

PATENT JOURNAL

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APRIL 2023

VOL 56 • No. 04



Companies and Intellectual
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Part II of II

ISSUED MONTHLY

DATE OF ISSUE: 26 APRIL 2023

ISSN 2223-4837

PATENT JOURNAL

INCLUDING TRADE MARKS, DESIGNS AND
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VOL. 56 No. 04

Date of Issue: 26 APRIL 2023

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The Designs Act, 1993

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2. PATENTS

PATENTS**APPLICATIONS FOR PATENTS**

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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 2023/03/27 -

2023/03842 ~ Complete ~54:A METHOD FOR ANALYZING ADOPTION INTENTION OF E-BOOK USAGE AMONG STUDENTS DURING COVID-19 ~71:Dr. Dhriti Das, Assistant Professor, Department of M.Com, Gauhati Commerce College, R.G. Baruah Road, Guwahati, Assam, 781021, India;Dr. Kaberi Bezbarua, Assistant Professor, Department of Accountancy, Gauhati Commerce College, R.G.Baruah Road, Guwahati, Assam, 781021, India;Dr. Mayuri Sarma, Associate Professor, Department of Accountancy, Gauhati Commerce College, R.G.Baruah Road, Guwahati, Assam, 781021, India;Dr. Samrat Bharadwaj, Assistant Professor, Department of Commerce, Digboi College, Itavata, Digboi, Assam, 786171, India;Dr. Sumadhur Roy, Assistant Professor, Department of Business Management, Gauhati Commerce College, Guwahati, Assam, 781021, India;Susmita Deka, Administrative Assistant Cum Accountant, Indian Institute of Technology, Guwahati, Amingaoan, Kamrup, Assam, 781038, India ~72: Dr. Dhriti Das;Dr. Kaberi Bezbarua;Dr. Mayuri Sarma;Dr. Samrat Bharadwaj;Dr. Sumadhur Roy;Susmita Deka~

2023/03856 ~ Complete ~54:AUDIO SAMPLING CLOCK SYNCHRONIZATION ~71:THAT CORPORATION, 45 Sumner Street, Milford, United States of America ~72: BARNHILL, Matthew, S.;DARR, Roger, R;EASLEY, Matthew~ 33:US ~31:63/126,563 ~32:17/12/2020

2023/03865 ~ Complete ~54:5- AND 6-AZAINDOLE COMPOUNDS FOR INHIBITION OF BCR-ABL TYROSINE KINASES ~71:EnLive Therapeutics, Inc., 6200 Lookout Road, Floor 1, BOULDER 80301-3319, CO, USA, United States of America ~72: KINTZ, Samuel;LYSSIKATOS, Joseph P.;REN, Li~ 33:US ~31:63/087,763 ~32:05/10/2020;33:US ~31:63/224,236 ~32:21/07/2021

2023/03876 ~ Complete ~54:STARCH-BASED AQUEOUS ADHESIVE COMPOSITION ~71:BOSTIK SA, 420, rue d'Estienne d'Orves, 92700, Colombes, France ~72: FRANK BÜTERÖWE~ 33:EP ~31:20306198.1 ~32:12/10/2020

2023/03882 ~ Provisional ~54:PAIN RELIEF GEL ~71:Jacobus Johannes Du Plessis, 16 Homeria street, South Africa ~72: JACOBUS JOHANNES DU PLESSIS~

2023/03841 ~ Complete ~54:APPLICATION OF HBO1 AND ITS INHIBITOR IN PREPARING DRUGS FOR TREATING CASTRATION-RESISTANT PROSTATE CANCER ~71:THE FIRST PEOPLE'S HOSPITAL OF HANGZHOU LIN'AN DISTRICT, No. 548, Yijin Street, Jincheng Street, Lin'an District, Hangzhou City, Zhejiang Province, People's Republic of China ~72: LIU Qing;MIN Zhichao;XU Lin;ZHAN Hongwei~ 33:CN ~31:2022114409920 ~32:17/11/2022

2023/03845 ~ Complete ~54:ENRICHED A-KID FOR AKMA AUTHENTICATION SERVICE ~71:NOKIA TECHNOLOGIES OY, KARAKAARI 7, 02610 ESPOO, FINLAND, Finland ~72: KHARE, Saurabh;NATARAJAN, Rajesh, Babu~ 33:IN ~31:202241018484 ~32:29/03/2022

2023/03859 ~ Complete ~54:BOLTER ~71:JOY GLOBAL UNDERGROUND MINING LLC, 40 Pennwood Place, Suite 100, United States of America ~72: FOURIE, Willem;GEORGIOU, Michael;LUO, Xuanwen;SUBASCHANDRAN, Vijayanath;WILLAMAN, Patrick, Ross~ 33:US ~31:63/086,392 ~32:01/10/2020

2023/03861 ~ Complete ~54:REPULSION BASED ROTATIONAL SYSTEM ~71:DABHADKAR, Yogiraj Narayanrao, Flat No. 303, 2c, Rajyog Co. Operative Housing Society, Near Lokhandwala Circle, Andheri (west), India ~72: DABHADKAR, Yogiraj Narayanrao~ 33:IN ~31:202021036895 ~32:27/08/2020

2023/03864 ~ Complete ~54:MICROBIOME SIGNATURE FOR THE CHARACTERIZATION OF SKIN TYPES ~71:Givaudan SA, Chemin de la Parfumerie 5, VERNIER 1214, SWITZERLAND, Switzerland ~72: JARRIN, Cyrille;VILANOVA, David;ZANCHETTA, Catherine~ 33:GB ~31:2016237.6 ~32:13/10/2020

2023/03868 ~ Complete ~54:DEVICE AND METHOD FOR APPLYING PHOTOBIO-MODULATION ~71:G Life, 117 rue des Bouleaux, THOIRY 01710, FRANCE, France ~72: BONNEAU, Michel;GERELLI, Emmanuel;GERELLI, Sébastien;JONIOVA, Jaroslava;WAGNIÈRES, Georges~ 33:EP ~31:20199710.3 ~32:01/10/2020;33:IB ~31:2021/059842 ~32:15/04/2021

2023/03844 ~ Complete ~54:APPLICATION OF FKBP11 PROTEIN OR CODING GENE IN PREPARING MEDICINES FOR TREATING LARYNGEAL SQUAMOUS CELL CARCINOMA ~71:WUXI NO. 2 PEOPLE'S HOSPITAL, No. 68 Zhongshan Road, Liangxi District, Wuxi City, People's Republic of China ~72: YANG Jiechao~ 33:CN ~31:202211539730X ~32:02/12/2022

2023/03847 ~ Complete ~54:RISK ASSESSMENT AND MANAGEMENT SYSTEM OF PERSONS AND ASSETS ~71:Dexter Slabbert, Unit 2, Victory Mews, 44 Commercial Road, South Africa ~72: Dexter Slabbert~

2023/03850 ~ Complete ~54:PEPTIDE FORMULATIONS AND METHODS OF USE ~71:REALTA LIFE SCIENCES, INC., 5665 Lowery Road #100, United States of America ~72: CUNNION, Kenji;KRISHNA, Neel K.~ 33:US ~31:63/111,367 ~32:09/11/2020

2023/03853 ~ Complete ~54:IMMUNO ONCOLOGY COMBINATION THERAPY WITH IL-2 CONJUGATES AND PEMBROLIZUMAB ~71:SYNTHORX, INC., 11099 North Torrey Pines Road, Suite 190, United States of America ~72: CAFFARO, Carolina, E.;LEVEQUE, Joseph;MILLA, Marcos;PTACIN, Jerod;SHAWVER, Laura~ 33:US ~31:63/090,033 ~32:09/10/2020;33:US ~31:63/158,669 ~32:09/03/2021;33:US ~31:63/173,114 ~32:09/04/2021

2023/03857 ~ Complete ~54:COMPOSITIONS ISOLATED FROM DATE PALM TREE ~71:The State Of Israel, Ministry Of Agriculture & Rural Development, Agricultural Research Organization (ARO) (Volcani Institute), Volcani Center, P.O. Box 15159, Israel ~72: KOLTAL, Hinanit;NAMDAR, Dvora~ 33:US ~31:63/072,969 ~32:01/09/2020;33:US ~31:63/221,099 ~32:13/07/2021

2023/03866 ~ Complete ~54:PROCESS FOR RACEMIZING AND ISOLATING ATROPISOMERS OF 7-CHLORO-6-FLUORO-1-(2-ISOPROPYL-4-METHYLPYRIDIN-3-YL)PYRIDO[2,3-D]PYRIMIDINE-2,4(1H,3H)-DIONE ~71:Amgen Inc., One Amgen Center Drive, THOUSAND OAKS 91320-1799, CA, USA, United States of America ~72: BEAVER, Matthew G.;CORBETT, Michael T.;FANG, Yuanqing;FORD, David D.;PARSONS, Andrew T.;ST-PIERRE, Gabrielle;TELMESANI, Reem~ 33:US ~31:63/088,848 ~32:07/10/2020;33:US ~31:63/162,278 ~32:17/03/2021

2023/03869 ~ Complete ~54:HBI SLOW COOLING SYSTEM AND METHOD ~71:Midrex Technologies, Inc., 3735 Glen Lake Drive, Suite 400, CHARLOTTE 28208, NC, USA, United States of America ~72: LEWIS, James Lloyd;ORLEANS, Lemuel;VOELKER, Brian~ 33:US ~31:63/092,015 ~32:15/10/2020;33:US ~31:17/500,427 ~32:13/10/2021

2023/03870 ~ Complete ~54:COLOURING COMPOSITION FOR FOOD PRODUCTS ~71:Givaudan SA, Chemin de la Parfumerie 5, VERNIER 1214, SWITZERLAND, Switzerland ~72: BIRTIC, Simona;HEUDRE, Mélanie Marie-Paule Patricia;LAURENCON, Lise~ 33:GB ~31:2016984.3 ~32:26/10/2020

2023/03877 ~ Complete ~54:ARRANGEMENT OF CONTROLLING DRILLING PARAMETERS DURING EXTRACTION OF A DRILL STRING ~71:EPIROC ROCK DRILLS AKTIEBOLAG, 701 91 Örebro, Sweden ~72: GUSTAV MÖRTZELL;MAGNUS OLSSON~ 33:SE ~31:2051380-0 ~32:27/11/2020

2023/03878 ~ Complete ~54:CLEANSING COMPOSITIONS COMPRISING A FATTY ACID AND SOAP MIXTURE AND METHOD FOR MAKING A CLEANSING BAR COMPRISING SAID MIXTURE ~71:UNILEVER GLOBAL IP LIMITED, Port Sunlight, Wirral, Merseyside, CH62 4ZD, United Kingdom ~72: ELIZABETH JOY SPENCER;MICHAEL GERARD CLARKE;TERENCE JAMES FARRELL~ 33:EP ~31:20206522.3 ~32:09/11/2020

2023/03840 ~ Provisional ~54:PYLON PROTECTION ~71:COCHRANE STEEL PRODUCTS (PTY) LTD, 125 FITTER ROAD, SPARTAN, South Africa ~72: TBA~

2023/03846 ~ Complete ~54:RAPID TEMPERATURE-RISING ELECTRIC BLANKET HEATING PROTECTION CIRCUIT ~71:XUZHOU COLLEGE OF INDUSTRIAL TECHNOLOGY, 1 Xiangwang Road, Gulou District, Xuzhou City, Jiangsu Province, 221000, People's Republic of China ~72: ZHOU Tianpei~ 33:CN ~31:2023201882070 ~32:10/02/2023

2023/03848 ~ Complete ~54:CHILD-RESISTANT CONTAINER FOR TOBACCO-CONTAINING PRODUCTS ~71:NICOVENTURES TRADING LIMITED, Globe House, 1 Water Street, United Kingdom ~72: BAILEY, Ryan;GIDUZ, Luke;LAUT, Michael;PATEL, Pankaj;WATSON, Nicholas H.~ 33:US ~31:17/012,908 ~32:04/09/2020;33:US ~31:17/464,979 ~32:02/09/2021

2023/03852 ~ Complete ~54:FIRST NETWORK NODE, SECOND NETWORK NODE AND METHODS IN A WIRELESS COMMUNICATIONS NETWORK ~71:TELEFONAKTIEBOLAGET LM ERICSSON (PUBL), 164 83, Sweden ~72: LYAZIDI, Yazid;QIU, Liwei;SHI, Nianshan;VESELY, Alexander~ 33:CN ~31:PCT/CN2020/122642 ~32:22/10/2020

2023/03855 ~ Complete ~54:3-[(1H-PYRAZOL-4-YL)OXY]PYRAZIN-2-AMINE COMPOUNDS AS HPK1 INHIBITOR AND USE THEREOF ~71:BEIGENE, LTD, c/o Mourant Governance Services (Cayman) Limited, 94 Solaris Avenue, Cayman Islands ~72: LI, Jing;WANG, Zhiwei;XU, Sanjia~ 33:CN ~31:PCT/CN2020/119171 ~32:30/09/2020;33:CN ~31:PCT/CN2020/135968 ~32:11/12/2020;33:CN ~31:PCT/CN2021/076993 ~32:20/02/2021;33:CN ~31:PCT/CN2021/113967 ~32:23/08/2021

2023/03858 ~ Complete ~54:BOLTER ~71:JOY GLOBAL UNDERGROUND MINING LLC, 40 Pennwood Place, Suite 100, United States of America ~72: BROAD, Greg;GEORGIOU, Michael;SAELER, Kevin;WILLAMAN, Patrick Ross~ 33:US ~31:63/086,392 ~32:01/10/2020

2023/03862 ~ Complete ~54:CLINICAL SUPPLY PACKS WITH ELECTRONIC LABELING ~71:Janssen Pharmaceutica NV, Turnhoutseweg 30, BEERSE 2340, BELGIUM, Belgium ~72: JACOBS, Karl;LAUWERS, Roger~ 33:US ~31:63/071,794 ~32:28/08/2020

2023/03867 ~ Complete ~54:SYSTEM AND METHOD FOR PROVIDING GRID-FORMING CONTROL OF AN INVERTER-BASED RESOURCE ~71:General Electric Company, 1 River Road, SCHENECTADY 12345, NY, USA, United States of America ~72: HOWARD, Dustin;LARSEN, Einar Vaughn~ 33:US ~31:17/024,748 ~32:18/09/2020

2023/03871 ~ Complete ~54:FIBRE OPTIC SENSING METHOD AND SYSTEM FOR GENERATING A DYNAMIC DIGITAL REPRESENTATION OF OBJECTS AND EVENTS IN AN AREA ~71:Fiber Sense Limited, 1a/1110 Middle Head Road, MOSMAN 2088, NSW, AUSTRALIA, Australia ~72: ENGLUND, Mark Andrew~ 33:AU ~31:2020903494 ~32:28/09/2020

2023/03875 ~ Complete ~54:A ZINC FORTIFIED TEA COMPOSITION ~71:EKATERRA RESEARCH AND DEVELOPMENT UK LIMITED, 100 Victoria Embankment, London EC4Y 0DY, United Kingdom ~72: BALAMURUGAN VELUSAMY;DEEPAK RAMACHANDRA MHASAVADE;SWATHY PALAGIRI;VETRI KUMARAN~ 33:IN ~31:202021043961 ~32:08/10/2020;33:EP ~31:20208854.8 ~32:20/11/2020

2023/03874 ~ Complete ~54:SYSTEM AND METHOD FOR LIVE PARI-MUTUEL WAGERING ON MULTIPLE PAST EVENTS ~71:EXACTA SYSTEMS, LLC, 1123 Gateway Blvd., Boynton Beach, Florida, 33426, United States of America ~72: GLEN M ROSE;JEFFERSON C LIND;JEREMY F STEIN;JOSEPH R ENZMINGER;KATHERINE M PAISLEY;NIMAI MALLE;PATRICK NEELY~ 33:US ~31:63/083,459 ~32:25/09/2020

2023/03879 ~ Complete ~54:ANTIMICROBIAL BIODEGRADABLE COMPOSITIONS FOR FOOD CONTACT ARTICLES ~71:MEREDIAN, INC., 140 Industrial Boulevard, Bainbridge, Georgia, 39817, United States of America ~72: CAROL G LEGGETT;PHILLIP VAN TRUMP;RUSSELL MULLINS;THOMAS K. III LEGGETT~ 33:US ~31:63/068,401 ~32:21/08/2020

2023/03872 ~ Complete ~54:HIGH DOSE SHIGELLA VACCINE PREPARATION ~71:EVELIQUE BIOTECHNOLOGIES GMBH, Karl-Farkas-Gasse 22, 1030, Wien, Austria ~72: ESZTER NAGY;GÁBOR NAGY;IRENE NEUHAUSER;PETRA GIRARDI;SHUSHAN HARUTYUNYAN;TAMÁS HENICS;VALERIA SZIJARTO~ 33:EP ~31:20201844.6 ~32:14/10/2020

2023/03880 ~ Complete ~54:METHODS OF DIAGNOSING TUBERCULOSIS AND DIFFERENTIATING BETWEEN ACTIVE AND LATENT TUBERCULOSIS ~71:CEPHEID, 904 Caribbean Drive, United States of America ~72: NYGREN, Malin~ 33:US ~31:63/088,077 ~32:06/10/2020;33:US ~31:63/104,187 ~32:22/10/2020

2023/03843 ~ Complete ~54:A TEST DEVICE FOR COMPREHENSIVE SIMULATION OF TUNNEL STATE ~71:China Railway Xi'an Survey, Design and Research Institute Co. , Ltd, of CREC, No.30 Youyi East Road, Xi'an City, Shaanxi Province, 710054, People's Republic of China;Xi'an University of Architecture and Technology, No. 13, Middle Yanta Road, Beilin District, Xi'an City, Shaanxi Province, 710055, People's Republic of China;Xi'an University of Technology, No.5 Jinhua South Road, Xi'an City, Shaanxi Province, 710048, People's Republic of China ~72: Guoqiang LIN;Lei WANG;Rongjian LI;Rongjin LI;Shibin ZHANG;Weishi BAI;Xin ZOU~

2023/03849 ~ Complete ~54:PEPTIDES AND METHODS OF USE ~71:REALTA LIFE SCIENCES, INC., 5665 Lowery Road #100, United States of America ~72: CUNNION, Kenji;KRISHNA, Neel K.~ 33:US ~31:63/108,732 ~32:02/11/2020

2023/03851 ~ Complete ~54:METHODS AND SYSTEMS FOR APNT POSITIONING AND INTEGRITY MONITORING IN AVIATION NAVIGATION NETWORK ~71:BEIJING UNIVERSITY OF AERONAUTICS AND ASTRONAUTICS, 37 College Road, Haidian District, Beijing, 100191, People's Republic of China ~72: FANG, Kun;HUANG, Siqi;WANG, Zhipeng;ZHU, Yanbo~

2023/03854 ~ Complete ~54:IMMUNO ONCOLOGY THERAPIES WITH IL-2 CONJUGATES ~71:SYNTHORX, INC., 11099 North Torrey Pines Road, Suite 190, United States of America ~72: CAFFARO, Carolina, E.;LEVEQUE, Joseph;MILLA, Marcos;PTACIN, Jerod;SHAWVER, Laura~ 33:US ~31:63/090,005 ~32:09/10/2020;33:US ~31:63/158,672 ~32:09/03/2021;33:US ~31:63/173,130 ~32:09/04/2021

2023/03860 ~ Complete ~54:ISOTHERMAL NUCLEIC ACID AMPLIFICATION METHODS FOR POINT-OF-NEED DIAGNOSIS ~71:MIDGE MEDICAL GMBH, Colditzstrasse 34/36, 16A, Germany ~72: Anke KURRECK;Manfred WEIDMANN;Markus RIESTER;Michael DIEBOLD;Ulf THIELE~ 33:EP ~31:20201885.9 ~32:14/10/2020;33:EP ~31:20204790.8 ~32:29/10/2020;33:EP ~31:20206553.8 ~32:09/11/2020

2023/03863 ~ Complete ~54:NEW COMPOUNDS AND THEIR USE AS THERAPEUTICALLY ACTIVE SUBSTANCES IN THE TREATMENT AND/OR PREVENTION OF DISEASES INVOLVING THE RETINAL PIGMENT EPITHELIUM ~71:endogena therapeutics, inc., 111 Pine Street, SAN FRANCISCO 94111, CA, USA, United States of America ~72: MARIGO, Mauro;MUELLER, Alex;STEGER, Matthias~ 33:US ~31:17/065,795 ~32:08/10/2020

2023/03873 ~ Complete ~54:PYRROLO[3,2-C]PYRIDIN-4-ONE DERIVATIVES USEFUL IN THE TREATMENT OF CANCER ~71:SCORPION THERAPEUTICS, INC., One Winthrop Square, Suite 400, Boston, Massachusetts, 02110, United States of America ~72: ANGEL GUZMAN-PEREZ;BENJAMIN C MILGRAM;JR. DAVID ST. JEAN;RYAN D WHITE~ 33:US ~31:63/082,324 ~32:23/09/2020;33:US ~31:63/092,970 ~32:16/10/2020

2023/03881 ~ Complete ~54:SEQUENCING TEMPLATES COMPRISING MULTIPLE INSERTS AND COMPOSITIONS AND METHODS FOR IMPROVING SEQUENCING THROUGHPUT ~71:ILLUMINA CAMBRIDGE LIMITED, 19 Granta Park, Great Abington, United Kingdom;ILLUMINA, INC., 5200 Illumina Way, United States of America ~72: BOUTELL, Jonathan Mark;GORMLEY, Niall Anthony;KHURANA, Tarun;WU, Yir-Shyuan~ 33:US ~31:63/094,422 ~32:21/10/2020;33:US ~31:63/256,040 ~32:15/10/2021

2023/03973 ~ Provisional ~54:FAECAL SLUDGE CONTROL & PROCESSING SYSTEM ~71:Applied Technologies 2020 (PTY) Ltd, 47 Ferero Avenue Randpark Ridge, South Africa ~72: Battista Errera;Edward Keyrouz;Mthuthuzeli Zamxaka~

- APPLIED ON 2023/03/28 -

2023/03884 ~ Provisional ~54:METER READER ~71:Phumo Maduna, 57 Calomel Street, South Africa ~72: Phumo Maduna~ 33:ZA ~31:ZA202300001 ~32:27/03/2023

2023/03887 ~ Complete ~54:METHOD FOR PROMOTING GERMINATION OF AKEBIA TRIFOLIATA SUBSP.AUSTRALIS SEEDS AND METHOD FOR PROMOTING GROWTH OF SEEDLINGS OF AKEBIA TRIFOLIATA SUBSP.AUSTRALIS ~71:Huaihua University, 180 Huaidong Road, Hecheng District, Huaihua, Hunan, 418099, People's Republic of China ~72: HUANG, Hui;SONG, Songquan;WU, Xianjin;YU, Shuangni~ 33:CN ~31:2022106765016 ~32:15/06/2022

2023/03889 ~ Complete ~54:FLEXIBLE SELF-POWDERED HUMIDITY SENSOR AND PREPARATION METHOD THEREFOR ~71:Xinyu University, No. 2666, Yangguang Avenue, High-tech Zone, Xinyu City, Jiangxi Province, 338004, People's Republic of China ~72: FU, Haiyan;HUANG, Ping;LIU, Chen;LUO, Yongping;OU, Hui;XIAO, Zonghu;XU, Shunjian;ZHONG, Wei~ 33:CN ~31:2022107850482 ~32:05/07/2022

2023/03903 ~ Complete ~54:ANTISENSE OLIGONUCLEOTIDES TARGETING THE EXON 51 OF DYSTROPHIN GENE ~71:BIOMARIN TECHNOLOGIES B.V., Barbara Strozziilaan 201, 1083 HN Amsterdam, Netherlands ~72: JUDITH CHRISTINA THEODORA VAN DEUTEKOM;PETER CHRISTIAN DE VISSER~ 33:US ~31:63/085,668 ~32:30/09/2020

2023/03907 ~ Complete ~54:KEY DERIVATION METHOD ~71:nChain Licensing AG, Grafenauweg 6, ZUG 6300, SWITZERLAND, Switzerland ~72: PAGANI, Alessio;PETTIT, Michaela;TARTAN, Chloe;ZHANG, Wei~ 33:GB ~31:2017904.0 ~32:13/11/2020

2023/03899 ~ Complete ~54:DEVICE FOR RAPIDLY TRANSFERRING REAR SUPPORTING TROLLEY OF SHIELD MACHINE IN TUNNEL AND MANUFACTURING METHOD THEREFOR ~71:CHINA RAILWAY FIRST GROUP CO., LTD., No. 1 Yanta North Road, Beilin District, Xi'an, Shaanxi Province, 710000, People's Republic of China;TRACK TRAFFIC ENGINEERING CO., LTD. OF CHINA RAILWAY NO. 1 GROUP, No. 50-6, Shanhe Road, Anzhen Sub-district, Xishan District, Wuxi, Jiangsu Province, 214000, People's Republic of China ~72: HE, Xiaodong;HU, Kui;LI, Zhanwei;LIU, Jianwei;LIU, Yongqiang;MAO, Zhixin;WU, Jincheng;YANG, Qian;ZHANG, Xiaoning;ZHANG, Yubao~ 33:CN ~31:2023100064712 ~32:04/01/2023

2023/03910 ~ Complete ~54:METHODS FOR REDUCING HOST CELL PROTEIN CONTENT IN ANTIBODY PURIFICATION PROCESSES AND ANTIBODY COMPOSITIONS HAVING REDUCED HOST CELL PROTEIN CONTENT ~71:Eli Lilly and Company, Lilly Corporate Center, INDIANAPOLIS 46285, IN, USA, United States of America ~72: BOWES, Brian David;HUANG, Lihua;KREBS, Lara Ellen;PLICHTA, Steven A.;RICHER, Sarah M.~ 33:US ~31:63/086,915 ~32:02/10/2020

2023/03913 ~ Complete ~54:PYRIMIDINE CARBOXAMIDE COMPOUND AND APPLICATION THEREOF ~71:SHANGHAI MEIYUE BIOTECH DEVELOPMENT CO., LTD., 3333 Shenjiang Road, Building 1, Floor 5, Block A, People's Republic of China ~72: CHEN, Yongkai;LUAN, Linbo;WANG, Chaodong;YAO, Yuanshan;YE, Guozhong~ 33:CN ~31:202011020721.0 ~32:25/09/2020;33:CN ~31:202111095465.6 ~32:17/09/2021

2023/03893 ~ Complete ~54:METHOD FOR TOP SEALING A CARDBOARD TRAY LINED WITH A PLASTIC FOIL AND CARDBOARD TRAY THEREFOR ~71:PACKABLE B.V., Slachthuisakade 40, 7602 CV Almelo, Netherlands ~72: RONALD ZWAGA~ 33:EP ~31:20152305.7 ~32:16/01/2020

2023/03900 ~ Complete ~54:METHODS FOR ENHANCED BIOLOGICAL PHOSPHORUS REMOVAL ~71:HIAS HOW2O AS, Sandvikavegen 136, Norway ~72: EIKÅS, Sondre;SØRENSEN, Gjermund;SALTNES, Torgeir~ 33:GB ~31:2015889.5 ~32:07/10/2020

2023/03905 ~ Complete ~54:PLASTIC CONTAINER AND METHOD FOR DETERMINING A PROPERTY OF A PLASTIC CONTAINER ~71:ALPLA WERKE ALWIN LEHNER GMBH & CO. KG, Allmendstrasse 81, 6971, Hard, Austria ~72: CHRISTIAN ZMÖLNIG;THOMAS BOHLE~ 33:CH ~31:01192/20 ~32:21/09/2020

2023/03909 ~ Complete ~54:GROOVED SIDE LINER FOR CENTRIFUGAL PUMP ~71:Weir Minerals Australia Ltd, 1 Marden Street, SYDNEY 2064, NEW SOUTH WALES, AUSTRALIA, Australia ~72: CALMA, Cesar;GLAVES, Garry~ 33:AU ~31:2020903927 ~32:29/10/2020

2023/03888 ~ Complete ~54:PLANT SEED PRIMER, PREPARATION METHOD AND APPLICATION ~71:Huaihua University, 180 Huaidong Road, Hecheng District, Huaihua, Hunan, 418099, People's Republic of China ~72: HU, Xiangwei;HUANG, Hui;WU, Xianjin~ 33:CN ~31:2022114708903 ~32:23/11/2022

2023/03894 ~ Complete ~54:MICROWAVE HEATING SYSTEM WITH SUPPRESSION TUNNEL AND RELATED FEATURES ~71:A.L.M. Holding Company, 920 10th Avenue North, ONALASKA 54650, WI, USA, United States of America ~72: BYRNES, Michael R.;FREDERIXON, Drew J.;HEGG, Vernon R.;HEHIR, Jacob G.;JAEGER, Kenneth D.;REINKE, Gerald H.~ 33:US ~31:62/869,305 ~32:01/07/2019

2023/03901 ~ Complete ~54:INTERLEUKIN-2-FC FUSION PROTEINS AND METHODS OF USE ~71:GILEAD SCIENCES, INC., 333 Lakeside Drive, Foster City, United States of America ~72: BACA, MANUEL;GILMORE, SARAH A.;HUNG, MAGDELEINE S.;JAVANBAKHT, HASSAN;KANWAR, MANU;KHAN,

SHAHZADA;MUKHERJEE, PRASENJIT K.;NAGEL, MARK R.;PAPALIA, GIUSEPPE;TAM, DANNY W.;THOMAS, MAJLINDA K.~ 33:US ~31:63/104,376 ~32:20/10/2020;33:US ~31:63/181,075 ~32:28/04/2021

2023/03906 ~ Complete ~54:LIQUID-STATE PHARMACEUTICAL COMPOSITION EXHIBITING EXCELLENT PRESERVATIVE EFFECTIVENESS ~71:ISHIHARA SANGYO KAISHA, LTD., 3-15, Edobori 1-chome, Nishi-ku, Osaka-shi, Osaka, 5500002, Japan ~72: TAKESHI SHINDO~ 33:JP ~31:2020-164034 ~32:29/09/2020

2023/03937 ~ Complete ~54:DEVICE FOR SEPARATING CO₂ FROM AMBIENT AIR AND ABSORBING CONCENTRATED CO₂ ~71:FREIHERR VON UND ZU WEILER, Jorg, 1 Unter den Eichen, Germany;KUSE, Kolja, 175a Oberfohringer Street, Germany;PETRASCH, Phillip, 4 Locanda Gaon di Sopra, Italy ~72: FREIHERR VON UND ZU WEILER, Jorg;PETRASCH, Phillip~ 33:DE ~31:DE 202020003779.6 ~32:06/09/2020

2023/03892 ~ Complete ~54:COMPOSITIONS COMPRISING CYTISINE IN THE TREATMENT AND/OR PREVENTION OF ADDICTION IN SUBJECTS IN NEED THEREOF ~71:ACHIEVE LIFE SCIENCES, INC., 520 Pike Street, Suite 2250, Seattle, Washington, 98101, United States of America ~72: ANTHONY CLARKE;CINDY A JACOBS;DANIEL F CAIN~ 33:US ~31:62/899,637 ~32:12/09/2019;33:US ~31:62/988,890 ~32:12/03/2020

2023/03912 ~ Complete ~54:SMART LADDER ~71:USS VETERAN SERVICES COMPANY LLC, 8008 Vinecrest Avenue, United States of America ~72: BREWER Stephen W.;DINGMAN, David;JOHNS, Clifford L.~ 33:US ~31:63/071,437 ~32:28/08/2020

2023/03890 ~ Complete ~54:HELMET FOR TREATING INSOMNIA ~71:NINGBO KANGNING HOSPITAL (NINGBO CENTER FOR MENTAL DISEASE PREVENTION AND CONTROL), No. 1, Zhuangyu South Road, Zhuangshi Street, People's Republic of China ~72: LI Xingxing;YU Chang;YU Haihang;ZHOU Dongsheng;ZHOU Qi~

2023/03895 ~ Complete ~54:INTELLIGENT ELECTRIC VEHICLE CHARGING PILE RECOMMENDATION SYSTEM AND METHOD ~71:Xinyu university, No. 2666, Sunshine Avenue, High-tech Zone, Xinyu City, Jiangxi Province, People's Republic of China ~72: Li Ling;Wang Qing~ 33:CN ~31:202310219829.X ~32:09/03/2023

2023/03897 ~ Complete ~54:INTELLIGENT MANAGEMENT SYSTEM FOR STUDENT DORMITORY ~71:BINZHOU POLYTECHNIC, No. 919 Yellow River 12 Road, Binzhou, Shandong, 256600, People's Republic of China ~72: JIAO, Shufeng;SU, Shan;ZHANG, Xiaoping~

2023/03902 ~ Complete ~54:DETONATOR ASSEMBLY ~71:DETNET SOUTH AFRICA (PTY) LTD, AECI Place, The Woodlands, Woodlands Drive, Woodmead, South Africa ~72: LIEBENBERG, Abraham Johannes;MULLER, Elmar Lennox~ 33:ZA ~31:2020/06083 ~32:01/10/2020

2023/03904 ~ Complete ~54:PROCESS FOR REMOVING CYANIDE FROM A CYANIDE-BEARING AQUEOUS FLUID ~71:COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION, Clunies Ross St, Acton, Australian Capital Territory, 2601, Australia ~72: PAUL BREUER;XIANWEN DAI~ 33:AU ~31:2020903887 ~32:27/10/2020

2023/03908 ~ Complete ~54:SELF-TARGETING EXPRESSION VECTOR ~71:Touchlight IP Limited, Morelands And Riverdale Buildings, Lower Sunbury Road, HAMPTON TW12 2ER, UNITED KINGDOM, United Kingdom ~72: ADIE, Thomas Antony James;LEGIEWICZ, Michal;QUINTANEIRO, Leonor Maximo;ROTHWELL, Paul James~ 33:GB ~31:2014751.8 ~32:18/09/2020

2023/03914 ~ Complete ~54:DATA TRANSMISSION METHOD, ELECTRONIC DEVICE AND COMPUTER-READABLE STORAGE MEDIUM ~71:SHENZHEN NATIONAL ENGINEERING LABORATORY OF DIGITAL TELEVISION CO., LTD., Room 21A, Guoshi Building, No. 1801, Shahe West Road, Gaoxin Community, People's

Republic of China ~72: CHANG, Lin;GONG, Jun;LI, Xinguo;XU, Linyu;XU, Peiqiu;YU, Xiaolong~ 33:CN
~31:202011373056.3 ~32:30/11/2020

2023/03883 ~ Provisional ~54:MATHEMATICS TEACHING AID ~71:OGILVIE, Karen, Susan, 4 SORREL WAY,
CARTERTON, OXFORDSHIRE OX18 1AG, UNITED KINGDOM, United Kingdom ~72: OGILVIE, Karen, Susan~

2023/03898 ~ Complete ~54:METHOD AND SYSTEM FOR GAS EXTRACTION THROUGH AUXILIARY
DIRECTIONAL LONG BOREHOLE ~71:HUNAN UNIVERSITY OF SCIENCE & TECHNOLOGY, Shimatou, Yuhu
District, Xiangtan, People's Republic of China ~72: Pengfei WANG;Xun ZHAO;Yong CHEN;Yutian WANG~ 33:CN
~31:202211164307.6 ~32:23/09/2022

2023/03911 ~ Complete ~54:METHOD FOR PRODUCING ALLOY POWDERS BASED ON TITANIUM METAL
~71:RD Titan Group, TOV, Stryiska St. 3 Solonka, Pustomy District, LVIV REGION 81131, UKRAINE,
Ukraine;Velta Holding US Inc, 1226, King St., County of New Castle, WILMINGTON 19801 , DE, USA, United
States of America ~72: BRODSKYY, Andriy;CHUKHMANOV, Oleksandr;GONCHAR, Andrii;ROMANOV,
Roman;TROSHCHYLO, Viktor~ 33:US ~31:17/005,986 ~32:28/08/2020

