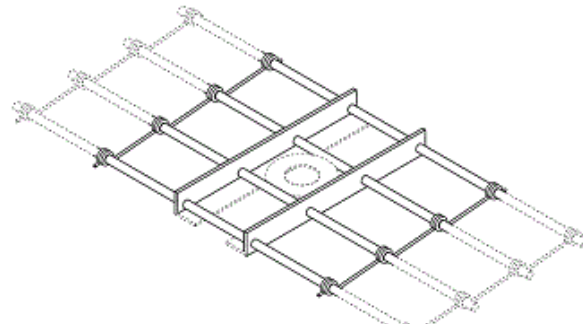
21: F2022/00109 22: 2022-02-01 23:  
43: 2022-02-01  
52: Class 8 24: Part F  
71: ODENDAL, Nico DeWet

**54: Connectors**

57: The design relates to a connector having a pair of L-shaped clipping formations for over-centre clipping engagement with similar clipping formations of a complementary connector for connecting articles such as furniture to one another.



End view



PERSPECTIVE VIEW

21: F2022/00221 22: 2022-02-28 23:  
43: 2022-02-28  
52: Class 8 24: Part F  
71: VICTOR, Paul

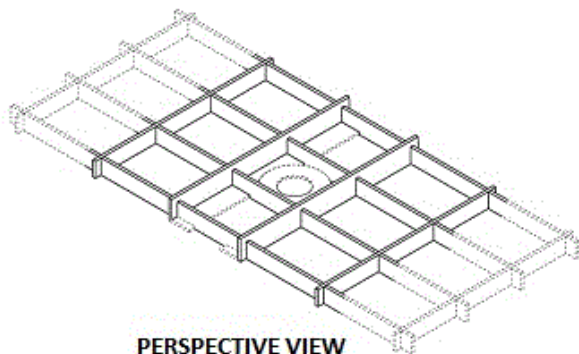
**54: MOUNTING DEVICE FOR A SHOCK ABSORBER FOR A VEHICLE**

57: The design is for a mounting device for a shock absorber for a vehicle, substantially as shown in the accompanying representations.

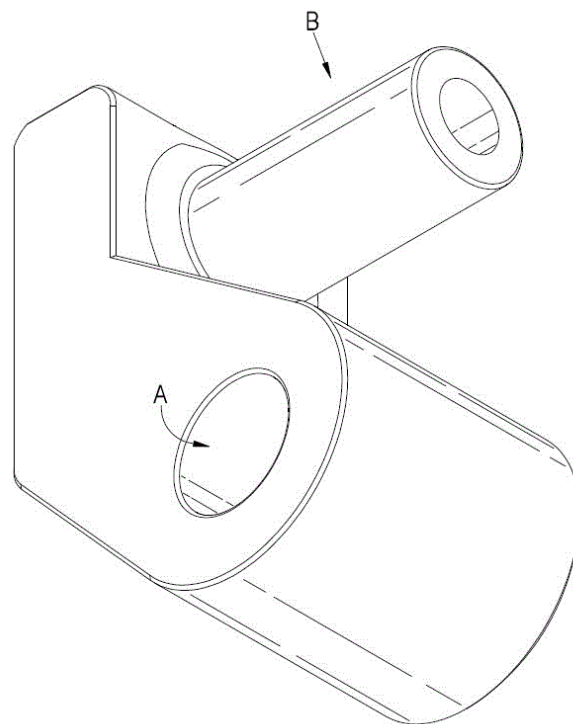
21: F2022/00213 22: 2022-02-28 23:  
43: 2022-09-01  
52: Class 25. 24: Part F  
71: DAVIES, CRAIG DAVID, DAVIES, GORDON DANIEL

**54: Header Board**

57: The design relates to a header board. The features of the design are those of shape and/or configuration and/or pattern.



PERSPECTIVE VIEW



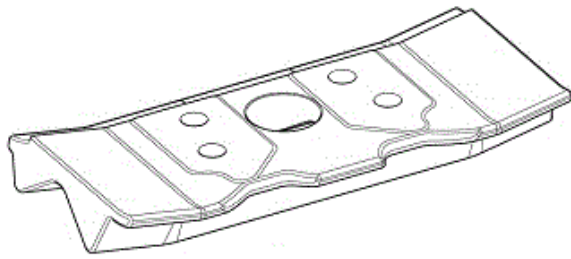
21: F2022/00215 22: 2022-02-28 23:  
43: 2022-09-01  
52: Class 25. 24: Part F  
71: DAVIES, CRAIG DAVID, DAVIES, GORDON DANIEL

**54: Header Board**

57: The design relates to a header board. The features of the design are those of shape and/or configuration and/or pattern.

21: F2022/00240 22: 2022-03-10 23:  
43: 2022-09-12  
52: Class 15. 24: Part F  
71: EPIROC DRILLING SOLUTIONS, LLC  
**54: Track Shoe for Tracked Vehicle**

57: The design relates to a track shoe for a tracked vehicle. The features of the design are those of shape and/or configuration.



**PERSPECTIVE VIEW**

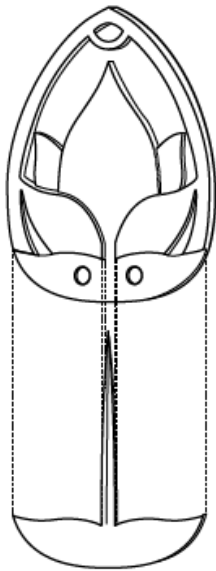
21: F2022/00257 22: 2022-03-11 23:  
43: 2022-04-04

52: Class 11 24: Part F

71: NIXED JEWELLERY (PTY) LTD

**54: PENDANT**

57: The features of the design for which novelty is claimed are the shape and / or configuration and / or pattern of a PENDANT as shown in the accompanying representations, irrespective of the features shown in broken lines.



**EXPLODED PERSPECTIVE VIEW**

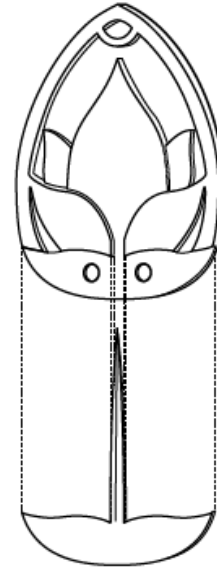
21: F2022/00258 22: 2022-03-11 23:  
43: 2022-04-04

52: Class 22 24: Part F

71: NIXED JEWELLERY (PTY) LTD

**54: PENDANT**

57: The features of the design for which novelty is claimed are the shape and / or configuration and / or pattern of a PENDANT as shown in the accompanying representations, irrespective of the features shown in broken lines.



**EXPLODED PERSPECTIVE VIEW**

21: F2022/00265 22: 2022-03-16 23:  
43: 2022-09-14

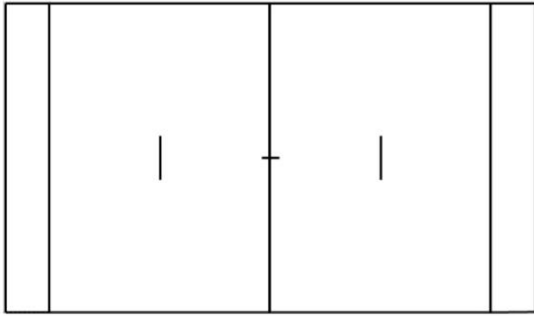
52: Class 21 24: Part F

71: NGOZA, Thato Frederick

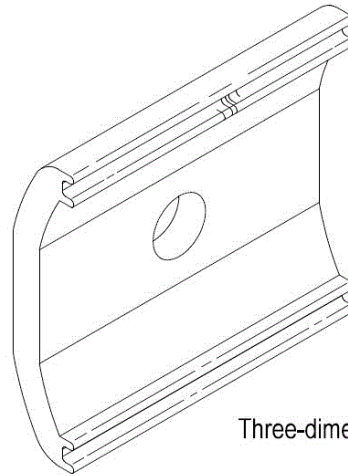
**54: GAME PLAYING FIELDS**

57: The design is for a layout of a game playing field, in particular for a two-person rugby match. The layout comprises of a rectangular shaped outline divided into a field of play area and two in-goal areas, each on opposing sides of the field of play area. Each in-goal area is in the form of a rectangle positioned perpendicular between opposing touch-lines, such to define the field of play area therebetween. Furthermore, the field of play area is divided by a centre line into equal portions, which defines a halfway line. Each portion includes a starting line, parallel to the halfway line, positioned substantially in the centre of each portion, which defines either an offside line or an attacking line, depending on the direction of play. Furthermore, the halfway line includes a centre mark on which a ball is positioned at the start of each game.





Plan view of layout of a game playing field

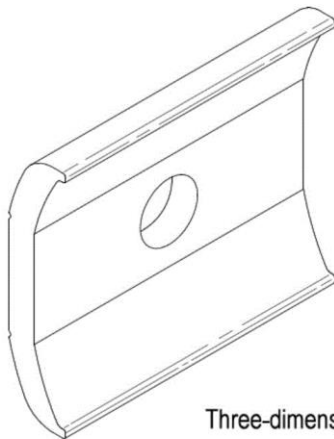


Three-dimensional view

21: F2022/00271 22: 2022-03-16 23:  
43: 2022-03-16  
52: Class 25 24: Part F  
71: KELLER, Izaan Louis

**54: PRESSURE SPREADING DEVICE**

57: The design is applied to a pressure spreading device for a corner connector arrangement for a fenestration system. The features of the design for which protection is claimed include the shape and/or configuration of a pressure spreading device, substantially as illustrated in the accompanying representations.



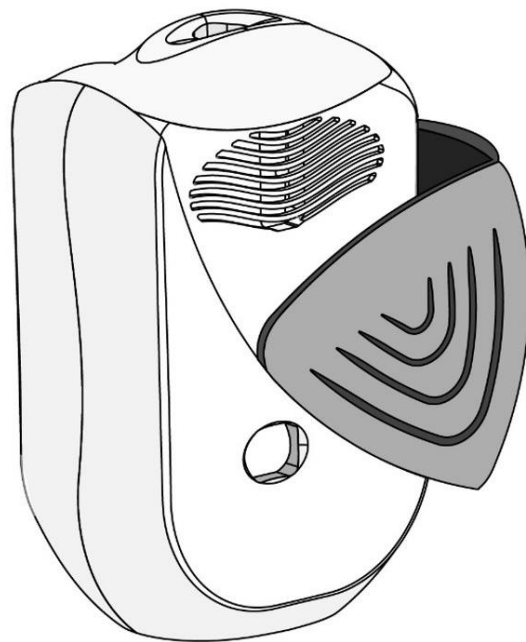
Three-dimensional view

21: F2022/00304 22: 2022-03-24 23:  
43: 2022-10-07  
52: Class 24 24: Part F  
71: CIPLA LIMITED

33: IN 31: 355741-001 32: 2021-12-29  
33: IN 31: 355742-001 32: 2021-12-29

**54: INHALER DEVICE**

57: The design is applied to an inhaler device. The features of the design for which protection is claimed are those of the shape and/or configuration and/or pattern of the inhaler device, substantially as illustrated in the accompanying representation. Neither colour nor shading form part of the design and are disclaimed.



21: F2022/00272 22: 2022-03-16 23:  
43: 2022-03-16  
52: Class 25 24: Part F  
71: KELLER, Izaan Louis

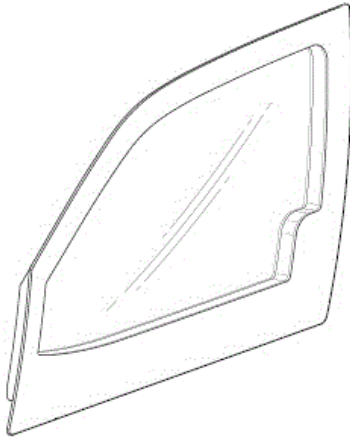
**54: PRESSURE SPREADING DEVICE**

57: The design is applied to a pressure spreading device for a corner connector arrangement for a fenestration system. The features of the design for which protection is claimed include the shape and/or configuration of a pressure spreading device, substantially as illustrated in the accompanying representations.

21: F2022/00305 22: 2022-03-25 23:  
43: 2022-10-07  
52: Class 12 24: Part F  
71: SVI ENGINEERING (PTY) LTD

**54: ARMoured WINDOW**

57: The design relates to an armoured window. The features of the design are those of shape and/or configuration and/or pattern.

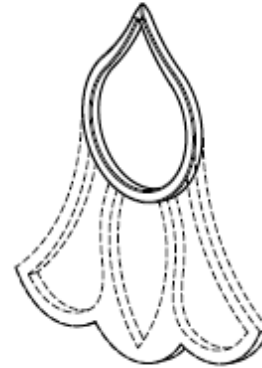


FRONT PERSPECTIVE VIEW

21: F2022/00331 22: 2022-03-30 23:  
43: 2022-10-07  
52: Class 11 24: Part F  
71: NIXED JEWELLERY (PTY) LTD

**54: PENDANT**

57: The features of the design for which novelty is claimed are the shape and / or configuration and / or pattern of a PENDANT as shown in the accompanying representations, irrespective of the features shown in broken lines.

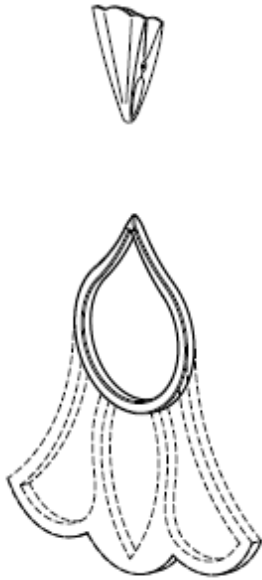


EXPLODED PERSPECTIVE VIEW

21: F2022/00332 22: 2022-03-30 23:  
43: 2022-10-07  
52: Class 22 24: Part F  
71: NIXED JEWELLERY (PTY) LTD

**54: PENDANT**

57: The features of the design for which novelty is claimed are the shape and / or configuration and / or pattern of a PENDANT as shown in the accompanying representations, irrespective of the features shown in broken lines.



EXPLODED PERSPECTIVE VIEW

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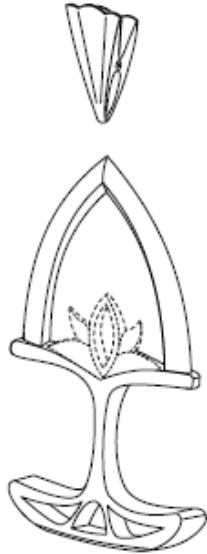
21: F2022/00335 22: 2022-03-30 23:  
43: 2022-10-07  
52: Class 11 24: Part F  
71: NIXED JEWELLERY (PTY) LTD  
**54: PENDANT**  
57: The features of the design for which novelty is claimed are the shape and / or configuration and / or pattern of a PENDANT as shown in the accompanying representations, irrespective of the features shown in broken lines.



EXPLODED PERSPECTIVE VIEW

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21: F2022/00336 22: 2022-03-30 23:  
43: 2022-10-07  
52: Class 22 24: Part F  
71: NIXED JEWELLERY (PTY) LTD  
**54: PENDANT**  
57: The features of the design for which novelty is claimed are the shape and / or configuration and / or pattern of a PENDANT as shown in the accompanying representations, irrespective of the features shown in broken lines.

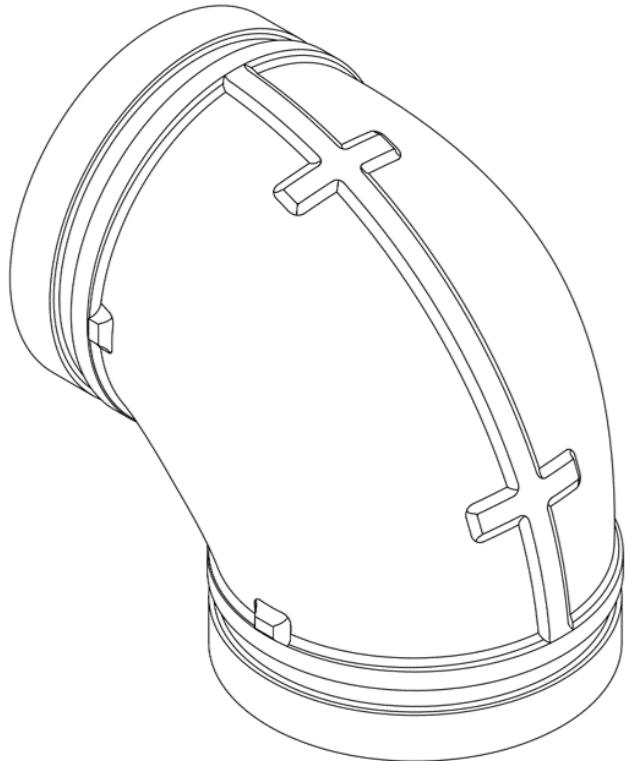


**EXPLODED PERSPECTIVE VIEW**

21: F2022/00343 22: 2022-03-31 23:  
43: 2022-10-07  
52: Class 23 24: Part F  
71: VICTAULIC COMPANY  
33: US 31: 29/814,058 32: 2021-11-03

**54: ELBOW FITTING**

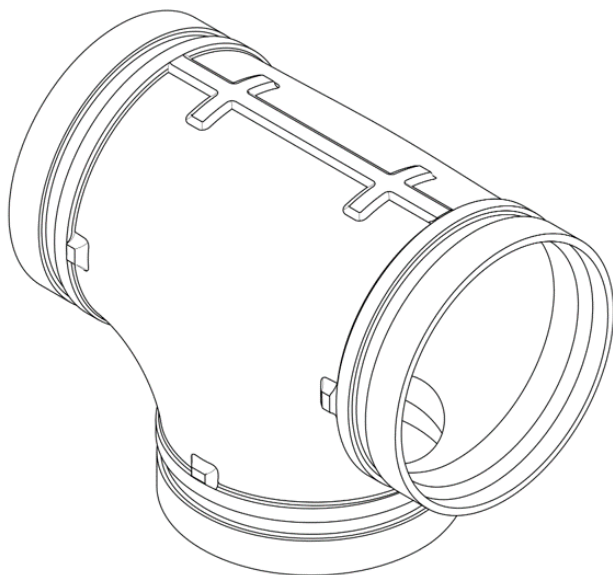
57: The design is applied to an elbow fitting. The features of the design for which protection is claimed are those of the shape and/or configuration and/or pattern of the elbow fitting, substantially as illustrated in the accompanying representation.



21: F2022/00341 22: 2022-03-31 23:  
43: 2022-10-07  
52: Class 23 24: Part F  
71: VICTAULIC COMPANY  
33: US 31: 29/814,057 32: 2021-11-03

**54: TEE FITTING**

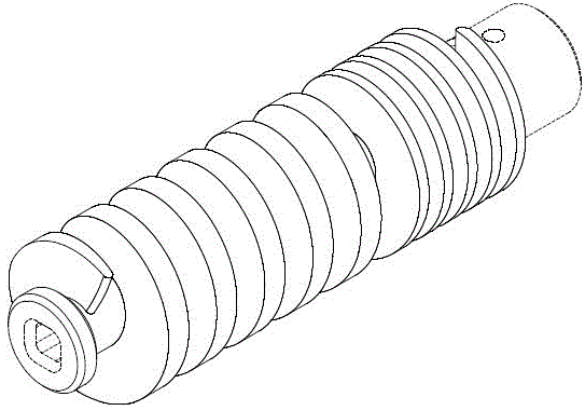
57: The design is applied to a tee fitting. The features of the design for which protection is claimed are those of the shape and/or configuration and/or pattern of the tee fitting, substantially as illustrated in the accompanying representation.



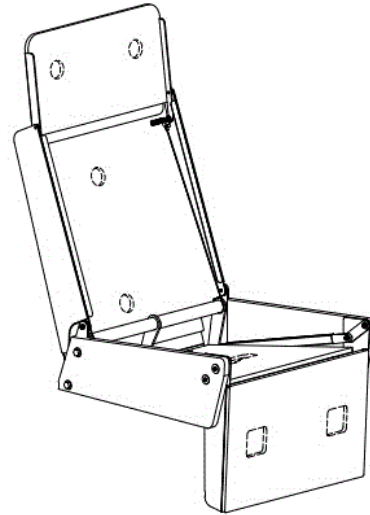
21: F2022/00428 22: 2022-04-21 23:  
43: 2022-04-21  
52: Class 31 24: Part F  
71: FREDDY HIRSCH GROUP PROPRIETARY LIMITED

**54: Screw Conveyors**

57: The design relates to a screw conveyor substantially as shown in the accompanying representations, but the aspects depicted by the equi-spaced broken lines are optional and do not form an essential part of the design.