2023/03885 ~ Provisional ~54:AN IMPLANT ~71:JORDAAN, Gert, Jacobus, ROODERAND 510, PORTION 64,
VENTERSKROON, 2531, SOUTH AFRICA, South Africa ~72: JORDAAN, Gert, Jacobus~

2023/03886 ~ Complete ~54:METHOD AND SYSTEM FOR OPTIMIZING ELECTRIC SHIP VOYAGE BASED ON
STATE OF CHARGE ESTIMATION OF LITHIUM BATTERY ~71:SHANGHAI JIAO TONG UNIVERSITY, No.800,
Dongchuan Rd., Minhang District, Shanghai, 200240, People's Republic of China ~72: LIANG, Kejing;LIN,
Anni;MA, Jianjun;WEN, Shuli;YE, Huili;ZHU, Miao~ 33:CN ~31:202211262984.1 ~32:14/10/2022

2023/03891 ~ Complete ~54:DOUBLE MELON SPLEEN-BOOSTING DISPERSING AGENT AND ITS
PREPARATION METHOD ~71:ANHUI SCIENCE AND TECHNOLOGY UNIVERSITY, No.9 Donghua Road,
Fengyang County, Chuzhou, People's Republic of China ~72: CHENG Xin;DOU Jinfeng;GUO Zhenchao;HE
Xinyi;LI Guangrui;LU Jiawen;WANG Haibo;WU Xiaoyu;ZHANG Xinyong~ 33:CN ~31:CN202211418423.6
~32:14/11/2022

2023/03896 ~ Complete ~54:QUALITY ANALYSIS METHOD BASED ON MACHINE VISION IN METAL FOIL
MANUFACTURING ~71:Hangzhou Apogee Tech Co., Ltd., 9/F, Building 11, AI Town, 1818-2 Wenyi West Road,
Yuhang Street, Yuhang District, Hangzhou City, Zhejiang Province, 311121, People's Republic of China ~72:
Jiang Wei;Jingxue Shen;Ming Ge~

- APPLIED ON 2023/03/29 -

2023/03931 ~ Complete ~54:FLUSHING DEVICE FOR PREVENTING THE ADHESION AND RESIDUE OF
OOCYTE CORONA CUMULUS COMPLEXES AT THE TUBE WALL ~71:Zhejiang University, No. 866
Yuhangtang Road, Xihu District, Hangzhou, Zhejiang, People's Republic of China ~72: Feng Chun;Jin Fan;Jin
Min;Rao Jinpeng;Tian Shen;Yu Ya~ 33:CN ~31:2022226979117 ~32:13/10/2022

2023/03936 ~ Complete ~54:AN AIR VENT ~71:ROCK SOLID INDUSTRIES INTERNATIONAL (PTY) LTD, 46
Eden Park Drive, Mkondeni, South Africa ~72: VOSS, Michael~ 33:ZA ~31:2019/04021 ~32:21/06/2019

2023/03945 ~ Complete ~54:LIMIT DEVICE FOR DETECTING MOTOR FAULT OF CAR ~71:WEST ANHUI
UNIVERSITY, Moon Island, West of Yunlu Bridge, Yu District, Lu District, Anhui, 237012, People's
Republic of China ~72: WU, Congbing;ZHOU, Hongxia~ 33:CN ~31:202210489165.4 ~32:06/05/2022

2023/03915 ~ Provisional ~54:SOLAR SAFETY BRACKET ~71:Indlovu Northpoint Civils, 18 sidmore road, South
Africa ~72: Indlovu Northpoint Civils~

2023/03934 ~ Complete ~54:COMPOSITIONS AND METHODS FOR THE TREATMENT OF VIRAL INFECTIONS ~71:CIDARA THERAPEUTICS, INC., 6310 Nancy Ridge Drive, Suite 101, San Diego, California 92121, United States of America ~72: ALAIN NONCOVICH;ALLEN BORCHARDT;DANIEL C BENSEN;JAMES M BALKOVEC;JASON COLE;LESLIE W TARI;QUYEN-QUYEN THUY DO;SIMON DOEHRMANN;THANH LAM;THOMAS P BRADY;WANLONG JIANG;ZHI-YONG CHEN~ 33:US ~31:62/897,036 ~32:06/09/2019;33:US ~31:62/941,405 ~32:27/11/2019;33:US ~31:62/948,143 ~32:13/12/2019;33:US ~31:62/959,857 ~32:10/01/2020;33:US ~31:62/966,500 ~32:27/01/2020;33:US ~31:62/970,491 ~32:05/02/2020;33:US ~31:62/984,705 ~32:03/03/2020;33:US ~31:62/988,304 ~32:11/03/2020;33:US ~31:63/032,488 ~32:29/05/2020;33:US ~31:63/062,377 ~32:06/08/2020

2023/03939 ~ Complete ~54:FLOATING FLOW-GUIDE PLATE FOR ELECTROCHEMICAL CELLS ~71:FUSION FUEL PORTUGAL, S.A, Rua da Fábrica, S/N, Sabugo, Portugal ~72: FERREIRA SILVA, Jaime Domingos~ 33:PT ~31:116826 ~32:14/10/2020

2023/03941 ~ Complete ~54:SYSTEM AND METHOD FOR MULTI-CHANNEL DETECTION AND MONITORING OF INTRACRANIAL PRESSURE, AND MULTI-CHANNEL DEVICE ~71:BRAIN CARE DESENVOLVIMENTO E INOVAÇÃO TECNOLOGICA S.A., Rua Cid Silva César, nº 600, Sala 06, Parque Santa Felícia Jardim, Brazil ~72: ANDRADE, Rodrigo De Albuquerque Pacheco;JUNIOR, Deusdedit Lineu Spavieri;MIYAZAKI, Caio Kioshi;OLIVEIRA, Sérgio Mascarenhas;OSHIRO, Helder Eiki~ 33:BR ~31:BR 10 2020 021338 5 ~32:19/10/2020

2023/03959 ~ Complete ~54:ANTENNA DEVICE AND ELECTRONIC DEVICE COMPRISING SAME ~71:SAMSUNG ELECTRONICS CO., LTD., 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Republic of Korea ~72: DOHYUK HA;JINSU HEO;JUNSEOK LEE;JUNGHO PARK;KWANGHYUN BAEK;KYOUNGHO JEONG;YOUNGJU LEE;YOUNGSUB KIM~ 33:KR ~31:10-2020-0129159 ~32:07/10/2020;33:KR ~31:10-2021-0056285 ~32:30/04/2021

2023/03960 ~ Complete ~54:COMPOUND AS AKT KINASE INHIBITOR ~71:CHIA TAI TIANQING PHARMACEUTICAL GROUP CO., LTD., No. 369 Yuzhou South Rd., Lianyungang, Jiangsu, 222062, People's Republic of China ~72: DAMIN ZHAO;WEI SHI;YINSHENG ZHANG;YONG GAO;YUAN YIN~ 33:CN ~31:202011057860.0 ~32:30/09/2020;33:CN ~31:202110261605.6 ~32:10/03/2021

2023/03967 ~ Complete ~54:ANTI-CD93 CONSTRUCTS AND USES THEREOF ~71:DYNAMICURE BIOTECHNOLOGY LLC, One Broadway 14FL, Cambridge, Massachusetts 02142, United States of America ~72: ANGELA NORTON;GREGORY JONES;JIAN LI;LIHUA WU;ROXANN GUERRETTE;SHIGERU KOMABA;ZHINAN XIA;ZIRONG CHEN~ 33:US ~31:63/084,474 ~32:28/09/2020;33:US ~31:PCT/US2021/035542 ~32:02/06/2021;33:US ~31:PCT/US2021/043784 ~32:29/07/2021

2023/03923 ~ Complete ~54:SYSTEM AND METHOD FOR NETWORK ACCESS PAYMENT PROCESSING ~71:FLITCH PREPAID (PTY) LTD, 120 Dorp Street, South Africa ~72: DE BRUYN, Daniel Ignatius;DE VILLIERS, Jacques Gideon~

2023/03930 ~ Complete ~54:CONCRETE STRUCTURE CURING DEVICE ~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: LI, Xiong;MENG, Fulei;SHI, Gaofei;XIN, Guanjie;ZHANG, Yao~

2023/03946 ~ Complete ~54:SINGLE-STAGE CARBON DIOXIDE MULTI-SPLIT COOLING AND HEATING MULTIFUNCTIONAL CENTRAL AIR CONDITIONER ~71:BEIJING JINGKELUN ENGINEERING DESIGN AND RESEARCH INSTITUTE CO., LTD., Room 301, Building 2, No. 12 Juyuan Middle Road, People's Republic of China ~72: CAO, Wenjie;CHAO, Haiying;HAO, Lixuan;KANG, Jianhui;LI, Jiujiang;MAO, Tongqin;WANG,

Quanjiang;XIE, Weibo;YANG, Jianguo;YANG, Shiheng;ZENG, Xianting;ZHANG, Jilong;ZHAO, Hui;ZHOU, Chengjun~ 33:CN ~31:202011014307.9 ~32:24/09/2020

2023/03948 ~ Complete ~54:THREE-DIMENSIONALLY DISTRIBUTED LIQUID ATOMIZATION HEAT EXCHANGER, CONTROL METHOD THEREOF, REFRIGERATION SYSTEM, AND AIR CONDITIONER ~71:BEIJING JINGKELUN ENGINEERING DESIGN AND RESEARCH INSTITUTE CO., LTD., Room 301, Building 2, No. 12 Juyuan Middle Road, People's Republic of China ~72: CAO, Wenjie;CHAO, Haiying;HAO, Lixuan;KANG, Jianhui;LI, Junzeng;MAO, Tongqin;WANG, Quanjiang;XIE, Weibo;YANG, Jianguo;ZHANG, Jilong;ZHAO, Hui;ZHOU, Chengjun~ 33:CN ~31:202011021378.1 ~32:25/09/2020

2023/03916 ~ Provisional ~54:ENLARGED POSITIVE DISPLACEMENT MULTI PORT PUMP / TURBINE ~71:Stanley Preston Lewis, 8 Jessem Street, Bethelsdorp, South Africa ~72: Stanley Preston Lewis~

2023/03920 ~ Complete ~54:RADIOMETRIC CONSISTENCY CORRECTION METHOD FOR THE IMAGES COLLECTED BY THE MULTI-SPECTRAL UAV CAMERA ~71:Hohai University, No. 8 Focheng West Road, Jiangning District, Nanjing City, Jiangsu Province, 211100, People's Republic of China ~72: Shunzhong XI;Ying GE;Yong LI~

2023/03922 ~ Complete ~54:A HORN MOUTH TEE BEND BRIDGE FRAME STRUCTURE CONNECTING PIECE ~71:CHINA CONSTRUCTION SECOND ENGINEERING BUREAU LTD., 251 Beiyangwa, Liyuan Town, Tongzhou District, Beijing, People's Republic of China;THE FIRST CONSTRUCTION ENGINEERING COMPANY LTD. OF CHINA CONSTRUCTION SECOND ENGINEERING BUREAU, Floors 1-7, Building 1, Yard 9, Kechuang 4th Street, Beijing Economic and Technological Development Zone, Daxing District, Beijing City, People's Republic of China ~72: Chenglong LU;Chuangui WU;Guoqing SUN;Hongshu REN;Liangliang WANG;Peng ZHANG;Qiuhe YE;Wenlong LIU;Xiaohui ZHANG;Yuanliang LIU~ 33:CN ~31:202220722036.0 ~32:30/03/2022

2023/03927 ~ Complete ~54:CONSTRUCTION MATERIAL COMPRESSIVE STRENGTH DETECTION DEVICE ~71:Henan University of Urban Construction, Longxiang Avenue, Xincheng District, Pingdingshan City, Henan Province, 467036, People's Republic of China ~72: CAI, Jing;CAI, Yujie;CHEN, Yao;LAN, Qixun;LI, Yajie;LIU, Yuxiao;WANG, Chaoyong;WANG, Zhe;XIE, Fan;XU, Huafeng;ZHANG, Yao;ZHOU, Shuke~ 33:CN ~31:2022111346099 ~32:19/09/2022

2023/03933 ~ Complete ~54:APPARATUS FOR THE ELECTRO-STATIC SEPARATION OF PARTICULATE MATERIALS ~71:ERTOCOM (PTY) LTD, Unit 18 Acacia Park, 1 Falcon Road, South Africa ~72: O'BRIEN, Craig Anthony~ 33:ZA ~31:2022/04644 ~32:26/04/2022

2023/03938 ~ Complete ~54:METHOD OF TREATING CANCERS WITH ALKYNE SUBSTITUTED QUINAZOLINE DERIVATIVES ~71:BLACK DIAMOND THERAPEUTICS, INC., One Main Street, 10th Floor, United States of America ~72: ARISTA, Luca;BUCK, Elizabeth;FLOHR, Alexander;LIN, Tai-An;LUCAS, Matthew;O'CONNOR, Matthew;OTTAVIANI, Giorgio;ROBERTS, Chris;ROMASHKO, Darlene;SMITH, Sherri;WATERS, Nigel;WRONA, Iwona~ 33:US ~31:63/108,645 ~32:02/11/2020;33:US ~31:63/166,045 ~32:25/03/2021;33:US ~31:63/190,067 ~32:18/05/2021;33:US ~31:63/218,717 ~32:06/07/2021;33:US ~31:63/237,782 ~32:27/08/2021;33:US ~31:63/244,540 ~32:15/09/2021

2023/03942 ~ Complete ~54:BEVERAGE DISPENSING ASSEMBLY ~71:HEINEKEN SUPPLY CHAIN B.V., Tweede Weteringplantsoen 21, Netherlands ~72: KOUTERS, Lucas Johannes Cornelis;WIGMAN, Peter Henri Samuel~ 33:EP ~31:20203953.3 ~32:26/10/2020

2023/03947 ~ Complete ~54:PREFUSION-STABILIZED HMPV F PROTEINS ~71:BOARD OF REGENTS, THE UNIVERSITY OF TEXAS SYSTEM, 210 West 7th Street, United States of America ~72: HSIEH, Ching-Lin;MCLELLAN, Jason;RUSH, Scott;WANG, Nianshuang~ 33:US ~31:63/089,978 ~32:09/10/2020

2023/03954 ~ Complete ~54:PHYSICALLY UNCLONABLE FUNCTIONS ~71:nChain Licensing AG, Grafenauweg 6, ZUG 6300, SWITZERLAND, Switzerland ~72: DAVIES, Jack Owen;WRIGHT, Craig Steven~ 33:GB ~31:2015475.3 ~32:30/09/2020

2023/03957 ~ Complete ~54:DEVICE FOR INJECTING FLUID INTO A BIRD ~71:Desvac, 23 boulevard de la Chanterie ZA Pole 49, SAINT-BARTHELEMY D'ANJOU 49124, FRANCE, France ~72: MAGNIAUX, Philippe~ 33:EP ~31:20306092.6 ~32:25/09/2020

2023/03963 ~ Complete ~54:FLOOD DRAINAGE DITCH STRUCTURE ~71:CHINA HARBOUR ENGINEERING COMPANY LTD., No. 9, Chunxiu Road, Dongcheng District, Beijing, 100027, People's Republic of China ~72: RONG WANG~ 33:CN ~31:2022110086658 ~32:22/08/2022

2023/03966 ~ Complete ~54:ANTI-CD94 ANTIBODIES AND METHODS OF USE THEREOF ~71:DREN BIO, INC., 384 Foster City Blvd. Foster City, California 94404, United States of America ~72: NENAD TOMASEVIC;RUO SHI SHI~ 33:US ~31:63/085,932 ~32:30/09/2020;33:US ~31:63/088,926 ~32:07/10/2020

2023/03969 ~ Complete ~54:ALLOY WIRE ROD AND PREPARATION METHOD AND APPLICATION THEREOF ~71:XIAMEN HONGLU TUNGSTEN MOLYBDENUM INDUSTRY CO., LTD., No. 339, Liansheng Road, North Jimei Industrial Zone, Jimei District,, People's Republic of China ~72: FANG, Yijin;GUO, Donghong;LV, Sheng;PENG, Fusheng;TANG, Minfeng;TU, Qijian;WU, Xianyue;YAO, Tongkai;ZHANG, Weibing~ 33:CN ~31:202110077980.5 ~32:20/01/2021

2023/03971 ~ Complete ~54:A PANEL FOR AN AIR CIRCULATION SYSTEM ~71:Hibocare Technologies South Africa (Pty) Ltd., 5 Park Way, Fourways Gardens, FOURWAYS, Johannesburg 2055, Gauteng Province, SOUTH AFRICA, South Africa ~72: SEEGER, Graham Neville~

2023/03926 ~ Complete ~54:TUNG OIL-BASED PLASTICIZER AND PREPARATION METHOD THEREOF ~71:Institute of Chemical Industry of Forest Products, Chinese Academy of Forestry, No. 16, Suojinwu Village, Xuanwu District, Nanjing, Jiangsu, People's Republic of China;Xuzhou Jinglin New Biological Material Technology Research Institute Co., Ltd., South side of Xuzhou Industrial Park Xuzhou Expressway, Jiawang District, Xuzhou, Jiangsu, People's Republic of China ~72: Bei Yu;Feng Guodong;Hu Lihong;Hu Yun;Jia Puyou;Sun Zhiwu;Zhang Meng;Zhong Dongnan;Zhou Yonghong~ 33:CN ~31:2022113248616 ~32:27/10/2022

2023/03935 ~ Complete ~54:DEVICE FOR FLUSHING THE INNER WALL OF TEST TUBES DURING OOCYTE RETRIEVAL ~71:Zhejiang University, No. 866 Yuhangtang Road, Xihu District, Hangzhou, Zhejiang, People's Republic of China ~72: Feng Chun;Jin Fan;Jin Min;Rao Jinpeng;Tian Shen;Yu Ya~ 33:CN ~31:2022228102453 ~32:25/10/2022

2023/03943 ~ Complete ~54:NOVEL BIARYL DERIVATIVE USEFUL AS DIACYLGLYCEROL ACYLTRANSFERASE 2 INHIBITOR, AND USE THEREOF ~71:LG CHEM, LTD., 128, YEOUI-DAERO, YEONGDEUNGPO-GU, SEOUL 07336, REPUBLIC OF KOREA, Republic of Korea ~72: CHO, Woo Young;JOO, Hyun Woo;JUNG, Jin Young;LEE, Eun Jin;SEO, Bo Kyung;YOON, Seung Hyun;YOON, Su Young~ 33:KR ~31:10-2020-0112843 ~32:04/09/2020

2023/03950 ~ Complete ~54:PREPARATION METHOD, PRODUCT AND APPLICATION OF SYMMETRICAL "PYRAMID" NANO ZINC OXIDE ~71:ANHUI POLYTECHNIC UNIVERSITY, No.8, Beijing Middle Road, Wuhu, Anhui, 241000, People's Republic of China ~72: LI, Xiaojuan;NI, Qingqing;SUN, Yanyan;XIA, Murun;XU, Ping;XU, Zhenzhen;YIN, Maoli~ 33:CN ~31:202210257459.4 ~32:16/03/2022

2023/03955 ~ Complete ~54:PREDICTIVE MODELING AND CONTROL OF CELL CULTURE ~71:Amgen Inc., One Amgen Center Drive, THOUSAND OAKS 91320-1799, CA, USA, United States of America ~72: KHODABANDEHLOU, Hamid;TULSYAN, Aditya;WANG, Tony Y.~ 33:US ~31:63/086,417 ~32:01/10/2020

2023/03964 ~ Complete ~54:METHODS FOR TRIGGERING SAFETY KILLING MECHANISMS USING A CD47-SIRP? BLOCKADE AGENT ~71:SANA BIOTECHNOLOGY, INC., 188 East Blaine Street, Suite 400, Seattle, Washington, 98102, United States of America ~72: SONJA SCHREPFFER~ 33:US ~31:63/090,001 ~32:09/10/2020;33:US ~31:63/135,518 ~32:08/01/2021

2023/03965 ~ Complete ~54:PULSED CHARGING AND HEATING TECHNIQUES FOR ENERGY SOURCES ~71:TAE TECHNOLOGIES, INC., 19631 Pauling, Foothill Ranch, California, 92610, United States of America ~72: GHRYN LOVELESS;MIKHAIL SLEPCHENKOV;RAINER FASCHING;ROOZBEH NADERI~ 33:US ~31:63/084,352 ~32:28/09/2020;33:US ~31:63/119,504 ~32:30/11/2020

2023/03968 ~ Complete ~54:COLLAGEN INK FOR 3D PRINTING ~71:VISCOFAN, S.A., C/ Berroa n°186; 15 4°17'; pl. – Polígono Industrial Berroa, Spain ~72: GUEMBE LAPUENTE, Amaia;IZCO ZARATIEGUI, Jesús, María;RECALDE IRURZUN, José, Ignacio;ZÚÑIGA ARRARÁS, Teresa~ 33:ES ~31:P202030996 ~32:02/10/2020

2023/03970 ~ Complete ~54:METHOD FOR CLEANING THE HEAT EXCHANGE TUBES OF STEAM GENERATORS IN A NUCLEAR POWER STATION ~71:ATOMENERGOREMONT JOINT-STOCK COMPANY, Proektiruemyi 4062 proezd, 6, str. 2, pom. 26, Russian Federation;JOINT STOCK COMPANY "ROSENERGOATOM", 25 Ferganskaya Street, Russian Federation;LLC "KROK", ul. Michurina, 48B, pom. 14 Belgorodskaya obl., Russian Federation;SCIENCE AND INNOVATIONS - NUCLEAR INDUSTRY SCIENTIFIC DEVELOPMENT, PRIVATE ENTERPRISE, 24 B. Ordynka Street, Floor 8, Office 820, Russian Federation ~72: EVSEENKO, Gennadii Vasilevich;ROMANCHUK, Vitalii Borisovich;SALISHCHEV, Sergei Aleksandrovich;SHCHETININ, Gennadii Nikolaevich~ 33:RU ~31:2020128922 ~32:01/09/2020

2023/03917 ~ Provisional ~54:EDUCATIONAL METHOD ~71:LIFEGAP (PTY) LTD, SUITE NUMBER 11 MEMORIAL PAVILION, IMPERIAL WANDERERS STADIUM CORLETT, South Africa ~72: LISA JUNE DU PREEZ;MARIO SIEGFRIED VISSER~

2023/03924 ~ Complete ~54:PROCESS FOR PREPARING (15ALPHA,16ALPHA,17BETA)-ESTRA-1,3,5(10)-TRIENE-3,15,16,17-TETROL (ESTETROL) AND INTERMEDIATES OF SAID PROCESS ~71:INDUSTRIALE CHIMICA S.R.L., Via Abbondio Sangiorgio 12, MILANO, Italy ~72: FASANA, Andrea;LENNA, Roberto;LUCENTINI, Riccardo~ 33:IT ~31:102019000017414 ~32:27/09/2019;33:IT ~31:102019000021879 ~32:22/11/2019

2023/03929 ~ Complete ~54:AN IOT BASED SYSTEM FOR DATA ACQUISITION ~71:Amisha R Patel, Department of Mathematics, Institute of Technology, Nirma University, Ahmedabad, Gujarat, 382481, India;Ankit D. Oza, Institute of Advanced Research, Gandhinagar, Gujarat, 382426, India;Barkha Wadhvani, School of Engineering, P P Savani University, Kosamba, Surat, Gujarat, 394125, India;Chintan Patel, Kaushalya – The Skill University, Ahmedabad, Gujarat, 380052, India;Jitali Dineshkumar Patel, Department of Computer Science and Engineering, Institute of Technology, Nirma University, Ahmedabad, Gujarat, 382481, India;Nibedita Das, Institute of Advanced Research, Gandhinagar, Gujarat, 382426, India;Nilam Thakkar, LDRP - ITR, Gandhinagar, Gujarat, 382024, India;Reena G.Patel, School of Cyber Security and Digital Forensics, National Forensic Sciences University, Gandhinagar Campus, Sector-9, Gandhinagar, Gujarat, 382007, India;Richa Sharma, SITAICS, Rashtriya Raksha University, Gandhinagar, Gujarat, 382305, India;Sanjay Sonar, Institute of Advanced Research, Gandhinagar, Gujarat, 382426, India;Vijayendra A Desai, C. K. Pithawala College of Engineering and Technology, Surat, Gujarat, 395007, India ~72: Amisha R Patel;Ankit D. Oza;Barkha Wadhvani;Chintan

Patel;Jitali Dineshkumar Patel;Nibedita Das;Nilam Thakkar;Reena G.Patel;Richa Sharma;Sanjay Sonar;Vijayendra A Desai~ 33:IN ~31:202321021502 ~32:25/03/2023

2023/03951 ~ Complete ~54:A DRAINAGE DEVICE ~71:VAN DER MERWE, Nicolaas, Johannes, 235 VONKPROP ROAD, WALTLOO, 0184, SOUTH AFRICA, South Africa ~72: VAN NIEKERK, Andre, Louis~ 33:ZA ~31:2020/05523 ~32:07/09/2020

2023/03958 ~ Complete ~54:HELIOSTAT CALIBRATION ~71:STELLENBOSCH UNIVERSITY, Admin B, Victoria Street, Stellenbosch, South Africa ~72: SMIT, Willem Jacobus~ 33:ZA ~31:2020/06085 ~32:01/10/2020

2023/03961 ~ Complete ~54:SYSTEM AND METHOD FOR LOW-COST STRUCTURE FABRICATION AND DEPLOYMENT ~71:FUTURE EARTH, INC., 108 Lakeland Ave., Dover, Delaware 19901, United States of America ~72: JASON ROSAMOND~ 33:US ~31:63/076,301 ~32:09/09/2020

2023/03918 ~ Provisional ~54:BEE BIOVECTOR DISPENSER ~71:MWB Holdings (Pty) Ltd, 954 Sardinia Bay Road, Lovemore Park, Port Elizabeth, South Africa;RHODES UNIVERSITY, Drosty Road, South Africa ~72: BRUGGEMAN, Michiel;HARRIS, Jaimee;VILLET, Martin~

2023/03919 ~ Complete ~54:IMPROVEMENT METHOD FOR IMPROVED BRASSICA NAPUS RAPHANUSSATIVUS CYTOPLASMIC MALE STERILE RESTORER LINE ~71:Huzhou Agricultural Science and Technology Development Center, No. 768, Luwang Road, Wuxing District, Huzhou City, Zhejiang Province, 313009, People's Republic of China;Zhejiang Academy of Agricultural Sciences, No. 198, Shiqiao Road, Hangzhou City, Zhejiang Province, 310021, People's Republic of China ~72: DING, Fuquan;FENG, Zhongping;HAO, Pengfei;HU, Hao;HUA, Shuijin;LI, Lupeng;LIN, Baogang;LOU, Weidong;REN, Yun;ZHU, Jianfang~

2023/03921 ~ Complete ~54:NEW ENERGY COUPLING COAL CHEMICAL INDUSTRY MULTI-ENERGY SYSTEM, EVALUATION METHOD AND COMPUTER-READABLE STORAGE MEDIUM ~71:Xinjiang Institute of Engineering, No. 1350, Aidinghu Road, Urumqi Economic and Technological Development Zone (Toutunhe District), Urumqi, Xinjiang, People's Republic of China ~72: Fan Xiaochao;Fu Tao;Li Xi;Shi Ruijing;Xu Lei~ 33:CN ~31:2022104361624 ~32:21/04/2022

2023/03925 ~ Complete ~54:CLUSTER CENTER INITIALIZATION METHOD IN CONSIDERATION OF NEIGHBORHOOD INFORMATION ~71:Wuhu Technology and Innovation Research Institute, AHUT, Building B5, Science and Technology Industrial Park, Zhongshan South Road, Yijiang District, Wuhu City, Anhui Province, 241000, People's Republic of China ~72: LI, Cong;WANG, Wenyan;WU, Ziheng;YANG, Song;ZHAO, Yuan~

2023/03940 ~ Complete ~54:AROMATIC HETEROCYCLIC COMPOUND, AND PHARMACEUTICAL COMPOSITION AND APPLICATION THEREOF ~71:EXSCIENTIA AI LIMITED, Level 3, Dundee One River Court, 5 West Victoria Dock Road, United Kingdom;GT APEIRON THERAPEUTICS LIMITED, 22 Pottinger Street, Central Hong Kong, People's Republic of China ~72: BAI, Haiyun;BARBEAU, Olivier Rémy;BESNARD, Jérémy;GU, Xiaohui~ 33:CN ~31:202011552478.7 ~32:24/12/2020

2023/03952 ~ Complete ~54:LIVE-ATTENUATED RNA HYBRID VACCINE TECHNOLOGY ~71:Access to Advanced Health Institute, 1616 Eastlake Avenue East, Ste. 400, SEATTLE 98102, WA, USA, United States of America ~72: VAN HOEVEN, Neal;VOIGT, Emily~ 33:US ~31:63/075,053 ~32:04/09/2020

2023/03953 ~ Complete ~54:LACTAM COMPOUNDS AS KV1.3 POTASSIUM SHAKER CHANNEL BLOCKERS ~71:D.E. Shaw Research, LLC, 120 West 45th Street, 39th Floor, NEW YORK 10036, NY, USA, United States of America ~72: GIORDANETTO, Fabrizio;JENSEN, Morten ~31:stergaard;JOGINI, Vishwanath;SNOW, Roger John~ 33:US ~31:63/088,171 ~32:06/10/2020

2023/03962 ~ Complete ~54:A DRAG-REDUCING ASSEMBLY ~71:HENDRIK GEORG KIESER, Desert Wolf Estate, 48 Klipkop, Graham Road, Pretoria, 0056, South Africa ~72: HENDRIK GEORG KIESER~ 33:ZA ~31:2020/04923 ~32:11/08/2020;33:ZA ~31:2021/01131 ~32:19/02/2021

2023/03928 ~ Complete ~54:PHOTO-HYDROGEN FUEL CELL COGENERATION SYSTEM, CAPACITY CONFIGURATION METHOD AND MEDIUM ~71:Xinjiang Institute of Engineering, No. 1350, Aidinghu Road, Urumqi Economic and Technological Development Zone (Toutunhe District), Urumqi, Xinjiang, People's Republic of China ~72: Fan Xiaochao;Fu Tao;Li Xi;Shi Ruijing;Xu Lei~ 33:CN ~31:202210426856X ~32:21/04/2022

2023/03932 ~ Complete ~54:CULTIVATION METHOD OF GRAFTING SEEDLINGS OF CITRUS RETICULATA BLANCO HYBRID SEEDS ~71:CITRUS RESEARCH INSTITUTE OF ZHEJIANG PROVINCE, NO. 11 DAQIAO ROAD, People's Republic of China ~72: HUANG, Xiu;KE, Fuzhi;NIE, Zhenpeng;SUN, Jianhua;SUN, Lifang;XU, Jianguo~ 33:CN ~31:202210514884.7 ~32:11/05/2022

2023/03944 ~ Complete ~54:POLYALKYLENE GLYCOL FOR REDUCING WHITE ETCHING CRACKS ~71:BASF SE, CARL BOSCH STRASSE 38, 67056 LUDWIGSHAFEN AM RHEIN, GERMANY, Germany ~72: KOSCHABEK, Rene;RITTIG, Frank~ 33:EP ~31:20194778.5 ~32:07/09/2020

2023/03949 ~ Complete ~54:METHOD FOR PREPARING GRAPHENE OXIDE NANOSCROLL ~71:ANHUI POLYTECHNIC UNIVERSITY, No.8, Beijing Middle Road, Wuhu, Anhui, 241000, People's Republic of China ~72: LI, Xiaojuan;NI, Qingqing;XIA, Murun;XU, Zhenzhen;YANG, Li;YIN, Maoli~ 33:CN ~31:202210257545.5 ~32:16/03/2022

2023/03956 ~ Complete ~54:MERKLE PROOF ENTITY ~71:nChain Licensing AG, Grafenauweg 6, ZUG 6300, SWITZERLAND, Switzerland ~72: AMMAR, Bassem;DAVIES, Jack Owen;WRIGHT, Craig Steven;ZHANG, Wei~ 33:GB ~31:2017731.7 ~32:10/11/2020

2023/03972 ~ Provisional ~54:MOST CONVENIENT BOOKHOLDER ~71:HILTON BRIAN THOMAS, 309 THORA COURT, KITE STR, HORISON, South Africa ~72: HILTON BRIAN THOMAS~

- APPLIED ON 2023/03/30 -

2023/04081 ~ Complete ~54:GUAR GUM-BASED COMPOUND AND PREPARATION METHOD THEREOF, ZINC-SULFUR SEPARATION INHIBITOR AND ZINC-SULFUR FLOTATION SEPARATION METHOD, FLOCCULANT AND APPLICATION THEREOF ~71:GENERAL RESEARCH INSTITUTE OF MINING & METALLURGY, NO. 1, XIWAI WENXING STREET, People's Republic of China ~72: CHEN, Yannan;LU, Liang;WU, Meng;XIONG, Wei;ZHANG, Xingrong;ZHU, Yangge~

2023/04072 ~ Provisional ~54:MODERN CLASSIC DUST-FREE GRAVES ~71:NAKEDI ALBERTINA MOJAPELO, HOUSE NO. 20136, MOGODI MAKOTO, MPHAAHLELE, South Africa ~72: NAKEDI ALBERTINA MOJAPELO ~

2023/04002 ~ Complete ~54:AEROSOL-GENERATING DEVICE OPERABLE IN AN AEROSOL-RELEASING MODE AND IN A PAUSE MODE ~71:PHILIP MORRIS PRODUCTS S.A., Quai Jeanrenaud 3, Switzerland ~72: BUTIN, Yannick;HAU, Daniela;NESOVIC, Milica;OLIANA, Valerio;STURA, Enrico;VALDEZ ROJAS, Ezequiel~ 33:EP ~31:20193921.2 ~32:01/09/2020

2023/04009 ~ Complete ~54:DISTRIBUTED HIGHWAY IMAGE STORAGE METHOD AND APPARATUS, AND DISTRIBUTED HIGHWAY IMAGE SEARCH METHOD AND APPARATUS ~71:CHECC DATA CO., LTD., Block A, 9th Floor, Jiahao International Centre, 116 Zizhuyuan Road, Haidian District, Beijing, 100097, People's Republic of China;CHECC HIGHWAY MAINTENANCE AND TEST TECHNOLOGY CO. LTD., Block A, 9th Floor,

Jiahao International Centre, 116 Zizhuyuan Road, Haidian District, Beijing, 100097, People's Republic of China;CHINA HIGHWAY ENGINEERING CONSULTANTS CORPORATION, 17 Changyungong, Xisanhuan North Road, Haidian District, Beijing, 100089, People's Republic of China ~72: CUI, Yuping;DONG, Yuanshuai;HOU, Yun;LI, Wang;LI, Yuxuan;QIAN, Zhenyu;SONG, Zhangliang;SUN, Tiancheng;TONG, Xinlong;YANG, Xuan;ZHANG, Yanhong;ZHANG, Yunling;ZHOU, Jing~ 33:CN ~31:202210651900.7 ~32:09/06/2022

2023/04017 ~ Complete ~54:A RODENT-PROOF BARRIER MATERIAL AND A METHOD OF MANUFACTURING A RODENT-PROOF BARRIER MATERIAL ~71:RENTOKIL INITIAL 1927 PLC, Compass House Manor Royal Crawley, West Sussex, RH10 9PY, United Kingdom ~72: GARY WINGETT;MARK BROWN;ROBERT SHAND~ 33:GB ~31:2018101.2 ~32:18/11/2020

2023/04019 ~ Complete ~54:CANNABINOID COMBINATIONS AND THEIR USE IN THE TREATMENT OF CANCER ~71:NELSON MANDELA UNIVERSITY, University Way, Summerstrand, 6001 Port Elizabeth, South Africa ~72: CARMINITA LARA FROST;NATASHA BEUKES;RECARDIA LAKEN SIMONEY SCHOEMAN;RUBY-ANN LEVENDAL~ 33:ZA ~31:2020/05408 ~32:31/08/2020