Three-dimensional view

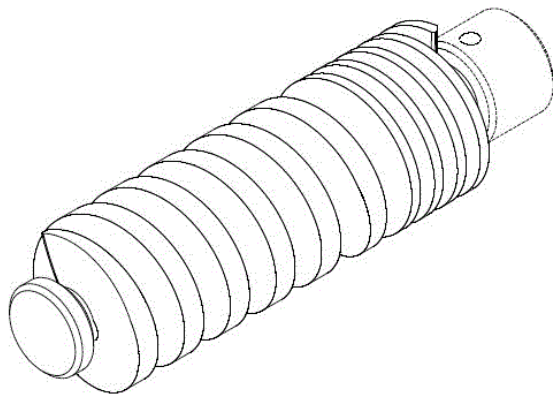


PERSPECTIVE VIEW OF CHAIR  
IN AN UPRIGHT POSITION

21: F2022/00429 22: 2022-04-21 23:  
43: 2022-04-21  
52: Class 31 24: Part F  
71: FREDDY HIRSCH GROUP PROPRIETARY  
LIMITED

**54: Screw Conveyors**

57: The design relates to a screw conveyor substantially as shown in the accompanying representations, but the aspects depicted by the equi-spaced broken lines are optional and do not form an essential part of the design.



Three-dimensional view

21: F2022/00439 22: 2022-04-25 23:  
43: 2022-11-03  
52: Class 6 24: Part F  
71: BRAVO GROUP MANUFACTURING (PTY)  
LIMITED

**54: CHAIR**

57: The design relates to a chair. The features of the design are those of shape and/or configuration and/or pattern. The features shown in broken lines form no part of the claimed design.

**HYPOTHECATIONS**

No records available

**JUDGMENTS**

No records available

**OFFICE PRACTISE NOTICES**

Change in address of address for service for patent, trademark, design and copyright filings. As from **1 December 2022**, Smit & Van Wyk, Inc will relocate to new offices situated at:

**Sanlynn Office Park  
East Block, 2nd Floor  
c/o Alkantrand & Sanlam Street  
Lynnwood Manor  
Pretoria  
0081**

Their postal address (P O Box 111, Innovation Hub, Pretoria 0087) and docex address (Docex 111, Brooklyn) remain unchanged.

# 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 cinematograph 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: 2022/00050. 22: 17/11/2022 43: 17/11/2022  
 24: 2020/11/16 to 2022/09/30; JOHANNESBURG  
 25: 2022/11/01; JOHANNESBURG  
 71: VALENTE BOSCH  
 1 Weiland Crescent, Bloubostrand, Randburg, 2188, South Africa  
 75: VALENTE BOSCH 1 Weiland Crescent, Bloubostrand, Randburg, ZA, 2188, Phone :0609817842, Email :valente@trike.co.za  
 76: VALENTE BOSCH; SAMANTHA BOSCH  
 77: VALENTE BOSCH  
 54: **SKAAPBOER**  
 78: KEENO LEE HECTOR; ZOE BROWN; NATALIA de ROCHA; BRUMILDA van RENSBURG; KASHIFA SITHOLE; SETLHABI TAUNYANE  
 26: The above link to the film SKAAPBOER is available from 17/11/2022 - 22/11/2022. The link is locked from download and only intended for the verification of the film by the appointed CIPC Representative.  
 55: Specimen lodged/Not lodged.  
 56: Preview Requested/Not requested  
 57: Harold Bruyns (38), a coloured banking clerk find himself in a predicament. For many years he worked his way up in the bank and on the day of his promotion as Bank Accountant, instead he finds himself fired. The story revolves around Harold Bruyns, who has worked all of his life in the bank. On the day of his promotion as bank accountant, he gets fired. Being blacklisted and bared from the financial sector, he is unable to get a job in the finance sector. His wife, Bernice Bruyns, a budding actress and a stay at home mom, refuses to go back

to the "Kassie". As a child Harold grew up on a farm with his grandpa, but got torn away by his lascivious mom that brought him to the city. It is these memories of him as a child the night of his deepest despair that he remanence of being carefree on a farm and triggers his desire to farm with sheep - You can't go wrong with 'kos en klerie' is the advice he receives from Mr. Stokvel, his next-door neighbor. So, Harold decides to become a Skaapboer, right here, right now in a little, previously white's only suburb, in Jozzi. He pursues his childhood memory and has to learn that life is more than just numbers. At the end of the story he becomes our hero, the one who draws the community together, bringing back that spirit of Ubuntu. In turn he also learns that he was setup by one of his selfish colleagues in the bank and thus his name is cleared and his old-new accounting position awarded back to him. But life has run its due course and Harold buys the small piece of land in the middle of the suburb and transforms it into a lovely little farm called VADERLAND.

**58: CO**



**HYPOTHECATIONS**

No records available

**JUDGMENTS**

No records available

**OFFICE PRACTISE NOTICES**

No records available

## 5. CORRECTION NOTICES

## TRADE MARK CORRECTION NOTICES

The trade mark under application number **2017/22744** was advertised in the May 2022 journal without the associated application number which read as **2017/15884**. The whole advertisement should have appeared as the one below but the **25/05/2022** will remain as the valid publication date.

2017/22744 in Class 09: Computer monitors; LCD large-screen displays; large size electronics digital displays, namely, digital signage; interactive whiteboards; touch panel; software. in the name of SAMSUNG ELECTRONICS CO., LTD., 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea.  
Address for service: Von Seidels, 1 Park Close, Central Park, Century City, 7441, SOUTH AFRICA

**SAMSUNG FLIP**

Associated with: 2017/15884  
FILED: 2017-08-08

## PATENT CORRECTION NOTICES

The patent under application number **2021/02374** was advertised in the September 2022 journal without the publication drawing and it should have appeared as the one below but the publication date will remain the **28/09/2022**.

21: 2021/02374. 22: 2021/04/12. 43: 2022/07/07

51: A01N; A61K; C07D; A61P; A01P

71: NIPPON SODA CO., LTD.

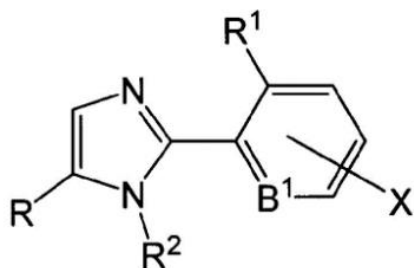
72: SAKANISHI, Keita, SAKIYAMA, Norifumi, AOYAMA, Hikaru, MATSUI, Maki, IWASA, Takao, KOBAYASHI, Tomomi, USHIJIMA, Daisuke, AZUMA, Keita, SUMINO, Masanori, ASHIKARI, Yasuhiko, SHIBAYAMA, Kotaro, TAGUCHI, Riho

33: JP 31: 2018-202998 32: 2018-10-29

**54: (HETERO) ARYLIMIDAZOLE COMPOUND AND HARMFUL ORGANISM CONTROL AGENT**

00: -

The present invention addresses the problem of providing a (hetero)arylimidazole compound which has an excellent harmful organism controlling activity, particularly an excellent insecticidal activity and/or an excellent acaricidal activity, also has excellent safety, and can be synthesized industrially advantageously. The (hetero)arylimidazole compound according to the present invention is a compound represented by formula (I), or an N-oxide compound, a stereoisomer, a tautomer or a hydrate of the compound, or a salt of the compound, the N-oxide compound, the stereoisomer, the tautomer or the hydrate. In formula (I), B<sup>1</sup> represents a nitrogen atom or CH; X represents a substituted or unsubstituted C3-8 cycloalkyl group; R<sup>1</sup> represents a substituted or unsubstituted C1-6 alkylthio group or a substituted or unsubstituted C1-6 alkylsulfonyl group; R<sup>2</sup> represents a substituted or unsubstituted C1-6 alkyl group; and R represents a substituted or unsubstituted C2-6 alkenyl group.



The patent under application no: 2021/09057 was advertised in the August 2022 journal with incorrect sequence of priority information and thwy should have appeared as **33: US 31: 62/852,013 32: 2019-05-23 33: US 31:**

**16/855,089 32: 2020-04-22** but the publication date will remain the **31 AUGUST 2022**. The entire publication should have appeared as the one below:

21: 2021/09057. 22: 2021/11/15. 43: 2022/06/22

51: G07F G07D G06Q

71: JCM AMERICAN CORPORATION

72: KUBAJAK, David, C.

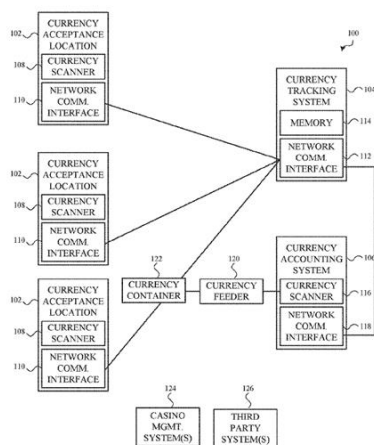
**33: US 31: 62/852,013 32: 2019-05-23**

**33: US 31: 16/855,089 32: 2020-04-22**

**54: CURRENCY TRACKING AND ACCOUNTING SYSTEMS**

00: -

Devices, systems and methods are provided to enable casino operators to track and account for printed casino currency items. In one example, a currency accounting system includes a currency scanner, a network communications interface, and a processor. The processor is configured to receive, from the currency scanner, an identifier of a printed casino currency item; transmit the identifier of the printed casino currency item via the network communications interface to a remote currency tracker; receive, via the network communications interface and in response to transmission of the identifier of the printed casino currency item, an identifier of a currency acceptance location through which the printed casino currency item passed; and generate a currency report using the identifier of the printed casino currency item and the identifier of the currency acceptance location.



The patent under application no: **2021/07331** was advertised in the August 2022 journal with incorrect sequence of priority information and they should have appeared as **33: KR 31: 10-2019-0077776 32: 2019-06-28 33: KR 31: 10-2020-0004379 32: 2020-01-13 33: KR 31: 10-2020-0004386 32: 2020-01-13 33: KR 31: 10-2020-0069219 32: 2020-06-08** but the publication date will remain the **31 AUGUST 2022**. The entire publication should have appeared as the one below:

21: 2021/07331. 22: 2021/09/29. 43: 2022/06/23

51: A61K A61P

71: HANMI PHARM. CO., LTD.

72: KWON, Hyun Joo, KIM, Jung Kuk, PARK, Eun Jin, LEE, Jong Min, LEE, Jong Suk, JO, Hyo Sang, CHOI, In Young

**33: KR 31: 10-2019-0077776 32: 2019-06-28**

**33: KR 31: 10-2020-0004379 32: 2020-01-13**

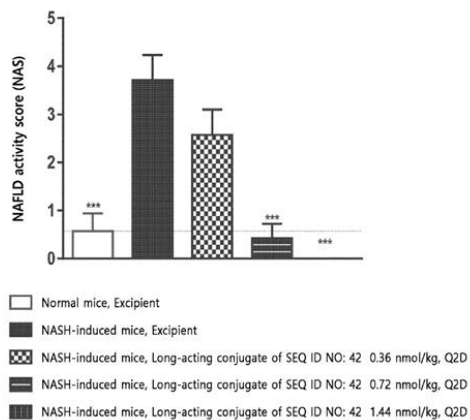
**33: KR 31: 10-2020-0004386 32: 2020-01-13**

**33: KR 31: 10-2020-0069219 32: 2020-06-08**

**54: THERAPEUTIC USE, FOR LIVER DISEASE, OF TRIPLE AGONIST HAVING ACTIVITY WITH RESPECT TO ALL OF GLUCAGON, GLP-1, AND GIP RECEPTORS, OR CONJUGATE THEREOF**

00: -

The present invention relates to a therapeutic use, for liver disease, of a triple agonist having activity with respect to all of glucagon, GLP-1, and GIP receptors, or a long-acting conjugate thereof.



The patent under application no: **2019/05214** was advertised in the August 2022 journal with incorrect sequence of priority information and they should have appeared as **33: US 31: 62/453,278 32: 2017-02-01 33: US 31: 62/453,300 32: 2017-02-01 33: US 31: 62/453,306 32: 2017-02-01 33: US 31: 62/453,315 32: 2017-02-01** but the publication date will remain the **31 AUGUST 2022**. The entire publication should have appeared as the one below:

21: 2019/05214. 22: 2019/08/07. 43: 2022/06/20

51: F17C

71: HYDROSTOR INC.

72: LEWIS, Cameron, MCGILLIS, Andrew, YOUNG, Davin, VANWALLEGHEM, Curtis

**33: US 31: 62/453,278 32: 2017-02-01**

**33: US 31: 62/453,300 32: 2017-02-01**

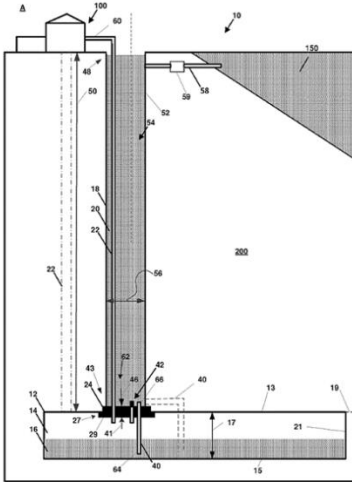
**33: US 31: 62/453,306 32: 2017-02-01**

**33: US 31: 62/453,315 32: 2017-02-01**

**54: A HYDROSTATICALLY COMPENSATED COMPRESSED GAS ENERGY STORAGE SYSTEM**

00: -

A compressed gas energy storage system may include an accumulator for containing a layer of compressed gas atop a layer of liquid. A gas conduit may have an upper end in communication with a gas compressor/expander subsystem and a lower end in communication with accumulator interior for conveying compressed gas into the compressed gas layer of the accumulator when in use. A shaft may have an interior for containing a quantity of a liquid and may be fluidly connectable to a liquid source/sink via a liquid supply conduit. A partition may separate the accumulator interior from the shaft interior. An internal accumulator force may act on the inner surface of the partition and the liquid within the shaft may exert an external counter force on the outer surface of the partition, whereby a net force acting on the partition is less than the accumulator force.



The patent under application no: **2014/07913** was advertised in the August 2022 journal with incorrect name of the applicant which should read as **COMMSCOPE CONNECTIVITY BELGIUM BVBA** but the publication date will remain the **31 AUGUST 2022**. The entire publication should have appeared as the one below:

21: 2014/07913. 22: 2014/10/30. 43: 2022/06/20

51: G02B

71: **COMMSCOPE CONNECTIVITY BELGIUM BVBA**

72: AZNAG, Mohamed, DE GROE, Emilie, HOUBEN, Diederik, COENEGRACHT, Philippe, DOULTREMONT, Pieter, VAN GENECHTEN, Geert, FREDERICKX, Maddy, Nadine, MICHIELS, Maarten, KEUSTERMANS, Eric, Marcel, M.

33: US 31: 61/766,514 32: 2013-02-19

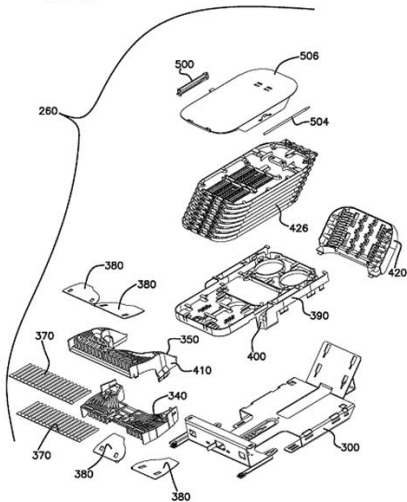
33: US 31: 61/619,747 32: 2012-04-03

**54: TELECOMMUNICATIONS ENCLOSURE AND ORGANIZER**

00: -

A closure (10) includes a cover (4) and seal block (18). A feeder cable pathway and rear cover is provided for separation of feeder cables from drop cables. The organizer (426) in the closure includes an end cap and rear cable storage (190). Cable fixation clips, linear or bendable, can be used individually or daisy chained together. Cable fixation chambers (224, 226) are positioned on top of the gel block (220) housing. The organizer is a click together organizer. Dual heights on cable guides on sides of the groove plate facilitate cable installation. Tray supports with rounded ends prevent looseness of the tray mounts. Other organizers include cable routing features for compact storage.

FIG. 50



## DESIGNS CORRECTION NOTICES

The Design under application nos: **A2011/01699 & A2011/01700** were advertised in the October 2022 journal with incorrect lapsed dates which read as **26/10/2011** instead of **27/04/2018** and the name of the application should read **Ricard not Richard** but the publication date will remain the **26 October 2022**. The whole publications should appeared as these two below:

Notice is hereby given that: **PERNOD RICARD USA, LLC 250 Park Avenue, 17<sup>th</sup> FLOOR, NEW YORK, NY 10177, United States of America** has made application for the restoration of the design registered to the said: **PERNOD RICHARD USA, LLC** for the Design: **BOTTLE** application number: **A2011/01699** date: **27/04/2018** which become void on **27/04/2014** 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

Notice is hereby given that: **PERNOD RICARD USA, LLC 250 Park Avenue, 17<sup>th</sup> FLOOR, NEW YORK, NY 10177, United States of America** has made application for the restoration of the design registered to the said: **PERNOD RICHARD USA, LLC** for the Design: **BOTTLE** application number: **A2011/01700** date: **27/04/2018** which become void on **27/04/2014** 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

## COPYRIGHT CORRECTION NOTICES

No records available

## PATENTS

## Advertisement List for November 2022

Number of Advertised Patents: 838

Application Number	Patent Title	Filing Date
2011/06426	BIO-BASED POLYETHYLENE TEREPHTHALATE PACKAGING AND METHOD OF MAKING THEREOF	2011/09/01
2011/07421	METHODS FOR IMPROVING PHARMACOKINETICS	2011/10/10
2011/08906	CLIP SCOOP	2011/12/05
2012/01222	17-HYDROXY-17-PENTAFLUORETHYL-ESTRA-4,9(10)-DIEN-11-ARYL DERIVATIVES, METHODS FOR THE PRODUCTION THEREOF AND USE THEREOF FOR TREATING DISEASES	2012/02/17
2012/06187	METHOD AND APPARATUS FOR ENCODING AND DECODING MOTION VECTOR BASED ON REDUCED MOTION VECTOR PREDICTOR CANDIDATES	2012/08/16
2013/03133	PROGNOSIS AND RISK ASSESSMENT OF PATIENTS WITH NON-SPECIFIC COMPLAINTS	2013/04/29
2013/06619	NEGATIVE PRESSURE WOUND CLOSURE DEVICE	2013/09/03
2013/08155	PARALLEL BIT INTERLEAVER	2013/10/31
2013/08637	ANTI-CGRP COMPOSITIONS AND USE THEREOF	2013/11/18
2013/09305	WEAR ASSEMBLY	2013/12/10
2014/00725	METHODS AND COMPOSITIONS FOR LIVE ATTENUATED VIRUSES	2014/01/30
2014/02900	CODING REFERENCE PICTURES FOR A REFERENCE PICTURE SET	2014/04/22
2014/04183	NUMBER OF CONTEXTS REDUCTION FOR CONTEXT ADAPTIVE BINARY ARITHMETIC CODING	2014/06/06
2014/04184	NUMBER OF CONTEXT REDUCTION FOR CONTEXT ADAPTIVE BINARY ARITHMETIC CODING	2014/06/06
2014/07468	METHOD FOR EXPRESSION OF HETEROLOGOUS PROTEINS USING A RECOMBINANT NEGATIVE-STRAND RNA VIRUS VECTOR	2014/10/15
2014/09536	METHODS FOR ENGINEERING ALLOGENEIC AND IMMUNOSUPPRESSIVE RESISTANT T CELL FOR IMMUNOTHERAPY	2014/12/23
2015/01459	BUCKET FOR CABLE SHOVEL	2015/03/03
2015/02762	APPARATUS FOR DECODING A VIDEO	2015/04/23



Application Number	Patent Title	Filing Date
2015/03159	SMALL CRYSTAL FERRIERITE AND METHOD OF MAKING THE SAME	2015/05/06
2015/03434	A METHOD OF DECODING AN IMAGE	2015/05/14
2015/05315	SHORT-ACTING FACTOR VII POLYPEPTIDES	2015/07/23
2015/06287	COMMUNICATION SYSTEM AND METHOD	2015/08/28
2016/00324	LOCK ARRANGEMENT	2016/01/14
2016/00901	KDM1A INHIBITORS FOR THE TREATMENT OF DISEASE	2016/01/27
2016/02193	1,2,4-OXADIAZOLE DERIVATIVES AS IMMUNOMODULATORS	2016/03/31
2016/06974	REINFORCED CONCRETE PIPE	2016/10/11
2016/08188	METHOD AND SYSTEM FOR DE-ERECTION AND RE-ERECTION OF A BLADE OF A WIND TURBINE	2016/11/25
2016/08296	POSITIVE DRIVE CONVEYOR	2016/12/01
2016/08362	RAILWAY SWITCH ACTUATOR	2016/12/05
2017/00528	ANTI-CTLA4 MONOCLONAL ANTIBODY OR ANTIGEN BINDING FRAGMENT THEREOF, MEDICINAL COMPOSITION AND USE	2017/01/23
2017/00924	INHIBITORS OF TRYPTOPHAN DIOXYGENASES (IDO1 AND TDO) AND THEIR USE IN THERAPY	2017/02/06
2017/00955	ANTI-TIGIT ANTIBODIES	2017/02/07
2017/04866	PROTECTIVE ARTICLES	2017/07/18
2017/06000	2-(HET)ARYL-SUBSTITUTED CONDENSED BICYCLIC HETEROCYCLE DERIVATIVES AS PEST CONTROL AGENTS	2017/09/04
2017/06222	DETACHABLE WEAR STRIP FOR USE IN THE VACUUM BELT FILTER DEVICE	2017/09/13
2017/06522	FOAMING DENTIFRICE WITH DESENSITIZING AGENTS	2017/09/27
2017/07117	ANTIBODY COMPOSITIONS FOR TUMOR TREATMENT	2017/10/19
2017/07138	ANTI-CEACAM6 ANTIBODIES AND USES THEREOF	2017/10/20
2017/07321	FLAT STEEL PRODUCT AND METHOD FOR THE PRODUCTION THEREOF	2017/10/27
2017/07706	TRIAZOLE AGONISTS OF THE APJ RECEPTOR	2017/11/14
2017/07897	A FIBER AND A PROCESS FOR THE MANUFACTURE THEREOF	2017/11/21
2017/08110	CODE AND CONTAINER OF SYSTEM FOR PREPARING A BEVERAGE OR FOODSTUFF	2017/11/29
2017/08380	GROUPING PALETTE BYPASS BINS FOR VIDEO CODING	2017/12/11
2017/08619	CYS80 CONJUGATED IMMUNOGLOBULINS	2017/12/18

Application Number	Patent Title	Filing Date
2017/08656	NON-PNEUMATIC ELASTOMERIC TIRE WITH CROSSED SPOKE SIDEWALLS	2017/12/19
2018/00122	USE OF AMITRIPTYLINE FOR BLOCKING BRAIN HEMICHANNELS AND METHOD FOR POTENTIATING ITS EFFECT IN VIVO	2018/01/08
2018/00128	SYSTEM FOR DOSED DISPENSING OF A FLUID AND METHOD OF MANUFACTURING	2018/01/08
2018/01992	ORAL CARE COMPOSITIONS	2018/03/26
2018/02125	PHARMACEUTICAL COMPOSITION AND APPLICATION THEREOF	2018/04/03
2018/02328	NEUROCOMPUTER SYSTEM FOR SELECTING COMMANDS ON THE BASIS OF RECORDING BRAIN ACTIVITY	2018/04/10
2018/02899	ADAPTER SYSTEM FOR CUTTING TOOTH	2018/05/03
2018/04113	ELECTRICAL POWER DISTRIBUTION	2018/06/20
2018/04151	METHOD AND DEVICE FOR REGULATING THE OPERATION OF A STRIPPING DEVICE ON A CONVEYOR BELT	2018/06/21
2018/04153	WASH-DURABLE, FLUID ABSORBENT SUBSTRATE WITH ANTIMICROBIAL PROPERTIES AND/OR IMPROVED WASHABILITY, AND HYGIENE PRODUCT SUCH AS REUSABLE SANITARY NAPKIN	2018/06/21
2018/04175	AUTOMATIC BAIL OFF FOR LOCOMOTIVE BRAKING SYSTEM	2018/06/21
2018/05189	SCORING OF INTERNET PRESENCE	2018/08/01
2018/06594	EZ ADJUST IMPELLER CLEARANCE	2018/10/04
2018/08552	NOVEL B-LACTAMASE INHIBITORS	2018/12/19
2019/00059	ANTI-B7-H3 ANTIBODIES AND ANTIBODY DRUG CONJUGATES	2019/01/04
2019/01465	HYDROGENATION PROCESS	2019/03/08
2019/01708	HETERODIMERIC IMMUNOGLOBULIN CONSTRUCTS AND PREPARATION METHODS THEREOF	2019/03/19
2019/01905	ALPHA-V BETA-6 INTEGRIN LIGANDS AND USES THEREOF	2019/03/27
2019/02063	METHOD FOR COLD DEFORMATION OF AN AUSTENITIC STEEL	2019/04/02
2019/02124	MODULATOR OF CYSTIC FIBROSIS TRANSMEMBRANE CONDUCTANCE REGULATOR, PHARMACEUTICAL COMPOSITIONS, METHODS OF TREATMENT, AND PROCESS FOR MAKING THE MODULATOR	2019/04/04
2019/02260	PROCESS AND DEVICE FOR THE FORMATION OF DIRECTLY-FORMED	2019/04/10

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	CELLULOSIC WEBS	
2019/02320	17ALPHA,21-DIESTERS OF CORTEXOLONE FOR USE IN THE TREATMENT OF TUMORS	2019/04/12
2019/02465	ADJUVANT COMPOSITIONS FOR PLANT TREATMENT CHEMICALS	2019/04/17
2019/02535	PRODUCTION OF SOLUBLE HIV ENVELOPE TRIMERS IN PLANTA	2019/04/23
2019/03047	HANDLING LIMITED NETWORK SLICE AVAILABILITY	2019/05/15
2019/03183	MUTATED PROTOPORPHYRINOGEN IX OXIDASE (PPX) GENES	2019/05/21
2019/03334	ELECTROSURGICAL INSTRUMENT	2019/05/27
2019/03454	CLEANSING COMPOSITION	2019/05/30
2019/03648	TRANSFER SYSTEM FOR SEALED ENCLOSURE COMPRISING A DEVICE FOR SEALED CONNECTION WITH A CLOSED VOLUME	2019/06/07
2019/03708	NEW ANTHELMINTIC QUINOLINE-3-CARBOXAMIDE DERIVATIVES	2019/06/10
2019/03750	INTEGRATED PURIFICATION AND MEASUREMENT OF DNA METHYLATION AND CO-MEASUREMENT OF MUTATIONS AND/OR MRNA EXPRESSION LEVELS IN AN AUTOMATED REACTION CARTRIDGE	2019/06/11
2019/03759	SILAGE PRODUCED FROM A CORN HYBRID COMPRISING BROWN MIDRIB AND FLOURY TRAITS, AND ANIMAL FEED COMPOSITIONS COMPRISING SAME	2019/06/11
2019/03796	PREFERRED PAIRING OF ANTIBODY DOMAINS	2019/06/12
2019/03808	NOVEL PHENYL DERIVATIVES	2019/06/12
2019/03885	POLYMORPHS OF HERBICIDAL SULFONAMIDES	2019/06/14
2019/04266	SWEETENING COMPOSITIONS	2019/06/28
2019/04387	COMPOSITIONS AND METHODS FOR TREATING, AMELIORATING AND PREVENTING H. PYLORI	2019/07/03
2019/04403	A STABLE, SELF-DISPERSIBLE, LOW FOAMING SOLID PESTICIDE FORMULATION	2019/07/04
2019/04686	ROCK BREAKING DEVICE	2019/07/17
2019/04877	HETEROCYCLYLAMINES AS PI3K INHIBITORS	2019/07/25
2019/05350	METHOD FOR PREPARATION OF 3,7-BIS-(DIMETHYLAMINO)-PHENOTHIAZIN-5-IUM CHLORIDE OR BROMIDE	2019/08/13
2019/05823	SECURITY BAGS	2019/09/03

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2019/06012	POWER CONTROL METHOD, TERMINAL DEVICE AND NETWORK DEVICE	2019/09/11
2019/06030	AN IMPROVED SOLAR WATER DISTILLATION MODULE	2019/09/12
2019/06043	LIPID-BASED NANOPARTICLES WITH ENHANCED STABILITY	2019/09/12
2019/06077	APPARATUS AND METHOD FOR A SINGLE SENSOR ACTION PLATE	2019/09/13
2019/06127	CRYSTALLINE SOLID FORMS OF SALTS OF N-{4-[(6,7-DIMETHOXYQUINOLIN-4-YL)OXY]PHENYL}-N-#39;-(-4-FLUOROPHENYL) CYCLOPROPANE-1,1-DICARBOXAMIDE, PROCESSES FOR MAKING, AND METHODS OF USE	2019/09/17
2019/06131	HERBICIDAL MIXTURE, COMPOSITION AND METHOD	2019/09/17
2019/06151	AGGREGATION METHODS, GNODEBS, USER EQUIPMENTS AND STORAGE MEDIUM	2019/09/18
2019/06448	AN AUTO-INJECTOR	2019/09/30
2019/07741	METHOD AND DEVICE FOR ENCODING POLAR CODE	2019/11/22
2019/08101	BANDWIDTH PART CONFIGURATION METHOD, NETWORK DEVICE, AND TERMINAL	2019/12/05
2019/08103	RESOURCE SCHEDULING METHOD, TERMINAL DEVICE, AND NETWORK DEVICE	2019/12/05
2020/00716	METHOD FOR OPERATING A SYSTEM, SYSTEM, AND COMPUTER PROGRAM PRODUCT	2020/02/04
2020/00799	FUEL STATION FORECOURT PAYMENT SYSTEM	2020/02/07
2020/01283	IRON COMPLEX COMPOUNDS FOR THERAPEUTIC USE	2020/02/28
2020/01897	DOWNHOLE DEVICE DELIVERY AND ASSOCIATED DRIVE TRANSFER SYSTEM AND METHOD OF DELIVERING A DEVICE DOWN A HOLE	2020/03/24
2020/01923	DEVICE AND UNIT	2020/03/24
2020/02041	EPIDERMAL GROWTH FACTOR RECEPTOR INHIBITORS	2020/05/04
2020/02067	BACTERIAL GENES AND ISOLATES FOR CONFERRING INSECT RESISTANCE	2020/05/04
2020/02481	METHOD OF SPLITTING THE RETURN FLUIDIZATION GAS IN A GAS SOLIDS OLEFIN POLYMERIZATION REACTOR	2020/05/06
2020/02816	EXTENSIBLE COMPRESSION COUPLER	2020/05/15

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2020/02993	COMPOUNDS FOR THE TREATMENT OF NEUROMUSCULAR DISORDERS	2020/05/21
2020/03217	A METHOD FOR PRODUCING METALLURGICAL COKE FROM NON-COKING COAL	2020/05/29
2020/03409	SULPHONYL UREA DERIVATIVES AS NLRP3 INFLAMMASOME MODULATORS	2020/06/08
2020/03893	SINGLE-DOMAIN ANTIBODY-CYTOSINE DEAMINASE FUSION PROTEINS	2020/06/26
2020/03945	KIBBLE TIPPING SYSTEM	2020/06/29
2020/04453	PRC2 INHIBITORS	2020/07/20
2020/04672	AGRICULTURAL NET INSTALLATIONS	2020/07/29
2020/05002	HYDROPONICS SYSTEM	2020/08/13
2020/05487	HUMIDIFICATION AND DEHUMIDIFICATION PROCESS AND APPARATUS FOR CHILLING BEVERAGES AND OTHER FOOD PRODUCTS AND PROCESS OF MANUFACTURE	2020/09/03
2020/05705	CENTER TURN AND TWIST MECHANISM OF A SWITCHGEAR	2020/09/14
2020/05953	A CONSTRUCTION ELEMENT	2020/09/28
2020/06044	SWING GATE	2020/09/30
2020/06092	IMIDAZOPIPERAZINE INHIBITORS OF TRANSCRIPTION ACTIVATING PROTEINS	2020/10/01
2020/06215	LOCATION OF TURBINES IN A MATRIX RIG AND TRANSPORT OF ENERGY, AS WELL AS ONE METHOD FOR MOUNTING TURBINES WITH ASSOCIATED PROPELLER SET	2020/10/07
2020/06754	OXYFUEL CLINKER PRODUCTION WITHOUT RECIRCULATION OF THE PREHEATER EXHAUST GASES	2020/10/29
2020/07003	A SYSTEM FOR PREDICTING SUBMERGED ORE FURNACE ELECTRODE LENGTHS AND FOR AUTOMATIC ADJUSTMENT AND CONTROL THEREOF	2020/11/11
2020/07208	KNOTLESS WOVEN STEEL STRAND NET	2020/11/19
2020/07229	SYSTEMS AND METHODS FOR APPLYING AN AGRICULTURAL PRACTICE TO A TARGET AGRICULTURAL FIELD	2020/11/19
2020/07324	MODULAR TRAILERS	2020/11/20
2020/07505	METHOD OF PREPARING AND DELIVERING OOCYST SOLUTIONS	2020/12/02
2021/00782	METHOD AND DEVICE FOR MANAGING UNITS OF BULK	2021/02/04

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	MATERIAL, AND COMPUTER PROGRAMME	
2021/01650	STATE ANALYSIS OF AN ELECTRICAL OPERATING RESOURCE	2021/03/11
2021/01654	USE OF A SYNERGISTIC MIXTURE OF EXTRACTANTS FOR EXTRACTING RARE EARTH ELEMENTS FROM AN AQUEOUS MEDIUM COMPRISING PHOSPHORIC ACID	2021/03/11
2021/02776	LOCKING MECHANISM FOR A WEAR ASSEMBLY	2021/04/26
2021/03505	MOBILE MINERAL MATERIAL PROCESSING STATION	2021/05/24
2021/03506	MOBILE MINERAL MATERIAL PROCESSING STATION	2021/05/24
2021/03561	PHARMACEUTICAL FORMULATIONS CONTAINING RELACORILANT, A HETEROARYL-KETONE FUSED AZADECALIN COMPOUND	2021/05/25
2021/03783	DIGITAL FIAT CURRENCY	2021/06/02
2021/03897	A SYSTEM AND METHOD FOR MANAGING INVENTORY WITHIN A SMART BOX	2021/06/07
2021/03938	DECORATIVE PANEL, AND DECORATIVE FLOOR COVERING CONSISTING OF SAID PANELS	2021/06/08
2021/04146	DECORATIVE PANEL, AND DECORATIVE FLOOR COVERING CONSISTING OF SAID PANELS	2021/06/17
2021/04289	FOOD MOULDING	2021/06/22
2021/04290	PLANT CULTIVATION	2021/06/22
2021/04452	METHOD FOR PRODUCING SODIUM SULFITE BY REMOVING SULFUR FROM SULFUR-CONTAINING FLUE GAS USING INDUSTRIAL ALKALI RESIDUE CONTAINING ARSENIC	2021/06/28
2021/04552	A CYLINDER LOCK UNIT AND AN ASSOCIATED KEY	2021/06/30
2021/04682	NASAL DRUG DELIVERY DEVICE	2021/07/05
2021/04775	AFLAME RETARDANT COMPOSITION COMPRISING THE SALTS AMMONIUM SULPHA, AND DISODIUM HYDROGEN PHOSPHATE, AND A SOFTENER	2021/07/08
2021/05490	FULLY MECHANIZED MINING WORKING FACE MINE WATER RESOURCE UTILIZATION SYSTEM AND USE METHOD THEREOF	2021/08/02
2021/05597	USE GRAPHICAL REPRESENTATION-BASED USER AUTHENTICATION SYSTEM AND METHOD	2021/08/10
2021/05601	AD HOC VIRTUAL COMMUNICATION BETWEEN APPROACHING USER	2021/08/10

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	GRAPHICAL REPRESENTATIONS	
2021/05903	METHOD AND MACHINE FOR CREATING AND SEALING FLAPS OF FLEXIBLE PACKAGES, AND VARIOUS MODELS OF FLEXIBLE 3D PLUS-TYPE PACKAGES	2021/08/10
2021/05950	A DISPLACEMENT DEVICE	2021/08/19
2021/06033	AN ELECTRIC GENERATOR HAVING A TOOTHLESS STATOR	2021/08/20
2021/06061	AN ENCODER, A DECODER AND CORRESPONDING METHODS OF DEBLOCKING FILTER ADAPTATION	2021/08/23
2021/06372	ADVICE PRESENTATION SYSTEM	2021/08/31
2021/06432	POWER PLUG RETENTION DEVICE	2021/09/02
2021/06433	HYBRID RENDERING	2021/09/02
2021/06434	CUSTOMIZED OUTPUT TO OPTIMIZE FOR USER PREFERENCE IN A DISTRIBUTED SYSTEM	2021/09/02
2021/06481	ANTI-BROWNING FRUIT AND VEGETABLE PROCESSING DEVICE	2021/09/03
2021/06605	TORQUE TRANSFER AND CONTROL APPARATUS FOR A DRILLING TOOL	2021/09/08
2021/07053	NOVEL PROCESS FOR THE PREPARATION OF FILGOTINIB AND INTERMEDIATES THEREOF	2021/09/21
2021/08360	CELLULOSE CASING, METHOD FOR PRODUCING SAME AND PRODUCT STUFFED IN SAID CASING	2021/10/28
2021/08420	WEAR ASSEMBLY	2021/10/29
2021/08841	BOREHOLE SEALING AND IMPROVED FOAM PROPERTIES FOR CONTROLLED FOAM INJECTION (CFI) FRAGMENTATION OF ROCK AND CONCRETE	2021/11/09
2021/09200	METHODS AND COMPOSITIONS OF ASTROVIRUS REPLICONS	2021/11/17
2021/09248	COMPOSITION AND METHOD FOR SPRAY DRYING AN ADJUVANT VACCINE EMULSION	2021/11/18
2021/09249	PERSONAL PROTECTIVE DEVICES WITH CARRYING BAGS	2021/11/18
2021/09573	PRMT5 INHIBITORS	2021/11/25
2021/09576	METASTABLE CRYSTAL MODIFICATION AND METHOD FOR THE PRODUCTION THEREOF (I)	2021/11/25
2021/09845	BINDING MOLECULE SPECIFIC FOR CD73 AND USE OF BINDING MOLECULE	2021/12/01
2021/10345	INSECT-BASED BIOWASTE PROCESSING APPARATUS	2021/12/13
2021/10440	MOULDED POLYURETHANE HYDROGELS	2021/12/14

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2022/00725	A NATURAL MOSQUITO REPELLENT COMPOSITION AND PROCESS OF PREPARING THE SAME	2022/01/14
2022/01238	COMPOSITION AND METHODS FOR THE TREATMENT OF ANAL AND RECTAL DISORDERS	2022/01/26
2022/01461	CORE NETWORK NODE, ACCESSIBILITY MANAGEMENT DEVICE, AND COMMUNICATION METHOD	2022/02/01
2022/01487	MILK FOAMING DEVICE AND METHOD FOR PRODUCING MILK FOAM	2022/02/02
2022/01504	EDGE BUILD-UP MEASUREMENT	2022/02/02
2022/01556	FUNGICIDE COMPOSITION	2022/02/04
2022/01563	CELLULOSE PRETREATMENT	2022/02/04
2022/01564	HIGH DENSITY BOTTLE DRUM FOR STORAGE, AGITATION AND READING OF BLOOD CULTURE BOTTLES AND METHODS OF STORING	2022/02/04
2022/01663	REAR STRUCTURE FOR AN ELECTRIC VEHICLE	2022/02/08
2022/01664	FRONT STRUCTURE FOR AN ELECTRIC VEHICLE	2022/02/08
2022/01667	PORTABLE SAFE	2022/02/08
2022/01737	CELL PHONE MOUNT FOR BUG KILLING GUNS	2022/02/09
2022/01926	A DISPLAY DEVICE	2022/02/15
2022/01939	PRODUCTION OF MALIC ACID	2022/02/15
2022/01994	PROVISIONING AND EXPOSING USER EQUIPMENT (UE) COMMUNICATION PATTERN ASSOCIATED WITH AN APPLICATION TO REQUEST TRAFFIC OF THE APPLICATION TO BE ANALYZED IN THE CORE NETWORK (CN)	2022/02/16
2022/02098	SECURITY LOCK	2022/02/18
2022/02100	A SEALING DIAPHRAGM	2022/02/18
2022/02105	METHOD FOR APPLYING STONE DUST	2022/02/18
2022/02224	A Nozzle	2022/02/22
2022/02259	FORMULATIONS OF POLYALKYLENE OXIDE-ASPARAGINASE AND METHODS OF MAKING AND USING THE SAME	2022/02/23
2022/02260	A QUICK RELEASE PIN	2022/02/23
2022/02370	COMPOSITIONS AND METHODS FOR TREATING VIRAL INFECTIONS	2022/02/24
2022/02374	A METHOD FOR OBTAINING DATA FROM AN IMAGE OF AN OBJECT OF A USER THAT HAS A BIOMETRIC CHARACTERISTIC OF THE USER	2022/02/24
2022/02578	UPPER PART FOR A SPICE MILL	2022/03/02