2023/04023 ~ Complete ~54:GYRATORY CRUSHER SPIDER BUSHING ~71:Sandvik SRP AB, SVEDALA 23381, SWEDEN, Sweden ~72: GUNNARSSON, Johan;JOHANSSON, Jan~

2023/04027 ~ Complete ~54:PRESSURE VALVE PROCESSING ~71:SWEETWATER ENERGY, INC., 2400 Mt. Read Boulevard, Dock 55, United States of America ~72: SAMJITSINGH, Sharon~ 33:US ~31:63/087,077 ~32:02/10/2020;33:US ~31:63/146,608 ~32:06/02/2021;33:US ~31:63/153,740 ~32:25/02/2021

2023/03975 ~ Provisional ~54:METHODS AND SYSTEMS FOR CALIBRATING AND VERIFYING AN ELECTROCHEMICAL BIOSENSOR ~71:FOURIE, Pieter Rousseau, 7 Buffalo Street, Vygeboom, South Africa ~72: FOURIE, Pieter Rousseau~

2023/03980 ~ Provisional ~54:8BIT METER MANAGEMENT SYSTEM ~71:TREVOR PATRICK MAJA, Unit 7 Kingston Park, 639 Old Pretoria Main Road, Halfway House, South Africa ~72: TREVOR PATRICK MAJA~ 33:ZA ~31:0 ~32:29/03/2023

2023/03988 ~ Complete ~54:FUEL SUPPLY LOCATION SYSTEM ~71:Value App (Pty) Ltd, 1 Teuton Avenue, Bloubostrand, South Africa ~72: VAN 'T HOF, Diederik Egbert Joseph~

2023/04011 ~ Complete ~54:BLASTING SYSTEM ~71:DETNET SOUTH AFRICA (PTY) LTD, AECI Place, The Woodlands, Woodlands Drive, Woodmead, South Africa ~72: LIEBENBERG, Abraham Johannes;MULLER, Elmar Lennox~ 33:ZA ~31:2020/06084 ~32:01/10/2020

2023/04016 ~ Complete ~54:MODULATORS OF CYSTIC FIBROSIS TRANSMEMBRANE CONDUCTANCE REGULATOR ~71:VERTEX PHARMACEUTICALS INCORPORATED, 50 Northern Avenue, Boston, Massachusetts, 02210, United States of America ~72: ALEXANDER RUSSELL ABELA;ALINA SILINA;ANTON V GULEVICH;BRYAN A FRIEMAN;COREY DON ANDERSON;FABRICE PIERRE;HARIPADA KHATUYA;JACLYN CHAU;JASON MCCARTNEY;JEREMY CLEMENS;JINGLAN ZHOU;JOE A TRAN;JOHNNY UY;LEV TYLER DEWEY FANNING;LINO VALDEZ;MARK THOMAS MILLER;PAUL KRENITSKY;PETER (DECEASED) GROOTENHUIS;PRASUNA PARASELLI;SARA SABINA HADIDA RUAH;SUNNY ABRAHAM;THOMAS CLEVELAND;TIMOTHY A DWIGHT;TIMOTHY RICHARD COON;VIJAYALAKSMI ARUMUGAM;VITO MELILLO;YOSHIHIRO ISHIHARA~ 33:US ~31:63/088,935 ~32:07/10/2020

2023/04024 ~ Complete ~54:APPARATUS FOR RESIN INJECTION, MINING MACHINE AND METHOD
~71:Sandvik Mining and Construction Oy, Pihtisulunkatu 9, TAMPERE 33330, FINLAND, Finland ~72:
RUOTSALAINEN, Pasi~ 33:EP ~31:20204134.9 ~32:27/10/2020

2023/04030 ~ Complete ~54:MODIFIED CXCL10 FOR IMMUNOTHERAPY OF CANCER DISEASES
~71:TECHNION RESEARCH & DEVELOPMENT FOUNDATION LIMITED, Senate House Technion City, Israel
~72: JARROUS, Ghada;KARIN, Nathan~ 33:US ~31:63/041,936 ~32:21/06/2020;33:US ~31:63/150,622
~32:18/02/2021

2023/03976 ~ Provisional ~54:ROCK ANCHOR COMPONENT ~71:Theodore Daniel Swemmer, PO Box 75746,
South Africa ~72: Theodore Daniel Swemmer~

2023/03979 ~ Provisional ~54:INTERLOCK PIPE CLAMP ASSEMBLY ~71:SCHOLTZ, Johann, 2 Osborn Road,
Wadeville, South Africa ~72: SCHOLTZ, Johann~

2023/03982 ~ Provisional ~54:PROCESS FOR THE EXTRACTION OF BIOSTIMULANTS AND AMINO ACIDS
FROM KELP ~71:OMNIA GROUP (PROPRIETARY) LIMITED, Building H, Monte Circle Office Park, 178
Montecasino Boulevard, South Africa ~72: HUYSER, Johannes Jacobus;KLEINHANS, George;STANDER,
Barend Frederik~

2023/03985 ~ Complete ~54:A PRESSURE GAUGE OF EXPLOSION-PROOF STRUCTURE AND AUTOMATIC
EQUIPMENT ~71:Tianjin Sino-German University of Applied Sciences, No. 2, Yashen Road, Haihe Education
Park, Jinnan District, Tianjin City, 300350, People's Republic of China ~72: Xin Shao~

2023/03994 ~ Complete ~54:A COMPOSITION FOR USE IN DUST SUPPRESSION AND ROAD
STABILISATION ~71:KUPHELA ENVIRONMENTAL SOLUTIONS (PTY) LTD, Stallion Road, Beaulieu Office
Park, Stallion Rd, Crowthorne AH, South Africa ~72: BRITZ, Andries Petrus~ 33:ZA ~31:2022/03734
~32:01/04/2022

2023/03997 ~ Complete ~54:A DESIGN ASSISTANT SYSTEM BASED ON XR AND IMAGE GENERATION
TECHNOLOGY ~71:Wang Yuanyuan, No.3 Wenyuan Road, Xianlin University Town, Qixia District, Nanjing City,
Jiangsu Province, People's Republic of China;Weng Gengjia, No.3 Wenyuan Road, Xianlin University Town, Qixia
District, Nanjing City, Jiangsu Province, People's Republic of China;Zhang Xuan, No.3 Wenyuan Road, Xianlin
University Town, Qixia District, Nanjing City, Jiangsu Province, People's Republic of China ~72: Wang
Yuanyuan;Weng Gengjia;Zhang Xuan~

2023/04003 ~ Complete ~54:CROSS-LINKABLE ALLYLAMIDO POLYMERS ~71:QUEENSLAND UNIVERSITY
OF TECHNOLOGY, Gardens Point Campus, 2 George Street, Australia;UNIVERSITEIT GENT, Sint-
Pietersnieuwstraat 25, Belgium ~72: DARGAVILLE, Tim;HOOGENBOOM, Richard~ 33:EP ~31:20202622.5
~32:19/10/2020

2023/04031 ~ Provisional ~54:DNA PALLETS ~71:MARTINUS JORDAAN NORTJE, 76 HAMILTON ROAD,
CLAREMONT, South Africa ~72: MARTINUS JORDAAN NORTJE~

2023/04005 ~ Complete ~54:FLUID TRANSPORT AND DISTRIBUTION MANIFOLD ~71:SUNFLOWER
THERAPEUTICS, PBC, 18 SHIPYARD DRIVE, SUITE 2A, HINGHAM, MASSACHUSETTS 02043, USA, United
States of America ~72: BANCHIERI, Andrew;HAUSER, Brian;WEISER, David~ 33:US ~31:63/075,447
~32:08/09/2020

2023/04008 ~ Complete ~54:ROAD SURFACE ROUGHNESS MEASUREMENT METHOD AND DEVICE, AND
ELECTRONIC DEVICE AND MEDIUM ~71:CHECC DATA CO., LTD., Block A, 9th Floor, Jiahao International

Centre, 116 Zizhuyuan Road, Haidian District, Beijing, 100097, People's Republic of China; CHECC HIGHWAY MAINTENANCE AND TEST TECHNOLOGY CO. LTD., Block A, 9th Floor, Jiahao International Centre, 116 Zizhuyuan Road, Haidian District, Beijing, 100097, People's Republic of China; CHINA HIGHWAY ENGINEERING CONSULTANTS CORPORATION, 17 Changyungong, Xisanhuan North Road, Haidian District, Beijing, 100089, People's Republic of China ~72: CUI, Li; CUI, Yuping; DONG, Yuanshuai; HOU, Yun; HU, Lin; HU, Runtong; QIAN, Zhenyu; SUN, Tiancheng; TONG, Xinlong; YANG, Xuan; ZHANG, Haoyu; ZHANG, Yanhong; ZHANG, Yunling ~33:CN ~31:202210470883.7 ~32:28/04/2022

2023/04015 ~ Complete ~54: MODULATORS OF CYSTIC FIBROSIS TRANSMEMBRANE CONDUCTANCE REGULATOR ~71: VERTEX PHARMACEUTICALS INCORPORATED, 50 Northern Avenue, Boston, Massachusetts, 02210, United States of America ~72: ALEXANDER RUSSELL ABELA; ALINA SILINA; ANTON V GULEVICH; BRYAN A FRIEMAN; COREY DON ANDERSON; FABRICE PIERRE; HARIPADA KHATUYA; JACLYN CHAU; JASON MCCARTNEY; JEREMY CLEMENS; JINGLAN ZHOU; JOE A TRAN; JOHNNY UY; LEV TYLER DEWEY FANNING; LINO VALDEZ; MARK THOMAS MILLER; PAUL KRENITSKY; PETER (DECEASED) GROOTENHUIS; PRASUNA PARASELLI; SARA SABINA HADIDA RUAH; SUNNY ABRAHAM; THOMAS CLEVELAND; TIMOTHY A DWIGHT; TIMOTHY RICHARD COON; TROY VICKERS; VIJAYALAKSMI ARUMUGAM; VITO MELILLO; YOSHIHIRO ISHIHARA ~33:US ~31:63/088,686 ~32:07/10/2020

2023/04025 ~ Complete ~54: PROSTHETIC VALVE DOCKING DEVICE ~71: Edwards Lifesciences Corporation, One Edwards Way, IRVINE 92614, CA, USA, United States of America ~72: CHAU, Jocelyn; NGUYEN, Tram Ngoc; PATEL, Darshin S. ~33:US ~31:63/105,099 ~32:23/10/2020; 33:US ~31:63/159,130 ~32:10/03/2021; 33:US ~31:63/252,524 ~32:05/10/2021

2023/04028 ~ Complete ~54: INJECTOR SYSTEM FOR EXTRUDER EQUIPMENT ~71: SWEETWATER ENERGY, INC., 2400 Mt. Read Boulevard, Dock 55, United States of America ~72: SAMJITSINGH, Sharon; TUDMAN, Scott ~33:US ~31:63/087,077 ~32:02/10/2020; 33:US ~31:63/146,608 ~32:06/02/2021; 33:US ~31:63/153,740 ~32:25/02/2021

2023/03989 ~ Complete ~54: A PROCESS FOR OPTIMIZING QUORUM QUENCHING-MEDIATED BACTERIAL ATTENUATION BY SIGNALLING INTERFERENCE ~71: Dr. Kayeen Vadakkan, Assistant Professor, Department of Biotechnology, St. Mary's College, Thrissur, Kerala, 680020, India ~72: Dr. Kayeen Vadakkan ~

2023/03995 ~ Complete ~54: DUAL-MOTOR PERFORMANCE SYNCHRONOUS TEST DEVICE ~71: CHONGQING UNIVERSITY OF SCIENCE AND TECHNOLOGY, No.20, University Town East Road, Shapingba District, Chongqing, People's Republic of China; HUNAN INSTITUTE OF ENGINEERING, No.88 Fuxing East Road, Xiangtan City, Hunan Province, People's Republic of China ~72: DING Jin; HUANG Zhonghua; XIE Ya; XU Yangyang ~33:CN ~31:202210398426.1 ~32:15/04/2022

2023/03998 ~ Complete ~54: AN IMAGE GENERATION METHOD BASED ON GAN NEURAL NETWORK AND WEIGHTED AVERAGE IMAGE OPTIMIZATION TECHNIQUE ~71: Wang Yuanyuan, No.3 Wenyuan Road, Xianlin University Town, Qixia District, Nanjing City, Jiangsu Province, People's Republic of China; Weng Gengjia, No.3 Wenyuan Road, Xianlin University Town, Qixia District, Nanjing City, Jiangsu Province, People's Republic of China; Zhang Xuan, No.3 Wenyuan Road, Xianlin University Town, Qixia District, Nanjing City, Jiangsu Province, People's Republic of China ~72: Wang Yuanyuan; Weng Gengjia; Zhang Xuan ~

2023/04020 ~ Complete ~54: VANDAR-IMPROVED HYDROELECTRIC POWER SYSTEMS ~71: MOSTAK AHMED, 6 Durbar Road Luton Bedfordshire LU4 8BA, United Kingdom ~72: MOSTAK AHMED ~33:GB ~31:2013680.0 ~32:01/09/2020

2023/04022 ~ Complete ~54:ANTIBODIES TO CANINE AND FELINE ONCOSTATIN M RECEPTOR BETA AND USES THEREOF ~71:Zoetis Services LLC, 10 Sylvan Way, PARSIPPANY 07054, NJ, USA, United States of America ~72: BMMERT, Gary Francis;GONZALES, Andrea Joy~ 33:US ~31:63/093,607 ~32:19/10/2020

2023/03978 ~ Provisional ~54:FLUID BED ROASTING SYSTEM ~71:STELLENBOSCH UNIVERSITY, Admin B, Victoria Street, Stellenbosch, South Africa ~72: PRETORIUS, Brendan George~

2023/03986 ~ Complete ~54:A DETECTING STRUCTURE AND A PRESSURE CONDUCTING TYPE LIQUID LEVEL GAUGE ~71:Tianjin Sino-German University of Applied Sciences, No. 2, Yashen Road, Haihe Education Park, Jinnan District, Tianjin City, 300350, People's Republic of China ~72: Xin Shao~

2023/03992 ~ Complete ~54:INHIBITING HUMAN INTEGRIN ALPHA4BETA7 ~71:MORPHIC THERAPEUTIC, INC., 35 Gatehouse Drive, A2 Waltham, Massachusetts, 02451, United States of America ~72: ALEKSEY I GERASYUTO;BLAISE S LIPPA;BRUCE N ROGERS;BRYCE A HARRISON;BYUNGCHAN KIM;CHENG ZHONG;DAN CUI;DAWN M TROAST;EUGENE HICKEY;EVELYNE HOUANG;FU-YANG LIN;JAMES E DOWLING;KRISTOPHER N HAHN;KYLE D KONZE;MATTHEW G BURSAVICH;ROBERT ZAHLER;SALMA RAFI;TYLER DAY~ 33:US ~31:62/916,062 ~32:16/10/2019

2023/04001 ~ Complete ~54:AEROSOL-GENERATING DEVICE WITH MEANS FOR IDENTIFYING A TYPE OF AN AEROSOL-GENERATING ARTICLE BEING USED WITH THE DEVICE ~71:PHILIP MORRIS PRODUCTS S.A., Quai Jeanrenaud 3, Switzerland ~72: BUTIN, Yannick;CHATEAU, Maxime;STURA, Enrico~ 33:EP ~31:20199174.2 ~32:30/09/2020

2023/04006 ~ Complete ~54:A FLOORPLAN VISUALISATION SYSTEM ~71:LIFESIZE PLANS IP PTY LTD, 1A Queen Street, Australia ~72: GHALEB, Christopher~ 33:AU ~31:2020903582 ~32:02/10/2020;33:AU ~31:2021107119 ~32:25/08/2021

2023/04010 ~ Complete ~54:FE-CR-SI ALLOY AND PREPARATION METHOD THEREFOR ~71:NORTH CHINA UNIVERSITY OF SCIENCE AND TECHNOLOGY, No. 21, Bohai Avenue, Caofeidian New City, Tangshan, Hebei, 063210, People's Republic of China ~72: GUI, Yongliang;HAO, Wei;LONG, Haiyang;QIN, Tieyu;SONG, Chunyan;XU, Lianbo;ZHANG, Xuefeng~ 33:CN ~31:202210660075.7 ~32:13/06/2022

2023/04013 ~ Complete ~54:DRIVING MANAGEMENT DEVICE, ON-BOARD UNIT, AND DRIVING MANAGEMENT SYSTEM ~71:YAZAKI CORPORATION, 4-28, Mita 1-chome Minato-ku, Tokyo, 108-8333, Japan ~72: JUNJI TANAKA;KOSUKE KOGO;TERUHITO NAKAO;YOHEI MANABE~ 33:JP ~31:2020-187260 ~32:10/11/2020

2023/04018 ~ Complete ~54:MODULATORS OF CYSTIC FIBROSIS TRANSMEMBRANE CONDUCTANCE REGULATOR ~71:VERTEX PHARMACEUTICALS INCORPORATED, 50 Northern Avenue, Boston, Massachusetts, 02210, United States of America ~72: ALEXANDER RUSSELL ABELA;ALINA SILINA;ANDREW DINH;BRYAN A FRIEMAN;COREY DON ANDERSON;FABRICE PIERRE;JACLYN CHAU;JASON MCCARTNEY;JEREMY CLEMENS;JINGLAN ZHOU;JOE A TRAN;LEV TYLER DEWEY FANNING;LINO VALDEZ;MARK THOMAS MILLER;PAUL KRENITSKY;PETER (DECEASED) GROOTENHUIS;SARA SABINA HADIDA RUAH;SUNNY ABRAHAM;THOMAS CLEVELAND;TIMOTHY A DWIGHT;TIMOTHY RICHARD COON;VIJAYALAKSMI ARUMUGAM;YOSHIHIRO ISHIHARA~ 33:US ~31:63/088,799 ~32:07/10/2020

2023/04021 ~ Complete ~54:PEG-FREE AQUEOUS SUSPENSIONS FOR PARENTERAL ADMINISTRATION OF A CORTICOSTEROID ~71:Pfizer Inc., 66 Hudson Boulevard East, NEW YORK 10001-2192, NY, USA, United States of America ~72: BERGMAN, Joel Aaron;SALMAN, Omar Abdelrahman~ 33:US ~31:63/104,143 ~32:22/10/2020;33:US ~31:63/252,705 ~32:06/10/2021

2023/04026 ~ Complete ~54:VASCULAR STENT-GRAFT ~71:ASCENCE MEDICAL GMBH, Modecenterstraße 22/D14, Austria ~72: GOTTARDI, Roman;MOORE, Michael~ 33:ZA ~31:2020/06308 ~32:12/10/2020

2023/03974 ~ Provisional ~54:A METHOD AND SYSTEM OF INITIATING A TELEPHONE CALL BETWEEN TWO COMMUNICATION DEVICES ~71:SEPTEMBER, Joseph, Unit 20 Eldorado Complex, 135 Becksberg Avenue, Lyttelton, CENTURION 0157, Gauteng, SOUTH AFRICA, South Africa ~72: SEPTEMBER, Joseph~

2023/03977 ~ Provisional ~54:SUB-SURFACE ZONAL IRRIGATION COMBINING ROOT ENHANCEMENT CAPSULE ~71:CLARKE, Richard Enslin, 106 Main Road, South Africa ~72: CLARKE, Richard Enslin~

2023/03991 ~ Complete ~54:AN INFORMATION SECURITY INFORMATION TERMINAL ~71:Anhui Vocational College Of Defense Technology, 56 Meishan Middle Road, Lu'an, People's Republic of China ~72: Cai Zhengbao~

2023/03996 ~ Complete ~54:GAS DETECTION SYSTEM AND METHOD ~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~

2023/04004 ~ Complete ~54:CELL RETENTION DEVICE ~71:SUNFLOWER THERAPEUTICS, PBC, 18 SHIPYARD DRIVE, SUITE 2A, HINGHAM, MASSACHUSETTS 02043, USA, United States of America ~72: BANCHIERI, Andrew;GRAHAM, Marc, Miller;LIU, Flora~ 33:US ~31:63/075,443 ~32:08/09/2020

2023/04007 ~ Complete ~54:PLANT RODLET FOR FORESTRY, PREPARATION METHOD AND APPLICATION METHOD ~71:Zhejiang Qianjiang Biochemical Co., Ltd., 19-21/F, Qianjiang Building, 178 Qianjiang West Road, Haizhou Street,, Haining, Jiaxing, People's Republic of China ~72: Chang hong;Cheng yutong;Lu chunfeng;Lu jianwei;Qian jiangwei;Shen bo;Si wen;Wu yefei;Yang jiaian;Yu haiyan;Zhu jianxin;Zhu jinshan~ 33:CN ~31:2022108299834 ~32:13/07/2022

2023/04014 ~ Complete ~54:OPERATION MANAGEMENT SERVICE SYSTEM ~71:YAZAKI CORPORATION, 4-28, Mita 1-chome Minato-ku, Tokyo, 108-8333, Japan ~72: JUNJI TANAKA;KOSUKE KOGO;TERUHITO NAKAO;YOHEI MANABE~ 33:JP ~31:2020-187261 ~32:10/11/2020

2023/04029 ~ Complete ~54:CXCL9 AND VARIANTS THEREOF FOR IMMUNOTHERAPY OF CANCER DISEASES ~71:TECHNION RESEARCH & DEVELOPMENT FOUNDATION LIMITED, Senate House Technion City, Israel ~72: JARROUS, Ghada;KARIN, Nathan~ 33:US ~31:63/041,940 ~32:21/06/2020;33:US ~31:63/150,629 ~32:18/02/2021

2023/03981 ~ Provisional ~54:A METHOD OF VALORISING A SOLID WASTE PRODUCT ~71:UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG, 1 Jan Smuts Avenue, Braamfontein, Johannesburg, 2000, South Africa ~72: ALAN SHEMI;MICHAEL BODUNRIN;SEHLISELO NDLOVU~

2023/03983 ~ Provisional ~54:PROCESS FOR SULFOALKYLATION OF K-HUMATES ~71:OMNIA GROUP (PROPRIETARY) LIMITED, Building H, Monte Circle Office Park, 178 Montecasino Boulevard, South Africa ~72: HUYSER, Johannes Jacobus;KLEINHANS, George;STANDER, Barend Frederik~

2023/03984 ~ Complete ~54:AGROTIS IPSILON NORA VIRUS FOR PREVENTING AND CONTROLLING LEPIDOPTERAN PESTS AND APPLICATION THEREOF ~71:Institute of Plant Protection, Henan Academy of Agricultural Sciences, 116 Huayuan Road, Zhengzhou, Henan, 450002, People's Republic of China ~72: DUAN, Yun;FAN, Zhiye;GONG, Zhongjun;HAN, Ruihua;JIANG, Yueli;LI, Tong;MIAO, Jin;WU, Yuqing;ZHANG, Gaiping~

2023/03987 ~ Complete ~54:A SHELL STRUCTURE AND AN INDUSTRIAL AUTOMATIC FLOWMETER
~71:Tianjin Sino-German University of Applied Sciences, No. 2, Yashen Road, Haihe Education Park, Jinnan District, Tianjin City, 300350, People's Republic of China ~72: Xin Shao~

2023/03990 ~ Complete ~54:A PREPARATION METHOD OF NEGATIVE TEMPERATURE COEFFICIENT THERMOSENSITIVE CERAMICS BASED ON BARIUM STRONTIUM TITANATE SOLID SOLUTION SYSTEM
~71:CAS Sensor (Foshan) Technology CO. Ltd, Room 301-1 & 302, Building 4, Tianfu Technology Center, No. 12, Xianan Road, Guicheng Street, Nanhai District, Foshan City, Guangdong Province, People's Republic of China ~72: CHANG, Aimin;PAN, Ye;XIE, Juntao;ZHANG, Huimin~ 33:CN ~31:202211688347.0 ~32:28/12/2022

2023/03993 ~ Complete ~54:HEAT TRANSFER DEVICE FORMED BY CASTING ~71:CHONGQING HECHUANG GANYI TECHNOLOGY CO., LTD, No.19-7 to No.19-9 Nanping West Road 75, Nanan District, Chongqing City, People's Republic of China ~72: WEI HE;WEI TAN;XIAOJUN ZHOU;XIAOQIANG REN;YUMENG TAN~

2023/04012 ~ Complete ~54:COATING OF MATERIALS WITH BIOSURFACTANT COMPOUNDS
~71:STELLENBOSCH UNIVERSITY, Admin B, Victoria Street, South Africa ~72: CLEMENTS, Tanya Lee;KHAN, Wesaal;MUTTA, Nusrat Begum;NDLOVU, Thando~ 33:ZA ~31:2020/05912 ~32:25/09/2020

- APPLIED ON 2023/03/31 -

2023/04035 ~ Complete ~54:LONG-TERM PRESERVATION METHOD FOR SALICACEAE (SENSU STRICTO) SEEDS ~71:Kunming Institute of Botany, Chinese Academy of Sciences, No. 132, Lanhei Road, Kunming, Yunnan Province, 650201, People's Republic of China ~72: CAI, Jie;FANG, Yunhua;GUO, Yongjie;HE, Huajie;HU, Xiaojian;LIU, Cheng;TAN, Zhigang;YANG, Juan;YANG, Lan;YANG, Xiangyun;ZHANG, Ting;ZHANG, Xiaoyin~ 33:CN ~31:2022112724189 ~32:18/10/2022

2023/04043 ~ Complete ~54:BIOFACTORS FOR THE TREATMENT AND PROPHYLAXIS OF DEMENTIA
~71:WÖRWAG PHARMA GMBH & CO.KG, Flugfeld-Allee 24, Germany ~72: Fritz WÖRWAG;Marcus WÖRWAG~ 33:EP ~31:20200644.1 ~32:07/10/2020

2023/04048 ~ Complete ~54:IMPROVEMENTS IN GAMMA-ACTIVATION ANALYSIS MEASUREMENTS
~71:CHRYCOS CORPORATION LIMITED, Waite Road, Australia ~72: TICKNER, James~ 33:AU ~31:2020903133 ~32:02/09/2020

2023/04051 ~ Complete ~54:RADIATION RESISTANT INORGANIC OXIDE FLAKES ~71:NIPPON FIBER CORPORATION, 2373-2, Fuse, Abiko-City, Chiba 2701162, Japan ~72: HIROSHI FUKAZAWA~ 33:JP ~31:2020-169452 ~32:06/10/2020

2023/04060 ~ Complete ~54:SECURITY DOCUMENTS OR ARTICLES COMPRISING OPTICAL EFFECT LAYERS COMPRISING MAGNETIC OR MAGNETIZABLE PIGMENT PARTICLES AND METHODS FOR PRODUCING SAID OPTICAL EFFECT LAYERS ~71:SICPA HOLDING SA, Avenue de Florissant 41, PRILLY 1008, SWITZERLAND, Switzerland ~72: CALLEGARI, Andrea;DESPLAND, Claude-Alain;LOGINOV, Evgeny~ 33:EP ~31:20194060.8 ~32:02/09/2020

2023/04032 ~ Provisional ~54:WATER ENGINE ~71:Martin Hempel, 138 Villiers Road, Walmer, South Africa ~72: Martin Hempel~

2023/04071 ~ Complete ~54:TRANSPORT AND STORAGE CONTAINER FOR LIQUIDS ~71:PROTECHNA S.A., Avenue de la Gare 14, Switzerland ~72: FRIEDRICH, Stefan~ 33:DE ~31:10 2020 127 721.0 ~32:21/10/2020

2023/04040 ~ Complete ~54:METHODS FOR MODIFYING THE OPTICAL APPEARANCE OF POLYMERS
~71:LUMMUS NOVOLEN TECHNOLOGY GMBH, Gottlieb-Daimler-Strasse 8, Germany ~72: RÄNTZSCH,
Volker;WITTNER, Manfred~ 33:EP ~31:20200272.1 ~32:06/10/2020

2023/04042 ~ Complete ~54:SMOKING DEVICE WITH HEATING PROFILE BASED ON PUFF VOLUME
~71:PHILIP MORRIS PRODUCTS S.A., Quai Jeanrenaud 3, Switzerland ~72: MIRONOV, Oleg;STURA, Enrico~
33:EP ~31:20194715.7 ~32:04/09/2020

2023/04044 ~ Complete ~54:APPARATUS, METHOD, OR COMPUTER PROGRAM FOR PROCESSING AN
ENCODED AUDIO SCENE USING A BANDWIDTH EXTENSION ~71:FRAUNHOFER-GESELLSCHAFT ZUR
FÖRDERUNG DER ANGEWANDTEN FORSCHUNG E.V., Hansastrasse 27c, Germany ~72: BÜTHE,
Jan;BAYER, Stefan;DÖHLA, Stefan;FOTOPOULOU, Eleni;FUCHS, Guillaume;MULTRUS,
Markus;REUTELHUBER, Franz~ 33:EP ~31:20201093.0 ~32:09/10/2020;33:EP ~31:20207517.2
~32:13/11/2020;33:EP ~31:21180869.6 ~32:22/06/2021

2023/04064 ~ Complete ~54:QUINOLINE CGAS ANTAGONIST COMPOUNDS ~71:ImmuneSensor
Therapeutics, Inc., 2110 Research Row, Suite 610, DALLAS 75235, TX, USA, United States of America;The
Board of Regents of the University of Texas System, 210 West 7th Street, AUSTIN 78701, TX, USA, United
States of America ~72: CHEN, Chuo;CHEN, Zhijian;QIU, Jian;SHI, Heping;SUN, Lijun;TAN, Huiling;TSCHANTZ,
Matt;WEI, Qi;WU, Youtong~ 33:US ~31:63/074,446 ~32:03/09/2020;33:US ~31:63/124,713
~32:11/12/2020;33:US ~31:63/196,146 ~32:02/06/2021

2023/04034 ~ Complete ~54:DEVICE AND ASSOCIATED METHOD FOR CONTAMINANT DETECTION AND
MAPPING ~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;SIDDIQUE, Husnain;TAHA,
Muhammad~

2023/04036 ~ Complete ~54:SULPHOALUMINATE CEMENT MATERIAL WITH RETARDING EFFECT
~71:CHONGQING UNIVERSITY, 174 Shazheng Street, Shapingba District, Chongqing, 400044, People's
Republic of China ~72: CHEN, Mingwei;HUANG, Yubin;ZHANG, Cheng;ZHANG, Pei~

2023/04050 ~ Complete ~54:ARTICULATED MOLD ARRANGEMENT FOR A GLASS PROCESSING SYSTEM
~71:GLASSTECH, INC., 995 Fourth Street, Ampoint Industrial Park, Perrysburg, Ohio, 43551, United States of
America ~72: CRISTIN J REINHART;DAVID B NITSCHKE;DEAN M NITSCHKE;JR. JAMES P
SCHNABEL;STEPHEN D SNYDER~ 33:US ~31:17/011,520 ~32:03/09/2020

2023/04073 ~ Provisional ~54:MULTI TELEVISION DRIVE-INS CONFIGURATIONS ~71:HILTON BRIAN
THOMAS, 309 THORA COURT, KITE STR, HORISON, South Africa ~72: HILTON BRIAN THOMAS~

2023/04057 ~ Complete ~54:MAGNETIC MATRICES AND METHODS OF USING THE SAME ~71:JOSE
PANCÁCIO RIBEIRO, 1100 Alameda Oscar Niemeyer, Apt. 1803C, Nova Lima, Minas Gerais, 34006-065,
Brazil;RIBEIRO, CLÁUDIO HENRIQUE TEIXEIRA, 9808 Caitlins Ct. Ellicott City, Maryland, 21042, United
States of America ~72: CLÁUDIO HENRIQUE TEIXEIRA RIBEIRO;JOSE PANCÁCIO RIBEIRO~
33:US ~31:17/067,066 ~32:09/10/2020

2023/04062 ~ Complete ~54:METHOD FOR TREATING A WASTEWATER EFFLUENT BY DENSIFYING
SLUDGE IN A SEQUENCING BATCH REACTOR ~71:Suez International, 16 Place de l'Iris, Tour CB21,
PARIS 92040, LA DEFENSE CEDEX, FRANCE, France ~72: DAUNAY, Alexis;PETITPAIN PERRIN,
Françoise~ 33:FR ~31:2010109 ~32:02/10/2020

2023/04065 ~ Complete ~54:CRYSTALLINE FORMS OF A PHARMACEUTICAL COMPOUND ~71:Azafaros B.V., J.H. Oortweg 21, LEIDEN 2333 CH, THE NETHERLANDS, Netherlands ~72: BLATTER, Fritz;HETT, Robert;LANDSKRONER, Kyle;ROBIN, Jennifer~ 33:EP ~31:20199934.9 ~32:02/10/2020

2023/04070 ~ Complete ~54:PHOTOSTABLE COMPOSITION AND METHOD OF REDUCING OR CONTROLLING WEED POPULATION APPLYING SAID COMPOSITION ~71:UPL Corporation Limited, 6th Floor, Suite 157B, Harbor Front Building, President John Kennedy Street, PORT LOUIS, MAURITIUS, Mauritius;UPL do Brasil Industria e Comercio de Insumos Agropecuarios S.A., Avenida Maeda, s/nº, Prédio Comercial, térreo, Distrito Industrial, ITUVERAVA 14500-000, BRAZIL, Brazil ~72: LIMA SILVA, Ferdinando Marcos;QUEIROZ, Ana Flávia~ 33:BR ~31:10 2020 020168 9 ~32:01/10/2020;33:BR ~31:10 2021 019763 3 ~32:01/10/2021

2023/04037 ~ Complete ~54:PERFORMANCE TEST SYSTEM AND EVALUATION METHOD OF SUBWAY TRACTION MOTOR ~71:HUNAN HUGONG ELECTRIC CO., LTD., Room 1006, No. 9, Xiaotang Road, High-tech Zone, Xiangtan, People's Republic of China;HUNAN INSTITUTE OF ENGINEERING, No.88 Fuxing East Road, Xiangtan City, Hunan Province, People's Republic of China ~72: HUANG Zhonghua;LIU Wantai;WEN Shigui;XIE Ya~ 33:CN ~31:CN202210395471.1 ~32:14/04/2022

2023/04045 ~ Complete ~54:APPARATUS, METHOD, OR COMPUTER PROGRAM FOR PROCESSING AN ENCODED AUDIO SCENE USING A PARAMETER SMOOTHING ~71:FRAUNHOFER-GESELLSCHAFT ZUR FÖRDERUNG DER ANGEWANDTEN FORSCHUNG E.V., Hansastrasse 27c, Germany ~72: BÜTHE, Jan;BAYER, Stefan;DÖHLA, Stefan;FOTOPOULOU, Eleni;FUCHS, Guillaume;MULTRUS, Markus;REUTELHUBER, Franz~ 33:EP ~31:20201093.0 ~32:09/10/2020;33:EP ~31:20207520.6 ~32:13/11/2020;33:EP ~31:21180873.8 ~32:22/06/2021

2023/04052 ~ Complete ~54:EXTRACTION OF BASE METALS USING CARBONACEOUS MATTER AND A THIOCARBONYL FUNCTIONAL GROUP REAGENT ~71:JETTI RESOURCES, LLC, 2010 8th Street, Boulder, Colorado, 80302, United States of America ~72: DAVID DIXON;EDOUARD ASSELIN;NELSON MORA HUERTAS;ZIHE REN~ 33:US ~31:63/080,549 ~32:18/09/2020

2023/04033 ~ Provisional ~54:MOLECULAR MODELLING METHOD FOR A FUNCTIONAL MATERIAL ~71:CSIR, Scientia, Meiring Naude Road, Brummeria, Pretoria, 0184, South Africa ~72: KATLEGO JAFTA RAMALATSWA;RAPELA REGINA MAPHANGA~

2023/04039 ~ Complete ~54:SMOKING DEVICE WITH HEATING PROFILE BASED ON PUFF FREQUENCY ~71:PHILIP MORRIS PRODUCTS S.A., Quai Jeanrenaud 3, Switzerland ~72: STEFFEN, Fabrice;STURA, Enrico;UTHURRY, Jerome~ 33:EP ~31:20194709.0 ~32:04/09/2020

2023/04053 ~ Complete ~54:EXTRACTING BASE METALS USING A WETTING AGENT AND A THIOCARBONYL FUNCTIONAL GROUP REAGENT ~71:JETTI RESOURCES, LLC, 2010 8th Street, Boulder, Colorado, 80302, United States of America ~72: DAVID DIXON;EDOUARD ASSELIN;NELSON MORA HUERTAS;ZIHE REN~ 33:US ~31:63/080,578 ~32:18/09/2020;33:US ~31:63/212,518 ~32:18/06/2021

2023/04056 ~ Complete ~54:TRICYCLIC PYRIDONES AND PYRIMIDONES ~71:ERASCA, INC., 3115 Merryfield Row Suite 300 San Diego, California 92121, United States of America ~72: BENJAMIN JONES;JEAN-MICHEL VERNIER;JUN FENG;MARCOS GONZALEZ-LOPEZ;NICHOLAS A ISLEY;PING CHEN~ 33:US ~31:63/082,221 ~32:23/09/2020;33:US ~31:63/259,894 ~32:18/12/2020

2023/04061 ~ Complete ~54:SECURITY MARKING, METHOD AND DEVICE FOR READING THE SECURITY MARKING, SECURITY DOCUMENT MARKED WITH THE SECURITY MARKING, AND METHOD AND SYSTEM FOR VERIFYING SAID SECURITY DOCUMENT ~71:SICPA HOLDING SA, Avenue de Florissant 41, PRILLY

1008, SWITZERLAND, Switzerland ~72: CALLEGARI, Andrea;CARNERO, Benito;DINOEV, Todor;DORIER, Jean-Luc;LOGINOV, Evgeny;RAEMY, Xavier Cédric~ 33:EP ~31:20194057.4 ~32:02/09/2020

2023/04066 ~ Complete ~54:METHODS FOR REDUCING HOST CELL PROTEIN CONTENT IN PROTEIN PURIFICATION PROCESSES ~71:Eli Lilly and Company, Lilly Corporate Center, INDIANAPOLIS 46285, IN, USA, United States of America ~72: BOWES, Brian David;KREBS, Lara Ellen~ 33:US ~31:63/086,915 ~32:02/10/2020

2023/04046 ~ Complete ~54:COMPOSITIONS AND METHODS FOR TREATING WOUNDS ~71:IMAGINE PHARMA LLC, 28 S. Waterloo Road, Suite 100, United States of America ~72: POLLETT, Johathan;THAI, Ngoc~ 33:US ~31:63/122,746 ~32:08/12/2020

2023/04047 ~ Complete ~54:PRESSURE VALVE ASSEMBLY ~71:SWEETWATER ENERGY, INC., 2400 Mt. Read Boulevard, Dock 55, United States of America ~72: SAMJITSINGH, Sharon~ 33:US ~31:63/087,077 ~32:02/10/2020;33:US ~31:63/146,608 ~32:06/02/2021;33:US ~31:63/153,740 ~32:25/02/2021

2023/04055 ~ Complete ~54:QUAY TYPE STEEL JETTY AND CONSTRUCTION METHOD THEREOF ~71:CHINA HARBOUR ENGINEERING COMPANY LTD., No. 9,Chunxiu Road, Dongcheng District, Beijing, 100027, People's Republic of China ~72: HONGXIANG WANG~ 33:CN ~31:202210886891X ~32:26/07/2022

2023/04059 ~ Complete ~54:APPARATUS, METHOD, OR COMPUTER PROGRAM FOR PROCESSING AN ENCODED AUDIO SCENE USING A PARAMETER CONVERSION ~71:FRAUNHOFER-GESELLSCHAFT ZUR FÖRDERUNG DER ANGEWANDTEN FORSCHUNG E.V., Hansastrasse 27c, Germany ~72: BÜTHE, Jan;BAYER, Stefan;DÖHLA, Stefan;FOTOPOULOU, Eleni;FUCHS, Guillaume;MULTRUS, Markus;REUTELHUBER, Franz~ 33:EP ~31:20201093.0 ~32:09/10/2020;33:EP ~31:20207515.6 ~32:13/11/2020;33:EP ~31:21180863.9 ~32:22/06/2021

2023/04038 ~ Complete ~54:INTEGRATION OF HIGH FREQUENCY RECONSTRUCTION TECHNIQUES WITH REDUCED POST-PROCESSING DELAY ~71:DOLBY INTERNATIONAL AB, Apollo Building, 3E Herikerbergweg 1-35, 1101 CN, Amsterdam Zuid Oost, Netherlands ~72: HEIKO PURNHAGEN;KRISTOFER KJOERLING;LARS VILLEMOES;PER EKSTRAND~ 33:US ~31:62/662,296 ~32:25/04/2018

2023/04041 ~ Complete ~54:SCREENING DEVICE AND METHOD FOR SCREENING A PERSON ~71:SCARABEE SYSTEMS & TECHNOLOGY B.V., 131, Hoeksteen, Netherlands ~72: TAN, Michael Kim~ 33:NL ~31:2026564 ~32:28/09/2020

2023/04049 ~ Complete ~54:TUBULAR REACTORS ~71:UNISA, Preller Street, Muckleneuk, South Africa ~72: HILDEBRANDT, Diane;LIU, Xinying;SHEN, Jianqi~ 33:GB ~31:2013769.1 ~32:02/09/2020

2023/04054 ~ Complete ~54:ROTARY TELESCOPIC BOOM LIFT ~71:MAGNI REAL ESTATE S.R.L., Via Vespucci, 2, 41013, Castelfranco Emilia, Italy ~72: RICCARDO MAGNI~ 33:IT ~31:102020000023365 ~32:05/10/2020

2023/04058 ~ Complete ~54:METHODS OF CONTINUOUS AND SEMI-CONTINUOUS PRODUCTION OF ELECTROCHEMICAL CELLS ~71:24M TECHNOLOGIES, INC., 130 Brookline, St. Cambridge, Massachusetts, 02139, United States of America ~72: GLENN JORDAN;GREGORY MEHOS;HASAN SIDDIQUI;MADELEINE FINKENAUER;MATTHEW R TYLER;NATHAN COSTA;NEIL AXELSEN;RAYMOND ZAGARS~ 33:US ~31:63/089,957 ~32:09/10/2020;33:US ~31:63/115,293 ~32:18/11/2020

2023/04063 ~ Complete ~54:CYP81E GENES CONFERRING HERBICIDE TOLERANCE ~71:Colorado State University Research Foundation, 2537 Research Blvd., Suite 200, FORT COLLINS 80526, CO, USA, United

States of America;Monsanto Technology LLC, 800 North Lindbergh Boulevard, ST LOUIS 63167, MO, USA, United States of America;The Board of Trustees of the University of Illinois, 352 Henry Administration Building, 506 South Wright Street, URBANA 61801, IL, USA, United States of America ~72: BEFFA, Roland;GAINES, Todd;GIACOMINI, Darci Ann;RODRIGUES ALVES DE FIGUEIREDO, Marcelo;TRAN, Patrick John~ 33:US ~31:63/073,276 ~32:01/09/2020

2023/04067 ~ Complete ~54:AEROSOL PROVISION DEVICE ~71:Nicoventures Trading Limited, Globe House, 1 Water Street, LONDON WC2R 3LA, UNITED KINGDOM, United Kingdom ~72: BOHAM, Scott George~ 33:GB ~31:2015680.8 ~32:02/10/2020

2023/04069 ~ Complete ~54:EARLY STRENGTH SLAG-BASED CEMENTITIOUS BINDER ~71:GCP Applied Technologies Inc., 2325 Lakeview Parkway, Suite 450, ALPHARETTA 30009, GA, USA, United States of America ~72: BURNS, Elizabeth;ESTEPHANE, Pierre~ 33:US ~31:63/086,627 ~32:02/10/2020

2023/04068 ~ Complete ~54:METHOD FOR TREATING A WASTEWATER EFFLUENT IN A SEQUENCING BATCH REACTOR (SBR) HAVING A CONSTANT LEVEL AND CONTROLLED RECOVERY ~71:Suez International, Tour CB21, 16 place de l'Iris, La Defense Cedex, PARIS 92040, FRANCE, France ~72: DAUNAY, Alexis;PETITPAIN PERRIN, Françoise~ 33:FR ~31:2010111 ~32:02/10/2020

- APPLIED ON 2023/04/03 -

2023/04083 ~ Complete ~54:HIGH-PERFORMANCE BISMUTH BRASS ALLOY MATERIAL FOR MOBILE PHONE LENSES ~71:NINGBO XINGAODA ADVANCED METALLIC MATERIALS CO., LTD, Lincheng Village, Linshan Town, Yuyao City, Zhejiang Province, People's Republic of China ~72: Bin Feng;Dong Yuan;Dongchao Yang;Guanbing He;Jianwei Zhang;Min Huang;Yi Zhang~ 33:CN ~31:202210821874.8 ~32:12/07/2022

2023/04096 ~ Complete ~54:APPLICATION OF INACTIVATED LACTOBACILLUS CASEI IOB-P9 POSTBIOTICS IN HYPOGLYCEMIC ASPECT ~71:TIANJIN INNOORIGIN BIOLOGICAL TECHNOLOGY CO., LTD, Building 31, Green Valley Health Industrial Park, 59 Kangtai Avenue, Binhai Technology Park, Binhai High-Tech Zone, Tianjin, 300000, People's Republic of China ~72: HAN, Xuemei;LIANG, Wu;WANG, Haikuan~ 33:CN ~31:202210525330.7 ~32:16/05/2022

2023/04106 ~ Complete ~54:WAVE ENERGY ABSORBER WITH ADJUSTABLE HYDRODYNAMIC PROPERTIES ~71:MARINE POWER SYSTEMS LIMITED, The Warehouse Building, Urban Village, Swansea, SA1 2AQ, United Kingdom ~72: GRAHAM FOSTER~ 33:GB ~31:2017475.1 ~32:04/11/2020

2023/04110 ~ Complete ~54:METHOD OF IMPROVING THE TEXTURE AND FUNCTIONALITY OF A DRY FRACTIONATED PLANT PROTEIN CONCENTRATE BEVERAGE ~71:Société des Produits Nestlé S.A., Avenue Nestlé 55, VEVEY 1800, SWITZERLAND, Switzerland ~72: BORTOLIN, Marina;PENSEYRES, Ludovic;RICHON, Pierre-Alain;VAFEIADI, Christina;WOOSTER, Timothy James~ 33:EP ~31:20195595.2 ~32:10/09/2020

2023/04099 ~ Complete ~54:LIPID NANOPARTICLES FOR DELIVERING MRNA VACCINES ~71:SANOFI, 46 Avenue de la Grande, France ~72: BEAULIEU, Angela Lynne;CASIMIRO, Danilo;CHIVUKULA, Sudha;DEROSA, Frank;DIAS, Anusha;GOLDMAN, Rebecca L.;GOPANI, Hardip Rajeshbhai;KALNIN, Kirill;KARVE, Shrirang;KHANMOHAMMED, Asad;PATEL, Priyal;PLITNIK, Timothy;SARODE, Ashish L.;TIBBITTS, Timothy;TRAN, Khang Anh;VARGAS MONTOYA, Natalia~ 33:US ~31:63/110,965 ~32:06/11/2020;33:US ~31:63/212,523 ~32:18/06/2021;33:EP ~31:21315198.8 ~32:13/10/2021

2023/04101 ~ Complete ~54:ORGANIC WASTE ANAEROBIC REACTOR ~71:BEIJING GEOENVIRON ENGINEERING & TECHNOLOGY, INC, Floor 1, In The Underground 1st To 4th Floor Of Building 13, Courtyard 9, Dijin Road,, Haidian District, Beijing, 100095, People's Republic of China ~72: CHANGQING QI;GANG

DU;JUN CHEN;QINGBIN YANG;SHENGLI ZHEN;YU CHEN;ZHE NI~ 33:CN ~31:202110265780.2
~32:11/03/2021;33:CN ~31:202120520057.X ~32:11/03/2021

2023/04094 ~ Complete ~54:COMMUNICATIONS SYSTEMS AND METHODS WITH STOCHASTICALLY
DISTRIBUTED ORBITING SATELLITES ~71:STAR MESH LLC, 22 Monterey Drive, Princeton Jct., United States
of America ~72: SCHLOEMER, Gerald, R.~ 33:US ~31:62/697,250 ~32:12/07/2018;33:US ~31:62/739,245
~32:30/09/2018

2023/04095 ~ Complete ~54:METHOD FOR TREATING ARSENIC-CONTAINING BACTERIAL LEACHATE
~71:NORTHEASTERN UNIVERSITY, Northeastern University, No.11, Lane 3, Wenhua Road, Heping District,
Shenyang, Liaoning Province, 110819, People's Republic of China ~72: CHEN, Yajing;TONG, Linlin;YANG,
Hongying~ 33:CN ~31:2022103841535 ~32:13/04/2022

2023/04113 ~ Complete ~54:HSD17B13 INHIBITORS AND USES THEREOF ~71:FL2022-001, Inc., 601
California Street, Suite 600, SAN FRANCISCO 94108, CA, USA, United States of America ~72: BOTROUS,
Iryny;FASANYA, Karensa L.;GOVEK, Steven P.;HUDSON, Andrew R.;NAGASAWA, Johnny Y.;SMITH, Nicholas
D.~ 33:US ~31:63/085,846 ~32:30/09/2020

2023/04075 ~ Provisional ~54:A METHOD OF PROVIDING INSURANCE DATA ~71:ESTATE CONCIERGE
SERVICE (PTY) LTD., 11 Harrier Crescent, DOUGLASDALE, Johannesburg 2191, Gauteng Province, SOUTH
AFRICA, South Africa ~72: CIKES, Derek;KOHLE, Nicolas Godfrey~

2023/04079 ~ Provisional ~54:LIVESTOCK IDENTIFICATION AND TRACEABILITY SYSTEM ~71:MYCOW
(PTY) LTD, 174 Veale Street, Nieuw Muckleneuk, South Africa ~72: DE KOCK, Meyer Etienne;GOUWS, Johan
Andries~

2023/04091 ~ Complete ~54:MEASURING INSTRUMENT AND METHOD FOR THERMAL CONDUCTIVITY OF
ICE ~71:WEST ANHUI UNIVERSITY, West Anhui University, Moon Island, West of Yunlu Bridge, Lu ~39;an
City, People's Republic of China ~72: HU Xunmei;LI Shuo;SUN Pengjiao;SUN Yaxin;WAN Neng;WEI
Xiangchun;ZHANG Bo;ZHAO Jiangdong;ZHAO Minfu;ZHENG Jianwen~ 33:CN ~31:CN202310195973.4
~32:28/02/2023

2023/04092 ~ Complete ~54:METHOD FOR REFINING BIO-BASED PROPYLENE GLYCOL ~71:CHANGCHUN
MEIHE SCIENCE AND TECHNOLOGY DEVELOPMENT CO., LTD., No. 2919 Foshan Street, Economic
Development Zone Changchun, Jilin, 130102, People's Republic of China ~72: YI YUAN~ 33:CN
~31:201811151458.1 ~32:29/09/2018

2023/04076 ~ Provisional ~54:METHOD OF ASSEMBLING CYLINDRICAL BATTERY SYSTEMS ~71:Neill
Human, 15 Lobelia Street, South Africa ~72: Neill Human~

2023/04078 ~ Provisional ~54:SOLAR PANEL ALARM MONITORING SYSTEM ~71:Edmund Herbert, 38 Parrot
Street, South Africa ~72: Edmund Herbert~

2023/04082 ~ Complete ~54:COMPOSITE FIELD MODULATED MICROWAVE COLD PLASMA JET DEVICE
~71:Huzhou Institute of Zhejiang University, Level 2-3, Building B1 and B2, Science and Technology Innovation
Complex, 819 Xisaishan Road, South Taihu New District, Huzhou City, Zhejiang Province, 313000, People's
Republic of China ~72: Bingwen YU;Dengjie YU;Haoze WEI;Wei JIN;Yiwen BAI~ 33:CN ~31:2022108422218
~32:18/07/2022

2023/04085 ~ Complete ~54:AUXILIARY DEVICE FOR THREADING STEEL STRANDS ~71:Zhengzhou
Engineering Co.,LTD of China Railway Seventh Group, No.8, Middle-Longhai Road, Zhengzhou City, Henan

Province, 450052, People's Republic of China ~72:

CHEN,Huifang;CHEN,Xiangyang;LU,Ping;MA,Shuqiang;SHI,Hongqian;SUN,Yaxing;WANG,Junpeng;WANG,Qing
;YANG,Yuxi;ZHANG,Guoyue~ 33:CN ~31:202320560548.6 ~32:21/03/2023

2023/04086 ~ Complete ~54:DRINKING WATER PACKAGING FILM AND PREPARATION METHOD THEREOF
~71:Guangdong Lihong Innovative Materials Co., Ltd., Plot C12-4, Bonded Area, Shantou City, Guangdong
Province, 515071, People's Republic of China ~72: LIN, Wenmao;SUN, Lijia~

2023/04102 ~ Complete ~54:GREASE EXTRACTION DEVICE FOR ORGANIC WASTE LEACHATE AND
EXTRACTION PROCESS ~71:BEIJING GEOENVIRON ENGINEERING & TECHNOLOGY, INC, Floor 1, In The
Underground 1st To 4th Floor Of Building 13, Courtyard 9, Dijin Road,, Haidian District, Beijing, 100095, People's
Republic of China ~72: CHANGQING QI;GANG DU;JUN CHEN;QINGBIN YANG;SHENGLI ZHEN;YU
CHEN;ZHE NI~ 33:CN ~31:202110240863.6 ~32:04/03/2021;33:CN ~31:202120469717.6 ~32:04/03/2021

2023/04114 ~ Complete ~54:FLUID TRANSFER DEVICE AND METHOD OF USE FOR SAME ~71:ICU
MEDICAL, INC., 951 Calle Amanecer, United States of America ~72: FANGROW, Thomas F.;HUGHES,
Christopher James;NELSON, David;PUNIM, Amanda;SHAUVER, Erik Scott~ 33:US ~31:63/090,086
~32:09/10/2020

2023/04087 ~ Complete ~54:CLEANING METHOD FOR EFFECTIVELY IMPROVING VIGOR OF SALICACEAE
(SENSU STRICTO) SEEDS ~71:Kunming Institute of Botany, Chinese Academy of Sciences, No. 132, Lanhei
Road, Kunming, Yunnan Province, 650201, People's Republic of China ~72: CAI, Jie;FANG, Yunhua;HE,
Huajie;HU, Xiaojian;LIU, Cheng;QIN, Shaofa;TAN, Zhigang;YANG, Xiangyun;ZHANG, Ting;ZHANG, Xiaoyin~
33:CN ~31:2022111073829 ~32:13/09/2022

2023/04089 ~ Complete ~54:LUPEOL COUPLED TRIPHENYLPHOSPHINE DERIVATIVE AND ITS
PREPARATION AND APPLICATION ~71:QIQIHAR MEDICAL UNIVERSITY, 333 Bukui North Street, Jianhua
District,Qiqihar City, People's Republic of China ~72: BU Ming;CUI Hongxia;LIU Xinyang;SONG Xu;WANG
Jiafeng;WANG Zengxin;WU Jiale;YANG Jing;ZHANG Haotian~ 33:CN ~31:2022104985543 ~32:09/05/2022

2023/04093 ~ Complete ~54:NEUREGULIN-4 COMPOUNDS AND METHODS OF USE ~71:Eli Lilly and
Company, Lilly Corporate Center, INDIANAPOLIS 46285, IN, USA, United States of America ~72: DAY, Jonathan
Wesley;HEUER, Josef George;MUPPIDI, Avinash;NI, Wei;PANCOOK, James David~ 33:US ~31:62/827,386
~32:01/04/2019

2023/04084 ~ Complete ~54:GUIDE DEVICE FOR THREADING STEEL STRANDS ~71:Zhengzhou Engineering
Co.,LTD of China Railway Seventh Group, No.8, Middle-Longhai Road, Zhengzhou City, Henan Province,
450052, People's Republic of China ~72: GU, Tiejun;GUO, Shuanzheng;JIANG, Yang;LI, Dongyuan;LIU,
Zhanlei;LU, Ping;MA, Shuqiang;MAO, Danfeng;WANG, Haigang;YANG, Haitao;YANG, Zhi;ZHANG, Tao;ZHANG,
Yaping~ 33:CN ~31:202320559591.0 ~32:21/03/2023

2023/04090 ~ Complete ~54:APPLICATION OF BMP4 AS TARGET IN PREPARING DRUG FOR TREATING
DIABETIC CARDIOMYOPATHY ~71:QIQIHAR MEDICAL UNIVERSITY, 333 Bukui North Street, Jianhua
District,Qiqihar City, People's Republic of China ~72: DUAN Hongye;GAO Wei;GUO Tongjie;LIU Jicheng;QI
Zhanpeng;WANG Yuchun;WANG Yuting~ 33:CN ~31:2022108138917 ~32:12/07/2022

2023/04100 ~ Complete ~54:LIPOSOMES CONTAINING TLR4 AGONIST, PREPARATION AND USES
THEREOF ~71:SANOFI PASTEUR, 14 Espace Henry Vallée, Lyon, France ~72: GARINOT, Marie;HAENSLER,
Jean;PIRAS, Fabienne;RUIZ, Sophie;SYNTIN, Patrick~ 33:EP ~31:20306291.4 ~32:28/10/2020

2023/04115 ~ Provisional ~54:STORAGE BATTERY AND ELECTROLYTE ~71:Hermanus Christoffel Petrus Human, 10a Clifford Road, Chanclyff, South Africa ~72: Hermanus Christoffel Petrus Human;Jan Petrus Human~

2023/04074 ~ Provisional ~54:DISPENSER ~71:Novelquip Forestry (Pty) Ltd, Blazecor Unit 8 Pacaltsdorp Industria,, 6529, George, South Africa ~72: Daniel Jacobus Bauermeister;Greig Oppenheimer;Helgaard Petrus Steenkamp~

2023/04077 ~ Provisional ~54:RECIRCULATION GOODS STORAGE DEVICE ~71:Gian Mauro Moretti, 43 tenth street, South Africa ~72: Gian Mauro Moretti~

2023/04097 ~ Complete ~54:A FACILE, SUSTAINABLE THROUGHPUT PROCESS FOR MICROBIAL BIO-TRANSFORMATION-AIDED BIO-CATALYTIC UPGRADATION OF BIO-ETHANOL TO BIO-BUTANOL ~71:Pondicherry University, R.V. Nagar, Kalapet, Puducherry, 605014, India ~72: Kabilan Subash Chandra Bose;Navnit Kumar Ramamoorthy;Renganathan Sahadevan;Revanth Babu Pallam;Shovan Rakshit;Sudha Rani Sadras;Venkateswara Sarma Vemuri;Vinoth Vengadesan~

2023/04112 ~ Complete ~54:HSD17B13 INHIBITORS AND USES THEREOF ~71:FL2022-001, Inc., 601 California Street, Suite 600, SAN FRANCISCO 94108, CA, USA, United States of America ~72: FASANYA, Karensa L.;GOVEK, Steven P.;HUDSON, Andrew R.;LAI, Andiliy G.;SMITH, Nicholas D.~ 33:US ~31:63/085,843 ~32:30/09/2020

2023/04109 ~ Complete ~54:METHODS AND SYSTEMS FOR SYNCHRONISED AND ATOMIC TRACKING ~71:nChain Licensing AG, Grafenauweg 6, ZUG 6300, SWITZERLAND, Switzerland ~72: MEE, Andrew James~ 33:GB ~31:2013929.1 ~32:04/09/2020;33:GB ~31:2112503.4 ~32:02/09/2021

2023/04103 ~ Complete ~54:COMPOSITIONS AND METHODS FOR CANCER DIAGNOSIS ~71:AOA DX, 33 Hudson Street Unit 3505 E, Jersey City, New Jersey, 07302, United States of America ~72: HORACIO URI SARAGOVI~ 33:US ~31:63/087,427 ~32:05/10/2020

2023/04105 ~ Complete ~54:FOOD COMPOSITIONS INCORPORATING AGRICULTURAL MARC, AND METHODS OF PRODUCING THEREOF ~71:SONOMACEUTICALS, LLC, 421 Aviation Blvd., Santa Rosa, California, 95403, United States of America ~72: RALPH JEROME;TOREY ARVIK~ 33:US ~31:63/092,976 ~32:16/10/2020

2023/04108 ~ Complete ~54:ANTI-CEACAM5 ANTIBODIES AND CONJUGATES AND USES THEREOF ~71:Merck Patent GmbH, Frankfurter Strasse 250, DARMSTADT 64293 , GERMANY, Germany ~72: ANDERL, Jan;BERGER, Nir;DEUTSCH, Carl;HART, Felix;HECHT, Stefan;KÖNNING, Doreen;RAAB-WESTPHAL, Sabine;SCHRÖTER, Christian;SHAN, Min;SLOOT, Willem N.;TOLEIKIS, Lars~ 33:EP ~31:20194711.6 ~32:04/09/2020;33:EP ~31:20195559.8 ~32:10/09/2020

2023/04111 ~ Complete ~54:BACULOVIRUS EXPRESSION VECTOR ~71:Intervet International B.V., Wim de Körverstraat 35, BOXMEER 5831 AN, THE NETHERLANDS, Netherlands ~72: VAN DEN BORN, Erwin~ 33:EP ~31:20203379.1 ~32:22/10/2020

2023/04116 ~ Provisional ~54:GRINDER POSITIONER COMPONENT ~71:Sakhile Hopewell Ntuli, 1351 Empumelelweni, Ext 05, South Africa ~72: Sakhile Hopewell Ntuli~

2023/04098 ~ Complete ~54:IL-2 MUTANTS AND APPLICATION THEREOF ~71:SHANDONG SIMCERE BIOPHARMACEUTICAL CO., LTD., Lane 118, Furonghua Road, Pudong New District, People's Republic of China ~72: CAO, Zhuoxiao;FU, Yayuan;GE, Hu;HU, Yingying;REN, Jinsheng;TANG, Renhong~ 33:CN ~31:202010918842.0 ~32:04/09/2020;33:CN ~31:202110932286.7 ~32:13/08/2021

2023/04088 ~ Complete ~54:PHENYLE KETONE COMPOUNDS OR DERIVATIVES THEREOF WITH FLUORESCENCE LUMINESCENT PROPERTIES ~71:Dalian University of Technology, 2#, Linggong Road, Ganjingzi District, Dalian City, Liaoning Province, People's Republic of China ~72: SONG Ting;WANG Ziqian;ZHANG Zhichao~

2023/04104 ~ Complete ~54:LEGHEMOGLOBIN IN SOYBEAN ~71:PIONEER HI-BRED INTERNATIONAL, INC., 7100 N.W. 62nd Avenue, P.O. Box 1014, Johnston, Iowa, 50131-1014, United States of America ~72: ANTHONY J KINNEY;BO SHEN;HYEON-JE CHO;JOHN D EVERARD;KEVIN G RIPP;KNUT MEYER;THOMAS G PATTERSON;ZHAN-BIN LIU~ 33:US ~31:63/106,519 ~32:28/10/2020

2023/04107 ~ Complete ~54:MEMBRANE-BASED, IN-GEL LOOP-MEDIATED ISOTHERMAL AMPLIFICATION (LAMP) SYSTEM AND METHOD FOR DETECTING MICROBES ~71:CALIFORNIA INSTITUTE OF TECHNOLOGY, 1200 E. California Boulevard, M/C 6-32, Pasadena, California, 91125, United States of America ~72: ALAN YALUN GU;CLEMENT A CID;JING LI;LEOPOLD DOBELLE;MICHAEL R HOFFMANN;XUNYI WU;YANZHE ZHU~ 33:US ~31:63/117,932 ~32:24/11/2020

- APPLIED ON 2023/04/04 -

2023/04124 ~ Complete ~54:A FORMULA OF PLANT GINSENG CORDYCEPS SINENSIS ANTI PEELING AND BLACK HAIR SHAMPOO ~71:Yongming LIU, No. 1-2, Fuda Road, High-tech Industrial Park, Conghua Economic Development Zone, Guangzhou City, Guangdong Province, People's Republic of China ~72: Yongming LIU~

2023/04127 ~ Complete ~54:VIBRATING FEEDER FOR CEMENT PRODUCTION ~71:WUWEI LEIDA CEMENT CO., LTD, Huanglonggang, Shijian Town,Wuwei County,, Wuhu City, Anhui Province, 238300, People's Republic of China ~72: Sen YAO~

2023/04139 ~ Complete ~54:SOAP COMPOSITION COMPRISING HYDROGEL ~71:UNILEVER GLOBAL IP LIMITED, Port Sunlight, Wirral, Merseyside, CH62 4ZD, United Kingdom ~72: ANAL PUSHKARNA;GANESH ANKUSH PAWAR;PRASHANT POPAT BABAR;SIVAKUMAR ANANTHASUBRAMANIAN~ 33:EP ~31:20212206.5 ~32:07/12/2020

2023/04153 ~ Complete ~54:RADIATION HEAT DISSIPATION AND RADIATION HEAT COLLECTION-BASED COLD AND HOT CENTRAL AIR CONDITIONING SYSTEM ~71:BEIJING JINGKELUN ENGINEERING DESIGN AND RESEARCH INSTITUTE CO., LTD., Room 301, Building 2, No. 12 Juyuan Middle Road, People's Republic of China ~72: CAO, Wenjie;CHAO, Haiying;HAO, Lixuan;KANG, Jianhui;LI, Junzeng;MAO, Tongqin;WANG, Quanjian;XIE, Weibo;YANG, Jianguo;ZENG, Xianting;ZHANG, Jilong;ZHAO, Hui;ZHOU, Chengjun~ 33:CN ~31:202110080757.6 ~32:21/01/2021

2023/04119 ~ Complete ~54:SMART HOME MANAGEMENT SYSTEM BASED ON INTERNET OF THINGS ~71:YANG, Chang, Nanjing University of Aeronautics and Astronautics, 29 Jiangjun Avenue, Jiangning District, Nanjing, Jiangsu, 210016, People's Republic of China ~72: YANG, Chang~

2023/04123 ~ Complete ~54:FREQUENCY-ADJUSTABLE ACOUSTO-OPTIC ELECTROMAGNETIC STIMULATION DEVICE FOR ANIMAL EXPERIMENTS ~71:NINGBO KANGNING HOSPITAL (NINGBO CENTER FOR MENTAL DISEASE PREVENTION AND CONTROL), No. 1, Zhuangyu South Road, Zhuangshi Street, People's Republic of China ~72: LI Xingxing;YU Chang;ZHOU Dongsheng;ZHUANG Wenhao~

2023/04141 ~ Complete ~54:RETAINING WALL STRUCTURE USING CORRUGATED PLATES AND CONSTRUCTION METHOD THEREFOR ~71:CHINA RAILWAY 19 BUREAU GROUP CO., LTD., No. 19 Ronghua South Road, Beijing Economic and Technological Development Area, Beijing, 100176, People's Republic of China;CHINA RAILWAY 19TH BUREAU GROUP THIRD ENGINEERING CO., LTD., No. 36, Shenbei

Road, Shenbei New District, Shenyang, Liaoning, 110136, People's Republic of China ~72: ZHAO, Licai~ 33:CN
~31:202110581511.7 ~32:27/05/2021

2023/04146 ~ Complete ~54:WATER TREATMENT METHOD WITH RENEWAL OF THE ADSORBENT TO A
TARGETED INTERMEDIATE AGE ~71:Suez International, Tour CB21, 16 place de l'Iris, La Défense
Cédex, PARIS 92040, FRANCE, France ~72: BAUDIN, Isabelle;DANEL, Olivier;JOVANOVIĆ, Bastien~ 33:FR
~31:2009445 ~32:17/09/2020

2023/04118 ~ Provisional ~54:SOFTWARE APPLICATION THAT USES AI TO GENERATE BIOGRAPHICAL
FILMS OF PERSONS AND ENTITIES. ~71:HAVL Holding Trust, Lushof 52, Tzaneen, 0850, South Africa ~72:
JOHANNES NICHOLAAS VENTER~

2023/04130 ~ Complete ~54:FOLDABLE TENT FRAME ~71:ZEPELIN, S.R.O., Gen. M. R. Štefánika 7061,
Slovakia ~72: Juraj BREZAN~ 33:SK ~31:PUV 50096-2020 ~32:06/09/2020

2023/04134 ~ Complete ~54:A MAGL INHIBITOR ~71:H. LUNDBECK A/S, Ottiliavej 9, 2500 Valby, Denmark
~72: AMY ALLAN;CHERYL A GRICE;DANIEL J BUZARD;JEANNE V MOODY;JOHN J. M WIENER;JUSTIN S
CISAR;MICHAEL B SHAGHAFI;NICHOLAS RAFFAELE;OLIVIA D WEBER~ 33:US ~31:63/113,662
~32:13/11/2020

2023/04122 ~ Complete ~54:PARAMETRIC FAULT DIAGNOSIS METHOD FOR MULTI-LEVEL INVERTER
BASED ON BOND GRAPH MODELING ~71:XINJIANG UNIVERSITY, No.666 Shengli Road, Urumqi, Xinjiang,
People's Republic of China ~72: JIA Hailong;LIU Wenhong;PAZILAI Mahemuti;PENG Dongmei;WANG
Fang;YUAN Hang;ZHANG Baowei;ZHANG Xinyang~

2023/04126 ~ Complete ~54:NUCLEAR FUEL ROD AND MANUFACTURING METHOD ~71:FRAMATOME, 1
place Jean Millier, Tour Areva, France ~72: BISCHOFF, Jérémy;DUTHOO, Dominique~ 33:FR ~31:2010437
~32:13/10/2020

2023/04138 ~ Complete ~54:LIQUID AQUEOUS CLEANING COMPOSITION ~71:UNILEVER GLOBAL IP
LIMITED, Port Sunlight, Wirral, Merseyside, CH62 4ZD, United Kingdom ~72: CLAUDIA CREMONESI;GIOVANNI
TAINO;PINTU PAUL;UMA MADHAVAN~ 33:EP ~31:20206512.4 ~32:09/11/2020

2023/04142 ~ Complete ~54:A VEHICLE-MOUNTABLE RACK ~71:SHINGLEBACK OFF ROAD PTY LTD, 15
Mad Mans Gully Road, Australia ~72: TAYLOR, Andrew~ 33:AU ~31:2020903354 ~32:18/09/2020

2023/04147 ~ Complete ~54:FLUID TREATMENT METHOD AND PLANT ~71:Suez International, Tour CB21, 16
Place de l'Iris, PARIS LA DÉFENSE 92040, FRANCE, France ~72: DELAIRE, Mélanie;TRICOTTET,
Ludovic~ 33:FR ~31:2009442 ~32:17/09/2020

2023/04150 ~ Complete ~54:PREPARATION OF OXINDOLE DERIVATIVES AS NOVEL DIACYLGLYCERIDE
O-ACYLTRANSFERASE 2 INHIBITORS ~71:Merck Sharp & Dohme LLC, 126 East Lincoln Avenue, RAHWAY
07065, NJ, USA, United States of America ~72: BAO, Jianming;LIM, Yeon-Hee;ROANE, James P.~ 33:US
~31:63/089,063 ~32:08/10/2020

2023/04117 ~ Provisional ~54:A CAMPER ~71:BUYS, Floris, Cornelius, 55 FISH EAGLE DRIVE, SABLE HILLS
WATERFRONT ESTATE, PRETORIA, 0035, SOUTH AFRICA, South Africa;MEINTJIES, van der Merwe, Willem,
Schalk, 4B MOUNTAIN DRIVE, DERDEPOORT, PRETORIA, 0035, SOUTH AFRICA, South Africa ~72: BUYS,
Floris, Cornelius;MEINTJIES, van der Merwe, Willem, Schalk~