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2022/02611	TELEHANDLER WITH FACILITATED ASCENT AND DESCENT	2022/03/03
2022/02617	TREATMENT OF CANCER USING A COMBINATION COMPRISING MULTI-TYROSINE KINASE INHIBITOR AND IMMUNE CHECKPOINT INHIBITOR	2022/03/03
2022/02670	METHODS FOR QUANTIFICATION OF CARBOHYDRATES	2022/03/04
2022/02722	METHOD FOR SCHEDULING PRODUCTION ON A CONTINUOUS GALVANIZING LINE	2022/03/07
2022/02783	A PIN OPERATED VALVE	2022/03/08
2022/02798	PHARMACEUTICAL COMPOSITION FOR TOPICAL WOUND TREATMENT	2022/03/08
2022/02804	HIGH MODULUS GLASS FIBER COMPOSITION, GLASS FIBER THEREOF, AND COMPOSITE MATERIAL	2022/03/08
2022/02862	A SULFUR DOPED IRON SELENIDE NANOROD MATERIAL, PREPARATION METHOD AND APPLICATION	2022/03/09
2022/02873	SYSTEM AND METHOD FOR ESTIMATING BOTH THICKNESS AND WEAR STATE OF REFRACTORY MATERIAL OF A METALLURGICAL FURNACE	2022/03/09
2022/02874	A METHOD OF MANUFACTURING A FILM INCLUDING CAVITIES, WITH PROFILES BEING DETERMINED FOR STRETCH, DENSITY, THICKNESS AND/OR POROSITY OF THE FILM	2022/03/09
2022/02893	TELEHANDLER PROVIDED WITH IMPROVED CAB	2022/03/10
2022/02927	XANTHOPHYLL COMPOSITION COMPRISING LUTEIN AND ZEAXANTHIN WITH ENHANCED BIOAVAILABILITY	2022/03/10
2022/02931	SYSTEM AND METHOD FOR INFUSION OF DRUGS	2022/03/10
2022/02932	FXIA INHIBITORS AND PREPARATION METHOD THEREFOR AND PHARMACEUTICAL USE THEREOF	2022/03/10
2022/02964	GROUPED HATCHING INCUBATOR TRAY APPARATUS FOR QUAILS FOR TEST	2022/03/11
2022/02976	METHOD AND DEVICE FOR SYNTHESIS OF DIAMOND AND ALL OTHER ALLOTROPIC FORMS OF CARBON BY LIQUID PHASE SYNTHESIS	2022/03/11
2022/02977	METAL SHEET TREATMENT METHOD AND METAL SHEET TREATED WITH	2022/03/11

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	THIS METHOD	
2022/02988	METHODS FOR INDICATION OF REFERENCE STATION GNSS RTK INTEGER AMBIGUITY LEVEL	2022/03/11
2022/02993	USE OF A FUEL OIL WASH TO REMOVE CATALYST FROM A FLUIDIZED-BED PROPANE DEHYDROGENATION REACTOR EFFLUENT	2022/03/11
2022/02997	APPLICATION OF ZM5008 IN REGULATING PLANT HEIGHT AND INTERNODE LENGTH IN MAIZE	2022/03/11
2022/03053	A Rock Anchor	2022/03/15
2022/03080	CAP FOR A CONTAINER	2022/03/15
2022/03098	A PRESS HARDENING METHOD	2022/03/15
2022/03099	A PRESS HARDENING METHOD	2022/03/15
2022/03155	A FILTER CARTRIDGE FOR A LIQUID SUCH AS FUEL, THE UPPER END PLATE OF WHICH INCLUDING AN AUTOMATIC DEGASSING VALVE	2022/03/16
2022/03156	AN ENCODER, A DECODER AND CORRESPONDING METHODS FOR PERFORMING CHROMA DEBLOCKING FOR BLOCKS WHICH USE JOINT CHROMA CODING	2022/03/16
2022/03157	DETERMINING CORRECTIONS TO BE APPLIED TO A MULTICHANNEL AUDIO SIGNAL, ASSOCIATED CODING AND DECODING	2022/03/16
2022/03195	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	2022/03/17
2022/03217	METHOD FOR TREATING HUMAN OR ANIMAL URINE AND USES OF THE TRANSFORMED URINE OBTAINED IN PARTICULAR AS FERTILISER	2022/03/17
2022/03256	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	2022/03/18
2022/03257	OFFSHORE FLOATING WAVE POWER GENERATION ASSEMBLY	2022/03/18
2022/03332	A METHOD FOR OPERATING A SPRAY	2022/03/22

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	FLUID OPERATION SYSTEM FOR AN AGRICULTURAL SPRAYER, A SPRAY FLUID OPERATION SYSTEM, AN AGRICULTURAL SPRAYER, AND A METHOD FOR OPERATING AN AGRICULTURAL SPRAYER	
2022/03333	SWITCH ACTUATOR ADAPTER	2022/03/22
2022/03442	OIL-BASED LATENT RESIN AND PREPARATION METHOD AND USE THEREOF	2022/03/24
2022/03468	STEVIA CULTIVAR &#39;320032&#39; WITH SUPER HIGH REBAUDIOSIDE A CONTENT	2022/03/24
2022/03473	LABEL FLAGGER	2022/03/24
2022/03481	ADDITIVELY MANUFACTURED STRUCTURE AND METHOD OF MANUFACTURING THE SAME	2022/03/25
2022/03557	INDUSTRIAL PROCESS FOR THE PREPARATION OF HIGH PURITY ESTETROL	2022/03/28
2022/03567	IMMUNOMODULATORY IL-2 AGENTS IN COMBINATION WITH IMMUNE CHECKPOINT INHIBITORS	2022/03/28
2022/03572	CODING PROCESS FOR GEOMETRIC PARTITION MODE	2022/03/28
2022/03580	IL-17A MODULATORS AND USES THEREOF	2022/03/28
2022/03584	HYDRAULIC ROTARY-PERCUSSIVE HAMMER DRILL	2022/03/29
2022/03655	ENVIRONMENTALLY FRIENDLY PROCESS FOR TANNING HIDES	2022/03/30
2022/03665	VESSEL CLOSURE SEAL AND VESSEL CLOSURE	2022/03/30
2022/03666	ROLL CONNECTION	2022/03/30
2022/03669	A SYSTEM AND METHOD FOR GENERATING UTILIZATION DATA OF A VEHICLE	2022/03/30
2022/03702	SEATING IN A VEHICLE	2022/03/31
2022/03709	AN EXTENDED GENETIC TECHNIQUE-BASED PREVENTION SYSTEM AGAINST DENIAL OF SERVICE/DISTRIBUTED DENIAL OF SERVICE FLOOD ATTACKS IN VOICE OVER IP SYSTEMS AND A METHOD THEREOF	2022/03/31
2022/03764	DEVICE FOR DETECTING INSECT LARVAE AND ADULT INSECTS IN STORED PRODUCTS BY SENSING THEIR VOLATILE PHEROMONES AND SEMIOCHEMICALS	2022/04/01
2022/03765	SAMPLE TEST CASSETTE AND ANALYTE TEST SYSTEM UTILIZING	2022/04/01

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	THE SAME	
2022/03821	NEW BH3 MIMETIC PEPTIDE ANALOGUE FOR INHIBITING PTP1B ACTIVITY AND APPLICATION THEREOF	2022/04/04
2022/03832	CO-PRODUCTION OF HIGH PURITY ISOBUTANE AND BUTENE-1 FROM MIXED C4S	2022/04/04
2022/03842	INORGANIC DEGRADABLE PLASTIC MASTERBATCH MATERIAL, AND PREPARATION METHOD THEREFOR	2022/04/04
2022/03859	METHOD FOR ROTARY CLEARING IN STRIPPING TOOTH HOLDER OF MINING MACHINE AND ROTARY CLEARING DEVICE IN STRIPPING TOOTH HOLDER	2022/04/05
2022/03917	CONSTRUCTION AND OPTIMIZATION METHOD OF LIGNITE MOLECULAR STRUCTURE MODEL	2022/04/06
2022/03965	SPICE MILL PART AND METHOD FOR PRODUCING A SPICE MILL PART	2022/04/07
2022/03975	EXTRUSION BLOW MOULDED CONTAINER	2022/04/07
2022/04141	LOW PRESSURE INJECTION MOLD	2022/04/12
2022/04158	ROTARY VACUUM VESSEL CLOSURE WITH VESSEL CLOSURE SEAL	2022/04/12
2022/04194	SYSTEM, METHOD AND APPARATUS FOR PROVIDING A SOLAR PUMP SYSTEM FOR USE WITHIN A MECHANIZED IRRIGATION SYSTEM	2022/04/13
2022/04249	FINANCIAL MANAGEMENT METHOD AND SYSTEM	2022/04/13
2022/04370	USES OF COMPLEX OF ANGIOTENSIN II RECEPTOR ANTAGONIST METABOLITE AND NEP INHIBITOR IN TREATING HEART FAILURE	2022/04/19
2022/04371	GOLDEN POMFRET FISH PRODUCT AND PREPARATION METHOD THEREOF	2022/04/19
2022/04441	IRAK INHIBITOR AND PREPARATION METHOD THEREFOR AND USE THEREOF	2022/04/20
2022/04477	RANGE HOOD WITH GOOD FILTERING EFFECT AND CLEANING DEVICE FOR RANGE HOOD	2022/04/21
2022/04478	MULTI-FUNCTIONAL GAS STOVE	2022/04/21
2022/04531	REMOTE PLACEMENT INTELLIGENT SEABED OBSERVATION SYSTEM TOWED BY UNMANNED BOAT	2022/04/22
2022/04532	HIGH-PRECISION METHOD FOR EXTRACTING FARMLAND VEGETATION INFORMATION	2022/04/22

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2022/04533	REMOTE PLACEMENT INTELLIGENT MOORING SYSTEM TOWED BY UNMANNED BOAT	2022/04/22
2022/04658	COLLABORATIVE OPTIMIZATION CONTROL METHOD OF ORGANIC NITROGEN AND INORGANIC NITROGEN IN DENITRIFICATION PROCESS	2022/04/26
2022/04702	STACKABLE CONTAINER SUITABLE FOR SMALL ITEMS, AND METHOD OF FORMING IT	2022/04/28
2022/04718	SYSTEM FOR PREPARING A DILUTED COMPOSITION	2022/04/28
2022/04755	FREEZE-DRIED POWDER CONTAINING 2-[(3-AMINOPROPYL)AMINO]ETHANETHIOL AND ITS USE FOR PREPARING A THERMOGEL	2022/04/28
2022/04809	5-HT <sub>2A</sub> AGONISTS FOR USE IN TREATMENT OF DEPRESSION	2022/04/29
2022/04989	SUB-BOTTOM-PROFILE SEISMIC DATA ACQUISITION AUXILIARY APPARATUS AND CONSTRUCTION METHOD THEREOF	2022/05/06
2022/05077	EVAPORATIVE BABY BODYSUIT	2022/05/09
2022/05079	A LOCK	2022/05/09
2022/05163	METHOD FOR SCREENING STABLE YIELD WHEAT VARIETY WITH STRONG TOLERANCE	2022/05/10
2022/05202	A SYSTEM AND A METHOD OF IMPROVED SCA-ELM BASED DENSENET121 FOR CLASSIFICATION OF FRUIT DISEASES	2022/05/11
2022/05348	CROWN CAP	2022/05/13
2022/05529	A SPECIFIC MOLECULAR MARKER FOR DISCRIMINATING HOMOLOGOUS RAW MATERIALS FROM TOBACCO ORGANIC FERTILIZER AND APPLICATION THEREOF	2022/05/19
2022/05540	PROCESS METHOD FOR SINGLE-SIDE WELDING AND DOUBLE-SIDE MOLDING OF Q500QENH WEATHER-RESISTANT STEEL IN ALPINE REGION	2022/05/19
2022/05846	MOBILE ROTATING MECHANISM AND PHOTOVOLTAIC POWER GENERATION DEVICE WITH SELF-CLEANING FUNCTION	2022/05/26
2022/05921	NON-DEFORMABLE BLADE FOR CLOTH CLIP AND CLOTH CLIP WITH NON-DEFORMABLE BLADE	2022/05/27
2022/06804	SELF-SERVICE CHECK-IN SYSTEM FOR HOTELS BASED ON BIOMETRIC	2022/06/20

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	FEATURE RECOGNITION AND INTEGRATED FACE-IDENTITY CARD VALIDATION	
2022/07026	NOVEL COMPUTER HOST DEVICE FOR INFORMATION TECHNOLOGY	2022/06/24
2022/07106	HOOK TYPE COMMUTATOR HAVING BUSHING	2022/06/27
2022/07253	LARGE-ANGLE INCLINED ROOF HANGING BASKET AND MOUNTING METHOD THEREOF	2022/06/30
2022/07275	DOMESTIC KITCHEN WASTE DISPOSER CAPABLE OF SEPARATELY TREATING LIQUID WASTE AND SOLID WASTE AND OPERATION METHOD THEREOF	2022/06/30
2022/07405	A DIGITAL WATER MARKING SYSTEM AND A METHOD THEREOF	2022/07/05
2022/07687	SEEDER END DRIP TAPE CONVEYING DEVICE	2022/07/12
2022/07688	LARGE SPAN SPATIAL CHORD-SPOKE TRUSS STRUCTURE SYSTEM AND CONSTRUCTION METHOD	2022/07/12
2022/07690	PERICARPIUM TRICHOSANTHIS, BULBUS ALLII MACROSTEMONIS AND RHIZOMA PINELLIAE DRINK AND PREPARATION METHOD THEREOF	2022/07/12
2022/07691	PREPARATION METHOD OF RED MUD/WASTE PLASTIC REGENERATED RESIN COMPOSITE WELL LID	2022/07/12
2022/07692	FOLDABLE SHOPPING CART WITH BIONIC MECHANICAL STRUCTURE INSTEAD OF WHEELS	2022/07/12
2022/07693	METHOD FOR MONITORING STATE OF HYDRAULIC SUPPORT SYSTEM IN UNATTENDED WORKING FACE OF COAL MINE	2022/07/12
2022/07694	WATERPROOF REINFORCEMENT STRUCTURE OF UNDERGROUND PASSAGE AND CONSTRUCTION TECHNOLOGY THEREOF	2022/07/12
2022/07695	MONITORING CONTROL EQUIPMENT FOR EMERGENCY RESCUE SITE	2022/07/12
2022/07696	A SPECIAL WEEDING, SCARIFYING, DITCHING AND COVERING MACHINE FOR INTERTILLED CROPS	2022/07/12
2022/07697	A PREPARATION METHOD OF SAUCED DUCK WITH LOW BIOGENIC AMINE AND NITRITE	2022/07/12
2022/07698	PROCESS FOR COMBINING COMPONENTS OF A NOVEL SOLAR CELL	2022/07/12
2022/07699	A PHOSPHORUS-DOPED	2022/07/12

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	MOLYBDENUM CARBIDE COMPOSITE CATALYST AND ITS PREPARATION METHOD AND ELECTROCATALYTIC HYDROGEN EVOLUTION APPLICATION	
2022/07700	PECIAL FRESH-KEEPING STORAGE DEVICE FOR FRESH REHMANNIA	2022/07/12
2022/07752	UNDERGROUND DIAPHRAGM WALL WATER LEAKAGE TREATMENT METHOD	2022/07/13
2022/07753	METHOD FOR RAPIDLY EXCAVATING FOUNDATION PIT WITHIN EXISTING MUNICIPAL ROAD SCOPE	2022/07/13
2022/07754	METHOD FOR TESTING ANISOTROPIC STRENGTH AND PERMEABILITY OF BROKEN COAL	2022/07/13
2022/07755	EASY-TO-USE EDGE AND CORNER GUARD FOR TABLE TENNIS TABLES	2022/07/13
2022/07756	DEVICE FOR BURYING DRIP IRRIGATION TAPE BY MEANS OF SOWER TERMINAL	2022/07/13
2022/07757	TRADITIONAL CHINESE MEDICINE COMPOSITION CAPABLE OF PREVENTING HIGH-TEMPERATURE STRESS RESPONSE OF APIS CERANA CERANA FABRICIUS IN SUMMER	2022/07/13
2022/07758	TRADITIONAL CHINESE MEDICINE COMPOSITION CAPABLE OF PREVENTING EUROPEAN FOULBROOD	2022/07/13
2022/07759	EASY-TO-USE APPARATUS FOR ARM STRENGTH TRAINING	2022/07/13
2022/07760	HIGH-YIELD CULTIVATION METHOD OF TWO-CROP-A-YEAR GRAPES BY USING BASAL ACCESSORY SHOOTS	2022/07/13
2022/07761	WIND POWER GENERATION CONTROL SYSTEM AND METHOD APPLIED TO MICROGRID	2022/07/13
2022/07762	APPLICATION OF FOXO3A TRANSCRIPTION FACTOR IN PREPARATION OF DRUGS FOR DIAGNOSIS AND/OR TREATMENT OF OVARIAN CANCER	2022/07/13
2022/07763	A METHOD FOR IN-SITU SYNTHESIZING CARBONIZED POLYMER DOTS@ FEW-LAYER BLACK PHOSPHORENE 0D-2D HETEROJUNCTION	2022/07/13
2022/07764	PREPARATION METHOD OF MANGO KERNEL TANNIC ACID	2022/07/13
2022/07765	METHOD FOR PREPARING HIGH-ELASTIC-MODULUS CONCRETE BY MIXING OYSTER SHELL POWDER AND	2022/07/13

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	METAKAOLIN	
2022/07766	EXPERIMENTAL METHOD FOR SIMULATING EXPANSION FORM OF COMPENSATED GROUTING IN SHIELD TUNNEL	2022/07/13
2022/07767	PREPARATION METHOD OF SOLID MIXED FEED FOR CATTLE BREEDING	2022/07/13
2022/07768	EDIBLE FUNGUS LIQUID MEDICINE FORMULA FOR RELIEVING PAIN OF TERMINAL CANCER AND PREPARATION METHOD THEREOF	2022/07/13
2022/07769	AN ADDITIVE AND ITS APPLICATION METHOD FOR SODIUM SILICATE SAND CORE HARDENED BY COMPOSITE BLOWING	2022/07/13
2022/07772	DRAWING DEVICE FOR HIGHER MATHEMATICS	2022/07/13
2022/07810	LIQUID METAL-IN-CARBON NANOTUBE LITHIUM AIR BATTERY POSITIVE ELECTRODE AND PREPARATION METHOD THEREFOR	2022/07/13
2022/07833	VERTICAL HIGH-SPEED EJECTION DEVICE FOR ICE CRYSTAL IMPACT TEST	2022/07/14
2022/07869	ANTI-INTERFERENCE DETECTION SYSTEM OF METERING CHIP AND COMPUTER READABLE STORAGE MEDIUM	2022/07/15
2022/07874	VARIABLE-TEMPERATURE ABDOMINAL BELT FOR THE REHABILITATION AFTER ABDOMINAL LIPOSUCTION	2022/07/15
2022/07876	HIGH CORROSION-RESISTANT AND WEAR-RESISTANT IRON-BASED AMORPHOUS DAMAGE REPAIR COATING AND PREPARATION METHOD THEREOF	2022/07/15
2022/07877	CORROSION-INDUCED COATING AND SPRAYING METHOD THEREOF	2022/07/15
2022/07942	INTRAMUSCULAR FAT-RELATED INCRNA AND APPLICATION THEREOF	2022/07/18
2022/07949	BACILLUS CEREUS AND APPLICATION THEREOF IN ALLEVIATING SALT STRESS IN PLANTS	2022/07/18
2022/07956	SUPERFINE CERAMIC FIBER COTTON AND PRODUCTION METHOD THEREOF	2022/07/18
2022/08064	POND AQUACULTURE TAIL WATER FILTER DEVICE	2022/07/20
2022/08065	LUBRICATING OIL FOR MARINE MEDIUM-SPEED TRUNK-PISTON DIESEL ENGINES	2022/07/20



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2022/08066	COAL AND ROCK CUTTING TEST DEVICE AND USE METHOD THEREOF	2022/07/20
2022/08067	ENERGY-SAVING PIPE PROCESSING APPARATUS FOR BUILDING CONSTRUCTION	2022/07/20
2022/08068	ROTATIONAL IRRIGATION METHOD WITH SALT AND FRESH WATER FOR GREENHOUSE TOMATOES IN COASTAL SALINE-ALKALI LAND	2022/07/20
2022/08069	OPTIMAL OBSTACLE AVOIDANCE PATH PLANNING OF UNMANNED SHIP BASED ON DATA-DRIVEN SOLUTION OF HAMILTON-JACOBI-BELLMAN EQUATION	2022/07/20
2022/08070	ENERGY-SAVING AND SAFETY TECHNOLOGY BASED ON ACTIVE SENSING OF POWER CONSUMPTION INFORMATION	2022/07/20
2022/08071	OPTIMIZATION MODEL AND METHOD OF DEMAND RESPONSE OF INVERTER AIR CONDITIONING GROUP BASED ON VIRTUAL ENERGY STORAGE	2022/07/20
2022/08072	ENERGY RECOVERY GREENHOUSE BASED ON VEGETABLE PLANTING	2022/07/20
2022/08073	A SPECIAL BIO-ORGANIC FERTILIZER FOR ACTINIDIA CHINENSIS PLANCH IS PREPARED FROM UNDERGROWTH PLANT RESIDUES AS MAIN RAW MATERIALS.	2022/07/20
2022/08074	METHOD AND SYSTEM FOR GENERAL AVIATION RISK MONITORING BASED ON MULTIMODAL DATA	2022/07/20
2022/08075	METHOD FOR IDENTIFYING INNOVATION OPPORTUNITIES OF TRAFFIC TRAVEL SOFTWARE BASED ON USER COMMENTS	2022/07/20
2022/08076	FUSION FEATURE MODELING FOR IDENTIFYING GLOBAL WATER BIRD IMAGES BY DEEP CONVOLUTION NETWORK	2022/07/20
2022/08077	PREPARATION METHOD AND MEDICINE OF BIO-SOURCE NANO-SELENIUM FOR INHIBITING MYOCARDIAL HYPERTROPHY	2022/07/20
2022/08078	A HYBRID BEAMFORMING METHOD BASED ON SIGNAL-TO-LEAKAGE-PLUS-NOISE RATIO IN MILLIMETER-WAVE MIMO SYSTEMS	2022/07/20
2022/08092	INFORMATION TECHNOLOGY MULTIMEDIA DISPLAY DEVICE	2022/07/20
2022/08121	MULTI-AGENT SYSTEM FAULT DETECTION METHOD AIMING AT TIME	2022/07/21