2023/04121 ~ Complete ~54:AN APPARATUS FOR AND A METHOD OF DESHELLING NUTS ~71:HG
MOLENAAR & CO (PTY) LTD., Jan van Riebeeck Drive, PAARL 7622, SOUTH AFRICA, South Africa ~72:

MOLENAAR, Cornelis Jacobus;MOLENAAR, Martin Werner;THRING, Tom Lawrence~ 33:ZA ~31:2022/09498
~32:25/08/2022

2023/04125 ~ Complete ~54:LACTOBACILLUS FERMENTUM IOB802 AND APPLICATION THEREOF IN
IMPROVING SLEEP DISORDER ~71:TIANJIN INNOORIGIN BIOLOGICAL TECHNOLOGY CO., LTD, Building
31, Green Valley Health Industrial Park, 59 Kangtai Avenue, Binhai Technology Park, Binhai High-Tech Zone,
Tianjin, 300000, People's Republic of China ~72: HAN, Xuemei;LIANG, Wu;SUN, Yunqi;WANG, Haikuan~ 33:CN
~31:202210571582.3 ~32:25/05/2022

2023/04129 ~ Complete ~54:FLUIDISED BED PYROLYSIS APPARATUS AND METHOD ~71:UNIVERSITY OF
PRETORIA, CNR LYNNWOOD AND ROPER STREET, HATFIELD, PRETORIA, South Africa ~72:
HEYDENRYCH, Michael, David;MERCKEL, Ryan, David~

2023/04135 ~ Complete ~54:USE OF IFN-LAMBDA MRNA FOR TREATING VIRAL INFECTIONS ~71:ETHRIS
GMBH, Semmelweisstrasse 3, 82152, Planegg, Germany ~72: ANNA MACHT;CARSTEN
RUDOLPH;CHRISTIAN PLANK;KRISTIN LOHMER;THOMAS LANGENICKEL~ 33:EP ~31:20205674.3
~32:04/11/2020

2023/04144 ~ Complete ~54:POWDER COMPOSITION BASED ON MICROPARTICLES EMBEDDING
NANOPARTICLES FOR THE DELIVERY OF THERAPEUTIC/DIAGNOSTIC COMPOUNDS ~71:Consiglio
Nazionale delle Ricerche, Piazzale Aldo Moro 7, ROMA (RM) 00185, ITALY, Italy;PlumeSTARS s.r.l., Strada
Inzani, 1, PARMA (IT) 43125, ITALY, Italy ~72: CATALUCCI, Daniele;COLOMBO, Paolo;IAFISCO,
Michele;QUARTA, Eride~ 33:IT ~31:102020000021292 ~32:09/09/2020

2023/04149 ~ Complete ~54:METHOD FOR MONITORING A RAILWAY TRACK AND MONITORING UNIT FOR
MONITORING A RAILWAY TRACK ~71:Frauscher Sensor Technology Group GmbH, Gewerbestrasse 1, ST.
MARIENKIRCHEN 4774, AUSTRIA, Austria ~72: HAID, Sebastian;ZEILINGER, Rene~ 33:EP ~31:20200042.8
~32:05/10/2020

2023/04131 ~ Complete ~54:NEUROD1 AND DLX2 VECTOR ~71:NEUEXCELL THERAPEUTICS INC., 200
Innovation Blvd., Suite 258B State College, United States of America ~72: XU, Jie~ 33:US ~31:63/084,945
~32:29/09/2020;33:US ~31:63/247,442 ~32:23/09/2021

2023/04136 ~ Complete ~54:FUSION PROTEINS COMPRISING SULFOGLUCOSAMINE SULFOHYDROLASE
ENZYMES AND METHODS THEREOF ~71:DENALI THERAPEUTICS INC., 161 Oyster Point Blvd., South San
Francisco, California, 94080, United States of America ~72: CATHAL MAHON;GUNASEKARAN
KANNAN;MIHALIS KARIOLIS;TINA GIESE~ 33:US ~31:63/091,800 ~32:14/10/2020

2023/04140 ~ Complete ~54:SOLID STATE FORMS OF SUBSTITUTED PYRAZOLOPYRIMIDINES AND USES
THEREOF ~71:KSQ THERAPEUTICS, INC., 4 Maguire Road, Lexington, Massachusetts, 02421, United States
of America ~72: FRIEDRICH BLATTER;GIUSEPPE LAPADULA;HANLAN LIU;JEREMY CLINTON WILT~ 33:US
~31:63/107,765 ~32:30/10/2020

2023/04145 ~ Complete ~54:METHOD OF LOCATING AN OBJECT ~71:Orange, 111, quai du Président
Roosevelt, ISSY-LES-MOULINEAUX 92130, FRANCE, France ~72: ALTMAN, Zwi;LEGAY,
Philippe;MOUILLERON, Marc-Antoine;PHAN HUY, Dinh Thuy~ 33:FR ~31:2009134 ~32:09/09/2020;33:FR
~31:2010551 ~32:15/10/2020

2023/04152 ~ Complete ~54:CAP ASSEMBLY FOR A BEVERAGE CONTAINER ~71:SHAKACAN IP B.V.,
Gyroscoopweg 25,, Netherlands ~72: KAAAN, Wouter Jan;NICHOLLS, Andrew Bryce;NICHOLLS, Richard

John;PRUISSCHER, Sebastiaan;RESOORT, Mike;VAN LEEUWEN, Erwin Christiaan~ 33:NL ~31:2026556
~32:28/09/2020

2023/04154 ~ Provisional ~54:FUEL PERPETUAL MOTIONSELF CHARGING GENERATOR ~71:RELIABLE
SOURCE ENERGY PTY LTD REG 2021/412614/07, UNIT 5 PARK CLIFF 422 CURRIE ROAD ESSENWOOD,
South Africa ~72: GRAIG SCHOULTZ;MARK OFTEBRO~

2023/04120 ~ Complete ~54:AUTOMATIC DISTILLATION HEAD FOR DISTILLATION ~71:Leshan Normal
University, No.778, Binhe Road, Shizhong District, Leshan City, Sichuan Province, 614000, People's Republic of
China ~72: CHEN, Fengzheng;CHEN, Qiao;SUN, Guofeng;TIAN, Chong;WEN, Zhiguo~

2023/04128 ~ Complete ~54:HOSE STORAGE CONTAINER ~71:J.M. Rock Family Trust, 551 Ocean Cay Drive,
Key Largo, FL 33037, United States of America ~72: BUCK, Larry, Ray~ 33:US ~31:17/028,840 ~32:22/09/2020

2023/04133 ~ Complete ~54:NEUROD1 VECTOR ~71:NEUEXCELL THERAPEUTICS INC., 200 Innovation
Blvd., Suite 258B State College, United States of America ~72: XU, Jie~ 33:US ~31:63/084,908
~32:29/09/2020;33:US ~31:63/246,545 ~32:21/09/2021

2023/04132 ~ Complete ~54:DLX2 VECTOR ~71:NEUEXCELL THERAPEUTICS INC., 200 Innovation Blvd.,
Suite 258B State College, United States of America ~72: XU, Jie~ 33:US ~31:63/084,927 ~32:29/09/2020;33:US
~31:63/247,417 ~32:23/09/2021

2023/04137 ~ Complete ~54:PROCESS OF THERMALLY TREATING MINERALS AND APPARATUS
THEREFOR ~71:ROUNDHILL IP PTY LTD, Martin Broad 2 Fraser Parade, Charlestown, New South Wales 2290,
Australia ~72: JOHN DAVID WINTER~ 33:AU ~31:2020903709 ~32:13/10/2020

2023/04143 ~ Complete ~54:IL-2/IL-15RB β Y AGONIST FOR TREATING NON-MELANOMA SKIN CANCER
~71:CYTUNE PHARMA, 3, Chemin du Pressoir Chênaie, France ~72: David BÉCHARD;Irena
ADKINS;Nada PODZIMKOVA;Stefano FERRARA;Ulrich MOEBIUS~ 33:EP ~31:20203907.9 ~32:26/10/2020

2023/04148 ~ Complete ~54:PREPARATION OF BENZIMIDAZOLONE DERIVATIVES AS NOVEL
DIACYLGLYCERIDE O-ACYLTRANSFERASE 2 INHIBITORS ~71:Merck Sharp & Dohme LLC, 126 East Lincoln
Avenue, RAHWAY 07065, NJ, USA, United States of America ~72: ASHLEY, Eric R.;BAO, Jianming;CHENG,
Chen;LIM, Yeon-Hee;ROANE, James P.;SOUTHGATE, Emma Helen~ 33:US ~31:63/089,068 ~32:08/10/2020

2023/04151 ~ Complete ~54:IL-2/IL-15RB β Y AGONIST FOR TREATING SQUAMOUS CELL CARCINOMA
~71:CYTUNE PHARMA, 3, Chemin du Pressoir Chênaie, France ~72: David BÉCHARD;Irena
ADKINS;Nada PODZIMKOVA;Stefano FERRARA;Ulrich MOEBIUS~ 33:EP ~31:20203908.7 ~32:26/10/2020

- APPLIED ON 2023/04/05 -

2023/04171 ~ Complete ~54:PROCESSES FOR THE RECOVERY OF URANIUM ~71:OCP S.A., 2-4 Rue Al
Abtal, Hay Erraha, Casablanca, 20200, Morocco ~72: DRISS DHIBA;MOUNIR EL MAHDI;THOMAS E
BAROODY;WILLIAM W BERRY~

2023/04186 ~ Complete ~54:ASSAY FOR MEASURING POTENCY OF GENE THERAPY DRUG PRODUCT
~71:Prevail Therapeutics, Inc., 430 East 29th Street, Suite 940, NEW YORK 10016, NY, USA, United States of
America ~72: BIEZONSKI, Patricia;DAI, Yong;FENN, Timothy;HALLER, Jorge;NG, Mary~ 33:US
~31:63/092,189 ~32:15/10/2020

2023/04175 ~ Complete ~54:GAS SPRING AND RELATIVE SAFETY SYSTEM ~71:CAPPELLER FUTURA SRL, Via Delle Industrie, 32, 36050, Cartigliano (VI), Italy ~72: ALESSANDRO CAPPELLER~ 33:IT ~31:102020000021541 ~32:11/09/2020

2023/04189 ~ Complete ~54:PYRAZOLE DERIVATIVES AS RET KINASE INHIBITORS ~71:Eli Lilly and Company, Lilly Corporate Center, INDIANAPOLIS 46206-6288, IN, USA, United States of America ~72: ANDERSON, Erin D.;ANDREWS, Steven W.;BOLDRON, Christopher Pierre Albert Jean;CONDROSKI, Kevin R.;IRVIN, Thomas C.;KOLAKOWSKI, Gabrielle R. a/k/a Jody Gabrielle Rustmann;KUMAR, Manoj;MCFADDIN, Elizabeth A.;MCKENNEY, Megan L.;MCLEAN, Johnathan Alexander;MOURET, Tiphaine;MUNCHHOF, Michael J.;PANCALDI, Thomas Pierre Dino;PILKINGTON-MIKSA, Michael Alexander;PINTO, Marta~ 33:US ~31:63/110,643 ~32:06/11/2020

2023/04158 ~ Complete ~54:WATER STACKING STRUCTURE FOR WATER CHANNEL ~71:China Construction Second Engineering Bureau Shenzhen Construction Investment Development Co., Ltd., Room 2407-08, Chuangtuo Mansion, No. 9 Tengfei Road, Longgang District, SHENZHEN, People's Republic of China;THE FIRST CONSTRUCTION ENGINEERING COMPANY LTD. OF CHINA CONSTRUCTION SECOND ENGINEERING BUREAU, Floors 1-7, Building 1, Yard 9, Kechuang 4th Street, Beijing Economic and Technological Development Zone, Daxing District, Beijing, People's Republic of China ~72: Bentao ZHANG;Jing LI;Lei ZOU;Tao ZHOU;Yichen LI~ 33:CN ~31:202220837708.2 ~32:08/04/2022

2023/04161 ~ Complete ~54:PHOTOCHEMICAL METHOD AND DEVICE FOR VOLATILE ORGANIC COMPOUND POLLUTION CONTROL ~71:AMBIENT CARBON METHANE HOLDING APS, Forhåbningsholms Alle 19, 1. Th., Denmark ~72: JOHNSON, Matthew;PUGLIESE, Silvia;SCHMIDT, Johan Albrecht~ 33:EP ~31:20195550.7 ~32:10/09/2020

2023/04165 ~ Complete ~54:SELECTIVE DELIVERY OF OLIGONUCLEOTIDES TO GLIAL CELLS ~71:DICERNA PHARMACEUTICALS, INC, 75 Hayden Avenue, Lexington, United States of America ~72: GRIM, Travis;JUNG, Maire~ 33:US ~31:63/089,406 ~32:08/10/2020

2023/04168 ~ Complete ~54:ELECTRONIC DEVICE SUPPORTING MULTIPLE SIMS AND OPERATION METHOD THEREFOR ~71:SAMSUNG ELECTRONICS CO., LTD., 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Republic of Korea ~72: JUNGMIN OH;SANGHYUN LEE~ 33:KR ~31:10-2020-0137605 ~32:22/10/2020

2023/04173 ~ Complete ~54:STEAM HEATING SYSTEM FOR CONTAINER ~71:TRANS OCEAN BULK LOGISTICS LTD, Trans Ocean House, Tollbar Way, Hedge End, Southampton Hampshire, SO30 2UH, United Kingdom ~72: SERGIO BRYAN PARENZEE~ 33:CN ~31:202010926003.3 ~32:07/09/2020

2023/04177 ~ Complete ~54:METHOD FOR DECOMPOSING PLANT MATTER ~71:DANSTAR FERMENT AG, Poststrasse 30, Switzerland ~72: MOREL, Matthieu;ROGALSKA, Selma;SANCHEZ, Jean-Marc~ 33:EP ~31:20306255.9 ~32:21/10/2020

2023/04184 ~ Complete ~54:BACULOVIRUS EXPRESSION VECTOR ~71:Intervet International B.V., Wim de Körverstraat 35, AN BOXMEER NL-5831 , THE NETHERLANDS, Netherlands ~72: SERRANO GARCIA, Amaya~ 33:EP ~31:20203373.4 ~32:22/10/2020

2023/04190 ~ Complete ~54:AEROSOL PROVISION DEVICE ~71:Nicoventures Trading Limited, Globe House, 1 Water Street, LONDON WC2R 3LA, UNITED KINGDOM, United Kingdom ~72: BUREAU, David;LOCHTMAN, Daniel;SHERIDAN, James~ 33:GB ~31:2016479.4 ~32:16/10/2020

2023/04155 ~ Provisional ~54:A COMPOSITION FOR USE IN INHIBITING SPONTANEOUS COMBUSTION OF COAL SLOPES ~71:KUPHELA ENVIROMENTAL SOLUTIONS (PTY) LTD, Stallion Road, Beaulieu Office Park, Stallion Rd, Crowthorne AH, South Africa ~72: BUCKLE, JOHANNES DANIEL~

2023/04156 ~ Provisional ~54:ZAR-KA ~71:Matlhogonolo Solomon Tau, 1350 Pulela Street, South Africa ~72: Matlhogonolo Solomon Tau~ 33:ZA ~31:zar ~32:01/04/2023

2023/04163 ~ Complete ~54:USE OF GLASS-RESIN COMPOSITE FIBRES FOR REINFORCING CONCRETE ~71:COMPAGNIE GENERALE DES ETABLISSEMENTS MICHELIN, 23, Place des Carmes-Déchaux, 63000 CLERMONT-FERRAND, France ~72: MARTINEZ, Raphael;PLOUZENNEC, Pierre;ROOS, Kevin~ 33:FR ~31:FR2013359 ~32:16/12/2020

2023/04169 ~ Complete ~54:TETRAHYDROBENZOFURODIAZEPINONE COMPOUNDS AND PHARMACEUTICAL APPLICATIONS THEREOF ~71:JAPAN TOBACCO INC., 1-1, Toranomom 4-chome, Minato-ku, Tokyo, 105-6927, Japan ~72: IKUO MITANI;KAZUHITO HARADA;MASAFUMI INOUE;NOBUTAKA YAMAOKA;TAKAYUKI FURUKAWA;TAKUYA MACHIDA;YOSUKE OGOSHI;YUICHI NAKAGAWA~ 33:JP ~31:2020-168596 ~32:05/10/2020

2023/04176 ~ Complete ~54:HDAC INHIBITORS FOR IDIOPATHIC PULMONARY FIBROSIS AND OTHER LUNG INFLAMMATORY DISORDERS ~71:COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH (AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGN. OF SOC. ACT (ACT XXI OF 1860)), Anusandhan Bhawan, 2 Rafi Marg, India ~72: CHANDRASEKHAR, Srivari;MADHUSUDANA, Kuncha;MOHAN VENKATA SUBBARAO, Muppidi;RAJI REDDY, Chada;RAMAKRISHNA, Sistla;S MAINKAR, Prathama;SAI BALAGI, Andugulapati;SATYA KRISHNA, Tirunavalli~ 33:IN ~31:202011038497 ~32:05/09/2020

2023/04187 ~ Complete ~54:AEROSOL PROVISION DEVICE ~71:Nicoventures Trading Limited, Globe House, 1 Water Street, LONDON WC2R 3LA, UNITED KINGDOM, United Kingdom ~72: BUREAU, David;LOCHTMAN, Daniel;SHERIDAN, James~ 33:GB ~31:2016475.2 ~32:16/10/2020

2023/04160 ~ Complete ~54:A KITE ~71:OCEANERGY INNOVATION GMBH, ALBRECHTSTRASSE 22, D-10117 BERLIN , GERMANY, Germany;REINERS, Wolfram, Johannes, Bernd, 24 ALBUS DRIVE, SUNSET BEACH, CAPE TOWN, 7441, South Africa ~72: HARICH, Armin;REINERS, Wolfram, Johannes, Bernd~ 33:ZA ~31:2020/06272 ~32:09/10/2020

2023/04180 ~ Complete ~54:CRYSTALLINE FORMS OF A KRAS G12C INHIBITOR ~71:MIRATI THERAPEUTICS, INC., 3545 Cray Court, United States of America ~72: ANDRES, Patricia;ANDREW, Samuel;CHEN, Cheng Yi;GANCEDO, Susana Del Rio;GHARBAOUI, Tawfik;NELSON, Jennifer~ 33:US ~31:63/077,553 ~32:11/09/2020;33:US ~31:63/093,673 ~32:19/10/2020

2023/04188 ~ Complete ~54:AEROSOL PROVISION DEVICE ~71:Nicoventures Trading Limited, Globe House, 1 Water Street, LONDON WC2R 3LA, UNITED KINGDOM, United Kingdom ~72: BUREAU, David;LOCHTMAN, Daniel;SHERIDAN, James~ 33:GB ~31:2016480.2 ~32:16/10/2020

2023/04159 ~ Complete ~54:A DISTANCE MEASURING DEVICE AND A CALIPER ~71:China Construction Second Engineering Bureau Shenzhen Construction Investment Development Co., Ltd., Room 2407-08, Chuangtou Mansion, No. 9 Tengfei Road, Longgang District, SHENZHEN, People's Republic of China;THE FIRST CONSTRUCTION ENGINEERING COMPANY LTD. OF CHINA CONSTRUCTION SECOND ENGINEERING BUREAU, Floors 1-7, Building 1, Yard 9, Kechuang 4th Street, Beijing Economic and Technological Development Zone, Daxing District, Beijing, People's Republic of China ~72: Haiyu LI;Hui JIN;Liangjin WEI;Xiaosheng LUO;Xiaoya JIANG~ 33:CN ~31:202221042437.8 ~32:29/04/2022

2023/04181 ~ Complete ~54:COLOR MAP WRAPPERS AND PACKETS ~71:Hewlett-Packard Development Company, L.P., 10300 Energy Drive, SPRING 77389, TX, USA, United States of America ~72: KERBY, George Henry;NICHOLS, Stephen J.~

2023/04164 ~ Complete ~54:CONTINUOUS VIRUS RETENTIVE FILTRATION ~71:REGENERON PHARMACEUTICALS, INC., 777 Old Saw Mill River Road, Tarrytown, United States of America ~72: BROWNE, Ross;SCHNEIDER, Erik~ 33:US ~31:63/087,037 ~32:02/10/2020;33:US ~31:63/109,942 ~32:05/11/2020

2023/04167 ~ Complete ~54:ANTI-CD47 ANTIBODIES AND METHODS OF USE ~71:SHANGHAI HENLIUS BIOLOGICS CO., LTD., Room 617, Building 29, No. 1, Lane 618, Dingyuan Road, Songjiang District, People's Republic of China;SHANGHAI HENLIUS BIOPHARMACEUTICAL CO., LTD., The Whole Building, Building 1, (Building D), No. 1289, Yishan Rd, Xuhui District, People's Republic of China;SHANGHAI HENLIUS BIOTECH, INC., Room 330, Complex Building, No.222 Kangnan Road China (Shanghai) Pilot Free Trade Zone, Pudong District, People's Republic of China ~72: JIANG, Wei-Dong;TSENG, Chi-Ling;WANG, Jiin-Tarn~ 33:WO ~31:PCT/CN2020/118320 ~32:28/09/2020

2023/04172 ~ Complete ~54:POLYPEPTIDES TARGETING SARS-COV-2 AND RELATED COMPOSITIONS AND METHODS ~71:THE HOSPITAL FOR SICK CHILDREN, 686 Bay Street, 3rd Floor, Toronto, Ontario M5G 0A4, Canada ~72: EDURNE RUJAS DIEZ;JEAN-PHILIPPE JULIEN~ 33:US ~31:63/089,782 ~32:09/10/2020;33:US ~31:63/197,236 ~32:04/06/2021;33:US ~31:63/220,929 ~32:12/07/2021

2023/04191 ~ Complete ~54:PROCESS FOR THE PREPARATION OF 6-(4-NITRO-PHENOXY)-2H-PYRIDAZIN-3-ONE AND 6-(4-AMINO-PHENOXY)-2H-PYRIDAZIN-3-ONE DERIVATIVES AS INTERMEDIATES OF THYROID HORMONE ANALOGUES ~71:Madrigal Pharmaceuticals, Inc., 200 Barr Harbor Drive, Suite 400, WEST CONSHOHOCKEN 19428, PA, USA, United States of America ~72: CONFALONE, Pasquale N.;VELLEKOOP, A. Samuel~ 33:US ~31:63/104,898 ~32:23/10/2020;33:US ~31:63/150,616 ~32:18/02/2021

2023/04178 ~ Complete ~54:SUPPLYING POWER TO AN ELECTRIC VEHICLE ~71:OUR NEXT ENERGY, INC., 29050 Cabot Drive Novi,, United States of America ~72: IJAZ, Mujeeb;MOORHEAD, Brian~ 33:US ~31:63/089,990 ~32:09/10/2020;33:US ~31:63/161,822 ~32:16/03/2021

2023/04183 ~ Complete ~54:BENZO[H]QUINAZOLIN-4-AMINE AND THIENO[3,2-H]QUINAZOLIN-4-AMINE DERIVATIVES FOR THE TREATMENT OF CANCER ~71:Redona Therapeutics, Inc., 490 Arsenal Way, Suite 100B, WATERTOWN 02472, MA, USA, United States of America ~72: ALOIA, Andrea;GAUCHER, Bérangère;RADIMERSKI, Thomas;REINELT, Stefan;RICHALET, Florian;WEILER, Sven~ 33:EP ~31:20200850.4 ~32:08/10/2020;33:EP ~31:20213590.1 ~32:11/12/2020;33:EP ~31:21165054.4 ~32:25/03/2021

2023/04182 ~ Complete ~54:ROTATION APPARATUS FOR BOOM OF MINING VEHICLE AND MINING VEHICLE ~71:Sandvik Mining and Construction Oy, Pihtisulunkatu 9, TAMPERE 33330, FINLAND, Finland ~72: ANTONEN, Pekka;CONNELLY, Stephen;ERONEN, Kimmo;JÄRKKÄLÄ, Juho;KALLINEN, Risto;LAUNIS, Sirpa;MAKSIMAINEN, Jussi;PIIPPONEN, Juha~ 33:EP ~31:20210928.6 ~32:01/12/2020

2023/04157 ~ Provisional ~54:A MACHINE ~71:COMBRINCK, Paul Chrisstoffel, 26 A Melkbos Street, Grimbeekpark, Potchefstroom, 2531, South Africa ~72: COMBRINCK, Paul Chrisstoffel~

2023/04166 ~ Complete ~54:METHOD FOR PREPARING ETHYLENE PROPYLENE ~71:CHINA PETROLEUM & CHEMICAL CORPORATION, 22 Chaoyangmen North Street, Chaoyang District, People's Republic of China;SHANGHAI RESEARCH INSTITUTE OF PETROCHEMICAL TECHNOLOGY, SINOPEC, 1658 Pudong Bei Road, Pudong New Area, People's Republic of China ~72: LI, Xiaohong;QI, Guozhen;WANG, Hongtao;WANG, Li;YU, Zhinan;ZHENG, Yijun;ZONG, Hongyuan~ 33:CN ~31:202010968050.4 ~32:15/09/2020

2023/04174 ~ Complete ~54:CRUSHING LOAD CONTROL CIRCUITRY OF CRUSHER AND METHOD OF CONTROLLING CRUSHING LOAD OF CRUSHER ~71:KABUSHIKI KAISHA EARTHTECHNICA, 2-4, Kandajinbo-cho, Chiyoda-ku, Tokyo, 1010051, Japan ~72: JUN KOBAYASHI;KEITA YAMAMOTO;MORIYUKI SAKAMOTO;NOBUYUKI KAJITA;SATOSHI OTSUKI;TAKASHI KIJIMA~ 33:JP ~31:2020-179210 ~32:26/10/2020

2023/04185 ~ Complete ~54:HSD17B13 INHIBITORS AND USES THEREOF ~71:FL2022-001, Inc., 601 California Street, Suite 600, SAN FRANCISCO 94108, CA, USA, United States of America ~72: BOTROUS, Iriny;FASANYA, Karensa L.;GOVEK, Steven P.;HUDSON, Andrew R.;NAGASAWA. Johnny Y;SMITH, Nicholas D.~ 33:US ~31:63/085,849 ~32:30/09/2020

2023/04162 ~ Complete ~54:CATALYST MIXING DEVICE ~71:CHINA PETROLEUM & CHEMICAL CORPORATION, 22 Chaoyangmen North Street, Chaoyang District, People's Republic of China;SHANGHAI RESEARCH INSTITUTE OF PETROCHEMICAL TECHNOLOGY, SINOPEC, 1658 Pudong Bei Road, Pudong New Area, People's Republic of China ~72: GAO, Pan;JIN, Yongming;LI, Xiaohong;QI, Guozhen;WANG, Yanxue;ZONG, Hongyuan~ 33:CN ~31:202010968050.4 ~32:15/09/2020

2023/04170 ~ Complete ~54:POTENT AND SELECTIVE COMPOUNDS AS SEROTONIN 1B RECEPTOR MODULATORS ~71:FUNDACIÓ INSTITUT DE RECERCA CONTRA LA LEUCÈMIA JOSEP CARRERAS, Ctra. de Can Ruti, Camí de les Escoles, s/n, E-08916, Badalona Barcelona, Spain;LEUKOS BIOTECH, S.L., Muntaner, 383, 38186, 28170, E-08021, Barcelona, Spain ~72: JUAN ALBERTO CAMACHO GARCÍA;MEZ;JULIO CASTRO- PALOMINO LARIA;LISE CLÉMENT-DEMANGE;RUTH MUÑOZ RISUEÑO~ 33:EP ~31:20382888.4 ~32:08/10/2020

2023/04179 ~ Complete ~54:DEVICE FOR CLEANING HEAT EXCHANGE TUBES OF A STEAM GENERATOR OF A NUCLEAR POWER PLANT ~71:ATOMENERGOREMONT JOINT-STOCK COMPANY, Proektiruemyi 4062 proezd, 6, str. 2, pom. 26, Russian Federation;JOINT STOCK COMPANY "ROSENERGOATOM", 25 Ferganskaya Street, Russian Federation;LLC "KROK", ul. Michurina, 48B, pom. 14, Russian Federation;SCIENCE AND INNOVATIONS - NUCLEAR INDUSTRY SCIENTIFIC DEVELOPMENT, PRIVATE ENTERPRISE, 24 B. Ordynka Street, Floor 8, Office 820, Russian Federation ~72: EVSEENKO, Gennadii Vasilevich;ROMANCHUK, Vitalii Borisovich;SALISHCHEV, Sergei Aleksandrovich;SHCHETININ, Gennadii Nikolaevich~ 33:RU ~31:2020131368 ~32:23/09/2020

- APPLIED ON 2023/04/06 -

2023/04233 ~ Complete ~54:PHARMACEUTICAL COMPOSITION OF GLP-1/GLP-2 DUAL AGONISTS ~71:ZEALAND PHARMA A/S, Sydmarken 11, 2860, Sønderborg, Denmark ~72: JESPER SKOVBORG VILLADSEN;LISE GIEHM~ 33:EP ~31:20214558.7 ~32:16/12/2020

2023/04234 ~ Complete ~54:PHARMACEUTICAL COMPOSITION OF GLP-1/GLP-2 DUAL AGONISTS ~71:ZEALAND PHARMA A/S, Sydmarken 11, 2860, Sønderborg, Denmark ~72: JESPER SKOVBORG VILLADSEN;LISE GIEHM~ 33:EP ~31:20214559.5 ~32:16/12/2020

2023/04192 ~ Provisional ~54:MOTORISED SPARE WHEEL HANDLING SYSTEM ~71:POTGIETER, Riaan Jan Lotz, 5 Kingfisher Street, Rooihuiskraal North X16, South Africa ~72: POTGIETER, Riaan Jan Lotz~

2023/04193 ~ Provisional ~54:A VEHICLE COOKING AND/OR HEATING SYSTEM AND ASSOCIATED METHODS ~71:The Trustees for the time-being of Gutzeit Family Trust, 28 District Road, Oslo Beach, Port Shepstone, 4240, SOUTH AFRICA, South Africa ~72: GUTZEIT, Desmond George~

2023/04194 ~ Provisional ~54:DUAL MATERIAL SHEAR PIN NUT ~71:MOHLALEFI (PTY) LTD., 18 Tongani Street, Bryanston Ext 45, Sandton, Gauteng, 2191, South Africa ~72: GERALD MUNIAH;MARTIN NARE MASITISE~

2023/04196 ~ Complete ~54:A GOAF PLUGGING DEVICE CAPABLE OF AUTOMATICALLY ADJUSTING OPENING AND CLOSING STATE AND INSTALLATION METHOD THEREOF ~71:Changsha Mining Research Institute Co., Ltd., No. 343, South Lu Shan Road, Yuelu District, Changsha, Hunan Province, People's Republic of China ~72: Chang Liu;Min Qin;Zeyang Guo~ 33:CN ~31:2022114616263 ~32:17/11/2022

2023/04199 ~ Complete ~54:FULLY-AUTOMATED SERIAL PRODUCTION LINE AND PRODUCTION PROCESS OF GALVANIZED SHEET AIR DUCT ~71:Qingdao University of Technology, No. 11, Fushun Road, Shibei District, Qingdao City, Shandong Province, 266033, People's Republic of China ~72: CHEN, Xiaofei;JIANG, Naibin;QIU, Yiqun;WANG, Xianglong~

2023/04207 ~ Complete ~54:LAYERED CODING FOR COMPRESSED SOUND OR SOUND FIELD REPRESENTATIONS ~71:DOLBY INTERNATIONAL AB, Apollo Building, 3E Herikerbergweg 1-35, 1101 CN, Amsterdam Zuidoost, Netherlands ~72: ALEXANDER KRUEGER;SVEN KORDON~ 33:EP ~31:15306589.1 ~32:08/10/2015;33:EP ~31:15306653.5 ~32:15/10/2015;33:US ~31:62/361,416 ~32:12/07/2016;33:US ~31:62/361,461 ~32:12/07/2016

2023/04212 ~ Complete ~54:ADDRESS EXCHANGE SYSTEMS AND METHODS ~71:MAPMYID, INC., 430 Brightmore Downs, Alpharetta, United States of America ~72: GOPALAKRISHNAN, Gopal Santosh;SANTOSH, Kush~ 33:US ~31:63/076,117 ~32:09/09/2020;33:US ~31:17/200,548 ~32:12/03/2021;33:US ~31:17/224,822 ~32:07/04/2021

2023/04214 ~ Complete ~54:WIND POWER GENERATOR SET AND POWER CONTROL METHOD AND DEVICE THEREFOR ~71:XINJIANG GOLDWIND SCIENCE & TECHNOLOGY CO., LTD., No. 107 Shanghai Road, Economic & Technological Development Zone, People's Republic of China ~72: LIU, Zhongpeng~ 33:CN ~31:202011058738.5 ~32:30/09/2020

2023/04195 ~ Complete ~54:AN AUTOMATIC GOAF PLUGGING DEVICE AND CONSTRUCTION METHOD AND APPLICATION METHOD THEREOF ~71:Changsha Mining Research Institute Co., Ltd., No. 343, South Lu Shan Road, Yuelu District, Changsha, Hunan Province, People's Republic of China ~72: Chang Liu;Min Qin;Zeyang Guo~ 33:CN ~31:2022110331325 ~32:26/08/2022

2023/04197 ~ Complete ~54:PREPARATION METHOD OF SELF-CLEANING SUPER-HYDROPHOBIC PULP MOLDING MATERIAL ~71:CHINA NATIONAL PULP AND PAPER RESEARCH INSTITUTE CO.,LTD., Sinolight Building, No. 4, Qiyang Road, Wangjing, Chaoyang District, Beijing, 100102, People's Republic of China ~72: CHENG, Yun;ZHANG, Hongjie;ZHANG, Xue~ 33:CN ~31:2022106793711 ~32:14/06/2022

2023/04201 ~ Complete ~54:PHARMACEUTICAL COMPOSITION COMPRISING AN ATYPICAL ANTIPSYCHOTIC AGENT AND METHOD FOR THE PREPARATION THEREOF ~71:PHARMATHEN S.A., 6 DERVENAKION STREET, 15351 PALLINI ATTIKIS, GREECE, Greece ~72: KARAVAS, Evangelos~

2023/04205 ~ Complete ~54:MOF-DERIVED HIGH-POROSITY CARBON AEROGELS AND APPLICATION IN SUPERCAPACITORS ~71:SOOCHOW MOFS SCIENCE AND TECHNOLOGY LTD., No.209,Zhuyuan Road, Gaoxin District,Suzhou City, People's Republic of China ~72: LI Hui;LI Zuoxi;ZHANG Liying~ 33:CN ~31:2023101749384 ~32:28/02/2023

2023/04200 ~ Complete ~54:PHARMACEUTICAL COMPOSITION COMPRISING ARIPIPRAZOLE AND METHOD FOR THE PREPARATION THEREOF ~71:PHARMATHEN S.A., 6 DERVENAKION STREET, 15351 PALLINI ATTIKIS, GREECE, Greece ~72: KARAVAS, Evangelos~

2023/04206 ~ Complete ~54:PEDIATRIC NEGATIVE PRESSURE GASTRIC LAVAGE DEVICE FOR PEDIATRICIANS ~71:THE FIRST AFFILIATED HOSPITAL OF BENGBU MEDICAL COLLEGE, No. 287 Changhuai Road, Longzihu district, People's Republic of China ~72: DONG Huaifu;DONG Xiaoyu;LI Baoguang;YANG Mei;YANG Xiaoyun;ZHANG Ying~

2023/04210 ~ Complete ~54:COMPOSITION COMPRISING A COMBINATION OF IMMUNE CHECKPOINT INHIBITOR AND ANTIBODY-AMATOXIN CONJUGATE FOR USE IN CANCER THERAPY ~71:HEIDELBERG PHARMA RESEARCH GMBH, Gregor-Mendel-Strasse 22, Germany ~72: Andreas PAHL;Christoph MÜLLER;Michael KULKE;Susanne WERNER-SIMON;Torsten HECHLER~ 33:EP ~31:20205794.9 ~32:04/11/2020

2023/04220 ~ Complete ~54:STAT DEGRADERS AND USES THEREOF ~71:Kymera Therapeutics, Inc., 200 Arsenal Yards Blvd., Suite 230, WATERTOWN 02472, MA, USA, United States of America ~72: YANG, Bin;ZHENG, Xiaozhang;ZHU, Xiao~ 33:US ~31:63/088,787 ~32:07/10/2020;33:US ~31:63/123,337 ~32:09/12/2020

2023/04232 ~ Complete ~54:DYNAMIC USER-DEVICE UPSCALING OF MEDIA STREAMS ~71:MICROSOFT TECHNOLOGY LICENSING, LLC, One Microsoft Way, Redmond, Washington, 98052-6399, United States of America ~72: PERRY VICTOR LEA~ 33:US ~31:17/089,328 ~32:04/11/2020

2023/04238 ~ Complete ~54:PROTEINS AND BIOLOGICAL MATERIALS RELATED TO RICE (ORYZA SATIVA L.) YIELD, AND USE THEREOF IN RICE YIELD INCREASE ~71:INSTITUTE OF CROP SCIENCES, CHINESE ACADEMY OF AGRICULTURAL SCIENCES, 12 Zhongguancun South Street, People's Republic of China ~72: LI, Xia;WEI, Shaobo;ZHOU, Wenbin~ 33:CN ~31:202110259877.2 ~32:10/03/2021;33:CN ~31:202110360014.4 ~32:02/04/2021

2023/04241 ~ Complete ~54:MOVING CONTACT MECHANISM ~71:CHINT LOW VOLTAGE ELECTRICAL TECHNOLOGY CO., LTD., Room 107, No. 51 Building, 3255# Sixian Road, People's Republic of China ~72: AO, Denggui;YAN, Lijun~ 33:CN ~31:202120677214.8 ~32:01/04/2021

2023/04243 ~ Complete ~54:QUICK TRIPPING DEVICE AND CIRCUIT BREAKER ~71:CHINT LOW VOLTAGE ELECTRICAL TECHNOLOGY CO., LTD., Room 107, No. 51 Building, 3255# Sixian Road, People's Republic of China ~72: AO, Denggui;FU, Hao;XU,Yongfu~ 33:CN ~31:202110357139.1 ~32:01/04/2021

2023/04204 ~ Complete ~54:DRAINAGE ANTI-PRESSURE ANTI-FLOATING METHOD AND SYSTEM FOR AIRPORT UNDERGROUND SPACE ~71:CHINA RAILWAY CONSTRUCTION GROUP CO.,LTD., 20 Shijingshan Road, Shijingshan District, People's Republic of China ~72: GENG Mingming;GOU Yibo;GU Hongyin;GUO Yifei;LIU Kailei;MENG Ruoyu;TIAN Junying;WANG Chao;WANG Pan;WANG Shengzhao;WANG Wei;WU Yahui;XI Yichao;ZHANG Mingfei;ZHAO Yaming~

2023/04208 ~ Complete ~54:INSPECTION SYSTEM OF POWER LINE AND METHOD THEREOF ~71:HENAN CHANGJI ELECTRIC POWER CO., LTD, Floor 13, Building 18, East Building A, National University Science Park, Zhengzhou City, Henan Province, People's Republic of China ~72: BO WANG;QIAN WANG;SHOUBING DING;XIUHAO LIANG;ZHIYUAN HAN~

2023/04221 ~ Complete ~54:HERBICIDAL COMBINATIONS COMPRISING DIFLUFENICAN AND MESOTRIONE ~71:Bayer Aktiengesellschaft, Kaiser-Wilhelm-Allee 1, LEVERKUSEN 51373, GERMANY,

Germany;Monsanto Technology LLC, 800 North Lindbergh Boulevard, ST. LOUIS 63167, MO, USA, United States of America ~72: HEMMINGHAUS, John;PEREZ-JONES, Alejandro;PESTER, Dawn;TOSSENS, Herve~ 33:US ~31:63/076,534 ~32:10/09/2020

2023/04224 ~ Complete ~54:METHOD FOR TREATING OX40 RELATED DISEASE ~71:Kyowa Kirin Co., Ltd., 1-9-2, Otemachi, Chiyoda-ku, TOKYO 1000004, JAPAN, Japan ~72: IMAI, Nobuyuki;NAGATA, Yoshinori;OOTAKI, Kenji;SATO, Mitsuo;SHIMABE, Munetake~ 33:US ~31:63/089,809 ~32:09/10/2020;33:US ~31:63/116,365 ~32:20/11/2020;33:US ~31:63/233,592 ~32:16/08/2021

2023/04226 ~ Complete ~54:HERBICIDAL PYRIMIDINE DERIVATIVES ~71:MoA Technology Limited, 9400 Garsington Road, Oxford Business Park Oxford Oxfordshire OX4 2HN, OX4 2HN, UNITED KINGDOM, United Kingdom ~72: ALLEN, Ben;HOULSBY, Ian~ 33:GB ~31:2014350.9 ~32:11/09/2020

2023/04227 ~ Complete ~54:ANTIBODIES THAT BIND TO IL1RAP AND USES THEREOF ~71:Ichinos Sciences SA, Chemin de la Combeta 5, LA CHAUX-DE-FONDS 2300, SWITZERLAND, Switzerland ~72: CROSET, Amelie;DOUCEY, Marie-Agnes;LABANCA, Valentina;LOYAU, Jeremy;MACOIN, Julie;MBOW, Lamine;MONNEY, Thierry~ 33:EP ~31:20195961.6 ~32:14/09/2020;33:EP ~31:21151218.1 ~32:12/01/2021;33:EP ~31:21159485.8 ~32:26/02/2021;33:EP ~31:21179711.3 ~32:16/06/2021

2023/04230 ~ Complete ~54:SOLID DISPERSION FORMULATIONS OF AN FXR AGONIST ~71:TERNS PHARMACEUTICALS, INC., 1065 E. Hillsdale Blvd., Suite 100, Foster City, California 94404, United States of America ~72: AIYONG SI;CHUTIAN SHU;JIANWEI BIAN;JIAXIN DENG;MATT DUAN;SHENG GUO;YUJIN WANG~ 33:CN ~31:PCT/CN2020/114782 ~32:11/09/2020

2023/04235 ~ Complete ~54:PHARMACEUTICAL COMPOSITION OF GLP-1/GLP-2 DUAL AGONISTS ~71:ZEALAND PHARMA A/S, Sydmarken 11, 2860, Søborg, Denmark ~72: JESPER SKOVBORG VILLADSEN;LISE GIEHM~ 33:EP ~31:20214562.9 ~32:16/12/2020

2023/04239 ~ Complete ~54:OPERATING MECHANISM OF CIRCUIT BREAKER, AND CIRCUIT BREAKER ~71:CHINT LOW VOLTAGE ELECTRICAL TECHNOLOGY CO., LTD., Room 107, No. 51 Building, 3255# Sixian Road, People's Republic of China ~72: AO, Denggui;FU, Hao;XU,Yongfu~ 33:CN ~31:202110355214.0 ~32:01/04/2021

2023/04242 ~ Complete ~54:OPERATING MECHANISM OF CIRCUIT BREAKER AND ASSEMBLING METHOD ~71:CHINT LOW VOLTAGE ELECTRICAL TECHNOLOGY CO., LTD., Room 107, No. 51 Building, 3255# Sixian Road, People's Republic of China ~72: AO, Denggui;FU, Hao;XU,Yongfu;YAN, Lijun~ 33:CN ~31:202110355527.6 ~32:01/04/2021

2023/04198 ~ Complete ~54:EXPRESSION AND APPLICATION OF FEMALE-SPECIFIC PROTEIN OF CYNOGLOSSUS SEMILAEVIS ~71:Yellow Sea Fisheries Research Institute, Chinese Academy of Fishery Sciences, 106 Nanjing Road, Qingdao, Shandong, 266071, People's Republic of China ~72: CHEN, Yadong;CUI, Zhongkai;LI, Wenlong;SUN, Yuxuan;XU, Wenteng;XU, Xiaodong~ 33:CN ~31:2022111094929 ~32:13/09/2022

2023/04202 ~ Complete ~54:METHOD AND SYSTEM FOR PARTITIONING LESION IMAGING DATA ~71:TAIYUAN UNIVERSITY OF TECHNOLOGY, No. 79, Yingze West Street, Taiyuan City, Shanxi Province, 030024, People's Republic of China ~72: CHEN, Guijun;HUANG, Lixia;LI, Fenglian;WANG, Suzhe;ZHANG, Hongtao;ZHANG, Xueying;ZHANG, Yan~ 33:CN ~31:202210956937.0 ~32:10/08/2022

2023/04203 ~ Complete ~54:METHOD OF ACCESS CONTROL ~71:BEYNON, Devon Gregory Powell, 3 Craig Avenue,, South Africa ~72: BEYNON, Devon Gregory Powell~ 33:ZA ~31:2022/03939 ~32:07/04/2022

2023/04211 ~ Complete ~54:A COATED CAST IRON SUBSTRATE ~71:VERDICIO SOLUTIONS A.I.E., Avenida General Perón 14, Spain ~72: Carlota DOMINGUEZ FERNANDEZ;Cristina BLANCO ROLDAN;David NORIEGA PEREZ;Jorge RODRIGUEZ GARCIA;Laura MEGIDO FERNANDEZ;Roberto SUAREZ SANCHEZ;Thi Tan VU~

2023/04213 ~ Complete ~54:TECHNIQUE FOR ENABLING EXPOSURE OF INFORMATION RELATED TO ENCRYPTED COMMUNICATION ~71:TELEFONAKTIEBOLAGET LM ERICSSON (PUBL), 164 83, Sweden ~72: IHLAR, Marcus;MUÑOZ DE LA TORRE ALONSO, Miguel Angel;SANCHEZ VEGA, Veronica;SARKER, Zaheduzzaman~ 33:EP ~31:20382915.5 ~32:20/10/2020

2023/04216 ~ Complete ~54:SYSTEM AND METHOD FOR INSPECTING NUCLEAR FUEL PELLETS ~71:FRAMATOME, 1 place Jean Millier, Tour Areva, France ~72: FAYARD, Amaury;TELLJOHANN, Axel~ 33:EP ~31:20306260.9 ~32:22/10/2020

2023/04219 ~ Complete ~54:NOVEL USE OF MYCOBACTERIUM TUBERCULOSIS EXTRACT ~71:ZERIA PHARMACEUTICAL CO., LTD., 10-11, Nihonbashi Kobuna-cho, Chuo-ku, TOKYO 1038351, JAPAN, Japan ~72: HORII, Takayuki;TANAKA, Takao~ 33:JP ~31:2020-171491 ~32:09/10/2020;33:JP ~31:2020-217698 ~32:25/12/2020

2023/04222 ~ Complete ~54:NOVEL ANTI-SUGAR CHAIN ANTIBODY AND USE THEREOF ~71:National University Corporation Chiba University, 1-33, Yayoi-cho, Inage-ku, CHIBA-SHI 2638522, CHIBA, CHINA (P.R.C.), People's Republic of China ~72: KAWASHIMA, Hiroto;MATSUMURA, Ryuji~ 33:JP ~31:2020-169966 ~32:07/10/2020

2023/04231 ~ Complete ~54:RECOMBINANT MICROORGANISMS AND USES THEREFOR ~71:LANZATECH, INC., 8045 Lamon Avenue, Suite 400, Skokie, Illinois, 60077, United States of America ~72: FUNGMIN LIEW;MICHAEL KOEPKE~ 33:US ~31:63/147,108 ~32:08/02/2021

2023/04236 ~ Complete ~54:METHODS FOR TREATING CANCERS WITH ANTIBODY DRUG CONJUGATES (ADC) THAT BIND TO 191P4D12 PROTEINS ~71:AGENSYS, INC., 2375 Waterview Drive Northbrook, Illinois 60062, United States of America;SEAGEN INC., 21823 30th Drive SE, Bothell, Washington, 98021, United States of America ~72: DANA ANN KENNEDY;ELAINA MARIE GARTNER;ERIC JOHN CHOWN;TINA KIM-HAFKEN~ 33:US ~31:63/090,272 ~32:11/10/2020;33:US ~31:63/148,038 ~32:10/02/2021;33:US ~31:63/193,493 ~32:26/05/2021

2023/04209 ~ Complete ~54:FAULT LOCATING METHOD OF BURIED LINE ~71:HENAN CHANGJI ELECTRIC POWER CO., LTD, Floor 13, Building 18, East Building A, National University Science Park, Zhengzhou City, Henan Province, People's Republic of China ~72: ERHUI WANG;FENG WANG;HUAXU LI;ZHEN LEI;ZHIFU ZHAO~

2023/04217 ~ Complete ~54:TETRAMERIC ALPHA/BETA HYDROLASE VARIANTS WITH INCREASED TEMPERATURE STABILITY AND METHODS OF USING AND PRODUCING THEREOF ~71:DSM AUSTRIA GMBH, Erber Campus 1, Austria ~72: FRUHAUF, Sebastian;HOEBARTNER-GUSSL, Andreas;KILLINGER, Manuela;KRAINER, Florian;VOGTENTANZ, Gudrun~ 33:EP ~31:20200918.9 ~32:08/10/2020

2023/04218 ~ Complete ~54:MICROFIBRILLATED CELLULOSE CONTAINING PULP SHEETS WITH IMPROVED MECHANICAL PROPERTIES ~71:FiberLean Technologies Limited, Par Moor Centre, Par Moor Road, PAR PL24 2SQ, CORNWALL, UNITED KINGDOM, United Kingdom ~72: INGLE, Daniel;PARADIS, Mark;REEVE-LARSON, Thomas;SKUSE, David R.;WINDEBANK, Mark~ 33:US ~31:63/076,998 ~32:11/09/2020

2023/04223 ~ Complete ~54:ULTRAFast PICKLING METHOD AND INSTALLATION THEREFOR ~71:Centre de Recherche Metallurgiques ASBL -Centrum voor Research in de Metallurgie VZW, Rue Ravenstein 4,

BRUSSELS 1000, BELGIUM, Belgium ~72: FLAMENT, Sébastien;NOVILLE, Jean-François;SMAL, Julien;TUSSET, Victor;UIJTDEBROEKS, Hugo~ 33:EP ~31:20195838.6 ~32:11/09/2020

2023/04225 ~ Complete ~54:WASTE STORAGE FILM REFILL ~71:Sangenic International Limited, Mayborn House, Balliol Business Park, NEWCASTLE UPON TYNE NE12 8EW, TYNE AND WEAR, UNITED KINGDOM, United Kingdom ~72: RONTREE, Scott~ 33:GB ~31:2015338.3 ~32:28/09/2020

2023/04228 ~ Complete ~54:FUNGICIDAL COMBINATION ~71:UPL Limited, UPL House, 610 B/2, off Western Express Highway, Bandra Village, Bandra (East), MUMBAI 400051, MAHARASHTRA, INDIA, India ~72: DAS, Kuntal~ 33:IN ~31:202021029192 ~32:09/09/2020

2023/04229 ~ Complete ~54:APPARATUS FOR FILLING AND SEALING BAGS INTENDED FOR CONTAINING BANKNOTES ~71:CIMA S.P.A., Via di Mezzo 2-4, 41037, Mirandola (MO), Italy ~72: NICOLETTA RAZZABONI;VITTORIO RAZZABONI~ 33:IT ~31:102020000024370 ~32:15/10/2020

2023/04237 ~ Complete ~54:DNA MODIFYING ENZYMES AND ACTIVE FRAGMENTS AND VARIANTS THEREOF AND METHODS OF USE ~71:LIFEEDIT THERAPEUTICS, INC., 507 Airport Boulevard Suite 101 Morrisville, North Carolina, 27560, United States of America ~72: ALEXANDRA BRINER CRAWLEY;TEDD D ELICH;TYSON D BOWEN~ 33:US ~31:63/077,089 ~32:11/09/2020;33:US ~31:63/146,840 ~32:08/02/2021

2023/04240 ~ Complete ~54:OPERATING MECHANISM OF CIRCUIT BREAKER ~71:CHINT LOW VOLTAGE ELECTRICAL TECHNOLOGY CO., LTD., Room 107, No. 51 Building, 3255# Sixian Road, People's Republic of China ~72: AO, Denggui;FU, Hao;LU, Dengyu;YAN, Lijun~ 33:CN ~31:202110355281.2 ~32:01/04/2021

2023/04244 ~ Complete ~54:GYRATORY ROLLER CRUSHER ~71:CBSM MINING SERVICES PTY LTD, 474A Anzac Highway, Australia ~72: Christopher KELSEY~ 33:AU ~31:2020903268 ~32:11/09/2020

2023/04215 ~ Complete ~54:SYSTEM FOR AUTHENTICATING A USER AT AND REPORTING ABOUT USE OF A CHARGING DEVICE ~71:HEYCHARGE GMBH, Klenzestr. 43, Germany ~72: CARDE, Christopher;HOLZ, Florian~ 33:DE ~31:10 2020 128 700.3 ~32:30/10/2020

- APPLIED ON 2023/04/11 -

2023/04271 ~ Complete ~54:RURAL INDUSTRIAL INFORMATION MANAGEMENT SYSTEM ~71:Anhui Science And Technology University, No.9 Donghua Road, Fengyang County, Chuzhou City, Anhui Province, People's Republic of China ~72: Dai Jiajun;Wang chengyun;Wang qiudi;Wang weizhe;Xie Junyi;Zhang Wei~ 33:CN ~31:2023101664511 ~32:22/02/2023

2023/04277 ~ Complete ~54:BEMISIA TABACI REPELLENT AND PREPARATION METHOD THEREFOR ~71:Shandong Shouguang Vegetable Industry Group Biological Control Technology Co., Ltd., No. 9 Haoyuan Road, Luocheng Street, Shouguang City, Shandong Province, 262700, People's Republic of China;Shandong Shouguang Vegetable Industry Group Co., Ltd., No. 9, Haoyuan Road, Luocheng Street, Shouguang City, Shandong Province, 262700, People's Republic of China;Weifang University of Science and Technology, No. 1299, Jinguang Street, Shouguang City, Shandong Province, 262700, People's Republic of China ~72: DAI, Huijie;DING, Junyang;GUO, Jiajin;GUO, Yanchun;HUANG, Shengxian;LIN, Guiyu;XIA, Haibo;XIAO, Wanli;ZHANG, Chuanwei~ 33:CN ~31:2022106706836 ~32:15/06/2022

2023/04279 ~ Complete ~54:PRETREATMENT AND SMELTING REGENERATION METHOD FOR SCRAP ALUMINUM ~71:GUANGDONG ENGINEERING POLYTECHNIC COLLEGE, No. 18, Yuxing Road, Fenghuang Street, Tianhe District, Guangzhou City, Guangdong Province, 510660, People's Republic of China;GUANGDONG HONGBANG METAL ALUMINUM INDUSTRY CO., LTD, Ningxi Industrial Park, Xintang

Town, Zengcheng, Guangzhou, 511358, People's Republic of China ~72: CHEN, Xuwen;HE, Jingnan;KUANG, Zhiqian;WANG, Shuncheng;YANG, Zhenjiang;ZHU, Haidong~ 33:CN ~31:202211649833.1 ~32:21/12/2022

2023/04281 ~ Complete ~54:PRODUCTION AND MANAGEMENT METHOD FOR "RED BEAUTY" ORANGES GOING ON SALE EARLY ~71:CITRUS RESEARCH INSTITUTE OF ZHEJIANG PROVINCE, NO. 11 DAQIAO ROAD, People's Republic of China ~72: HUANG, Bei;JIN, Longfei;WANG, Peng;WEN, Mingxia;WU, Shaohui;XU, Jianguo~ 33:CN ~31:202210581115.9 ~32:25/05/2022

2023/04311 ~ Complete ~54:DRUG RESISTANCE OF TARGET STRAINS OF A PATHOGEN ~71:AAROGYAAI INNOVATIONS PVT. LTD., 677, 1st Floor, Suite No. 918, 13th Cross, Sector 1, HSR Layout Bangalore, 560102, India ~72: JAYASWAL, Praapti;TIWARI, Avlokita~ 33:IN ~31:202041055641 ~32:21/12/2020

2023/04318 ~ Complete ~54:METHOD FOR PREPARING HIGH-NITROGEN STAINLESS STEEL BY SELECTIVE LASER MELTING OF PURE METAL OVER-MATCHED POWDER ~71:NORTH CHINA UNIVERSITY OF SCIENCE AND TECHNOLOGY, NO. 21 BOHAI AVENUE, People's Republic of China ~72: NI, Guolong;REN, Jianbiao;SUN, Xin;WANG, Shuhuan;WANG, Yachao;ZHAO, Dingguo~ 33:CN ~31:202211153022.2 ~32:21/09/2022

2023/04330 ~ Complete ~54:NOVEL SAFETY SPRING MOUNTING CLIP ~71:FOTOGears TRADING (GUANGZHOU) LTD, PINSE CHUANG YI YUAN ROOM 213, 2ND FLOOR, BUILDING 1, NO.9, EAST MAWU DONGTOU STREET, People's Republic of China ~72: QUAH, Yow Chun~ 33:CN ~31:202120281370.2 ~32:01/02/2021

2023/04255 ~ Complete ~54:APPLICATION OF ATM PROTEIN IN THE PREPARATION OF PNEUMOCONIOSIS DIAGNOSIS PRODUCTS ~71:CHEN, Yan, No.6, Daying Road, Yunyan District, Guiyang City, Guizhou Province, 550001, People's Republic of China;DENG, Hao, No.6, Daying Road, Yunyan District, Guiyang City, Guizhou Province, 550001, People's Republic of China;WU, Mali, No.6, Daying Road, Yunyan District, Guiyang City, Guizhou Province, 550001, People's Republic of China;ZHANG, Tao, No.6, Daying Road, Yunyan District, Guiyang City, Guizhou Province, 550001, People's Republic of China ~72: CHEN, Yan;DENG, Hao;WU, Mali;ZHANG, Tao~

2023/04258 ~ Complete ~54:HYDRAULIC DRIVING OIL PUMPING UNIT ~71:Shanghai Yijiu Technology Co., Ltd., No.6, Kangye Road, Zhujiajiao Town, Qingpu District, Shanghai, 201700, People's Republic of China ~72: LI, Bingjie;LI, Feng;LI, Wei;ZHAO, Xiaohua~

2023/04263 ~ Complete ~54:RAINWATER WELL DEVICE WITH FILTERING FUNCTION ~71:Taizhou Vocational College of Science & Technology, No.288, Jiamu Road, Huangyan District, Taizhou City, Zhejiang Province, People's Republic of China ~72: LI, JUAN~

2023/04266 ~ Complete ~54:SOIL DETECTION DEVICE FOR GENERAL SURVEY OF DROUGHT DISASTERS ~71:Institute of Water Resources for Pastoral Area, MWR, No. 128, University East Street, Saihan District, Hohhot, Inner Mongolia, 010010, People's Republic of China ~72: CHEN, Xiaojun;CHEN, Zexun;LI, Wei;QUAN, Qiang;SUN, Lixin;WANG, Wenjun;WU, Yingjie;YIN, Hang;ZHANG, Weijie;ZHAO, Qian;ZHAO, Shuixia;ZHOU, Quancheng~ 33:CN ~31:2022105246962 ~32:13/05/2022

2023/04268 ~ Complete ~54:A CONVENIENT OPERATE INVERSE ROTATING STRAIGHT SLOT WHEEL FERTILIZER APPARATUS ~71:Lingnan Normal University, 29 Cunjin Road, Chikan District, Zhanjiang, Guangdong, 524048, People's Republic of China ~72: Qichao LI~

2023/04269 ~ Complete ~54:BIOLOGICAL FERTILIZER FOR VEGETABLES AND PREPARATION METHOD THEREOF ~71:Anhui Science And Technology University, No.9 Donghua Road, Fengyang County, Chuzhou

City, Anhui Province, People's Republic of China ~72: He keqin;Lu xiaomin;Wang Xihua;Wang hong;Yang dekun;Zhang Yu~ 33:CN ~31:2023101420606 ~32:13/02/2023

2023/04273 ~ Complete ~54:SIMULATED TUNNEL GROUTING DEVICE AND USING METHOD THEREFOR ~71:SHANDONG UNIVERSITY OF SCIENCE AND TECHNOLOGY, No.579 Qianwangang Road, Huangdao District, Qingdao, Shandong, 266590, People's Republic of China ~72: LIU, Weitao;MENG, Xiangxi;YANG, Chunhui;ZHAO, Jiyuan~ 33:CN ~31:202310072412.5 ~32:17/01/2023

2023/04278 ~ Complete ~54:SIMULATED COMPUTED TOMOGRAPHY EQUIPMENT FOR MEDICAL IMAGING TRAINING ~71:SHANGHAI UNIVERSITY OF MEDICINE AND HEALTH SCIENCES, 279 Zhouzhu Road, Pudong New Area, Shanghai, 201321, People's Republic of China ~72: PENG, Wenxian~

2023/04294 ~ Complete ~54:METHOD AND SYSTEM FOR DETECTING A STATE OF A JOINT OF A DRILL STRING ~71:EPIROC ROCK DRILLS AKTIEBOLAG, 701 91 Örebro, Sweden ~72: MATTIAS GÖTHBERG;SAMUEL ENBLOM~ 33:SE ~31:2051525-0 ~32:21/12/2020

2023/04297 ~ Complete ~54:DUAL PRESSURE PLANT FOR THE PRODUCTION OF NITRIC ACID AND METHOD FOR OPERATING SAME ~71:YARA INTERNATIONAL ASA, Drammensveien 131 0277, Norway ~72: ØIEN, Halvor;DE SMET, André;FAUCONNIER, Peter;RÖSLER, Ronald;VIGELAND, Bent~ 33:EP ~31:20195977.2 ~32:14/09/2020

2023/04299 ~ Complete ~54:FOLDING APPARATUS AND ELECTRONIC DEVICE ~71:Huawei Technologies Co., Ltd., Huawei Administration Building, Bantian, Longgang District, SHENZHEN 518129, GUANGDONG, CHINA (P.R.C.), People's Republic of China ~72: GUAN, Chenghao;LI, Yunyong;LIU, Ting;MA, Chunjun;NIU, Linhui;WANG, Gangchao;XU, Zhengyi~ 33:CN ~31:202010959362.9 ~32:14/09/2020;33:CN ~31:202011495418.6 ~32:17/12/2020

2023/04303 ~ Complete ~54:OVERLAPPED BLOCK MOTION COMPENSATION ~71:QUALCOMM Incorporated, ATTN: International IP Administration, 5775 Morehouse Drive, SAN DIEGO 92121-1714, CA, USA, United States of America ~72: CHANG, Yao-Jen;KARCZEWICZ, Marta;LI, Jingya;SEREGIN, Vadim~ 33:US ~31:63/129,238 ~32:22/12/2020;33:US ~31:17/534,325 ~32:23/11/2021

2023/04264 ~ Complete ~54:HYDROGEN PRODUCTION SYSTEM BASED ON DRY REFORMING OF METHANE ~71:JIMEI UNIVERSITY, No. 185, Yinjiang Road, Jimei District, Xiamen City, Fujian Province, 361021, People's Republic of China ~72: HUANG, Shenghua;HUANG, Yupeng;HUANG, Zhi;SU, Bosheng;WANG, Yilin~

2023/04288 ~ Complete ~54:DIRECT CONVERSION OF ESTERS TO CARBOXYLATES ~71:NIACET CORPORATION, 400 47TH STREET, NIAGARA FALLS, NEW YORK 14304, USA, United States of America ~72: BRANNEN, Kelly. A.;HARRIGAN, David, J.;SOJKA, Stanley, A.;TUNKS, Donal, S.~ 33:US ~31:63/079,683 ~32:17/09/2020

2023/04298 ~ Complete ~54:HEAT EXCHANGER ASSEMBLY ~71:BOTHA, Johannes, Matthys, Beukes, NO. 2 LONGBEACH, 2 THOMPSON STREET, STRAND, 7140 WESTERN CAPE, SOUTH AFRICA, South Africa ~72: BOTHA, Johannes, Matthys, Beukes~ 33:ZA ~31:2020/06305 ~32:12/10/2020

2023/04300 ~ Complete ~54:REACTIVE CONJUGATES ~71:Debiopharm Research & Manufacturing S.A., Rue du Levant 146, MARTIGNY 1920, SWITZERLAND, Switzerland ~72: GARROUSTE, Patrick;LEVY, Frederic;MARX, Léo;NYANGUILE, Origène Franz;PANTIN, Mathilde Lucile Colette;POSTUPALENKO, Viktoriia;SEGURA, Jean-Manuel~ 33:IB ~31:2020/078571 ~32:12/10/2020

2023/04304 ~ Complete ~54:A BITUMEN ADDITIVE COMPRISING AN AQUEOUS WAX DISPERSION AND ITS USE TO OBTAIN A FOAMED BITUMEN ~71:Sasol Germany GmbH, Anckelmannsplatz 1, HAMBURG 20537, GERMANY, Germany ~72: BUTZ, Thorsten;GROSS-MATTHIAS, Susann;JONES, Ben;OELKERS, Carsten~ 33:EP ~31:20205287.4 ~32:02/11/2020

2023/04308 ~ Complete ~54:MODIFIED PARAPOXVIRUS HAVING INCREASED IMMUNOGENICITY ~71:PRIME VECTOR TECHNOLOGIES GMBH, Herrenbergerstr. 24, Germany ~72: AMANN, Ralf;SALOMON, Ferdinand~ 33:EP ~31:20216195.6 ~32:21/12/2020

2023/04312 ~ Complete ~54:A HERBAL COMPOSITION ~71:DR. HUMA ALI, 158-A sector, Nizamuddin colony BHEL, Bhopal, India;DR. SAVITA DIXIT, Department of Chemistry, Maulana Azad National, Institute of Technology, Bhopal, India ~72: DR. HUMA ALI;DR. SAVITA DIXIT~ 33:IN ~31:202221006296 ~32:06/02/2022

2023/04296 ~ Complete ~54:ALLOY WIRE ROD AND PREPARATION METHOD AND APPLICATION THEREOF ~71:XIAMEN HONGLU TUNGSTEN MOLYBDENUM INDUSTRY CO., LTD., No. 339, Liansheng Road, North Jimei Industrial Zone,, People's Republic of China ~72: FANG, Yijin;GUO, Donghong;LV, Sheng;PENG, Fusheng;TANG, Minfeng;WU, Xianyue~ 33:CN ~31:202110077980.5 ~32:20/01/2021

2023/04305 ~ Complete ~54:MIXTURES OF PYRIDAZINES AS HERBICIDAL COMPOSITIONS ~71:Syngenta Crop Protection AG, Rosentalstrasse 67, BASEL 4058, SWITZERLAND, Switzerland ~72: HOLLOWAY, Thomas Edward;WAILES, Jeffrey Steven;WATKINS, Melanie Jayne~ 33:GB ~31:2016568.4 ~32:19/10/2020

2023/04307 ~ Complete ~54:SAFETY COVER FOR COUPLING WITH AN INJECTION DEVICE ~71:FISCHER, Stephan, Auf der Brede 8, Germany;MOHR, Bernd, Mühlenberg 2, Germany;WILKE, Tobias, Heuwinkel 3, Germany ~72: FISCHER, Stephan;MOHR, Bernd;WILKE, Tobias~ 33:DE ~31:10 2020 126 258.2 ~32:07/10/2020

2023/04310 ~ Complete ~54:MULTIPLE-SENSOR ANALYSIS OF GEOLOGICAL SAMPLES ~71:ENERSOFT INC, 7745 66th Street SE, Canada ~72: SANDEN, Grant I.;SEGAL, Yannai Z.R.~ 33:US ~31:63/079,236 ~32:16/09/2020

2023/04245 ~ Provisional ~54:AUTOMATIC VEHICLE LICENSE VERIFICATION ~71:MICHAEL JANKELOWITZ, 4 GLENEAGLES, 16 KILFENORA STREET, LAKEFIELD, South Africa ~72: MICHAEL JANKELOWITZ~ 33:ZA ~31:1 ~32:01/04/2023

2023/04246 ~ Provisional ~54:NKEMA REPELLANT ~71:NKELE MALAHLELA, 1194 OEWEERSWAELE STREET, South Africa ~72: NKELE MALAHLELA~

2023/04247 ~ Provisional ~54:CAP-SOC: A SYSTEM AND METHOD FOR ENABLING AND ACHIEVING EQUITABLE ECONOMIC PARTICIPATION BY THE HISTORICALLY EXCLUDED IN POST-APARTHEID SOUTH AFRICA ~71:George Smith, 11 Vorster Place, South Africa ~72: George Smith~

2023/04254 ~ Complete ~54:HIGH-SPEED SEALING TEST DEVICE ~71:Wuhu Technology and Innovation Research Institute, AHUT, Building B5, Science and Technology Industrial Park, Wuhu High-tech Zone, Zhongshan South Road, Yijiang District, Wuhu City, Anhui Province, 241000, People's Republic of China ~72: CHEN, Xiaoya;LI, Meng;SHI, Jun;SHI, Liping;SHI, Zhiqi;WANG, Tao;WEI, Wei~ 33:CN ~31:2022103714845 ~32:11/04/2022

2023/04286 ~ Complete ~54:METHOD FOR THE POPULARIZATION MODE OF HEAVY METAL POLLUTION PREVENTION AND CONTROL TECHNOLOGY INTEGRATION APPLIED IN COPPER DRESSING AND SMELTING SLAG DISPOSAL SITE AND AFFECTED AREAS ~71:BGRIMM TECHNOLOGY GROUP, Building

23, Zone 18 of ABP, No. 188, South 4th Ring Road West, Fengtai District, Beijing, People's Republic of China; China University of Geosciences (Bei Jing), No. 29, Xueyuan Road, Haidian District, Beijing, People's Republic of China; Southwest University of Science and Technology, 59 Qinglong Road, Mianyang, Fucheng District, Sichuan, 621010, People's Republic of China; University of Science and Technology Beijing, 30 Xueyuan Road, Haidian District, Beijing, People's Republic of China ~72: Cui Wei Hua; Fu Kai Bin; Jiang Hui; Wang Qiong; Wang Zhe; Yang Hui Fen; Yao Jun; Zhang Hua ~ 33:CN ~31:202310259116.6 ~32:17/03/2023

2023/04289 ~ Complete ~54:AEROPHONE INSTRUMENT USING AIR-FILLED OBJECT ~71:ORB MUSIC INC., 1467 HIGHWAY 7A, BETHANY, ONTARIO L0A 1A0, CANADA, Canada ~72: BAGATAVICIUS, Adam, Jason; MACDONALD, Jamus, Adrian ~ 33:US ~31:63/079,896 ~32:17/09/2020

2023/04292 ~ Complete ~54:AQUEOUS CLEANING COMPOSITION COMPRISING NON-IONIC SURFACTANT, QUATERNARY AMMONIUM COMPOUND, AND SEQUESTANT ~71:UNILEVER GLOBAL IP LIMITED, Port Sunlight, Wirral, Merseyside, CH62 4ZD, United Kingdom ~72: MARA ABBATANGELO; NADIA GROSSI; PUNAM BANDYOPADHYAY ~ 33:EP ~31:20208415.8 ~32:18/11/2020

2023/04302 ~ Complete ~54:CLEANING COMPOSITIONS CONTAINING POLYPEPTIDE VARIANTS ~71:The Procter & Gamble Company, One Procter & Gamble Plaza, CINCINNATI 45202, OH, USA, United States of America ~72: CHRISTENSEN, Lars Lehmann Hylling; JOHANSEN, Annette Helle; LANT, Neil Joseph; MALTEN, Marco; OEHLenschlaeger, Christian Berg; OESTERGAARD, Lars Henrik ~ 33:EP ~31:21162672.6 ~32:15/03/2021