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	DELAY OF A DATA PACKET LOSS	
2022/08122	FLEXIBLE CONNECTION STRUCTURE SUITABLE FOR FABRICATED STEEL STRUCTURE AND ENCLOSURE WALL PLATE AND INSTALLATION METHOD THEREOF	2022/07/21
2022/08123	AIR CIRCULATING BACKFLOW SEMICONDUCTOR DEHUMIDIFIER	2022/07/21
2022/08131	METHOD AND DEVICE FOR PREPARING MODIFIED COAGULANT BY USING ARTIFICIAL QUARTZ TAIL SLUDGE	2022/07/21
2022/08132	VERIFIABLE AND PRIVACY-PRESERVING MULTI-SUBSET DATA AGGREGATION METHOD BASED ON HOMOMORPHIC ENCRYPTION	2022/07/21
2022/08133	METHOD FOR PHOTOCATALYTIC DEGRADATION OF BENEFICIATION COLLECTORS BY FERRIC CARBOXYLATE	2022/07/21
2022/08134	METHOD AND SYSTEM FOR IDENTIFYING TRAVEL MODES OF BIKE-SHARING AND PRIVATE BICYCLES	2022/07/21
2022/08135	FAUCET FLOW RATE UNIFORMITY TEST METHOD AND SYSTEM	2022/07/21
2022/08136	SHOWER HEAD JET FORCE TEST METHOD AND DEVICE	2022/07/21
2022/08137	METHOD AND SYSTEM FOR TESTING CLEANING WATER VOLUME OF INTELLIGENT TOILET	2022/07/21
2022/08138	METHOD AND DEVICE FOR DETERMINING FLIGHT ATTITUDE	2022/07/21
2022/08139	MICROBIAL GEOCHEMICAL IN-SITU MINERALIZATION METHOD FOR SIMULTANEOUS IMMOBILIZATION OF MULTI-METAL(LOID)S IN NON-FERROUS METAL(LOID)S CONTAMINATED MINES	2022/07/21
2022/08140	A GAS PURIFICATION DEVICE DESIGNED FOR ANESTHESIOLOGY DEPARTMENT	2022/07/21
2022/08142	AN OXYGEN THERAPY CATHETER DESIGNED FOR ANESTHESIOLOGY DEPARTMENT	2022/07/21
2022/08143	MONITORING METHOD AND SYSTEM OF RARE PLANT POPULATION BASED ON UNMANNED AERIAL VEHICLE LIDAR	2022/07/21
2022/08144	A DISINFECTION CABINET FOR ANESTHESIOLOGY DEPARTMENT	2022/07/21
2022/08145	NOVEL CORONAVIRUS (ORF1AB	2022/07/21

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	GENE) DETECTION PRIMER PAIR AND APPLICATION THEREOF	
2022/08146	HIGH-YIELD CULTIVATION METHOD OF HYBRID RICE	2022/07/21
2022/08147	NOVEL CORONAVIRUS (N GENE) DETECTION PRIMER PAIR AND APPLICATION THEREOF	2022/07/21
2022/08148	SPECIAL ANTI-SHRIVELLING LIQUID FOR WALNUT SHOOT	2022/07/21
2022/08149	REFERENCE GENE RP DETECTION PRIMER PAIR AND APPLICATION THEREOF	2022/07/21
2022/08150	A STRAIN OF LACTIC ACID BACTERIA PRODUCING BETA-GLUCOSIDASE AND ITS SCREENING METHOD AND THE PREPARATION METHOD OF YOGURT ENRICHED WITH ACTIVE FLAVONOID AGLYCONES.	2022/07/21
2022/08174	COMPRESSION ROLLER-TYPE PARTICLE EXTRUSION COMPACT FORMING SYSTEM WITH CUTTING FUNCTION	2022/07/21
2022/08201	ORGANIC CONJUGATED SMALL-MOLECULE MATERIAL CONTAINING THIANTHRENE TERMINAL GROUP AND PREPARATION METHOD THEREOF	2022/07/22
2022/08304	MINING LIMIT DETERMINING METHOD AND SYSTEM FOR OPEN-PIT COAL MINE	2022/07/26
2022/08305	GLOBAL OPTIMIZATION METHOD AND SYSTEM FOR STAGING SCHEME OF OPEN-PIT COAL MINE	2022/07/26
2022/08306	METHOD FOR TIMELY DELAYING HEAVY PRUNING OF MULBERRY TREES IN WINTER AND MASS-PRODUCING RAW MATERIALS OF MULBERRY BUD TEA	2022/07/26
2022/08308	METHOD FOR DETECTING FACTORS AFFECTING TOMATO GROWTH AND QUALITY UNDER HIGH TEMPERATURE STRESS	2022/07/26
2022/08309	LONG-DISTANCE PAVEMENT STRUCTURAL SETTLEMENT MONITORING METHOD COMBINING DISTRIBUTED OPTICAL FIBER SENSING TECHNOLOGY AND PARAMETER INVERSE ANALYSIS	2022/07/26
2022/08310	MACHINING PROCESS FOR LARGE-DIAMETER THICK-WALLED STAINLESS STEEL PIPE FITTINGS UNDER HIGH PRESSURE WITH HYDROGEN PRESENT	2022/07/26

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2022/08311	MULTISTAGE RUBBER POWDER CRUSHING METHOD AND DEVICE	2022/07/26
2022/08312	PENNISETUM HYDRIDUM MIX FEED AND PREPARATION METHOD THEREOF	2022/07/26
2022/08368	A NON-LINEAR STIFFNESS VIBRATION ABSORBER	2022/07/27
2022/08369	MECHANICAL PRUNING METHOD OF LYCHEE TREE AND ITS TECHNICAL APPLICATION FIELD	2022/07/27
2022/08370	PIPELINE VALVE AUTOMATICALLY COMPENSATING FOR WEARING GAP FOR CONCRETE CONVEYING PUMP FOR BUILDING	2022/07/27
2022/08371	PRETREATMENT DEVICE FOR DETECTING MICROORGANISM IN MILK POWDER	2022/07/27
2022/08372	FLIP-CHIP SOLDERING DEVICE FOR SOLDERING CHIP TO CARRIER	2022/07/27
2022/08373	SEPARATION DEVICE FOR MILK POWDER PRODUCTION	2022/07/27
2022/08374	GLUE DISPENSING DEVICE FOR CHIP PACKAGING	2022/07/27
2022/08375	DRYING DEVICE FOR MILK POWDER PRODUCTION	2022/07/27
2022/08376	WATER-SAVING IRRIGATION METHOD FOR CROPS BASED ON ROOT SIGNAL CHARACTERISTICS	2022/07/27
2022/08377	METHOD FOR RECOVERING GOLD FROM GOLD SMELTING SLAG CHLORIDIZING ROASTING ELUENT	2022/07/27
2022/08378	ADJUSTABLE WATER RESOURCES ALLOCATION METHOD AND SYSTEM BASED ON ALLOCATION MATRIX	2022/07/27
2022/08379	GRAPE SEEDLING METHOD OF YOUNG-SHOOT GRAFTING	2022/07/27
2022/08380	NEGATIVE THERMAL EXPANSION CERAMIC MATERIAL AND PREPARATION METHOD THEREOF	2022/07/27
2022/08381	MACHINING PROCESS FOR LARGE-DIAMETER THICK-WALLED NICKEL ALLOY PIPE FITTINGS UNDER HIGH PRESSURE WITH HYDROGEN PRESENT	2022/07/27
2022/08382	APPLICATION OF LNCRNA AND ITS TARGET GENE IN SHEEP OVARIAN DEVELOPMENT	2022/07/27
2022/08383	MULTI-POINT MONITORING SYSTEM FOR AUTOMATIC ALARM AND FIRE FIGHTING FOR FOREST FIRE PREVENTION	2022/07/27
2022/08384	APPLICATION OF STAR AND ITS	2022/07/27

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	REGULATORY GENE	
2022/08385	DOUBLE-WHEAT KERNEL FLOWER-SCENTED BLUEBERRY WINE AND PREPARATION METHOD THEREOF	2022/07/27
2022/08386	METHOD AND SYSTEM FOR MEASURING GEOMETRIC PARAMETERS OF HYDRAULIC FRACTURE	2022/07/27
2022/08387	PREPARATION METHOD OF LIVESTOCK AND POULTRY ANTI-STRESS FEED	2022/07/27
2022/08389	A SECONDARY GROUTING REPAIR METHOD FOR SEALING GAS FAILURE-SEALING BOREHOLE SECTION	2022/07/27
2022/08390	A DIRECTIONAL HYDRAULIC FRACTURING AND WEAKENING DEVICE FOR HARD ROOF OF COAL MINE	2022/07/27
2022/08424	MULTI-ARM, MOVABLE ULTRAVIOLET DISINFECTION LAMP FOR CT AND MR ROOMS	2022/07/27
2022/08438	WATERSHED-SCALE COMPREHENSIVE RISK ASSESSMENT METHOD FOR PESTICIDE APPLICATION IN DRYLAND CROPS	2022/07/28
2022/08439	FUNGICIDAL COMPOSITION CONTAINING BENZOVINDIFLUPYR AND APPLICATION THEREOF	2022/07/28
2022/08440	CLOUD CONTROL SYSTEM AND METHOD FOR STAGE LIGHTING	2022/07/28
2022/08441	MANUFACTURING METHOD FOR HIGH-STRENGTH COLD-ROLLED PIPE	2022/07/28
2022/08442	ASSEMBLY TYPE CONCRETE SHEAR WALL AND DUCTILITY CONNECTION METHOD OF VERTICAL STEEL STRUCTURE THEREOF	2022/07/28
2022/08443	HYDROGEN PURIFICATION AND CARBON DIOXIDE RECYCLING DEVICE IN PRODUCTION SYSTEM OF HYDROGEN FROM METHANOL	2022/07/28
2022/08444	IMAGE PROCESSING AND FPGA-BASED DEVICE AND METHOD FOR IDENTIFICATION AND SEPARATION OF COAL AND GANGUE	2022/07/28
2022/08445	METHOD FOR IMPROVING REPRODUCTIVE EFFICIENCY OF SURROGATE SOWS	2022/07/28
2022/08446	INDOOR EXPERIMENT SYSTEM AND METHOD FOR SIMULATING STOPE FILLING	2022/07/28
2022/08447	PSEUDOMONAS_PUTIDA CUGB-JL11 FOR DEGRADATION OF TYPICAL	2022/07/28

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	FLOTATION REAGENTS IN MINES AND ITS APPLICATION	
2022/08449	ECOLOGICAL RESTORATION SHIP FOR LAKE WATER	2022/07/28
2022/08450	THE PREPARATION METHOD OF THE SPECIAL BIO-ORGANIC FERTILIZER FOR GRAPES AND THE SPECIAL BIO-ORGANIC FERTILIZER FOR GRAPES	2022/07/28
2022/08451	PREPARATION METHOD OF 4D-HYDROXYETHYL CHITOSAN THERMOSENSITIVE GEL	2022/07/28
2022/08452	VERTICAL TAKE-OFF AND LANDING TAIL-SITTER UNMANNED AERIAL VEHICLE AS WELL AS ITS CONTROL SYSTEM AND CONTROL METHOD	2022/07/28
2022/08453	A DAS IDENTIFICATION METHOD FOR MONITORING INTER-WELL REAL-TIME MICROSEISMIC VALID EVENTS BASED ON DEEP LEARNING	2022/07/28
2022/08455	A COMBINED EXTRACTION METHOD OF DRUG ENTITIES AND INTERACTIONS WITH MULTI-TASK SEQUENTIAL LABELING	2022/07/28
2022/08476	METHOD AND PLATFORM FOR DYNAMICALLY MONITORING TYPICAL GROUND FEATURES IN MINING ON THE BASIS OF MULTI-SOURCE REMOTE SENSING DATA FUSION AND DEEP NEURAL NETWORK	2022/07/28
2022/08486	STEEL-WOOD COMPOSITE BRIDGE DECK STRUCTURE AND LAYING METHOD THEREOF	2022/07/29
2022/08487	ROTATABLE PIER ANTI-COLLISION FLOATING DEVICE	2022/07/29
2022/08488	SEISMIC TEST METHOD FOR FULL-SCALE FUEL ASSEMBLY	2022/07/29
2022/08489	METHOD FOR MONITORING HEAVY METALS IN SOIL OF WETLAND PARK	2022/07/29
2022/08490	PROCESSING METHOD OF ANCIENT TEA TREE BLACK TEA	2022/07/29
2022/08491	WIND-RESISTANT PROTECTION DEVICE FOR VEGETATION RESTORATION TREES IN OPEN LIMESTONE MINING AREA	2022/07/29
2022/08492	METHOD FOR ARTIFICIALLY PROMOTING VEGETATION RESTORATION IN ROCKY MINES	2022/07/29
2022/08493	DEEP SPACE FILE TRANSMISSION METHOD BASED ON LTP MULTI-SESSION AGGREGATION STRATEGY	2022/07/29
2022/08494	CONTROLLED RELEASE FERTILIZER;SPECIAL FOR	2022/07/29

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	ALFALFA AND PREPARATION METHOD THEREOF	
2022/08495	METHOD FOR IMPROVING PLANTING SURVIVAL RATE OF SEEDLINGS IN ROCKY MOUNTAIN AREAS	2022/07/29
2022/08496	SELF-SINKING OCEAN BOTTOM SEISMIC ACQUISITION DEVICE AND WORKING METHOD THEREOF	2022/07/29
2022/08497	DEEP SPACE FILE TRANSMISSION METHOD BASED ON LTP ASYNCHRONOUS ACCELERATED RETRANSMISSION STRATEGY	2022/07/29
2022/08498	RAW MATERIAL STIRRING DEVICE FOR PRODUCTION OF DIAGNOSTIC REAGENTS	2022/07/29
2022/08499	METHOD FOR PLANTING POTATOES WITH HIGH YIELD AND POTATO CULTURE RACK	2022/07/29
2022/08500	AN INTEGRATED CONDUIT AND A PREVENTION DEVICE & ITS METHOD THEREOF OF TUNNEL ROCKBURST	2022/07/29
2022/08501	APPLICATION OF PROTEIN SUCCINYLAION MODIFICATION TO PREPARATION OF TUMOR CELL METABOLISM REGULATOR	2022/07/29
2022/08548	METHOD FOR MANUFACTURING SHEET METAL PART WITH S-SHAPED SECTION	2022/08/01
2022/08549	ACTIVE NOISE REDUCTION HEADREST	2022/08/01
2022/08550	MULTI-TARGET TRACKING DEVICE BASED ON MOBILE ROBOT PLATFORM	2022/08/01
2022/08551	STRATIFIED SAMPLING DEVICE FOR POLLUTION CONTROL OF CULTIVATED LANDS BASED ON GREEN AGRICULTURE	2022/08/01
2022/08552	HIGH-PERFORMANCE RUBBER-MODIFIED ASPHALT FACTORY PRODUCTION EQUIPMENT	2022/08/01
2022/08553	NEW TYPE OF RUBBER-MODIFIED ASPHALT PRODUCTION PROCESS METHOD	2022/08/01
2022/08554	THE POWDER AND TECHNICAL METHOD USED IN LASER CLADDING OF SELF-LUBRICATING WEAR-RESISTANT CO-BASED ALLOY	2022/08/01
2022/08555	DRIP IRRIGATION DEVICE FOR ARTIFICIAL ECOLOGICAL RESTORATION IN OPEN-PIT LIMESTONE MINES	2022/08/01

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2022/08556	SUBSTRATE FOR SOILLESS CULTURE OF GINSENG AND METHOD FOR SOILLESS CULTURE OF GINSENG	2022/08/01
2022/08557	METHOD FOR PREPARING PECTINASE BY FERMENTING PENICILLIUM OXALICUM CURRIE & THOM FROM GOOSE	2022/08/01
2022/08558	ULTRAFINE GRINDING DEVICE FOR FOOD RAW MATERIALS	2022/08/01
2022/08559	PREPARATION METHOD OF HIGH-ACTIVITY CELLULOSE DECOMPOSITION COMPOSITE ENZYME MAGNETIC MICROSPHERE	2022/08/01
2022/08560	PURPLE WHEAT-INFUSED LIQUOR AND PREPARATION METHOD THEREOF	2022/08/01
2022/08561	HIGH-PERFORMANCE AND HIGH-STRENGTH TANDEM SEAT TYPE COMPOSITE MATERIAL FUSELAGE STRUCTURE	2022/08/01
2022/08562	A POWDER AND METHOD FOR PREPARING A WEAR-CORROSION-RESISTANT CLADDING LAYER ON THE SURFACE OF Ti6Al4V	2022/08/01
2022/08563	A CONTROL METHOD OF RESIDUAL STRESS FOR LOW ALLOY STEEL PREPARED BY SELECTIVE LASER MELTING FOR HIGH-SPEED RAIL	2022/08/01
2022/08564	A POWDER AND TECHNICAL METHOD USED IN LASER CLADDING OF ALUMINUM BRONZE ALLOY GRADIENT COATING	2022/08/01
2022/08565	A POWDER AND METHOD FOR LASER ADDITIVE MANUFACTURING OF Nb-CONTAINING CORROSION-RESISTANT STAINLESS STEEL	2022/08/01
2022/08566	A METHOD FOR TESTING THE INTERFACE BONDING STRENGTH OF LASER CLADDING STAINLESS STEEL CLADDING LAYERS	2022/08/01
2022/08567	A POWDER AND METHOD FOR LASER CLADDING WEAR-RESISTANT AND CORROSION-RESISTANT HIGH ENTROPY ALLOY COATING ON THE SURFACE OF STAINLESS STEEL	2022/08/01
2022/08568	ALL-ALUMINUM AUTO-INDUCTION SPICE LIFTING PLATFORM FOR SMART HOME	2022/08/01
2022/08569	TRADITIONAL CHINESE MEDICINE FORMULA FOR RESISTING ANIMALS DERMATOMYCOSIS AND PREPARATION METHOD THEREOF	2022/08/01
2022/08570	COMBINE TRAINING SPORT	2022/08/01



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	EQUIPMENT	
2022/08571	A DECOUPLING DRIVING FORCE CLASSIFICATION MODEL FOR INDUSTRIAL CARBON EMISSION	2022/08/01
2022/08572	COAL MINE SAFETY PROTECTION DEVICE	2022/08/01
2022/08573	COAL MINE UNDERGROUND GAS PURIFY DEVICE	2022/08/01
2022/08574	AN ADVERSE EVENT RISK PREDICTION METHOD BASED ON PATIENTS'S; ELECTRONIC HEALTH RECORDS	2022/08/01
2022/08617	SYSTEM FOR DETERMINATION OF SOIL ATTRIBUTES USING MACHINE LEARNING TECHNIQUES FOR NON-IMAGERY SPECTROSCOPIC DATA	2022/08/02
2022/08622	ELASTIC EPOXY GROUTING MATERIAL AND PREPARATION METHOD THEREOF	2022/08/02
2022/08623	STEEL CABLE NET CONSTRUCTION PLATFORM FOR SIGHTSEEING PATIO IN SUPER HIGH-RISE BUILDING AND CONSTRUCTION METHOD THEREOF	2022/08/02
2022/08625	E-COMMERCE COMMODITY PUSHING SYSTEM AND METHOD BASED ON BIG DATA	2022/08/02
2022/08626	BACILLUS SIMPLEX S62 AND ITS APPLICATION	2022/08/02
2022/08627	POLYMETALLIC CATALYST FOR THE CATALYTIC OXIDATION OF OZONE FOR THE REMOVAL OF COD AND CHROMATICITY FROM WASTEWATER AND A PREPARATION METHOD THEREOF	2022/08/02
2022/08628	NUMERICAL SIMULATION CALCULATION METHOD AND SYSTEM FOR CONTROLLING GROUTING	2022/08/02
2022/08629	POWER GRID MAINTENANCE AND UNMANNED PATROL INTEGRATED OPERATION PLATFORM	2022/08/02
2022/08661	EQUIPMENT AND METHOD FOR EXTRACTING PLANT VOLATILE OIL	2022/08/03
2022/08662	EFFICIENT COUPLED TYPE RECYCLABLE RURAL SEWAGE TREATMENT DEVICE	2022/08/03
2022/08663	ORAL PREPARATION OF SYRINGA PUBESCENS TURCZ. FOR CLEARING THROAT AND BENEFITING LUNG, PREPARATION METHOD AND APPLICATION THEREOF	2022/08/03
2022/08664	5E TEACH SYSTEM AND METHOD FOR VISUAL PERCEPTION OF HEARING-	2022/08/03