2023/04248 ~ Provisional ~54:TALKING APP FOR LOCATION-BASED INFORMATION RETRIEVAL USING CHAT GPT ~71:MARK WYNESS VOSLOO, 47 NORTHOAKS PRIVATE ESTATE, NORTHOAKS AVENUE, HOUT BAY, South Africa ~72: MARK WYNESS VOSLOO ~

2023/04252 ~ Complete ~54:APPLICATION OF CTRP3 AND CTRP15 AS BIOMARKERS IN PREPARING PRODUCTS FOR EARLY DIAGNOSIS OF SPONTANEOUS INTRACEREBRAL HEMORRHAGE ~71:Institute of Chinese Materia Medica, China Academy of Chinese Medical Sciences, No. 16, Nanxiao Street, Inner Dongzhimen, Dongcheng District, Beijing, People's Republic of China ~72: PAN Wen; YANG Hongjun; ZHANG Fangbo ~ 33:CN ~31:2022103644753 ~32:07/04/2022

2023/04259 ~ Complete ~54:TOOTHBRUSH STRUCTURE ~71:CHIU, JU-HUI, No. 10, Ln. 6, Linsen Rd, Taoyuan Dist., Taoyuan City 330, Taiwan, Province of China ~72: CHIU, JU-HUI ~ 33:TW ~31:111203915 ~32:18/04/2022

2023/04314 ~ Provisional ~54:SOLAR GENSET ~71:Mariette Hayes, 841 1st ave Wonderboomssouth Pretoria, South Africa ~72: Joseph Hayes ~ 33:ZA ~31:1 ~32:07/04/2023

2023/04283 ~ Complete ~54:PREPARATION METHOD OF SELF-CLEANING GLASS COATING ~71:North China University of Water Resources and Electric Power, 36 Beihuan Road, Jinshui District, Zhengzhou, Henan province, 450000, People's Republic of China ~72: Chen Xi; Han Peng; Huang Liang; Shi Yurong; Wei Leyu; Yang Zhongzheng; Zhang Chenxi ~ 33:CN ~31:2023102377196 ~32:13/03/2023

2023/04287 ~ Complete ~54:COMPOUNDS FOR TREATING VIRUS INFECTIONS ~71:MELETIOS THERAPEUTICS, 13 Rue Monsigny 75002, France ~72: MANIERE, Xavier; SALOME, Marc ~ 33:EP ~31:20306048.8 ~32:17/09/2020; 33:EP ~31:21305200.4 ~32:18/02/2021

2023/04253 ~ Complete ~54:DEVICE FOR DETERMINING MOLECULAR WEIGHT OF HIGH POLYMER ~71:Leshan Normal University, No. 778, Binhe Road, Shizhong District, Leshan City, Sichuan Province, 614000, People's Republic of China ~72: CHEN, Fengzheng; CHEN, Jiaxuan; CHEN, Qiao; SUN, Guofeng; TIAN, Chong ~

2023/04256 ~ Complete ~54:A NOVEL RICE STARCH BASED BIO-CONTROL FORMULATION ~71:LOVELY PROFESSIONAL UNIVERSITY, JALANDHAR-DELHI G.T. ROAD, PHAGWARA, India ~72: Baral, Deewakar;Kaushik, Aditi~ 33:IN ~31:202211059645 ~32:18/10/2022

2023/04251 ~ Provisional ~54:HYDROPONICS SYSTEMS FOR COTTON PLANTS ~71:Boipelo Nelly Motshabi, 2910 unit 9, South Africa ~72: Boipelo Nelly Motshabi~

2023/04250 ~ Provisional ~54:AC LINE REACTOR WITH RESONATOR ~71:Jacobus Johannes van der Merwe, 1060 Pierneef Street, Villieria, South Africa ~72: Jacobus Johannes van der Merwe~

2023/04301 ~ Complete ~54:REACTIVE CONJUGATES ~71:Debiopharm Research & Manufacturing S.A., Rue du Levant 146, MARTIGNY 1920, SWITZERLAND, Switzerland ~72: GARROUSTE, Patrick;LEVY, Frédéric;MARX, Léo;NYANGUILE, Origène Franz;PANTIN, Mathilde Lucile Colette;POSTUPALENKO, Viktoriia;SEGURA, Jean-Manuel~

2023/04306 ~ Complete ~54:IMPROVED FRESHNESS IMPARTING COMPOSITIONS ~71:Firmenich SA, 7, Rue de la Bergère, SATIGNY 1242, SWITZERLAND, Switzerland ~72: BOUCKAERT, Etienne;KNAB, Robert;STRUILLLOU, Arnaud~ 33:US ~31:63/094,435 ~32:21/10/2020;33:EP ~31:20206074.5 ~32:06/11/2020

2023/04309 ~ Complete ~54:TRIPHENYL CALCILYTIC COMPOUNDS FOR THE TREATMENT OF AUTOSOMAL DOMINANT HYPOCALCEMIA TYPE 1 (ADH1) ~71:CALCILYTIX THERAPEUTICS, INC., 1800 Owens Str., Ste. C-1200, United States of America;UNITED STATES OF AMERICA, AS REPRESENTED BY THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES, Office of Technology Transfer National Institutes of Health, United States of America ~72: BRUCE, Simon;COLLINS, Michael T.;FOX, Jonathan;GAFNI, Rachel I.;HARTLEY, Iris R.;KOMEYLI, Ali;POZO, Karen A.;ROBERTS, Mary Scott;ROSZKO, Kelly B. L.;SANI-GROSSO, Ramei;SRIDHAR, Ananth~ 33:US ~31:63/080,165 ~32:18/09/2020;33:US ~31:63/159,397 ~32:10/03/2021

2023/04285 ~ Complete ~54:ZDY4200LS CRAWLER-TYPE ALL-HYDRAULIC TUNNEL DRILLING RIG FOR COAL MINES ~71:SHANDONG FANGDA ENGINEERING CO. , LTD, North Zhaili Town , Zichuan, Zibo, Shandong, 255150, People's Republic of China ~72: FENG, Jinyi;JIA, Bin;JIN, Xin;QIN, Yang;WANG, Yiyong;YANG, Kai;YIN, Yanze;ZANG, Tao;ZHAO, Kai~ 33:CN ~31:202211394184.5 ~32:08/11/2022

2023/04295 ~ Complete ~54:IMPROVEMENTS IN OR RELATING TO COPPER BASED PESTICIDES ~71:AGRONATURALIS LTD, Suite 2, Crown House, 2 Southampton Road, Ringwood, Hampshire, BH24 1HY, United Kingdom ~72: RICHARD MILLING~ 33:GB ~31:2016365.5 ~32:15/10/2020

2023/04260 ~ Complete ~54:TRAFFIC SIGN DETECTION ALGORITHM BASED ON LIGHTWEIGHT SSD ~71:Jiangsu Vocational and Technical College of Architecture, No. 26 Xueyuan Road, Zhaishan Street, Zhaishan Distric, Xuzhou City, Jiangsu Province, People's Republic of China ~72: Du jia hui;Du xuan;He hao;Qin sheng tao;Wei lai;You jia rui;Zhang gang~ 33:CN ~31:2023101361487 ~32:20/02/2023

2023/04261 ~ Complete ~54:DEVICE FOR QUICKLY CUTTING AND HARVESTING SUGARCANE AND USE METHOD THEREOF ~71:Guangxi Academy of Agricultural Sciences, 174 East Road of Daxue, People's Republic of China ~72: HE, Shanshan;JING, Yan;LI, Ming;LUO, Ting;TANG, Shiyun;WEI, Jinju;ZENG, Yuan;ZHANG, Baoqing~ 33:CN ~31:2022114582182 ~32:21/11/2022

2023/04262 ~ Complete ~54:POSITIONING RACK AND EARTHING METHOD FOR PREVENTING FIELD SUGARCANE FROM LODGING ~71:Guangxi Academy of Agricultural Sciences, 174 East Road of Daxue, People's Republic of China ~72: HE, Shanshan;JING, Yan;LI, Ming;LIANG, Chaoxu;TANG, Shiyun;ZENG, Yuan;ZHANG, Baoqing~ 33:CN ~31:2022111954997 ~32:28/09/2022

2023/04265 ~ Complete ~54:TREATMENT METHOD AND TREATMENT DEVICE FOR REMEDIATING CONTAMINATED SOIL BY PYROLYSIS AND CARBONIZATION OF BIOMASS ~71:Kunming University of Science and Technology, Kunming University of Science and Technology, Chenggong District, Kunming City, Yunnan Province, 650000, People's Republic of China ~72: CUI, Xiangfen;HU, Xuewei;HUANG, Jianhong;LI, Jie;LI, Yingjie;NING, Ping;PAN, Yi;TIAN, Senlin;ZHAO, Qun;ZHAO, Yihuang~ 33:CN ~31:2022109656716 ~32:12/08/2022

2023/04274 ~ Complete ~54:JET EXPERIMENT BENCH FOR MEASUREMENT OF TEMPERATURE FIELD OF ENGINE PISTON ~71:Harbin Engineering University, Harbin Engineering University, No. 145, Nantong Street, Nangang District, Harbin City, Heilongjiang Province, 150050, People's Republic of China ~72: CAO, Yilong;CHEN, Guangku;FAN, Ziyang;GAO, Wenxiang;HAO, Yanan;JIA, Sensen;WANG, Guixin;WANG, Ziyu;XIN, Qi;YU, Qian;ZHU, Jialiang~ 33:CN ~31:2022103840246 ~32:12/04/2022

2023/04276 ~ Complete ~54:A MINE PROP ~71:THE TREVOR CHARLES FROST FAMILY TRUST (IT 3642/95), 4 NUT AVENUE, OLIFANTSFONTEIN, GAUTENG, 1665, SOUTH AFRICA, South Africa ~72: FROST, Trevor, Charles~ 33:ZA ~31:2022/04039 ~32:11/04/2022

2023/04284 ~ Complete ~54:METHOD FOR PREPARING HIGH-STRENGTH CERAMSITE FROM COAL GANGUE, FLY ASH AND STEEL SLAG ~71:North China University of Water Resources and Electric Power, 36 Beihuan Road, Jinshui District, Zhengzhou, Henan province, 450000, People's Republic of China ~72: Chen Xi;Chen Xiao;Jiang Zhengquan;Wang Huixian;Wei Leyu;Xing Yan;Yang Zhongzheng;Zhang Chenxi~ 33:CN ~31:2023102377092 ~32:13/03/2023

2023/04313 ~ Provisional ~54:SIM CARD SWITCHING NOTIFICATION SERVICES ~71:SAKHILE HOPEWELL NTULI, 1351 EMPUMELELWENI EX5, South Africa ~72: SAKHILE HOPEWELL NTULI~

2023/04249 ~ Provisional ~54:CONCRETE WALL STRUCTURES ~71:PRINSLOO, Wessel Frans, 27 Erica Way, Durbanville Hills, Cape Town 7550, SOUTH AFRICA, South Africa;TOPFLOOR CONCRETE PROPRIETARY LIMITED, Cnr. Fabriek & Oop Street, Bellville South, Cape Town 7532, SOUTH AFRICA, South Africa ~72: PRINSLOO, Wessel Frans~

2023/04257 ~ Complete ~54:VERTICAL AXIS WIND TURBINE ~71:Shanghai Yijiu Technology Co., Ltd., No.6, Kangye Road, Zhujiajiao Town, Qingpu District, Shanghai, 201700, People's Republic of China ~72: LI, Bingjie;LI, Feng;LI, Wei;ZHAO, Xiaohua~

2023/04267 ~ Complete ~54:AN ADAPTIVE CONTROL DEVICE FOR LIFTING A BRIDGE-SUBGRADE APPROACH SLAB ~71:Nanjing Vocational Institute of Railway Technology, No.65, Pearl Road, Pukou District, Nanjing, Jiangsu, People's Republic of China ~72: FENG Honggao;HAN Yikang;ZHONG Zhipeng~ 33:CN ~31:202310188445.6 ~32:01/03/2023

2023/04270 ~ Complete ~54:HYDROPONIC VEGETABLE PLAN DEVICE AND PLANTING METHOD THEREOF ~71:Anhui Science And Technology University, No.9 Donghua Road, Fengyang County, Chuzhou City, Anhui Province, People's Republic of China ~72: He keqin;Lu xiaomin;Xia keming;Yang dekun;Zhang Yu~ 33:CN ~31:202310142049X ~32:13/02/2023

2023/04272 ~ Complete ~54:A RECONSTRUCTION METHOD FOR OPTICAL REMOTE SENSING TIME SERIES IMAGES AND ITS SYSTEM ~71:Hohai University, No. 8 Focheng West Road, Jiangning District, Nanjing City, Jiangsu Province, 211100, People's Republic of China ~72: Dan YANG;Li FENG;Xianzeng YANG;Yanan ZHOU~

2023/04275 ~ Complete ~54:A SIMULATED TUNNEL AND CONCRETE JET PRESSURE TEST DEVICE
~71:China University of Mining and Technology, South Lake Campus of China University of Mining and Technology, No.1 Daxue Road, Xuzhou City, Jiangsu Province, 221116, People's Republic of China ~72: Aimin LI;Fei CHEN;Guanzhong SUN;Mingzhuang WU;Nannan WU~

2023/04280 ~ Complete ~54:DEVICE FOR CEREBRAL PALSY REHABILITATION ~71:THE FIRST AFFILIATED HOSPITAL OF BENGBU MEDICAL COLLEGE, No. 287 Changhuai Road, Longzihu district, People's Republic of China ~72: CHEN Shuang;FAN Li;LI Baoguang;YANG Mei;YANG Xiaoyun;ZHANG Ying~

2023/04282 ~ Complete ~54:AN IOT ENABLED SMART SECURITY SYSTEM AND METHOD TO PROTECT PRIVACY AS WELL AS PROPERTY ~71:ANGRAM, Divyanshu, Village Bahlolpur,Post Bahlolpur, District Bulandshahr, Uttar Pradesh- 203397, India;KHAN, Mohd Tauseef, Rajkiya Engineering College, Banda, Uttar Pradesh- 210201, India;SHUKLA, Sheo Prasad, Director, Rajkiya Engineering College, Banda, Uttar Pradesh- 210201, India;SINGH, Abhijeet, Assistant Professor, Applied Science & Humanities Department, Rajkiya Engineering College, Banda, Uttar Pradesh- 210201, India;SINGH, Avinyash, Kajarihwa Ka Pokhara, Behind Police Line, Mirzapur, Uttar Pradesh – 231001, India;SINGH, Pushpendra, Assistant Professor, Electrical Engineering Department, Rajkiya Engineering College, Banda, Uttar Pradesh- 210201, India;TIWARI, Paras, 1413/1 Sheetal Khera, Raebareli Rd, Near OP Chaudhary Dental Hospital, Lucknow, Uttar Pradesh-226025, India;YADAV, Amit Kumar, Village Bahauddinpur, District Jaunpur, Uttar Pradesh, India ~72: ANGRAM, Divyanshu;KHAN, Mohd Tauseef;SHUKLA, Sheo Prasad;SINGH, Abhijeet;SINGH, Avinyash;SINGH, Pushpendra;TIWARI, Paras;YADAV, Amit Kumar~

2023/04290 ~ Complete ~54:NUCLEIC ACID CONSTRUCTS, VIRAL VECTORS AND VIRAL PARTICLES
~71:UCB BIOPHARMA SRL, Allée de la Recherche, 60, 1070, Brussels, Belgium ~72: BRITTANY NICOLE VALLETTE;CSILLA SIPEKY;MEIYU XU;STEFANIE MARIE DEDEURWAERDERE;TAL KRAMER~ 33:US
~31:63/089,817 ~32:09/10/2020

2023/04291 ~ Complete ~54:MANAGEMENT SYSTEM AND METHOD FOR A VISUAL NAVIGATIONAL INSTRUMENT OF AN AIRPORT ~71:CHINA HARBOUR ENGINEERING COMPANY LTD., No. 9,Chunxiu Road, Dongcheng District, Beijing, 100027, People's Republic of China ~72: ZHUANG SUN~ 33:CN
~31:2022110619347 ~32:01/09/2022

2023/04293 ~ Complete ~54:ANTI-DECTIN-1 ANTIBODIES AND METHODS OF USE THEREOF ~71:DREN BIO, INC., 384 Foster City Blvd. Foster City, California 94404, United States of America ~72: ANDREW P AH YOUNG-CHAPON;NENAD TOMASEVIC;PANAGIOTIS FOTAKIS;RUO SHI SHI;XIAODI DENG~ 33:US
~31:63/088,895 ~32:07/10/2020;33:US ~31:63/174,439 ~32:13/04/2021

- APPLIED ON 2023/04/12 -

2023/04315 ~ Provisional ~54:PHARMACEUTICAL COMPOSITION ~71:GORAM RESEARCH AND INVESTMENTS PROPRIETARY LIMITED, 8A Avenue Disandt, Fresnaye, Sea Point, Cape Town, 8005, SOUTH AFRICA, South Africa ~72: GORDON, Brent Michael~

2023/04321 ~ Complete ~54:ANTI-SARS-COV-2-SPIKE GLYCOPROTEIN ANTIBODIES AND ANTIGEN-BINDING FRAGMENTS ~71:REGENERON PHARMACEUTICALS, INC., 777 Old Saw Mill River Road, Tarrytown, United States of America ~72: BABB, Robert;BAUM, Alina;CHEN, Gang;GERSON, Cindy;HANSEN, Johanna;HUANG, Tammy T.;KYRATSOS, Christos;LEE, Wen-Yi;MALBEC, Marine;MURPHY, Andrew;OLSON, William;STAHL, Neil;YANCOPOULOS, George, D.~ 33:US ~31:63/004,312 ~32:02/04/2020;33:US
~31:63/014,687 ~32:23/04/2020;33:US ~31:63/025,949 ~32:15/05/2020;33:US ~31:63/034,865
~32:04/06/2020

2023/04379 ~ Complete ~54:PHARMACEUTICAL COMPOSITION COMPRISING HYDROXYCHLOROQUINE AND USES THEREOF ~71:PHILIP MORRIS PRODUCTS S.A., Quai Jeanrenaud 3, Switzerland ~72: CALVINO, Florian, Alexis;GUY, Philippe Alexandre;HOENG, Julia;KOLLI, Aditya, Reddy;KUCZAJ, Arkadiusz;MAJEED, Shoaib;MAZUROV, Anatoly;PEITSCH, Manuel;SEMREN, Tanja, Zivkovic;VAN DER TOORN, Marco~ 33:EP ~31:20196088.7 ~32:14/09/2020

2023/04316 ~ Provisional ~54:WATER-SAVING DEVICE CONTAINER ~71:Gerhard Jacques Cloete, 112b Norhdene rd, South Africa ~72: Gerhard Jacques Cloete;Gerhard Jacques Cloete~

2023/04320 ~ Complete ~54:BOX-TYPE SELF-RETAINING LARYNGOSCOPIC SURGERY SIMULATING TRAINER ~71:The First Affiliated Hospital, Sun Yat-sen University, No.58, Zhongshan 2nd Road, Guangzhou, Guangdong, People's Republic of China ~72: Dan WANG;Jie DENG;Wenbin LEI;Xingmei WU;Yihui WEN~ 33:CN ~31:2023101680995 ~32:27/02/2023

2023/04324 ~ Complete ~54:GEOGRAPHICAL KNOWLEDGE MAPPING QUALITY DETERMINATION METHOD BASED ON LIFE CYCLE THEORY ~71:Institute of Geographic Sciences and Natural Resources Research, CAS, 11A, Datun Road, Chaoyang District, Beijing, 100101, People's Republic of China ~72: BAI, Yan;PENG, Peng;QIU, Peiyuan;WANG, Shu;ZHU, Yunqiang~ 33:CN ~31:202310165099X ~32:24/02/2023

2023/04328 ~ Complete ~54:METHOD FOR REDUCING ENERGY CONSUMPTION OF HIGH-PRESSURE ROLLER MILLING-BALL MILLING SYSTEM ~71:BGRIMM TECH GROUP, BUILDING 23, ZONE 18 OF ABP, NO. 188, People's Republic of China ~72: HU, Yangjia;HU, Zhikai;LU, Hongyu;LU, Liang;LUO, Sigang;TANG, Yijing;WANG, Guoqiang;ZHAO, Jie;ZHAO, Zhiqiang;ZHU, Yangge~ 33:CN ~31:202210939349.6 ~32:05/08/2022

2023/04332 ~ Complete ~54:APPARATUS AND METHOD FOR ENCODING A PLURALITY OF AUDIO OBJECTS AND APPARATUS AND METHOD FOR DECODING USING TWO OR MORE RELEVANT AUDIO OBJECTS ~71:FRAUNHOFER-GESELLSCHAFT ZUR FÖRDERUNG DER ANGEWANDTEN FORSCHUNG E.V., Hansastrasse 27c, Germany ~72: BAYER, Stefan;EICHENSEER, Andrea;FUCHS, Guillaume;HERRE, Jürger;KÜCH, Fabian;KORSE, Srikanth;MULTRUS, Markus;THIERGART, Oliver;WECKBECKER, Dominik~ 33:EP ~31:20201633.3 ~32:13/10/2020;33:EP ~31:20215651.9 ~32:18/12/2020;33:EP ~31:21184367.7 ~32:07/07/2021

2023/04334 ~ Complete ~54:MEDICAL USE OF HONOKIOL ~71:BEIJING Tiantan Hospital, Capital Medical University, 119 S 4TH RING RD W, FENGTAI DISTRICT, BEIJING 100071, CHINA, People's Republic of China;CHENGDU JINRUI FOUNDATION BIOTECH CO., LTD, SUITE 2004, 20/F, EAST HOPE CENTER, 333 N YIZHOU AVENUE, HIGH-TECH DISTRICT, CHENGDU, SICHUAN 610000, CHINA, People's Republic of China ~72: LI, Shenglan;LI, Wenbin;QIU, Neng;YE, Haoyu~ 33:CN ~31:202011033093.X ~32:27/09/2020

2023/04351 ~ Complete ~54:GLP-1 PRODRUGS AND USES HEREOF ~71:Novo Nordisk A/S, Novo Allé, BagsvÆrd 2880, DENMARK, Denmark ~72: JØRGENSEN, Cecilie Mia;LAU, Jesper F.;LYKKE, Lennart;PREMDJEE, Bhavesh~ 33:EP ~31:20206198.2 ~32:06/11/2020;33:EP ~31:21182351.3 ~32:29/06/2021

2023/04337 ~ Complete ~54:HORTICULTURAL MODULE, ASSOCIATED GULLY ASSEMBLY, AND MOVING GULLY SYSTEM FORMED THEREFROM ~71:GAIA PROJECT AUSTRALIA PTY LTD, B106/460 Victoria Street, Australia ~72: HENNAYAKA, Nadun~ 33:AU ~31:2020903306 ~32:16/09/2020

2023/04343 ~ Complete ~54:SHISHA, HEAT-NOT-BURN, OR COMBUSTION CASING, PRODUCT, AND METHOD OF MAKING THE SAME ~71:TOBACCO TECHNOLOGY, INC., 600 Liberty Road, Eldersburg,

Maryland, 21784, United States of America ~72: GEORGE HIRAM CASSELS-SMITH;JOHN CRAIG SENATORE;NICHOLLAS JAMES HILL~ 33:US ~31:17/061,535 ~32:01/10/2020;33:US ~31:17/371,680 ~32:09/07/2021

2023/04317 ~ Provisional ~54:A SYSTEM FOR PROVIDING DIGITAL CONTENT ~71:MATHIBE, Jamal Jefferson, 10 Soho Lofts, Robert Bruce Drive, FOURWAYS, Johannesburg 2196, Gauteng Province, SOUTH AFRICA, South Africa ~72: MATHIBE, Jamal Jefferson~

2023/04323 ~ Complete ~54:HIGH ENTROPY FLUORITE OXIDE TARGET AND ITS PREPARATION METHOD ~71:Taiyuan University of Technology, No. 79, Yingze West Street, Taiyuan City, Shanxi Province, 030000, People's Republic of China ~72: Chufei CHENG;Jiadong HOU;Wenji LI;Xiaomin WANG;Yang MIAO;Ziqian MENG~ 33:CN ~31:202210915185.3 ~32:01/08/2022

2023/04325 ~ Complete ~54:A JOINT FACE ALIGNMENT METHOD AND SYSTEM CONSIDERING GLOBAL RIGID AND LOCAL NONRIGID ~71:Shenyang University of Technology, No.111, Shenliao West Road, Economic & Technological Development Zone, Shenyang, Liaoning, 110870, People's Republic of China ~72: Gang ZHANG;Zhuoni ZHANG~

2023/04333 ~ Complete ~54:SCRAP INVENTORY MANAGEMENT METHOD ~71:ARCELOMITTAL, 24-26, Boulevard d'Avranches, Luxembourg ~72: Alejandro FERNANDEZ ALONSO;Borja ENA RODRIGUEZ;Diego DIAZ FIDALGO;Pablo VALLEDOR PELLICER~ 33:IB ~31:PCT/IB2020/061424 ~32:03/12/2020

2023/04338 ~ Complete ~54:METHOD FOR RECORDING MASS PRODUCTION WORK CYCLES ~71:AISEMO GMBH, Jutogasse 3, 4675 Weibern, Austria ~72: WERNER SCHWARZ;WOLFGANG AUER~ 33:AT ~31:A 234/2020 ~32:15/10/2020

2023/04340 ~ Complete ~54:SHISHA, HEAT-NOT-BURN, OR COMBUSTION CASING WITH ACTIVE INGREDIENT, PRODUCT AND CASING WITH ACTIVE INGREDIENT, AND METHOD OF MAKING THE SAME ~71:TOBACCO TECHNOLOGY, INC., 600 Liberty Road, Eldersburg, Maryland, 21784, United States of America ~72: GEORGE HIRAM CASSELS-SMITH;JOHN CRAIG SENATORE;NICHOLLAS JAMES HILL~ 33:US ~31:17/061,535 ~32:01/10/2020;33:US ~31:17/343,363 ~32:09/06/2021

2023/04344 ~ Complete ~54:ANTI-CCR8 MONOCLONAL ANTIBODIES AND USES THEREOF ~71:LANOVA MEDICINES LIMITED, 2889 Jinke Road, Building 10, Room 318, Chamtime Plaza, People's Republic of China ~72: HUANG, WENTAO;LI, RUNSHENG~ 33:CN ~31:PCT/CN2020/121494 ~32:16/10/2020

2023/04346 ~ Complete ~54:PORCINE SEXED SEMEN AND METHODS OF USE ~71:ABS Global, Inc., 1525 River Road, DEFOREST 53532, WI, USA, United States of America ~72: CULBERTSON, Matthew;EBERSOLE, Matthew;HAMILTON, Daniel;HERRING, William~ 33:US ~31:63/092,299 ~32:15/10/2020

2023/04352 ~ Complete ~54:MIXTURES OF PYRIMIDINES AS HERBICIDAL COMPOSITIONS ~71:Syngenta Crop Protection AG, Rosentalstrasse 67, BASEL 4058, SWITZERLAND, Switzerland ~72: HOLLOWAY, Thomas Edward;WAILES, Jeffrey Steven;WATKINS, Melanie Jayne~ 33:GB ~31:2016569.2 ~32:19/10/2020

2023/04363 ~ Complete ~54:COMPOSITE FILTER TIP MATERIAL FOR CIGARETTES ~71:YANCHENG POLYTECHNIC COLLEGE, 285 Jiefang South Road, Yancheng City, Jiangsu Province, People's Republic of China ~72: FAN Lishan;WANG Huiling;ZHOU Bin;ZHOU Hongtao;ZHU Ting~

2023/04365 ~ Complete ~54:MINING METHOD WITHOUT COAL PILLAR IN MINING AREA FOR COMPREHENSIVE PREVENTION AND CONTROL OF ROCK BURST AND GAS ~71:TAIYUAN UNIVERSITY

OF TECHNOLOGY, NO. 79, Yingze West Street, Wanbailin District, Taiyuan City, People's Republic of China ~72: FENG Guorui;GAO Zhongxiang;LI Zhu;MA Junpeng;WANG Bo;WANG Fangfang;WEI Quande;WU Wenda~ 33:CN ~31:202210694884.X ~32:20/06/2022

2023/04336 ~ Complete ~54:A TROCAR MODULE, A FLUID CONNECTOR AND METHODS ~71:D.O.R.C. DUTCH OPHTHALMIC RESEARCH CENTER (INTERNATIONAL) B.V., Scheijdelveweg 2, Netherlands ~72: DE LANGE, Ronald;MACKAY, Alan William~ 33:NL ~31:2026624 ~32:05/10/2020

2023/04364 ~ Complete ~54:CULTURE METHOD OF CITRUS SEEDS FOR GRAFTING ~71:CITRUS RESEARCH INSTITUTE OF ZHEJIANG PROVINCE, No. 11 Daqiao Road, Huangyan District, People's Republic of China ~72: HUANG Xiu;KE Fuzhi;NIE Zhenpeng;SUN Lifang;WANG Luoyun;XU Jianguo~ 33:CN ~31:2022105083541 ~32:10/05/2022

2023/04339 ~ Complete ~54:DIPEPTIDYLPEPTIDASE AND LEUCINE AMINOPEPTIDASE POLYPEPTIDE VARIANTS ~71:AMYRA BIOTECH AG, Malzgasse 9, 4052, Basel, Switzerland ~72: SILVIA TIETZ;WERNER TSCHOLLAR~ 33:EP ~31:PCT/EP2020/080170 ~32:27/10/2020

2023/04347 ~ Complete ~54:SCALABLE SYNTHESIS OF PERIMORPHIC MATERIALS ~71:Dickinson Corporation, 31 Commercial Blvd., NOVATO 94949, CA, USA, United States of America ~72: BISHOP, Matthew;THOMAS, Abhay~ 33:US ~31:63/086,760 ~32:02/10/2020

2023/04355 ~ Complete ~54:A METHOD AND SYSTEM FOR AUTHENTICATING A USER ~71:VEA TECHNOLOGIES LTD, Loreto Convent, Mauritius ~72: ROWLAND, Mark-Anthony~ 33:US ~31:63/092,337 ~32:15/10/2020

2023/04356 ~ Complete ~54:IMMUNOGENIC ANTIGENS ~71:LONGHORN VACCINES AND DIAGNOSTICS, LLC, 2 Bethesda Metro Center, Suite 910, Bethesda, United States of America ~72: DAUM, Luke T.;FISCHER, Gerald W.;FISCHER, Jeffrey D.;SEI, Clara J.~ 33:TM ~31:63/094,116 ~32:20/10/2020;33:US ~31:63/094,472 ~32:21/10/2020;33:US ~31:63/246,360 ~32:21/09/2021

2023/04348 ~ Complete ~54:AN INDUCTOR COIL ~71:ETA Green Power Ltd., Hethel Engineering Centre, Chapman Way, Hethel, NORFOLK NR14 8FB, UNITED KINGDOM, United Kingdom ~72: BOWMAN, Liam~ 33:EP ~31:20204340.2 ~32:28/10/2020

2023/04350 ~ Complete ~54:NOVEL TYPE OF LONG SHELF-LIFE MELON PLANTS ~71:Syngenta Crop Protection AG, Rosentalstrasse 67, BASEL 4058, SWITZERLAND, Switzerland ~72: ALVAREZ CASANUEVA, Jose Ignacio;KUMAR, Rakesh;OLIVER, Marc~ 33:US ~31:63/107114 ~32:29/10/2020;33:US ~31:63/115774 ~32:19/11/2020

2023/04354 ~ Complete ~54:WATER DIGGER ~71:Alexei Egmar KRASS DE KRASSNOKUTSKI, 23 Chardonnay Crescent, Willowild, South Africa ~72: Alexei Egmar KRASS DE KRASSNOKUTSKI~ 33:ZA ~31:2020/05406 ~32:31/08/2020

2023/04326 ~ Complete ~54:LAYERED CODING AND DATA STRUCTURE FOR COMPRESSED HIGHER-ORDER AMBISONICS SOUND OR SOUND FIELD REPRESENTATIONS ~71:DOLBY INTERNATIONAL AB, Apollo Building, 3E Herikerbergweg, 1-35, 1101 CN, Amsterdam Zuidooost, Netherlands ~72: ALEXANDER KRUEGER;SVEN KORDON~ 33:EP ~31:15306591.7 ~32:08/10/2015;33:US ~31:62/361,863 ~32:13/07/2016

2023/04327 ~ Complete ~54:METHODS FOR CHARACTERIZING DISULFIDE BONDS ~71:REGENERON PHARMACEUTICALS, INC., 777 Old Saw Mill River Road, Tarrytown, New York, 10591-6707, United States of America ~72: SHUNHAI WANG~ 33:US ~31:62/792,994 ~32:16/01/2019

2023/04342 ~ Complete ~54:PROCESS FOR ENRICHING ADENO-ASSOCIATED VIRUS ~71:BIOMARIN PHARMACEUTICAL INC., 105 Digital Drive, Novato, California, 94949, United States of America ~72: ANANT RISHI;DANIEL GOLD;HARMIT VORA;JOHN MAGA;KIEU TRAN;RAHUL SHETH;YANHONG ZHANG~ 33:US ~31:63/108,629 ~32:02/11/2020

2023/04345 ~ Complete ~54:CD47-CD38 BISPECIFIC ANTIBODIES ~71:Ichnos Sciences SA, Chemin de la Combeta 5, LA CHAUX-DE-FONDS 2300, SWITZERLAND, Switzerland ~72: BLEIN, Stanislas;BOUCHEZ, Laure;DHEILLY, Elie;DOUCEY, Marie-Ange;ESTOPPEY, Carole;GRANDCELMONT, Camille;LOYAU, Jeremy;MONNEY, Thierry;POULEAU, Blandine;SAMMICHELLI, Stefano;STUTZ, Cian~ 33:EP ~31:20197033.2 ~32:18/09/2020

2023/04349 ~ Complete ~54:AN INDUCTOR COIL ~71:ETA Green Power Ltd., Hethel Engineering Centre, Chapman Way, Hethel, NORFOLK NR14 8FB, UNITED KINGDOM, United Kingdom ~72: BOWMAN, Liam~ 33:EP ~31:20204342.8 ~32:28/10/2020

2023/04353 ~ Complete ~54:METHOD OF MANUFACTURING A HOT ROLLING MILL ROLL BY LASER CLADDING ~71:Centre de Recherches Métallurgiques ASBL, Rue Ravenstein 4, BRUSSELS 1000, BELGIUM, Belgium ~72: ESSER, Grégory;SINNAEVE, Mario;WALMAG, Gisèle~ 33:EP ~31:20201483.3 ~32:13/10/2020

2023/04380 ~ Complete ~54:PHARMACEUTICAL COMPOSITION COMPRISING CHLOROQUINE AND USES THEREOF ~71:PHILIP MORRIS PRODUCTS S.A., Quai Jeanrenaud 3, Switzerland ~72: CALVINO, Florian, Alexis;GUY, Philippe Alexandre;HOENG, Julia;KOLLI, Aditya, Reddy;KUCZAJ, Arkadiusz;MAJEED, Shoaib;MAZUROV, Anatoly;PEITSCH, Manuel;SEMREN, Tanja, Zivkovic;VAN DER TOORN, Marco~ 33:EP ~31:20196087.9 ~32:14/09/2020