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	IMPAIRED STUDENT	
2022/08665	LIGHT-SIMPLIFIED FERTILIZATION METHOD FOR HIGH YIELD-TRIPLE CROPPING-DIRECT SEEDING RAPE IN RED-SOIL RICE FIELD	2022/08/03
2022/08666	PRE-HARVEST APPLICATION METHOD FOR IMPROVING PRESERVATIVE AND FRESH-KEEPING EFFECT OF CHERRY TOMATOES	2022/08/03
2022/08667	PLANTING METHOD OF ANNUAL TWO-PLANTING AND FOUR-HARVESTING IN RED-SOIL RICE FIELD	2022/08/03
2022/08668	GEOPOLYMER CONCRETE AND PREPARATION METHOD THEREOF	2022/08/03
2022/08669	ONE-PART GEOPOLYMER FULLY RECYCLED AGGREGATE SELF-INSULATION CONCRETE BLOCK	2022/08/03
2022/08670	ANTI-STRESS ENHANCING REAGENT FOR FRUIT TREES, APPLICATION METHOD AND APPLICATION THEREOF	2022/08/03
2022/08671	HIGH-TEMPERATURE RESISTANT POLYMER ASPHALT AND PREPARATION METHOD THEREOF	2022/08/03
2022/08686	FUSED RING SUBSTITUTED AROMATIC COMPOUND AND PREPARATION METHOD THEREFOR, HERBICIDAL COMPOSITION, AND USE THEREOF	2022/08/03
2022/08726	CONTROLLABLE AIR-BLOWING AND LIQUID-FLUSHING DEVICE FOR SURGICAL FIELD IN CARDIAC SURGERY	2022/08/04
2022/08759	ENVIRONMENT-FRIENDLY CORROSION-RESISTANT GLASS ELECTRIC MELTING FURNACE	2022/08/04
2022/08760	CARBON-BASED COMPOSITE MATERIAL, PREPARATION METHOD THEREFOR, AND APPLICATION THEREOF	2022/08/04
2022/08773	A TEST CUP FOR TESTING THE OIL RESISTANCE OF RUBBER PRODUCTS	2022/08/05
2022/08774	METHOD FOR PRODUCING PIG BILE SALTS	2022/08/05
2022/08775	BINHAI CYNANCHUM AURICULATUM ROOT BEER WITH HIGH AUXILIARY MATERIAL RATIO AND PREPARATION METHOD THEREOF	2022/08/05
2022/08776	METHOD FOR CONSTRUCTING COMPLEX WIND FIELD MODEL BASED ON MULTIPLE INDEPENDENT CONTROL PARAMETERS	2022/08/05
2022/08777	WATER-STOP STEEL PLATE	2022/08/05

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	REINFORCEMENT DEVICE	
2022/08778	METHOD FOR ACCOUNTING CARBON VALUES OF THREE UTILIZATION PATTERNS OF GRASSLAND	2022/08/05
2022/08779	HIGHLY ROBUST PARTIAL DISCHARGE PATTERN RECOGNITION METHOD	2022/08/05
2022/08780	PREDICTING AND WARNING METHOD BASED ON ABNORMAL HYDROGEN CONSUMPTION OF HYDROGEN LEAKAGE FOR HYDROGEN INTERNAL COMBUSTION ENGINE VEHICLE OR HYDROGEN FUEL CELL VEHICLE	2022/08/05
2022/08786	ZERO-SAMPLE PICTURE QUESTION-AND-ANSWER METHOD BASED ON SEMANTIC SPACE MAPPING	2022/08/05
2022/08787	VIDEO QUESTION-AND-ANSWER METHOD BASED ON CROSS-MODALITY HETEROGENEOUS GRAPH NEURAL NETWORK	2022/08/05
2022/08788	SELF-SYNCHRONIZING CONTROL METHOD AND DEVICE FOR CASCADED STATCOM SYSTEM	2022/08/05
2022/08789	DECENTRALIZED ECONOMICAL OPERATION CONTROL METHOD FOR MICRO-GRID BASED ON CASCADED INVERTERS	2022/08/05
2022/08790	METHOD FOR CONSTRUCTING SPATIAL EXTENT OF QUALITATIVE LOCATION BASED ON A KNOWLEDGE GRAPH	2022/08/05
2022/08900	ALUMINUM ALLOY PROCESSING TECHNOLOGY FOR HIGH-STRENGTH ANTI-THEFT LOCK CYLINDER	2022/08/10
2022/08901	STRETCHING DEVICE FOR YOGA TRAINING	2022/08/10
2022/08902	PUBLIC SERVICE SPACE ACCESSIBILITY MEASUREMENT METHOD AND APPARATUS BASED ON PEOPLE DEMANDS	2022/08/10
2022/08903	METHOD FOR PREPARING SODIUM POTASSIUM TITANATE WITH HIGH FLUIDITY AND MOISTURE RESISTANCE	2022/08/10
2022/08904	METHOD FOR SIMULTANEOUSLY DERIVATIZING, EXTRACTING AND DETECTING PHENOL COMPOUNDS AND ORGANIC ACID COMPOUNDS IN MEAT	2022/08/10
2022/08905	METHOD FOR INHIBITING FORMATION OF POLYCYCLIC AROMATIC HYDROCARBONS IN GRILLED MEAT THROUGH ONION SKIN EXTRACT	2022/08/10

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2022/08906	METHOD FOR CALCULATING CARBON SINK VALUE OF WETLAND PARK	2022/08/10
2022/08907	TESTING VERIFICATION METHOD FOR MODEL CO-SIMULATION	2022/08/10
2022/08908	WATER-LOCKING MOISTURIZING MASK CLOTH, PREPARATION METHOD AND APPLICATION THEREOF	2022/08/10
2022/08909	PREPARATION METHOD AND APPLICATION OF CARBON NANOFIBER	2022/08/10
2022/08910	RHEUMATOID ARTHRITIS EXERCISE MOVEMENT DEVICE	2022/08/10
2022/08911	PATH PLANNING METHOD, EQUIPMENT AND STORAGE MEDIUM FOR REALIZING SHORTEST HAMILTON LOOP	2022/08/10
2022/08912	LITSEA CUBEBA QUICK PEELING AND SORTING DEVICE	2022/08/10
2022/08913	MULTIFUNCTIONAL CAMERA MOUNTING PLATFORM	2022/08/10
2022/08914	MINING AREA THREE-DIMENSIONAL GEOLOGICAL MODELING SYSTEM BASED ON MULTI-SOURCE DATA FUSION	2022/08/10
2022/08915	TOWER-TYPE WIND POWER GENERATION SYSTEM	2022/08/10
2022/08916	MUNICIPAL SEWAGE TREATMENT DEVICE	2022/08/10
2022/08917	SELF-SERVICE TERMINAL DEVICE FOR DIGITAL LIBRARY	2022/08/10
2022/08918	LIBRARY INFORMATION SERVICE EQUIPMENT	2022/08/10
2022/08921	PRODUCTION PROCESS FOR HIGH-STRENGTH ALUMINUM ALLOY FOR BICYCLE FRAMES	2022/08/10
2022/08922	HIGH-TEMPERATURE ALUMINUM ALLOY FOR FLOOR HEATING PIPES AND PRODUCTION PROCESS THEREFOR	2022/08/10
2022/08923	EVALUATION METHOD OF MALNUTRITION IN NASOPHARYNGEAL CARCINOMA PATIENTS	2022/08/10
2022/08924	SOLAR CELL BASED ON CARBON NANOSTRUCTURE	2022/08/10
2022/08948	CAPSULE FOR BEVERAGES	2022/08/10
2022/08966	SUSPENDED FORCE MEASURING DEVICE FOR AGRICULTURAL IMPLEMENT AND METHOD THEREOF	2022/08/11
2022/08967	DEVICE FOR MEASURING OPERATION RESISTANCE AND OPERATION AREA OF HINGED TRACTION	2022/08/11

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	AGRICULTURAL IMPLEMENT AND METHOD THEREOF	
2022/08968	OPEN-PIT COAL MINING METHOD AND SYSTEM BASED ON FOUR-ELEMENT GLOBAL OPTIMIZATION	2022/08/11
2022/08972	EFFICIENT PREPARATION METHOD OF POLYSACCHARIDE FROM SPARASSIS CRISPA	2022/08/11
2022/08973	DISINFECTING ROOM FOR EPIDEMIC PREVENTION AND CONTROL	2022/08/11
2022/08974	VIBRATION PICKING CASTOR HARVESTER	2022/08/11
2022/08975	A FUNCTIONAL AGED DUCK BRAISED WITH FEATURED FLAVOR AND ITS PREPARATION METHOD	2022/08/11
2022/08979	QUANTITATIVE CALCULATION METHOD AND SYSTEM FOR ECOLOGICAL IMPACT GENERATED BY OPEN-PIT COAL MINING	2022/08/11
2022/08988	BIPOlar PLATE FOR FUEL CELL STACKS	2022/08/11
2022/08989	WHEEL HUB MADE OF HIGH-ENTROPY ALLOY STRENGTHENED ALUMINUM-BASED GRADIENT MATERIAL AND METHOD FOR MANUFACTURING SAME	2022/08/11
2022/09018	FIXED-POINT STRESS DETECTION SYSTEM	2022/08/12
2022/09019	STRESS SIGNAL FEATURE RESEARCH METHOD BASED ON FLAPW ALGORITHM	2022/08/12
2022/09020	STRESS DETECTION SYSTEM CAPABLE OF ADJUSTING EXTERNAL TEMPERATURE	2022/08/12
2022/09021	ESTABLISHMENT METHOD OF STANDARD CURVE OF QRT-PCR ASSAY FOR DETECTION OF INFLAMMATORY FACTORS IN RATS WITH RHEUMATOID ARTHRITIS	2022/08/12
2022/09023	CLOSED THORACIC DRAINAGE TUBE	2022/08/12
2022/09024	HYDROXYPROPYL CHITOSAN/CARBOXYMETHYL CHITOSAN DRUG-LOADED PARTICLES BASED ON EUPATORIUM ADENOPHORUM EXTRACT AND PREPARATION METHOD THEREOF	2022/08/12
2022/09025	EPOXY CORROSION COATING AND PREPARATION METHOD THEREOF	2022/08/12
2022/09026	ASPHALT MIXTURE MODIFYING ADDITIVE, PREPARATION METHOD THEREOF AND HIGH-TOUGHNESS ASPHALT MIXTURE	2022/08/12

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2022/09027	A PREPARATION METHOD OF GOLDEN POMFRET NOODLES WITH DEEP SEA SALT	2022/08/12
2022/09030	AN INTELLIGENT LOGISTIC BIG DATA PROCESSING PLATFORM	2022/08/12
2022/09033	MULTI-ANGLE PAINT SPRAY DEVICE FOR AUTOMOBILE PART	2022/08/12
2022/09034	GEAR GRINDING DEVICE WITH HIGH AUTOMATION DEGREE	2022/08/12
2022/09035	FIXTURE FOR PROCESSING SPLICED GEAR	2022/08/12
2022/09036	HIGH-ACCURACY PERFORATE DEVICE FOR AUTOMOBILE PART	2022/08/12
2022/09037	MULTIFUNCTIONAL INTELLIGENT SWEEPING ROBOT	2022/08/12
2022/09038	A PREPARATION METHOD OF ALPHA-HEMIHYDRATE PHOSPHOGYPSUM AND THE ALPHA-HEMIHYDRATE PHOSPHOGYPSUM	2022/08/12
2022/09039	AN EXTRACTION METHOD AND A EXTRACTION SYSTEM OF FUZZY EXTENSION MATRIX RULES BASED ON BIG DATA	2022/08/12
2022/09040	FORMULATION FOR IMPROVING INSULIN RESISTANCE IN GESTATIONAL DIABETES MELLITUS	2022/08/12
2022/09043	DIFFERENT-WEIGHT FEEDING METHOD AND DIFFERENT-WEIGHT FEEDING SYSTEM	2022/08/12
2022/09046	A GRASS GRID LAYING ROBOT	2022/08/12
2022/09055	EXPLOSION-PROOF WHEEL HUB WITH BUFFER STRUCTURE	2022/08/12
2022/09056	TECHNOLOGICAL METHOD FOR PREPARING HIGH-HARDNESS CORROSION-RESISTANT WHEEL HUB COATING	2022/08/12
2022/09084	AN OPHTHALMIC EXTERNAL EYELID-OPENING APPARATUS	2022/08/15
2022/09085	A DROUGHT EVENT RECOGNITION METHOD BASED ON THREE-DIMENSIONAL PERSPECTIVE	2022/08/15
2022/09094	AN INTERACTION PREDICTION METHOD AND SYSTEM FOR MIRNA AND DISEASE	2022/08/15
2022/09096	METHOD AND DEVICE FOR DETECTING TYRE CREEP OF ROTARY KILN	2022/08/15
2022/09097	METHOD FOR BREEDING AND PROPAGATING EVER-BEARING WHITE-FRUIT STRAWBERRIES	2022/08/15
2022/09098	METHOD FOR EXTRACTING	2022/08/15

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	ANTIOXIDATIVE ASTAXANTHIN FROM SALMON	
2022/09099	A GRAB FOR BAGGED GOODS	2022/08/15
2022/09105	COMPUTER VISION-BASED HUMAN BEHAVIOR RECOGNITION DEVICE	2022/08/15
2022/09106	ARTIFICIAL INTELLIGENCE-BASED SAFETY EARLY WARNING DEVICE	2022/08/15
2022/09107	ULTRA-WIDEBAND WAVEGUIDE POWER SPLITTER	2022/08/15
2022/09108	INTEGRATED BASE STATION ANTENNA	2022/08/15
2022/09109	DFIG ADAPTIVE CONTROL STRATEGY AND COORDINATION METHOD COMPATIBLE WITH FEEDER AUTOMATION	2022/08/15
2022/09110	DFIG COORDINATION CONTROL METHOD COMPATIBLE WITH FEEDER AUTOMATION	2022/08/15
2022/09111	METHOD AND DEVICE FOR CONTROLLING COMMUNICATION-FREE SELF-ADAPTIVE VIRTUAL INERTIA OF SERIES MICROGRID	2022/08/15
2022/09139	OCCLUDER FOR TREATING HEART DISEASE	2022/08/16
2022/09140	MYOCARDIAL ABLATION DEVICE	2022/08/16
2022/09141	MYOCARDIAL CUTTER	2022/08/16
2022/09142	CARDIAC INTERVENTIONAL THERAPY APPARATUS	2022/08/16
2022/09143	LACTIPLANTIBACILLUS PLANTARUM CAPABLE OF RELIEVING THE HARM OF FRYING OIL AND APPLICATION THEREOF	2022/08/16
2022/09151	METHOD FOR QUICKLY DETECTING MALIC ACID AS WAX GOURD TASTE DECISIVE FACTOR BASED ON NEAR-INFRARED SPECTROSCOPY	2022/08/16
2022/09152	A DUSTPROOF BLACKBOARD FOR TEACHING	2022/08/16
2022/09205	CULTURE SUBSTRATE AND CULTURE METHOD OF AURICULARIA CORNEA	2022/08/17
2022/09206	METHOD FOR SIMULTANEOUSLY DETERMINING CONCENTRATIONS OF 7 COMPONENTS ABSORBED INTO BLOOD IN EUCOMMIA ULMOIDES EXTRACT	2022/08/17
2022/09207	RAPID IDENTIFICATION KIT, SPECIAL FEED BOTTLE AND METHOD FOR DRUG RESISTANCE OF SPODOPTERA FRUGIPERDA	2022/08/17
2022/09208	APPARATUS FOR CONTROLLING RODENTS ON GRASSLAND	2022/08/17
2022/09209	AIR POLLUTION MONITORING DEVICE	2022/08/17

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2022/09210	TARGET GENE, SPECIFIC PRIMER PAIR, DETECTION METHOD AND KIT FOR DETECTING SALMONELLA PARATYPHI A	2022/08/17
2022/09211	MULTI-LAYER RUBBER ASPHALT DRAINAGE PAVEMENT STRUCTURE FOR ANTI-CRACKING AND ANTI-RUTTING	2022/08/17
2022/09213	MULTIFUNCTIONAL INTELLIGENT AUTOMATIC ASSEMBLY PRODUCTION LINE	2022/08/17
2022/09214	GRADING AND SCREENING EQUIPMENT FOR FINE-GRAINED MATERIALS	2022/08/17
2022/09215	MUSCA DOMESTICA FEEDING DEVICE FOR QUICKLY COLLECTING EGGS AND CHANGING FEEDS AND FEEDING METHOD THEREOF	2022/08/17
2022/09216	METHOD FOR PREDICTING PIN BREAKAGE OF MOVING BLADE OF FAN	2022/08/17
2022/09217	WIRING IDENTIFICATION METHOD FOR INLET CURRENT TRANSFORMER OF BUS DIFFERENTIAL PROTECTION DEVICE	2022/08/17
2022/09218	PREPARATION METHOD OF DICTYOPHORA RUBROVOLVATA PASTE	2022/08/17
2022/09219	METHOD FOR PREPARING AGROCYBE AEGIRITA MEDIUM FROM TOBACCO STEMS AND THE APPLICATION THEREOF	2022/08/17
2022/09220	SOCKET TYPE BOLT CONNECTION JOINT STRUCTURE FOR A MODULAR BUILDING WITH A STEEL STRUCTURE	2022/08/17
2022/09221	METHOD FOR PREPARING SUGARED AGROCYBE AEGIRITA	2022/08/17
2022/09222	TRADITIONAL CHINESE MEDICINE COMPOSITION FOR TREATING DUCK FLAVIVIRUS AND THE PREPARATION METHOD THEREOF	2022/08/17
2022/09223	A FUNCTIONAL YOGURT WITH A COMPOUND FLAVOR OF COIX CHINENSIS AND SETARIA ITALICA AND A PREPARATION METHOD THEREOF	2022/08/17
2022/09229	A DRUG RELOCATION METHOD AND SYSTEM BASED ON DRUG CLASSIFICATION GRAPH NEURAL NETWORK	2022/08/17
2022/09261	SYSTEM OF EFFECTIVE KEEPER BASED DOMINO CIRCUIT FOR LOW POWER APPLICATION	2022/08/18



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2022/09262	COMPREHENSIVE ANALYSIS METHOD OF AUXILIARY CONTROL SYSTEM OF BOOSTER STATION	2022/08/18
2022/09263	AUTOMATIC ANALYSIS METHOD FOR MONITORING ABNORMAL INDEX VALUES	2022/08/18
2022/09264	BEAM-ARCH COMBINED AND STEEL-CONCRETE COMPOSITE CONTINUOUS RIGID FRAME BRIDGE	2022/08/18
2022/09266	THREADED SLEEVE FOR ANCHORING THREADED STEEL BAR	2022/08/18
2022/09267	SAFETY BARRIER	2022/08/18
2022/09269	DISINFECTOR FOR HEMATOPOIETIC STEM CELL TRANSPLANTATION FOR TREATING HEMATOLOGIC DISEASE	2022/08/18
2022/09270	A MIXING DEVICE FOR FEED PRODUCTION	2022/08/18
2022/09271	METHOD FOR EXTRACTING SEISMIC LANDSLIDE VOLUME BY USING TANDEM-X BISTATIC INSAR	2022/08/18
2022/09272	METHOD FOR SIMULTANEOUS QUANTITATIVE DETERMINATION OF TEN ACTIVE INGREDIENTS IN SHUGANNING INJECTION	2022/08/18
2022/09273	APPARATUS FOR MEASURING SHRINKAGE OF CONCRETE	2022/08/18
2022/09274	EXPANDED PERLITE FOAM LIGHT SOIL AND PREPARATION METHOD THEREOF	2022/08/18
2022/09275	METHOD FOR IN VITRO PROPAGATION AND EFFECTIVE ROOTLESS SEEDLING GRAFTING OF WOODY RHODODENDRON	2022/08/18
2022/09276	METHOD FOR HEAVY METAL FIXATION AND SOILIZATION OF COPPER TAILINGS	2022/08/18
2022/09277	DOUBLE-PROTEIN YOGURT CONTAINING NATTOKINASE AND PREPARATION METHOD THEREOF	2022/08/18
2022/09278	INTELLIGENT ELECTRICAL CABINET WITH AUTOMATIC DRYING FUNCTION	2022/08/18
2022/09279	AN OPINION PREFERENCE ANALYSIS METHOD FOR COMMENTS ON MICROBLOG	2022/08/18
2022/09313	NOVEL CONNECTION DEVICE SUITABLE FOR VARIOUS TRACKSIDE APPARATUSES	2022/08/19
2022/09314	METHOD FOR MAKING RED JUJUBE-FLAVORED POTENTILLA ANSERINA FRUIT CRISPS	2022/08/19
2022/09315	POTENTILLA ANSERINA BISCUIT AND PREPARATION METHOD THEREOF	2022/08/19

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2022/09316	SODIUM TITANOSILICATE COMPOSITE FIBER FOR CESIUM ION ADSORPTION AND PRODUCT THEREOF	2022/08/19
2022/09317	SODIUM TITANOSILICATE COMPOSITE POROUS MICROSPHERES FOR CESIUM ION ADSORPTION	2022/08/19
2022/09318	GANODERMA STRAIN AND CULTIVATION METHOD OF FRUITING BODY OF GANODERMA SHANXIENSE THEREOF	2022/08/19
2022/09319	METHOD FOR SEPARATING ORGANIC MATTER FROM NATURAL WATER BODY	2022/08/19
2022/09320	SUPPORT METHOD OF ROADWAY SIDE AND FLOOR WITH COORDINATE STABILIZATION OF BOTTOM ANGLE PRESTRESSED GROUTING BOLTS AND BOTTOM ANGLE ANCHOR CABLES AT DIFFERENT ANGLES	2022/08/19
2022/09321	PREPARATION METHOD OF EXTERNALLY APPLIED LINIMENT FOR RELIEVING ONYCHIA LATERALIS	2022/08/19
2022/09322	METHOD FOR SIMULTANEOUS DETERMINATION OF CONTENTS OF SIX ACTIVE INGREDIENTS IN SHUGANNING INJECTION IN RAT PLASMA	2022/08/19
2022/09323	METHOD FOR SIMULTANEOUS DETECTION OF GASTRODIN (GAS), PARISHIN B (PB), AND FOUR NEUROTRANSMITTERS IN RAT BRAIN BY MICRODIALYSIS IN VITRO AND IN VIVO	2022/08/19
2022/09324	MUTE CASE OF A GENERATOR SET	2022/08/19
2022/09325	WRAPPED ENCLOSURE STRUCTURE SYSTEM SUITABLE FOR PREFABRICATED SUBSTATION	2022/08/19
2022/09326	STRUCTURE OF STRONG PREMIXING PRECOMBUSTION CHAMBER HAVING MULTI-STAGE REFLECTION OF SHOCK WAVES	2022/08/19
2022/09327	STRUCTURE OF SHOCK WAVE COMBUSTION-SUPPORTING TYPE PRECOMBUSTION CHAMBER FOR A GAS ENGINE	2022/08/19
2022/09328	SYNTHETIC METHOD OF 2-SUBSTITUTED BENZO[D]THIAZOLE DERIVATIVES	2022/08/19
2022/09329	EVALUATION-PROCESSING METHOD AND DEVICE FOR IMPORTANCE OF COAL-WATER COORDINATED CO-MINING	2022/08/19

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2022/09330	TRADITIONAL CHINESE MEDICINE APPLICATION WITH FAR INFRARED AUTOMATIC HEATING FUMIGATION	2022/08/19
2022/09331	EVALUATION METHOD AND SYSTEM OF COAL-WATER COORDINATED EXPLOITATION DEGREE BASED ON ANP THEORY	2022/08/19
2022/09332	NEW M2B-BASED SYSTEM FOR COMBINE COOPERATIVE POOL AND MIXED COMMERCIAL SERVICES	2022/08/19
2022/09333	ALBIC SOIL MODIFY AND PREPARATION METHOD THEREOF	2022/08/19
2022/09354	STRAW BALE BURNING DIRECT-FIRED BIOMASS BOILER WITH BOILER DRYING INSIDE	2022/08/19
2022/09362	SURFACE ENHANCED RAMAN SPECTRUM RAPID DETECTION METHOD FOR CHLORPYRIFOS AND ACETAMIPRID IN MULBERRY LEAVES	2022/08/22
2022/09363	METHOD FOR PREPARING POLYETHYLENE COPOLYMER	2022/08/22
2022/09364	SLUDGE PHOSPHORUS RECOVERY SYSTEM FOR DOMESTIC SEWAGE TREATMENT PLANT	2022/08/22
2022/09385	A TRASH COLLECTING MACHINE	2022/08/22
2022/09387	A COMPOSITION AND A METHOD FOR SOLVOTHERMAL SYNTHESIS OF A 3D FE-AL BIMETALLIC METAL-ORGANIC-FRAMEWORK	2022/08/22
2022/09388	A CONVOLUTIONAL NEURAL NETWORK SYSTEM FOR CORONARY ARTERY DISEASE DIAGNOSIS	2022/08/22
2022/09401	FLUORINE-CONTAINING RESIN COMPOSITION, PREPARATION METHOD THEREFOR, AND PREPARATION METHOD FOR CURED FILM CONTAINING SAME	2022/08/22
2022/09416	COLD CHAIN THERMAL INSULATING BOX FOR PREVENTING FRUITS FROM PREMATURE RIPENING AND SQUEEZING EACH OTHER	2022/08/23
2022/09417	FOOTBALL TRAINING DEVICE	2022/08/23
2022/09418	GEOGRAPHIC DATA TRANSMISSION METHOD AND SYSTEM BASED ON SM4 ALGORITHM	2022/08/23
2022/09419	K-POINT TEST METHOD OF IN-SITU STRESS OF HIGH-STRENGTH ROCK BASED ON KAISER EFFECT	2022/08/23
2022/09421	NOVEL ROTORCRAFT AND WORKING METHOD THEREOF	2022/08/23
2022/09422	EASILY ADJUSTED ENVIRONMENTAL CHAMBER	2022/08/23

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2022/09423	DUAL-PURPOSE SEEDER FOR CEREAL AND MILLET	2022/08/23
2022/09424	HIGH-EFFICIENCY HYBRID BREEDING METHOD FOR PEA	2022/08/23
2022/09425	MUNG BEAN SEEDING DEVICE	2022/08/23
2022/09426	EASILY MECHANIZED SHORT-DENSE TREE SHAPE WITH WIND-RESISTANCE AND HIGH-LIGHT-EFFICIENCY AND CULTIVATION METHOD THEREOF	2022/08/23
2022/09427	MULTI-LAYER INDOOR VEGETABLE PLANTING RACK	2022/08/23
2022/09444	TRADITIONAL CHINESE MEDICINE SKIN-SCRAPING MEDIUM AND PREPARATION METHOD THEREFOR	2022/08/23
2022/09445	A CLOSURE FOR A MULTI-USE DRINKS BOTTLE	2022/08/23
2022/09457	KIT AND METHOD FOR DETECTING URINARY EXOSOMES CARGO MIRNAS	2022/08/24
2022/09503	POTENTILLA ANSERINA BEVERAGE AND PREPARATION METHOD THEREOF	2022/08/25
2022/09504	MYOCARDIAL EXCISION DEVICE	2022/08/25
2022/09505	SNARE FOR TREATING HEART DISEASES	2022/08/25
2022/09506	PHARMACEUTICAL APPLICATION OF 1,25-DIHYDROXYVITAMIN D3 IN PREVENTING AND TREATING AMS	2022/08/25
2022/09507	PARAMETER ACQUISITION AND EVALUATION METHOD OF TRAFFIC CONGESTION STATE IN EXPRESSWAY SECTIONS	2022/08/25
2022/09508	IDENTIFICATION METHOD OF POWER GRID PARAMETER ERROR BRANCH BASED ON RESIDUAL SIMILARITY INDEX	2022/08/25
2022/09509	SPECIAL EQUIPMENT FOR REMOVING TOTAL NITROGEN FROM RESIN	2022/08/25
2022/09510	A NOVEL SUSTAINABLE WATER PURIFICATION PORTABLE DEVICE WITH TDS MEASURING DISPLAY AND CONTROLLER	2022/08/25
2022/09511	A NEW TRITERPENE FROM LUDWIGIA HYSSOIFOLIA (G.DON) EXELL	2022/08/25
2022/09545	APPLICATION OF EURYCOMANOL IN PREPARATION OF DRUG, FOOD PRODUCT AND HEALTH CARE PRODUCT FOR PREVENTING AND TREATING CHRONIC NON-BACTERIAL PROSTATITIS	2022/08/26
2022/09546	ELISA KIT FOR DETECTING HUMAN VEGF AND USING METHOD THEREOF	2022/08/26

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2022/09547	USE OF BETA-SITOSTEROL IN RELIEVING COW MAMMARY GLAND INFLAMMATION	2022/08/26
2022/09548	PRESSURIZATION AND OXYGENATION DEVICE FOR PLATEAU ENVIRONMENT	2022/08/26
2022/09549	METHOD FOR EVALUATING CANOPY COVER BASED ON AIRBORNE LIDAR DATA	2022/08/26
2022/09550	A REINFORCEMENT STRUCTURE FOR FOUNDATION TREATMENT OF BUILDING ENGINEERING	2022/08/26
2022/09551	INTELLIGENT QPCR INSTRUMENT DETECTION SYSTEM BASED ON IMAGE RECOGNITION TECHNOLOGY	2022/08/26
2022/09553	DEEP PROCESSING METHOD FOR MAKING WINE FROM BLUEBERRY POMACE	2022/08/26
2022/09554	CITRAL THIAZOLE HYDRAZONE DERIVATIVE, PREPARATION METHOD AND APPLICATION THEREOF	2022/08/26
2022/09556	METHOD FOR PREPARING ENZYMATIC HYDROLYSATE OF GIANT SALAMANDER	2022/08/26
2022/09574	BRIDGE INSPECTION VEHICLE	2022/08/26
2022/09594	METHOD FOR REINFORCEMENT CONSTRUCTION OF FOUNDATION PIT IN SILTY SOIL LAYER	2022/08/29
2022/09595	METHOD FOR QUANTITATIVELY EVALUATING CONTRIBUTION RATES OF DIFFERENT MASS TRANSFER DIFFUSION MECHANISMS OF SHALE GAS RESERVOIRS FOR SEEPAGE CAPACITIES OF RESERVOIR STRATA	2022/08/29
2022/09596	WATERPROOF AND MOISTURE-PERMEABLE COMPOSITE FABRIC	2022/08/29
2022/09599	BIOACTIVE PEPTIDE CONTAINING TRYPTOPHAN AND CYSTEINE AND USE THEREOF	2022/08/29
2022/09600	ELECTROMAGNETIC IMMUNITY TEST SYSTEM AND METHOD FOR VEHICLE UNDER DYNAMIC WORKING CONDITIONS	2022/08/29
2022/09602	A NEW MANAGEMENT APPROACH TO KNOWLEDGE CREATING STRATEGIC DECISION- MAKING IN ORGANIZATIONS	2022/08/29
2022/09603	A SYSTEM FOR INTEGRATING BLOCKCHAIN WITH LOCAL PUBLIC SERVICE AND METHOD THEREOF	2022/08/29
2022/09604	SUPPORTED PLATINUM-BASED THREE-WAY CATALYST	2022/08/29

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2022/09605	TREATMENT EQUIPMENT FOR DEGRADING DYE WASTEWATER BY PERIODIC REVERSAL ELECTROCHEMISTRY IN COOPERATION WITH PERSULFATE AND USING METHOD THEREOF	2022/08/29
2022/09606	A SEEDING DEVICE BASED ON A SEED BELT	2022/08/29
2022/09607	METHOD FOR PREPARING THREE-DIMENSIONAL TUBULAR MULTI-CELLULAR STRUCTURE	2022/08/29
2022/09608	A METHOD FOR IMPROVING LIPOSOLUBILITY AND THERMAL STABILITY OF RED CLOVER POLYSACCHARIDE	2022/08/29
2022/09609	WATER-SAVING AND ENVIRONMENT-FRIENDLY PIG FARM	2022/08/29
2022/09613	LIGHT-EMITTING ROAD TRAFFIC SIGN	2022/08/29
2022/09621	BOARD HAVING FLAME RETARDANT SURFACE	2022/08/29
2022/09639	CLEAVED AMPLIFIED POLYMORPHIC SEQUENCE (CAPS) MOLECULAR MARKER FOR GENE OF EPICUTICULAR WAX BIOSYNTHESIS ON MATURE FRUIT SURFACE OF WAX GOURD AND USE THEREOF	2022/08/30
2022/09640	VOC SAMPLING APPARATUS	2022/08/30
2022/09641	VISIBLE LIGHT CATALYST OF GRAPHITE-PHASE CARBON NITRIDE MODIFIED FABRIC, ONE-STEP PREPARATION METHOD AND APPLICATION THEREOF	2022/08/30
2022/09642	INFECTIOUS DISEASE DETECTION DEVICE BASED ON MECHANICAL TRANSMISSION AND PCR TECHNOLOGY AND WORKING METHOD THEREOF	2022/08/30
2022/09643	PEROVSKITE THIN-FILM SOLAR CELL	2022/08/30
2022/09644	PEROVSKITE LIGHT-ABSORBING LAYER MATERIAL AND APPLICATION THEREOF IN SOLAR CELLS	2022/08/30
2022/09645	SUPER-HYDROPHOBIC MODIFICATION METHOD OF POLYVINYLIDENE FLUORIDE HYDROPHOBIC MEMBRANE	2022/08/30
2022/09646	A FIREPROOF SUPER HYDROPHOBIC COATING, A SUPER HYDROPHOBIC MATERIAL AND THE CORRESPONDING PREPARATION METHOD	2022/08/30
2022/09647	DOUBLE-PILE UPLIFT AND	2022/08/30

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2022/09648	PREPARATION METHOD AND APPLICATION OF GOLD ION ADSORPTION MATERIAL WITH WIDE PH USE RANGE	2022/08/30
2022/09651	SELF-ADAPTIVE BANDWIDTH HYSTERESIS BAND CURRENT CONTROL METHOD AND SYSTEM FOR ELECTRIC VEHICLE INVERTER	2022/08/30
2022/09652	CONTROL METHOD AND SYSTEM FOR TORQUE DISTRIBUTION OF DISTRIBUTED-DRIVE VEHICLE	2022/08/30
2022/09653	ALOE VERA FLOWER TEA PRODUCTION METHOD AND ALOE VERA FLOWER TEA	2022/08/30
2022/09654	CELECOXIB-LOADED INJECTABLE TEMPERATURE-SENSITIVE CHITOSAN HYDROGEL, PREPARATION METHOD AND APPLICATION IN TREATING INTERVERTEBRAL DISC DEGENERATION THEREOF	2022/08/30
2022/09655	SOLID-LIQUID SEPARATION AND COLLECTION DEVICE FOR KITCHEN WASTE	2022/08/30
2022/09656	DESIGN METHOD FOR ANTENNA DISC OF WIFI ANTENNA FOR RURAL AND FOREST AREAS	2022/08/30
2022/09661	PHOTOISOMERIZATION-BASED BIOSENSOR AND APPLICATION THEREOF IN THROMBIN DETECTION	2022/08/30
2022/09665	A SYSTEM FOR MONITORING REALTIME HEALTH CONDITION OF A PATIENT AND A METHOD THEREOF	2022/08/30
2022/09666	SYSTEM FOR PREDICTION OF FIRM PERFORMANCE	2022/08/30
2022/09667	LEAKAGE CURRENT CONTROLLED BY SLEEP SWITCH FOR LOW POWER APPLICATION	2022/08/30
2022/09673	COMBINATION ULTRA-VIOLET A (UVA) AND ULTRA-VIOLET C (UVC) SYSTEM FOR REDUCTION AND INHIBITION OF GROWTH OF PATHOGENS	2022/08/30
2022/09705	ANTI-PLANT-VIRUS COMPOSITION, ANTI-PLANT-VIRUS AGENT AND APPLICATION THEREOF	2022/08/31
2022/09706	DEVICE FOR TESTING PHYSICAL PROPERTIES OF PILE-SOIL INTERFACE OF SIMULATED PILE	2022/08/31
2022/09707	METHOD FOR INDUCING ZEA MAYS L. TO RESIST FUSARIUM EAR ROT BY USING TRICHODERMA AGENT	2022/08/31
2022/09708	A SYSTEM AND A METHOD FOR PILOT	2022/08/31

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2022/09710	ANDROGEN RECEPTOR SMALL-MOLECULE FLUORESCENT PROBE AND PREPARATION METHOD AND APPLICATION THEREOF	2022/08/31
2022/09711	PREPARATION METHOD OF FENTANYL DRUG-CONTAINING HAIR REFERENCE MATERIAL AND APPLICATION THEREOF	2022/08/31
2022/09712	MULTI-VIEW TARGET RECOGNITION METHOD AND SYSTEM BASED ON INTERNET OF THINGS	2022/08/31
2022/09713	RAPID IDENTIFICATION METHOD AND APPLICATION OF ALKALI SOAKED CHICKEN	2022/08/31
2022/09714	METHOD FOR DETERMINING RANGE OF DEEP REGION OF SLOPE REINFORCEMENT	2022/08/31
2022/09715	BUILDING ENERGY-SAVING DOOR AND WINDOW WITH GOOD AIR CIRCULATION EFFECT	2022/08/31
2022/09716	PRIMATE EYEBALL FIXATOR	2022/08/31
2022/09718	KIT AND DETECTION METHOD FOR DETECTING TITER OF PRRSV-1 ANTIBODY	2022/08/31
2022/09736	DOUBLE-SPAN MOVABLE FORMWORK OF LOWER BEARING TYPE AND CONSTRUCTION METHOD	2022/08/31
2022/09767	BULLET-PROOF AND STAB-PROOF MATERIAL	2022/09/01
2022/09768	ROOT-PROMOTING TYPE SOIL CONDITIONER AND PREPARATION METHOD THEREOF	2022/09/01
2022/09769	OPTIMIZATION DESIGN METHOD FOR ELECTRICAL EQUIPMENT CONSIDERING BOTH ROBUSTNESS AND RELIABILITY	2022/09/01
2022/09770	A METHOD AND DEVICE FOR IDENTIFYING SUSPENDED MATTER IN URINARY DIAGNOSIS OF TIBETAN MEDICINE	2022/09/01
2022/09771	NUTRITIONAL FORTIFICATION DEVICE FOR SPROUT FOOD WITH RECYCLABLE WATER	2022/09/01
2022/09772	ACID PLUS ESSENTIAL OIL COMPOUND PREPARATION AND PREPARATION METHOD THEREOF	2022/09/01
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2022/09776	A METHOD FOR STUDYING THE MECHANISM OF SPATIAL HETEROGENEITY OF MICROHABITATS IN ALPINE MARSH WETLAND	2022/09/01
2022/09804	METHOD FOR EXPLORING MIGRATION AND TRANSFORMATION OF HEAVY METALS IN MULTIMEDIA ENVIRONMENT	2022/09/02
2022/09805	DETECTION DEVICE AND DETECTION METHOD FOR DETECTING DISTRIBUTION UNIFORMITY OF TRANSPARENT MATERIALS	2022/09/02
2022/09806	COMPONENTS ASSEMBLING DEVICE FOR COMPUTER MAINBOARD	2022/09/02
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2022/09818	IMPACT OF SPIRITUAL INTELLIGENCE AND EMOTIONAL INTELLIGENCE ON DECISION MAKING AND LIFE SATISFACTION	2022/09/02
2022/09860	VIRUS-LIKE PARTICLE (VLP), AND PREPARATION METHOD AND USE THEREOF	2022/09/05
2022/09861	PREPARATION METHOD OF RECOMBINANT PORCINE PSEUDORABIES VIRUS (PRV) STRAIN EXPRESSING PORCINE CIRCOVIRUS TYPE II (PCV2) ORF2 GENE	2022/09/05
2022/09867	VEHICLE ENERGY-FEEDING TYPE INTELLIGENT SUSPENSION BASED ON 2-DOF PARALLEL MECHANISM	2022/09/05
2022/09868	SAFETY INSPECTION SYSTEM AND METHOD FOR AQUACULTURE WORK BOAT OPERATING PERSONNEL	2022/09/05
2022/09869	METHOD FOR PREPARING DIMETHOXYDOPA	2022/09/05
2022/09870	HIGH-STRENGTH, TYPHOON-	2022/09/05

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2022/09873	TURBOT OFFSHORE THREE-DIMENSIONAL AQUACULTURE UNIT	2022/09/05
2022/09874	CT GUIDED PUNCTURE POSITIONING GRID FOR EASY POSITIONING	2022/09/05
2022/09875	HELICAL SILICON DRIFT DETECTOR AND DESIGN METHOD THEREOF	2022/09/05
2022/09876	HIGH-CONCENTRATION FINE FRACTION TAILINGS DEEP CONE THICKENER	2022/09/05
2022/09877	CLOUD BASED INTEGRATION OF HEALTH CARE SERVICES SYSTEM	2022/09/05
2022/09878	A TUNED WHALE OPTIMIZATION BASED STACKED-LSTM NETWORK FOR DIGITAL IMAGE SEGMENTATION	2022/09/05
2022/09879	DOUBLE RBF KERNEL-BASED DEEP SAMPLING WITH CNNs TO HANDLE COMPLEX IMBALANCED DATASETS	2022/09/05
2022/09880	AN IOT BASED SMART FARMING MANAGEMENT SYSTEM IN THE STATE OF ODISHA	2022/09/05
2022/09882	METHOD AND SYSTEM FOR PREDICTING SHORT TERM TRAFFIC FLOW OF SECTORS	2022/09/05
2022/09883	MULTI-FLIGHT 4D TRAJECTORY COLLABORATIVE OPTIMIZATION METHOD	2022/09/05
2022/09884	VEHICLE DOOR OPENING SIGNAL INDICATING SYSTEM	2022/09/05
2022/09885	PREPARATION METHOD OF ASYMMETRIC CAPACITOR ELECTRODE MATERIAL	2022/09/05
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2022/10001	SCREENING LOADING APPARATUS FOR FRUITS OF CAMELLIA OLEIFERA	2022/09/08
2022/10008	PREPARATION METHOD OF LITHIUM-SULFUR BATTERY CATHODE WITH DUAL PROTECTION FROM BIOCARBON AND COATING	2022/09/08
2022/10012	A DEVICE FOR QUICKLY DRYING PLANT SPECIMENS IN FIELD	2022/09/08
2022/10102	A PROCESS AND COMPOSITION FOR PREPARING PROTEIN RICH PUMPKIN SPROUTED ICE-POPSICLES	2022/09/12
2022/10236	REHABILITATION TRAINING MACHINE	2022/09/15
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2022/10239	PERFORMANCE TEST DEVICE OF METRO TRACTION MOTOR	2022/09/15
2022/10240	A CULTIVATION&#160;TECHNOLOGY FOR PREVENTING BASAL STALK ROT OF SOLANACEOUS&#160;VEGETABLES	2022/09/15
2022/10241	ELECTRIC FIELD DEVICE FOR TREATING TUMORS	2022/09/15
2022/10242	HOSPITAL DISCIPLINE EVALUATION METHOD AND SYSTEM	2022/09/15
2022/10244	GGPPS DIRECTED SINGLE-SITE MUTANT PROTEIN GGPPS-233	2022/09/15
2022/10272	A THREE-GEAR AIR MOTOR	2022/09/16
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2022/10274	AUTOMOBILE POWER PERFORMANCE IMPROVING SYSTEM	2022/09/16
2022/10275	SIT-UP TRAINING TESTING DEVICE	2022/09/16
2022/10276	WIND SPEED MEASURING DEVICE OF LARGE-SCALE FAN	2022/09/16
2022/10277	IMAGE SEGMENTATION METHOD BASED ON WEIGHTED ROBUST FCM CLUSTERING	2022/09/16
2022/10278	METHOD FOR QUICKLY EVALUATING INTRAMUSCULAR FAT CONTENT OF PORK USING WATER CONTENT	2022/09/16
2022/10279	PORTABLE MASK FOR MOUTH AND NOSE OF NON-INVASIVE VENTILATOR	2022/09/16
2022/10282	A SYSTEM AND A METHOD FOR MONITORING GRAIN STORAGE BAGS THROUGHOUT A SUPPLYCHAIN	2022/09/16
2022/10283	A SYSTEM AND A METHOD FOR GRAIN STORAGE MANAGEMENT	2022/09/16
2022/10286	ABSORPTION AND PURIFICATION SYSTEM FOR DUST AND HARMFUL GAS OF TUNNEL CONSTRUCTION	2022/09/16
2022/10287	EXPLORATION METHOD OF PORPHYRY-EPIHYDROTHERMAL-SKARN METALLOGENIC SYSTEM IN COLLISION OROGENIC ENVIRONMENT	2022/09/16
2022/10288	COMPREHENSIVE EXPLORATION METHOD FOR GOLD DEPOSITS IN PLATEAU BEDROCK AREA	2022/09/16
2022/10289	COMPREHENSIVE EXPLORATION METHOD FOR POLYMETALLIC ORES IN PLATEAU LOESS COVERAGE	2022/09/16

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2022/10291	COMPREHENSIVE EXPLORATION METHOD FOR FLUORITE ORES IN SHALLOW COVERAGE AREAS	2022/09/16
2022/10292	PURPLE SWEET POTATO ICE CREAM POWDER WITH HIGH DIETARY FIBER AND APPLICATION THEREOF	2022/09/16
2022/10293	METHOD FOR CONSTRUCTING GREEN HEALTHY VEGETATION INDEX FOR REMOTE SENSING IDENTIFICATION	2022/09/16
2022/10387	WEEDING-SPRAYING MACHINE SET FOR STRIP COMPOUND PLANTING OF CORNS AND SOYBEANS	2022/09/20
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2022/10445	UNDISTURBED SOIL SAMPLER FOR GRASSLAND AREA	2022/09/21
2022/10489	DNA BARCODE FOR SCREENING FLOCCULARIA LUTEOVIRENS WITH HIGH TOTAL POLYSACCHARIDE CONTENT	2022/09/21
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2022/10820	A NOVEL CONVOLUTIONAL NEURAL NETWORK BASED CARRIER FREQUENCY OFFSET ESTIMATOR FOR MIMO OFDM IN 5G	2022/09/30
2022/10821	A SYSTEM FOR PREDICTING SUSPENDED SEDIMENT CONCENTRATION USING HYBRID APPROACH AND METHOD THEREOF	2022/09/30
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2022/10862	PREPARATION METHOD OF WATER-PERMEABLE AND OIL-RESISTANT CONCRETE	2022/10/03

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2022/10999	A DEVICE FOR DESIGNING AND ANALYZING DOUBLE GATE DUAL MATERIAL GATE GRAPHENE NANORIBBON VTFET	2022/10/07
2022/11000	SENSOR-INTEGRATED FUTSAL DRIBBLE TIMER	2022/10/07
2022/11092	AN IMPROVED SEEDER FOR PLANT ASH OF BIOMASS POWER GENERATION	2022/10/11
2022/11093	INTER-ROW TILLAGE WEEDING MACHINE	2022/10/11
2022/11094	MANAGEMENT SYSTEM OF CONTEMPORARY LITERARY WORKS	2022/10/11
2022/11207	LAYING DUCK FEED FOR IMPROVING FRESHNESS OF DUCK EGGS DURING STORAGE PERIOD AND REPRODUCTIVE PERFORMANCE OF LAYING DUCKS AND APPLICATION THEREOF	2022/10/13
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2022/11297	VEHICLE CONTROL CONVERSION SYSTEM	2022/10/14
2022/11336	DENDROBIUM OFFICINALE POLYSACCHARIDE WITH ANTI-TUMOR EFFECT, AND PREPARATION METHOD AND APPLICATION THEREOF	2022/10/17
2022/11366	ELECTRIC PRUNING SHEARS	2022/10/17
2022/11446	A STRUCTURAL DEVICE FOR INDUSTRIAL ROBOTS	2022/10/19
2022/11447	A METHOD FOR OBTAINING ADVENTITIOUS BUDS OF TETRAPLOID BLUMEA BALSAMIFERA (L.) DC.	2022/10/19
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2022/11578	STIRRING AND MIXING DEVICE FOR	2022/10/24

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2022/11671	COLD CHAIN LOGISTICS WISDOM DATA SYSTEM	2022/10/26
2022/11672	NONDESTRUCTIVE DETECTION SYSTEM FOR AGRICULTURAL PRODUCT FRUIT AND VEGETABLE BASED ON AI TECHNOLOGY	2022/10/26
2022/11673	A MATERIAL TO SOLIDIFY HEAVY METALS IN MUNICIPAL SOLID WASTE INCINERATION FLY ASH BASED ON NANO ALUMINA AND ITS PREPARATION METHOD	2022/10/26
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2022/11734	INTELLIGENT DISINFECTION ROBOT FOR PM2.5 MICROBIOLOGICAL AEROSOL	2022/10/27
2022/11775	A NON-UNIFORM ENHANCED FINNED THERMOELECTRIC GENERATOR BASED ON SEMICONDUCTOR CHARACTERISTICS OF THERMOELECTRIC MATERIAL	2022/10/28
2022/11827	NOVEL PUNCTURE AND DRAINAGE TUBE	2022/10/31
2022/11836	TWO-DIMENSIONAL ENGINE	2022/10/31
2022/11869	SGRNA COMPOSITION FOR PORCINE MYELIN BASIC PROTEIN (MBP) GENE KNOCKOUT AND USE THEREOF	2022/10/31
2022/11917	BIOCONTROL STRAIN LB-1 OF PLANT DISEASE AND METHOD FOR OBTAINING ANTIFUNGAL CRUDE EXTRACT THEREOF	2022/11/02
2022/11995	A METHOD, SYSTEM AND STORABLE MEDIUM FOR CYBER ATTACK ATTRIBUTION	2022/11/03
2022/11996	A METHOD, A SYSTEM AND A STORABLE MEDIUM FOR PRECISE COUNTERATTACK FOR CYBERSPACES IN BIG DATA ENVIRONMENT	2022/11/03
2022/12068	AN ISOMETRIC ATTENUATION INDEX SCALE FOR URBAN ECONOMIC CIRCLES	2022/11/04
2022/12069	A COMPOSITE THERMOELECTRIC GENERATOR WITH NON-UNIFORM FLOW RATE BASED ON THE TEMPERATURE DEPENDENCE OF THERMOELECTRIC MATERIAL	2022/11/04
2022/12071	PREPARATION METHOD OF	2022/11/04

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	COMPOUND TRADITIONAL CHINESE MEDICINE DAHUANG QINYU EFFERVESCENT TABLETS	
2022/12121	AN APPLICATION OF RNA CIRC_0000615 AS A MARKER IN THE PREPARATION OF CRC DETECTION KIT	2022/11/07
2022/12169	COMBINED MINING METHOD FOR TRANSITION SUBLEVELS AND BARRIER PILLARS FROM CAVING TO FILLING	2022/11/08
2022/12282	A DEFOGGING DEVICE FOR AUTOMOBILE FRONT WINDSHIELD	2022/11/10
2022/12329	METHOD FOR PREDICTING SHIPPING CAPACITY OF COMPETITORS, COMPUTER-READABLE MEDIUM	2022/11/11
2022/12331	A BLACK FUNGUS SEA SEDGE AND PROCESSING METHOD THEREOF	2022/11/11
2022/12336	BURIED DATA COLLECTION METHOD BASED ON SPARK AND FLUME	2022/11/11
2022/12383	ANTI-BLOCKING CONCEALED DRAINAGE STRUCTURE OF ROAD SUBGRADE	2022/11/14
2022/12385	A METHOD FOR JOINT RETRIEVAL OF ARCTIC SEA ICE SNOW DEPTH BY FIELD OBSERVATION AND SATELLITE REMOTE SENSING	2022/11/14
2022/12386	SPLICED CONCEALED DRAINAGE PIPELINE FOR SUBGRADE	2022/11/14
2022/12387	CASSAVA TRANSCRIPTION FACTORS MEBHLH72, MEBHLH114 AND THEIR APPLICATION IN LINAMARIN SYNTHESIS	2022/11/14

### DESIGNS

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**Number of Advertised Designs: 122**

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A2020/01074	Watch Case	2020/08/05
A2020/01386	VEHICLE MIRROR ASSEMBLY	2020/10/23
A2020/01387	VEHICLE MIRROR ASSEMBLY	2020/10/23
A2020/01466	COLUMN BASE OR CAPITAL	2020/11/11
A2021/00439	EGG CARTON	2021/04/23
A2021/00441	EGG CARTON	2021/04/23
A2021/00494	CONTROL CAR OF AN ELECTRIC	2021/05/12

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	MULTIPLE UNIT	
A2021/00867	KETTLE	2021/07/26
A2021/00868	KETTLE	2021/07/26
A2021/00869	COFFEE MAKER	2021/07/26
A2021/00870	POT	2021/07/26
A2021/00871	COFFEE MAKER	2021/07/26
A2021/00872	POT	2021/07/26
A2021/00873	TOASTER	2021/07/26
A2021/00874	TOASTER	2021/07/26
A2021/00890	INSECT TRAP	2021/07/27
A2021/00936	BLENDER	2021/08/03
A2021/00968	Logo	2021/08/16
A2021/01023	PANELS WITH SOLAR CELL BORDERS	2021/09/03
A2021/01024	PANELS WITH SOLAR CELL BORDERS	2021/09/03
A2021/01053	JOYSTICK MODULE FOR ELECTRONIC DEVICES	2021/09/09
A2021/01056	ENVIRONMENTAL SENSOR MODULE FOR ELECTRONIC DEVICES	2021/09/09
A2021/01160	REMOTELY PILOTED AIRCRAFTS	2021/09/23
A2021/01317	CAR	2021/10/22
A2021/01318	SCALE CAR MODEL	2021/10/22
A2021/01401	Elution Generator Canister Assembly	2021/11/10
A2021/01402	Elution Generator Canister Assembly	2021/11/10
A2022/00047	AEROSOL GENERATING DEVICE, IN PARTICULAR TOBACCO HEATING DEVICE	2022/01/17
A2022/00048	AEROSOL GENERATING DEVICE, IN PARTICULAR TOBACCO HEATING DEVICE	2022/01/17
A2022/00049	AEROSOL GENERATING DEVICE, IN PARTICULAR TOBACCO HEATING DEVICE	2022/01/17
A2022/00050	AEROSOL GENERATING DEVICE, IN PARTICULAR TOBACCO HEATING DEVICE	2022/01/17
A2022/00124	FOLDING EXERCISE STAND FRAME	2022/02/09
A2022/00129	Display Stand for Watches	2022/02/10
A2022/00177	BOTTLE	2022/02/21
A2022/00178	A LOADING-HAULING-DUMPING (LHD) MACHINE	2022/02/22
A2022/00179	A REAR COVER FOR A LOADING-HAULING-DUMPING (LHD) MACHINE	2022/02/22
A2022/00180	Automobile	2022/02/22
A2022/00181	Lighting Apparatus	2022/02/22
A2022/00182	Lighting Apparatus	2022/02/22
A2022/00183	A CAB FOR A LOADING-HAULING-DUMPING (LHD) MACHINE	2022/02/22
A2022/00186	Container	2022/02/23



Application Number	Design Articles	Filing Date
A2022/00187	Container	2022/02/23
A2022/00190	Shoe Midsole	2022/02/24
A2022/00209	Storage Container Seal	2022/02/28
A2022/00210	Storage Container Seal	2022/02/28
A2022/00211	Storage Container Seal	2022/02/28
A2022/00212	Storage Container Seal	2022/02/28
A2022/00216	PACKAGING FOR FOODSTUFFS	2022/02/28
A2022/00217	PACKAGING FOR FOODSTUFFS	2022/02/28
A2022/00218	PACKAGING FOR FOODSTUFFS	2022/02/28
A2022/00219	PACKAGING FOR FOODSTUFFS	2022/02/28
A2022/00220	PACKAGING FOR FOODSTUFFS	2022/02/28
A2022/00233	FENDER FLARES	2022/03/07
A2022/00235	FENDER FLARES	2022/03/07
A2022/00238	Hair Brush	2022/03/09
A2022/00239	Part of a Hair Brush	2022/03/09
A2022/00241	Track Shoe and Track Assembly for Tracked Vehicles	2022/03/10
A2022/00242	BOTTLES	2022/03/10
A2022/00243	BOTTLES	2022/03/10
A2022/00244	BOTTLES	2022/03/10
A2022/00251	Yaw Brake Disc Resurfacing Tool	2022/03/11
A2022/00254	PENDANT	2022/03/11
A2022/00256	PENDANT	2022/03/11
A2022/00260	CAMERAS	2022/03/14
A2022/00263	Tire for an Automobile	2022/03/15
A2022/00264	Tire for an Automobile	2022/03/15
A2022/00303	INHALER DEVICE	2022/03/24
A2022/00329	PENDANT	2022/03/30
A2022/00330	PENDANT	2022/03/30
A2022/00333	PENDANT	2022/03/30
A2022/00334	PENDANT	2022/03/30
A2022/00340	TEE FITTING	2022/03/31
A2022/00342	ELBOW FITTING	2022/03/31
A2022/00352	AEROSOL GENERATING DEVICE, IN PARTICULAR TOBACCO HEATING DEVICE	2022/04/05
A2022/00353	AEROSOL GENERATING DEVICE, IN PARTICULAR TOBACCO HEATING DEVICE	2022/04/05
A2022/00354	AEROSOL GENERATING DEVICE, IN PARTICULAR TOBACCO HEATING DEVICE	2022/04/05
A2022/00355	AEROSOL GENERATING DEVICE, IN PARTICULAR TOBACCO HEATING DEVICE	2022/04/05
A2022/00356	BUILDING TOWER	2022/04/05
A2022/00358	BRACELET DESIGN 3	2022/04/05
A2022/00359	BRACELET DESIGN 2	2022/04/05
A2022/00385	BRACELET	2022/04/11
A2022/00386	BRACELET	2022/04/11
A2022/00390	PACKAGAING	2022/04/12

Application Number	Design Articles	Filing Date
A2022/00392	PACKAGAING	2022/04/12
A2022/00397	ALARM ACTIVATION INDICATOR	2022/04/13
A2022/00405	NURSING SCREEN	2022/04/19
A2022/00438	CHAIR	2022/04/25
A2022/00485	AIR PURIFIER	2022/05/09
A2022/00488	AIR PURIFIER	2022/05/09
A2022/00606	UNIQUE DESIGN	2022/05/31
F2016/01920	FOOD PROCESSING EQUIPMENT	2016/12/14
F2021/00241	RACKET	2021/03/08
F2021/00754	CONNECTOR FOR A MEDICAL DEVICE	2021/06/25
F2021/00784	PLANT-GROWING POT	2021/07/01
F2021/00930	HEATING DEVICE	2021/08/02
F2021/01011	PRONE POSITIONING ASSISTANCE DEVICES	2021/08/30
F2021/01161	REMOTELY PILOTED AIRCRAFTS	2021/09/23
F2021/01225	BARRICADE SYSTEM	2021/10/06
F2021/01305	BRACKET	2021/10/18
F2022/00090	ANTENNA ASSEMBLY	2022/01/31
F2022/00091	UNIT CELL OF METAMATERIAL BODY FOR ANTENNA	2022/01/31
F2022/00109	Connectors	2022/02/01
F2022/00213	Header Board	2022/02/28
F2022/00215	Header Board	2022/02/28
F2022/00221	MOUNTING DEVICE FOR A SHOCK ABSORBER FOR A VEHICLE	2022/02/28
F2022/00240	Track Shoe for Tracked Vehicle	2022/03/10
F2022/00257	PENDANT	2022/03/11
F2022/00258	PENDANT	2022/03/11
F2022/00265	GAME PLAYING FIELDS	2022/03/16
F2022/00271	PRESSURE SPREADING DEVICE	2022/03/16
F2022/00272	PRESSURE SPREADING DEVICE	2022/03/16
F2022/00304	INHALER DEVICE	2022/03/24
F2022/00305	ARMOURED WINDOW	2022/03/25
F2022/00331	PENDANT	2022/03/30
F2022/00332	PENDANT	2022/03/30
F2022/00335	PENDANT	2022/03/30
F2022/00336	PENDANT	2022/03/30
F2022/00341	TEE FITTING	2022/03/31
F2022/00343	ELBOW FITTING	2022/03/31
F2022/00428	Screw Conveyors	2022/04/21
F2022/00429	Screw Conveyors	2022/04/21
F2022/00439	CHAIR	2022/04/25

## OFFICE PRACTISE NOTICES

**NOTICE****COMPANIES AND INTELLECTUAL PROPERTY COMMISSION (CIPC)**

Taking into consideration that CIPC official office days are Mondays to Fridays and does not include week-ends or public holidays, notice is hereby given in terms of and for purposes of the Acts mentioned in the Schedule below, that CIPC will be closed to the public from **10h00 on Friday 23 December 2022 up to and including Monday 2 January 2023**.

The CIPC Offices at –

- a) the Department of Trade, Industry and Competition (the dtic) (77 Meintjies Street, Block F – Entfutfukweni) in Sunnyside, Pretoria;
- b) 1<sup>st</sup> floor, Office 103, Sancaradia Building, 541 Madiba Street, Arcadia, Pretoria;
- c) Talis House, No 17 Simmonds street, Cnr Main and Simmonds street, Marshalltown, Johannesburg;
- d) Norton Rose House No 8, Shop Number 3, Riebeeck Street, Thibault Square, Cape Town; and
- e) (CIPC officials) at Trade and Investment KwaZulu Natal (TIKZN) situated at 1 Arundel Close, Kingsmead Office Park, Kingsmead Boulevard, Stalwart Simelane Street in Durban, will re-open at 08h00 on Tuesday 3 January 2023.

The lodgment of documents and services of legal documents will be accepted on Thursday 22 December 2022 until 15h30.

The days from Friday 23 December 2022 up to and including Monday 2 January 2023 will be regarded as *dies non* for purposes of the stated Acts.

CIPC offers different lodgment / filing methods for certain services to its customers. During this period, services processed by automated means will continue to be processed while those services which require back-office intervention / finalisation e.g. services which require scanned documents to be e-mailed to dedicated e-mail addresses or uploaded via electronic platforms e.g. New E-Services, will only resume from Tuesday 3 January 2023.

Please also take note that with regards to name reservations, all reserved names that would have lapsed between Friday 23 December 2022 up to and including Monday 2 January 2023, will now have their reservation dates moved forward to Tuesday 3 January 2023 and will, therefore, only elapse on that date.

**SCHEDULE**

Trade Marks Act, 1993  
Patents Act, 1978  
Design Act, 1993  
Copyright Act, 1978  
Companies Act, 2008  
Close Corporations Act, 1984  
Co-operatives Act, 2005  
Registration of Copyright in Cinematograph Film Act, 1977

Kind regards.



Rory Voller  
30/09/2022 07:47:13(UTC+02:00)  
Signed by Rory Voller,  
RVoller@cipc.co.za

SIGNFLOW.COM

**Rory Voller**  
**Commissioner: CIPC**