2023/04319 ~ Complete ~54:A COMPOSITION FOR ANTI-OVARIAN AGING OF COWS AND APPLICATION THEREOF ~71:Ningxia Academy of Agriculture and Forestry Sciences, Institute of Animal Science (Ningxia Grass and Livestock Engineering Technology Research Center), No.590 East Huanghe Road, Jinfeng District, Yinchuan, Ningxia, People's Republic of China;Ningxia Benwang Ecological Agriculture Co., Ltd., Seven Groups of Horticultural Village, Minning Town, Yongning County, Yinchuan, Ningxia, People's Republic of China;Ningxia Wuxing Technology Co., Ltd., Room 1118, Building 5, Wanda Plaza, Zhengyuan North Street, Jinfeng District, Yinchuan, Ningxia, People's Republic of China;Yinchuan Maternity and Child Healthcare Hospital, No.56, Cultural West Street, Xingqing District, Yinchuan, Ningxia, People's Republic of China ~72: An Shi;Chuan Wang;Haihui Gao;Jianbao Ding;Jiandong Wang;Junli Zhang;Min Wang;Pengxia Hou;Ruigang Wang;Shufen Xu;Wu Jiang;Xiaodong Kang;Xiaojun Liang;Xiuqin Wang;Yanan Guo;Yang Yu;Yanping Li;Yuqiong Li;Yuwei Yang;Zhengwei Zhao~ 33:CN ~31:115025206 A ~32:15/06/2022

2023/04322 ~ Complete ~54:VISUAL RADIOFREQUENCY ABLATION TREATMENT DEVICE ~71:Guang'an People's Hospital, No. 1, Section 4, Binhe Road, Guang'an District, Guang'an City, Sichuan Province, 638000, People's Republic of China ~72: REN, Zhangxia;YANG, Ning;YANG, Renruiqi~ 33:CN ~31:202220851748.2 ~32:13/04/2022

2023/04329 ~ Complete ~54:SYSTEM AND METHOD FOR EXECUTING FINANCIAL TRANSACTION ~71:Comviva Technologies Limited, 5th, 7th & 8th floor, Capital Cyberscape, Village Ullahwas, Sector 59, Golf Course Extension Road, GURUGRAM 122102, HARYANA, INDIA, India ~72: GOYAL, Gaurav;JAIN, Manish~ 33:IN ~31:202211037780 ~32:30/06/2022

2023/04331 ~ Complete ~54:APPARATUS AND METHOD FOR ENCODING A PLURALITY OF AUDIO OBJECTS USING DIRECTION INFORMATION DURING A DOWNMIXING OR APPARATUS AND METHOD FOR DECODING USING AN OPTIMIZED COVARIANCE SYNTHESIS ~71:FRAUNHOFER-GESELLSCHAFT

ZUR FÖRDERUNG DER ANGEWANDTEN FORSCHUNG E.V., Hansastrasse 27c, Germany ~72: BAYER, Stefan;EICHENSEER, Andrea;FUCHS, Guillaume;HERRE, Jürger;KÜCH, Fabian;KORSE, Srikanth;MULTRUS, Markus;THIERGART, Oliver;WECKBECKER, Dominik~ 33:EP ~31:20201633.3 ~32:13/10/2020;33:EP ~31:20215648.5 ~32:18/12/2020;33:EP ~31:21184366.9 ~32:07/07/2021

2023/04335 ~ Complete ~54:AUTOTAXIN INHIBITOR COMPOUNDS ~71:ILDONG PHARMACEUTICAL CO., LTD., 2, BAUMOE-RO 27-GIL, SEOCHO-GU, SEOUL 06752, REPUBLIC OF KOREA, Republic of Korea ~72: BAN, Jun-Su;CHOI, Sung-Ku;JANG, Kyu-Sic;JUNG, Ju-Young;KIM, Jeong-Ah;KIM, Jeong-Geun;KIM, Kyung-Sun;KWON, Sung-Wook;LEE, Soo-Jin;LEE, Yoon-Suk;MOON, An-Na;PARK, Sun-Young;SONG, Dong-Keun~ 33:US ~31:63/088,219 ~32:06/10/2020

2023/04341 ~ Complete ~54:HYDROCARBON UPGRADING TO METHANOL AND HYDROGEN PRODUCT STREAMS ~71:TOPSOE A/S, Haldor Topsøes Allé 1, 2800, Kgs. Lyngby, Denmark ~72: CHARLOTTE STUB NIELSEN;PETER MØLGAARD MORTENSEN~ 33:EP ~31:20214171.9 ~32:15/12/2020

- APPLIED ON 2023/04/13 -

2023/04390 ~ Complete ~54:SPRING CLIP FOR PHOTOVOLTAIC MODULE MOUNTING ~71:Array Technologies, Inc., 3901 Midway Place NE, ALBUQUERQUE 87109, NM, USA, United States of America ~72: DE FRESART, Benjamin C.~ 33:US ~31:63/078,177 ~32:14/09/2020;33:US ~31:63/195,629 ~32:01/06/2021;33:US ~31:17/474,607 ~32:14/09/2021

2023/04393 ~ Complete ~54:POLLINATION PREDICTOR SYSTEM AND METHOD ~71:Accelerated Ag Technologies, LLC, 27253 US Hwy. 69, AMES 50010, IA, USA, United States of America ~72: COPE, Jason;KRONE, Todd;WESTGATE, Mark~ 33:US ~31:63/091,433 ~32:14/10/2020

2023/04401 ~ Complete ~54:PROCESS FOR THE REMOVAL OF FLUORIDE FROM ALKALINE HYDROXIDE SOLUTIONS ~71:BASF SE, Carl-Bosch-Strasse 38, 67056, Ludwigshafen am Rhein, Germany ~72: BIRGIT GERKE;FABIAN SEELER;JOACHIM NILS-OLOF;KERSTIN SCHIERLE-ARNDT;MATTIA GIACOMINI;REGINA VOGELSANG;WOLFGANG ROHDE~ 33:EP ~31:20208982.7 ~32:20/11/2020

2023/04357 ~ Provisional ~54:PEST CONTROL ~71:INSECT SCIENCE (PTY) LTD, 9 Industria Street, New Industrial area, Tzaneen 0850, Limpopo Province, SOUTH AFRICA, South Africa ~72: BOOYSEN, Petrus Johannes Gerhardus;BOUWER, Marc Clement;VAN GREUNEN, Divan Gerald~

2023/04359 ~ Provisional ~54:AGGREPAY - BLOCKCHAIN-BASED ONLINE PAYMENT AGGREGATION SYSTEM ~71:David Attila Szivos, 30 Marine Drive, South Africa ~72: David Attila Szivos~

2023/04366 ~ Complete ~54:VEHICLE-MOUNTED SECRET LANGUAGE ALARM AND ALARM METHOD ~71:JIMEI UNIVERSITY, No. 185, Yinjiang Road, Jimei District, Xiamen City, Fujian Province, 361021, People's Republic of China ~72: FANG, Yinqing;LAI, Lianyou;LIAO, Jianbin;SHU, Jian;XU, Bihui~ 33:CN ~31:2022103904286 ~32:14/04/2022

2023/04372 ~ Complete ~54:EXPRESSION VECTOR FOR SPECIFICALLY EXPRESSING SARS-COV-2 PROTEIN VACCINE BY USING RICE ENDOSPERM CELL, AND APPLICATION THEREOF ~71:China National Rice Research Institute, No. 28, Shuidaosuo Road, Fuyang District, Hangzhou City, Zhejiang Province, 311400, People's Republic of China ~72: CAO, Liyong;HONG, Yongbo;JI, Zhijuan;WEI, Xinghua;YU, Guoping;ZHAN, Xiaodeng;ZHANG, Mengchen~

2023/04394 ~ Complete ~54:AUTONOMOUS LEARNING METHOD FOR MECHANICAL ARM CONTROL METHOD ~71:Guangzhou Weimou Medical Instrument Co., Ltd., No.6 Nanjiang 2nd Road, Zhujiang Street,

Nansha District, Guangzhou City, 8 Self-Compiled 8 Buildings (9# building) 803, GUANGZHOU 511466, GUANGDONG, CHINA (P.R.C.), People's Republic of China ~72: HUANG, Kai;LIN, Haotian;NI, Huanqi;XIA, Jun~ 33:CN ~31:202111130379.4 ~32:26/09/2021

2023/04402 ~ Complete ~54:MITOCHONDRIAL ATP INHIBITORS TARGETING THE GAMMA SUBUNIT PREVENT METASTASIS ~71:LUNELLA BIOTECH, INC., 145 Richmond Road, Ottawa, Ontario, K1Z 1A1, Canada ~72: FEDERICA SOTGIA;JUSSI KANGASMETSA;MARCO FIORILLO;MICHAEL P LISANTI~ 33:US ~31:63/104,160 ~32:22/10/2020

2023/04361 ~ Provisional ~54:INDUCTIVE MOVEMENT SENSOR ~71:AZOTEQ HOLDINGS LIMITED, c/o Spyrou Kyprianou Avenue 20, Chapo Central, Cyprus ~72: BRUWER, Frederick Johannes;RADEMEYER, Daniel Barend;VILJOEN, Jean~

2023/04376 ~ Complete ~54:COMPOSITIONS AND METHODS OF MANUFACTURING PROTEIN MICROPARTICLES ~71:REGENERON PHARMACEUTICALS, INC., 777 Old Saw Mill River Road, Tarrytown, New York, 10591, United States of America ~72: HUNTER CHEN;PHILIP BRUDNICKI~ 33:US ~31:62/268,259 ~32:16/12/2015

2023/04378 ~ Complete ~54:SOFTWARE ACCELERATED GENOMIC READ MAPPING ~71:ILLUMINA, INC., 5200 Illumina Way, United States of America ~72: RIZK, Guillaume Alexandre Pascal~ 33:US ~31:63/078,890 ~32:15/09/2020

2023/04385 ~ Complete ~54:TOWING ARRANGEMENT FOR A TOWING VEHICLE, SYSTEM, TRAILER, AND METHOD ~71:SLEIPNER FINLAND OY, Puistokatu 2 A, Finland ~72: KORTESALMI, Ossi (DECEASED);MIETTINEN, Joonas~ 33:FI ~31:20205918 ~32:22/09/2020

2023/04387 ~ Complete ~54:COMPOUNDS AS MODULATORS OF BIS-PHOSPHOGLYCERATE MUTASE FOR THE TREATMENT OF SICKLE CELL DISEASE ~71:Genzyme Corporation, 50 Binney Street, CAMBRIDGE 02142, MA, USA, United States of America ~72: DESAI, Kunal;FANG, Zhong;GUERTIN, Kevin;HONG, Vu;JIANG, John Ziqi;LIM, Sungtaek;LIU, Jinyu;MUNSON, Mark~ 33:US ~31:63/077,973 ~32:14/09/2020

2023/04358 ~ Provisional ~54:INHALER THAT ARE SET BY A A DOCTOR TO ONLY WORK CERTAIN TIMES OF THE DAY AND WORKS WITH BIOMETRIC FINGERPRINT AND CAN BE SOLAR CHARGED. ~71:Barend Daniel DE BEER, 9 Swartberg Street Vaalpark, South Africa ~72: Barend Daniel DE BEER~

2023/04381 ~ Complete ~54:ANTIBODY-DRUG CONJUGATE AND APPLICATION THEREOF ~71:KEYMED BIOSCIENCES CO., LTD, Building 2, No. 18, Bio-town Middle Road, People's Republic of China;SHANGHAI MIRACOGEN INC., Suite 4E, Building 3, People's Republic of China ~72: CHEN, Bo;HU, Chaohong;LI, Hu;WANG, Ying;XU, Gang~ 33:CN ~31:202011105383.0 ~32:15/10/2020

2023/04383 ~ Complete ~54:NUCLEIC ACID ENCODING AN ANTI-VEGF ENTITY AND A NEGATIVE COMPLEMENT REGULATOR AND USES THEREOF FOR THE TREATMENT OF AGE-RELATED MACULAR DEGENERATION ~71:GYROSCOPE THERAPEUTICS LIMITED, 6th Floor, Rolling Stock Yard, 188 York Way, United Kingdom ~72: ELLIS, Scott;ESTEVE-RUDD, Julian;JOEL, Josephine;TAM, Lawrence~ 33:GB ~31:2016463.8 ~32:16/10/2020;33:GB ~31:2104148.8 ~32:24/03/2021

2023/04399 ~ Complete ~54:HETEROLOGOUS PRIME BOOST VACCINE ~71:BOEHRINGER INGELHEIM INTERNATIONAL GMBH, Binger Strasse 173 55216 Ingelheim am Rhein, Germany ~72: ELODIE BELNOUE;GUIDO WOLLMANN;KNUT ELBERS;KRISHNA DAS;MADIHA DEROUAZI~ 33:EP ~31:20195872.5 ~32:14/09/2020;33:EP ~31:20210671.2 ~32:30/11/2020;33:EP ~31:21155814.3 ~32:08/02/2021;33:EP ~31:21176373.5 ~32:27/05/2021

2023/04400 ~ Complete ~54:COMBINATION THERAPY USING BAX ACTIVATOR AGENT ~71:ALBERT EINSTEIN COLLEGE OF MEDICINE, 1300 Morris Park Avenue Bronx, New York, New York, 10461, United States of America ~72: EVRIPIDIS GAVATHIOTIS~ 33:US ~31:63/079,720 ~32:17/09/2020;33:US ~31:63/109,097 ~32:03/11/2020

2023/04368 ~ Complete ~54:A METHOD OF MANUFACTURING A WINDOW FRAME ~71:AVAX SA 407 CC, Pine Industrial Park, 103 Escom Road, New Germany, South Africa ~72: COETZEE, Quentin;KNOWLES, Travis~

2023/04369 ~ Complete ~54:A COOLING SYSTEM ~71:GOUWS, Johannes, Cornelius,, 7 KOORSBOOM CRES, LEPHALALE 0557, SOUTH AFRICA, South Africa ~72: GOUWS, Johannes, Cornelius,~ 33:ZA ~31:2022/06140 ~32:02/06/2022

2023/04386 ~ Complete ~54:CARRABITOL FORMULATION TO MAINTAIN OSMOTIC BALANCE IN PLANTS AGAINST ABIOTIC STRESS AND METHOD OF EXTRACTION & PREPARATION THEREOF ~71:M/S. PUSHPA J. SHAH, Plot No. 906/13, GIDC Panoli-394116, Tal. Ankleshwar, Dist. Bharuch 394116, Gujarat, India ~72: PATEL, Femida Y.;SHAH, Neil J.~ 33:IN ~31:202021041518 ~32:24/09/2020

2023/04389 ~ Complete ~54:METHODS OF BASE METAL RECOVERY WITH APPLICATIONS OF OXYGEN VECTORS ~71:L'Air Liquide, Societe Anonyme pour l'Etude et l'Exploitation des Procédés Georges Claude, 75 Quai D'orsay, PARIS 75007, FRANCE, France ~72: GOSTU, Sumedh;MAENG, Min Ho;MURRAY, Timothy L.~ 33:US ~31:17/072,788 ~32:16/10/2020

2023/04395 ~ Complete ~54:COMPOSITIONS AND METHODS FOR TREATMENT OF THYROID EYE DISEASE ~71:Viridian Therapeutics, Inc., 203 Crescent Street Bldg. 17, Suite 102b, WALTHAM 02453, MA, USA, United States of America ~72: BEDIAN, Vahe;HARWIN, Peter;KISELAK, Tomas;SHE, Angela;VIOLIN, Jonathan;ZHAO, Yang~ 33:US ~31:63/091,839 ~32:14/10/2020;33:US ~31:63/201,978 ~32:21/05/2021;33:US ~31:63/260,130 ~32:10/08/2021;33:US ~31:63/261,742 ~32:28/09/2021

2023/04396 ~ Complete ~54:CARTRIDGE CASE FOR CENTRE-FIRE AMMUNITION, AND CENTRE-FIRE AMMUNITION ~71:RUAG Ammotec AG, Uttigenstrasse 67, THUN 3602, SWITZERLAND, Switzerland ~72: BIEDERMANN, Peter;SPATZ, Peter~ 33:DE ~31:10 2020 127 053.4 ~32:14/10/2020

2023/04360 ~ Provisional ~54:APPARATUS AND METHOD FOR MANUFACTURING SAUSAGES ~71:FREDDY HIRSCH GROUP PROPRIETARY LIMITED, Cnr. 11th Avenue and Voortrekker Road, Maitland, Cape Town, 7405, SOUTH AFRICA, South Africa;Freddy Hirsch Group AG, Rothusstrasse 21, Hunenberg, 6331, SWITZERLAND, Switzerland ~72: FRITZ, Heindrich;LAUBSCHER, Jacobus Martin;SCHULTZ, Hermann August~

2023/04371 ~ Complete ~54:ACOUSTIC THERAPY EARPHONE ~71:NINGBO KANGNING HOSPITAL (NINGBO CENTER FOR MENTAL DISEASE PREVENTION AND CONTROL), No. 1, Zhuangyu South Road, Zhuangshi Street, People's Republic of China ~72: LI Xingxing;YU Chang;YU Haihang;ZHOU Dongsheng;ZHUANG Wenhao~

2023/04374 ~ Complete ~54:A HUMAN FLOW DISPERSAL DEVICE SUITABLE FOR ENCLOSED LARGE ACTIVITY PLACE ~71:Chongqing University of Science & Technology, No.20 Daxuecheng East Road, Shapingba District, Chongqing City, 40000, People's Republic of China ~72: Bihai Zou;Jialiang Geng;Jiawei Geng;Jie Chen;Xu Li;Yuxin Xia~

2023/04388 ~ Complete ~54:TETRAHYDROISOQUINOLINE DERIVATIVES FOR THE TREATMENT OF RED BLOOD DISORDERS AND INFLAMMATORY DISEASES ~71:Sanofi, 46 avenue de la Grande Armée, PARIS 75017, FRANCE, France ~72: BARBERIS, Claude;JURCAK, John;KARAGEORGE, George;TERRANOVA, Kristen~ 33:US ~31:63/078,118 ~32:14/09/2020;33:US ~31:63/229,338 ~32:04/08/2021

2023/04397 ~ Complete ~54:MODULAR STACKABLE WEAR-RESISTANT PANEL SYSTEM ~71:FLSmidth A/S, Vigerslev Allé 77, VALBY 2500, DENMARK, Denmark ~72: BARIC, Zdenko (Danny)~ 33:US ~31:63/091,878 ~32:14/10/2020

2023/04403 ~ Complete ~54:HDAC INHIBITOR SOLID STATE FORMS ~71:VIRACTA SUBSIDIARY, INC., 2533 S. Coast Hwy 101, United States of America ~72: DENG, Xiaohu;MAI, Wanping;MCRAE, Robert C.;NADJSOMBATI, Biljana~ 33:US ~31:63/106,811 ~32:28/10/2020

2023/04382 ~ Complete ~54:SILENCER ~71:Dieter CHRISTANDL, Bismarckgasse 4/3, Austria ~72: Dieter CHRISTANDL~ 33:DE ~31:10 2020 126 023.7 ~32:05/10/2020

2023/04391 ~ Complete ~54:IMPROVED METHOD FOR PRODUCING HIGHLY DIGESTIBLE HYDROLYZED KERATINACEOUS MATERIAL ~71:Tessenderlo Group NV, Troonstraat 130, BRUSSEL 1050, BELGIUM, Belgium ~72: FILLIÈRES, Romain~ 33:EP ~31:20201894.1 ~32:14/10/2020

2023/04398 ~ Complete ~54:DETERMINING WHETHER AN INACTIVE RELAY WTRU MAY INDEED SERVE A NETWORK-INITIATED CONNECTION AT A REMOTE SERVED WTRU ~71:InterDigital Patent Holdings, Inc., 200 Bellevue Parkway, Suite 300, WILMINGTON 19809, DE, USA, United States of America ~72: DENG, Tao;FREDA, Martino;HOANG, Tuong;RAO, Jaya~ 33:US ~31:63/091,488 ~32:14/10/2020;33:US ~31:63/136,430 ~32:12/01/2021

2023/04373 ~ Complete ~54:GEOPOLYMER FOAMED CONCRETE AND PREPARATION METHOD THEREOF ~71:ANHUI JIANZHU UNIVERSITY, No. 292, Ziyun Road, Economic and Technological Development Zone, Hefei City, Anhui Province, P.R., People's Republic of China ~72: CHEN Xudong;JIANG Tao;LI Chenglong;LIU Chang;LIU Xuan;WU Shaocai;XUAN Wenzhu~

2023/04377 ~ Complete ~54:SANITIZER DISPENSER SYSTEM AND METHOD ~71:MKAZI CONCEPTS (PTY) LTD., 2G56 One Eloff, 2 Salisburg Claim, Johannesburg, Gauteng, 2001, South Africa ~72: SIPHIWO PEACE MJWARA;THOKOZANI ZAMA NGCAMU~ 33:ZA ~31:2022/04561 ~32:25/04/2022

2023/04392 ~ Complete ~54:VEHICLE AND DEVICE POSITIONING METHOD ~71:Chery Automobile Co., Ltd., No 8, Changchun Road, Economy & Technology Development Zone, WUHU 241006, ANHUI, CHINA (P.R.C.), People's Republic of China ~72: WANG, Chuansu;WANG, Fei;WEI, Aoting;XIA, Cui~ 33:CN ~31:202011099321.3 ~32:14/10/2020

2023/04413 ~ Complete ~54:DETECTING THERMITE REACTIONS IN AN ELECTROLYTIC CELL ~71:ELYSIS LIMITED PARTNERSHIP, 1 Place Ville Marie, Suite #2323 Montréal, Canada ~72: D'ASTOLFO, Leroy;FINDLEY, Nicholas~ 33:US ~31:63/106,517 ~32:28/10/2020

2023/04367 ~ Complete ~54:QUALITY SCORE COMPRESSION ~71:ILLUMINA, INC., 5200 Illumina Way, United States of America ~72: RIZK, Guillaume Alexandre Pascal~ 33:US ~31:63/110,308 ~32:05/11/2020

2023/04370 ~ Complete ~54:METHOD AND SYSTEM OF IDENTIFYING AND QUANTIFYING A PROTEIN ~71:REGENERON PHARMACEUTICALS, INC., 777 Old Saw Mill River Road, Tarrytown, United States of America ~72: WANG, Shunhai;YAN, Yuetian~ 33:US ~31:62/753,633 ~32:31/10/2018;33:US ~31:62/863,617 ~32:19/06/2019

2023/04375 ~ Complete ~54:ADJUSTABLE AND EASY-TO-WEAR STERILE GLOVES ~71:Quzhou Peoples Hospital, No. 100, Minjiang Avenue, Kecheng Dist., Quzhou, Zhejiang, People's Republic of China ~72: Mengmeng Zhou;Wei Lu;Xiaoyang Li~

2023/04384 ~ Complete ~54:ELECTRICALLY CONDUCTIVE FIREBRICK SYSTEM ~71:MASSACHUSETTS INSTITUTE OF TECHNOLOGY, 77 Massachusetts Avenue, Cambridge, United States of America ~72: FORSBERG, Charles;STACK, Daniel, C~ 33:US ~31:63/104,681 ~32:23/10/2020

- APPLIED ON 2023/04/14 -

2023/04429 ~ Complete ~54:ENHANCED RATE SIGNALING IN WIRELESS NETWORKS WITH RELAY FUNCTION ~71:Koninklijke Philips N.V., High Tech Campus 52, EINDHOVEN 5656 AG, THE NETHERLANDS, Netherlands ~72: DEES, Walter;DIJK, Esko Olavi;GONZALEZ TEJERIA, Jesus~ 33:EP ~31:20196334.5 ~32:15/09/2020;33:EP ~31:21174561.7 ~32:19/05/2021;33:EP ~31:21191542.6 ~32:16/08/2021

2023/04404 ~ Provisional ~54:A BARRIER DETECTION DEVICE ~71:SHAUN FREDERICK STARKE, 250 Timbavati Street, South Africa ~72: Shaun Frederick Starke~

2023/04410 ~ Complete ~54:FULL-PLASTIC LIQUID PUMP ~71:XIAMEN DAIDA TECHNOLOGY CO., LTD., Floor 2, No.15-3, Rixin Road, Jimei District, Xiamen City, Fujian, People's Republic of China ~72: HENGXING DAI;YUJIAN YANG~

2023/04417 ~ Complete ~54:A METHOD OF PREPARING A HYDROCRACKING CATALYST ~71:SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V., Carel van Bylandtlaan 30, HR The Hague, Netherlands ~72: DEN BREEJEN, Johan, Peter;OUWEHAND, Cornelis;RIGUTTO, Marcello Stefano~ 33:EP ~31:20207174.2 ~32:12/11/2020

2023/04437 ~ Complete ~54:PORTABLE POWER SYSTEM ~71:WORKSPORT LTD., 55 East Beaver Creek Road, Canada ~72: LOUDON, Jonathan;MACDONALD, Jason;RICHARDSON, Julian;ROSSI, Steven~ 33:US ~31:63/175,860 ~32:16/04/2021

2023/04405 ~ Provisional ~54:DOG FECES COMPOSTER DEVICE ~71:Himkaar Singh, 891 Wexford Drive, South Africa ~72: Himkaar Singh~

2023/04414 ~ Complete ~54:MODULAR ENCAPSULATED HEAT PUMPS ~71:Clemenzi, Richard A., PO Box 18757, United States of America;Siglin, Judith A., PO Box 18757, United States of America ~72: Clemenzi, Richard A.;Siglin, Judith A.~

2023/04420 ~ Complete ~54:RESPIRATORY TREATMENTS ~71:HOFSETH BIOCARE ASA, Kipervikgata 13 N-6003 Ålesund, Norway ~72: BOMI FRAMROZE;CRAWFORD LINDEN ALEXANDER CURRIE~ 33:US ~31:63/114,976 ~32:17/11/2020;33:US ~31:63/211,972 ~32:17/06/2021

2023/04426 ~ Complete ~54:NOVEL ANTI-A2AP ANTIBODIES AND USES THEREOF ~71:Bayer Aktiengesellschaft, Kaiser-Wilhelm-Allee 1, LEVERKUSEN 51373, GERMANY, Germany ~72: FISCHER, Melanie;GLUNZ, Julia;HEITMEIER, Stefan;JÖRISSEN, Hannah;SCHULENBURG, Cindy;THIEL, Christoph;WEBER, Ernst;WILMEN, Andreas~ 33:EP ~31:20196259.4 ~32:15/09/2020

2023/04418 ~ Complete ~54:REAR UNDERFLOOR STRUCTURE FOR A MOTOR VEHICLE ~71:ARCELORMITTAL, 24-26, Boulevard d'Avranches, Luxembourg ~72: Dan HASENPOUTH;Olivier MORIAU~ 33:IB ~31:PCT/IB2020/060465 ~32:06/11/2020

2023/04424 ~ Complete ~54:METHOD AND SYSTEM OF UNDERGROUND DEPLOYMENT OF MATERIALS AND EQUIPMENT ~71:HYPERTUNNEL IP LIMITED, 1ST FLOOR, THE PAVILLION VIEWPOINT, BASING VIEW, BASINGSTOKE HAMPSHIRE RG21 4RG, UNITED KINGDOM, United Kingdom ~72: HELLIWELL, James;JORDAN, Steve;MEEKS, Alan~ 33:GB ~31:2014837.5 ~32:21/09/2020

2023/04439 ~ Provisional ~54:HORIZONTAL SPACER TRAY ~71:BUTI ABRAM MOLEFE, 120 BLOCK G, LETLHABILE, South Africa ~72: BUTI ABRAM MOLEFE~

2023/04435 ~ Complete ~54:IMPROVEMENTS IN SCREENING PANELS ~71:SCHENCK PROCESS AUSTRALIA PTY LIMITED, 65 Epping Road, New South Wales 2113, Australia ~72: JOHNSTONE, Aidan Paul~ 33:AU ~31:2020902955 ~32:19/08/2020

2023/04408 ~ Complete ~54:BONE SCAFFOLD WITH POROUS STRUCTURE AND PREPARATION METHOD THEREOF ~71:JILIN JIANZHU UNIVERSITY, NO. 5088, XINCHENG STREET, People's Republic of China ~72: FANG, Juan;ZHANG, Peng~

2023/04423 ~ Complete ~54:PYROLYSIS AND DEPOLYMERIZATION OF TIRE MATERIAL ~71:MICROWAVE SOLUTIONS GMBH, CHRISCHONAWEG 99, 4125 RIEHEN, SWITZERLAND, Switzerland ~72: ROSSOUW, Mathys Johannes;STAPELA, Annelie~ 33:CH ~31:01184/20 ~32:18/09/2020

2023/04425 ~ Complete ~54:A SLURRY SPREAD QUANTIFICATION SYSTEM AND A METHOD FOR QUANTIFYING A SLURRY SPREAD ~71:SAINT-GOBAIN PLACO, Tour Saint-Gobain 12 place de l'Iris, France ~72: CANTONNET, Jerome;COQUELIN, Samuel;JAFFEL, Hamouda;RANZANI DA COSTA, Andrea~ 33:EP ~31:20306072.8 ~32:21/09/2020

2023/04434 ~ Complete ~54:DEVICE AND METHOD FOR DETERMINING AND USING A SURPLUS OF AVAILABLE ELECTRICAL POWER GENERATED BY A SOLAR PHOTOVOLTAIC GENERATOR ~71:GLOBAL INVENTIONS, 1200 Avenue Olivier Perroy, 13790, France;Joël GILBERT, 405 CHEMIN DE LA SINE, 83560, France ~72: Joël GILBERT;NONNENMACHER, Bernard~ 33:FR ~31:FR2008557 ~32:19/08/2020

2023/04409 ~ Complete ~54:PYRIDIN-2(1H)-ONE QUINOLINONE DERIVATIVES AS MUTANT-ISOCITRATE DEHYDROGENASE INHIBITORS ~71:FORMA THERAPEUTICS, INC., 500 Arsenal Street, Suite 100, Watertown, Massachusetts, 02472, United States of America ~72: ANN-MARIE CAMPBELL;ANNA ERICSSON;DAVID R LANCIA JR;GARY GUSTAFSON;JIAN LIN;JUSTIN A CARAVELLA;R BRUCE DIEBOLD;SUSAN ASHWELL;WEI LU;ZHONGGUO WANG~ 33:US ~31:62/053,006 ~32:19/09/2014;33:US ~31:62/128,089 ~32:04/03/2015;33:US ~31:62/150,812 ~32:21/04/2015

2023/04433 ~ Complete ~54:TITRATION METHODS FOR DETECTING POLYVINYL SULFONATE (PVS) IN BUFFERS ~71:Amgen Inc., One Amgen Center Drive, THOUSAND OAKS 91320-1799, CA, USA, United States of America ~72: SOTO, Robert Joseph~ 33:US ~31:63/093,124 ~32:16/10/2020;33:US ~31:63/144,744 ~32:02/02/2021;33:US ~31:63/251,465 ~32:01/10/2021

2023/04440 ~ Provisional ~54:TORQUE VECTORING DIFFERENTIAL GEAR ~71:MALCOLM GAVIN PORTEOUS, 9 BEDFORD AVE, CRAIGHALL PARK,, South Africa ~72: MALCOLM GAVIN PORTEOUS~

2023/04406 ~ Provisional ~54:LOW COST HYDROGEN PRODUCTION AND HYDROGEN REFUELLING STATION ~71:Aquawatts Water and Energy, 944 Booi Street Ngangelizwe Mthatha 5100, South Africa ~72: Nzondelelo David Nkuzo~

2023/04422 ~ Complete ~54:PYROLYSIS OF CARBON BASED MATERIAL ~71:MICROWAVE SOLUTIONS GMBH, CHRISCHONAWEG 99, 4125 RIEHEN, SWITZERLAND, Switzerland ~72: ROSSOUW, Mathys Johannes;STAPELA, Annelie~ 33:CH ~31:01182/20 ~32:18/09/2020

2023/04427 ~ Complete ~54:BULK TRANSFER DELIVERY SYSTEM FOR MULTIPLE AGRICULTURAL PRODUCTS ~71:Clean Seed Agricultural Technologies Ltd., Unit 14, 7541 Conway Avenue, BURNABY V5E 2P7, BRITISH COLUMBIA, CANADA, Canada ~72: JHEETHEY, Manmohanjit Singh;MOLDER, Daniel Kirk

Stanley;QUON, Edward;RUFF, Robert Sydney;RUSH, Colin Michael;SCHEMBRI, Charles Joseph;SCHULTZ, Jason William;WILSON, Gordon Blair~ 33:CA ~31:3,093,241 ~32:16/09/2020;33:US ~31:63/079,233 ~32:16/09/2020

2023/04438 ~ Complete ~54:ALLOY POWDER, PREPARATION METHOD THEREFOR, AND USE THEREOF ~71:ZHAO, Yuanyun, Room 1401, Building 7, Shanhu Garden, No. 1 Kaide Road, Dalingshan Town Dongguan, People's Republic of China ~72: LIU, Li;ZHAO, Yuanyun~ 33:CN ~31:202011069507.4 ~32:30/09/2020

2023/04419 ~ Complete ~54:ELECTROLYSER FOR ELECTROCHLORINATION PROCESSES AND A SELF-CLEANING ELECTROCHLORINATION SYSTEM ~71:INDUSTRIE DE NORA S.P.A., Via Bistolfi 35, 20134, Milan, Italy ~72: ANNA RAMUNNI;FABIO TIMPANO~ 33:IT ~31:102020000031802 ~32:22/12/2020

2023/04432 ~ Complete ~54:AUTOMATIC DRILLING HOIST SPEED ~71:Caterpillar Global Mining Equipment LLC, 3501 S. FM Highway 1417, DENISON 75020, TX, USA, United States of America ~72: MOBERG, Carl J.~ 33:US ~31:17/026,460 ~32:21/09/2020

2023/04411 ~ Complete ~54:DEVICE FOR INJECTING LIQUID INTO PLANT LEAVES AND INJECTION METHOD ~71:GUIZHOU TOBACCO SCIENCE RESEARCH INSTITUTE, No. 29, Longtanba Road, Guanshanhu District, Guiyang City, Guiyang City, Guizhou Province, 550081, People's Republic of China ~72: CAI KAI;CHENG JIANZHONG;DAI LIANGYU;GAO WEICHANG;LIU TAOZE;ZHANG SHUYI;ZHU JINGWEI~ 33:CN ~31:202310166635.8 ~32:27/02/2023

2023/04415 ~ Complete ~54:MALT-1 MODULATORS ~71:EXSCIENTIA AI LIMITED, Level 3, Dundee One River Court, 5 West Victoria Rock Road, United Kingdom ~72: BESNARD, Jeremy;BLANGER, Claire, Christiane, Ginette;BRADLEY, Anthony;CAZAUX-LEROU, Lorène, Nathalie, Sabine;COOKE, Andrew, John;EVANS, David;GOMEZ, Sylvie Félicité;PINTO, Marta;PUCCI, Sabrina;RADOUX, Chris;RAY, Peter;RICHARDS, Simon;SANTOS, Catarina~ 33:GB ~31:2018412.3 ~32:23/11/2020

2023/04421 ~ Complete ~54:COMBINATION-THERAPY ANTIBODY DRUG CONJUGATE WITH IMMUNE CELL INHIBITOR ~71:SEAGEN INC., 21823 30th Drive SE, Bothell, Washington, 98021, United States of America ~72: ALYSON SMITH;BERNARD LIU;HEATHER VAN EPPS;KERRY KLUSSMAN;SHYRA GARDAI~ 33:US ~31:63/111,045 ~32:08/11/2020;33:US ~31:63/172,411 ~32:08/04/2021;33:US ~31:63/208,179 ~32:08/06/2021

2023/04407 ~ Complete ~54:SYSTEM, METHOD AND DEVICE FOR NON-INVASIVELY IDENTIFYING CHRONIC KIDNEY DISEASES FROM SALIVA OF A USER ~71:Dr. Navaneeth Bhaskar, CSE (Data Science), Sahyadri College of Engineering and Management, Mangalore, Karnataka, 575007, India;Dr. Priyanka Tupe-Waghmare, Symbiosis Institute of Technology, Symbiosis International (Deemed University), Pune, Maharashtra, 412115, India;Dr. Vijaya Rahul Pawar, 302, Richmond Park, Right Bhusari Colony, Paud Road, Pune, Maharashtra, 411038, India;Dr. Vinayak Bairagi, AISSMS Institute of Information Technology, Kennedy Road, Near RTO, Pune, Maharashtra, 411001, India;Mrs. Aswathy M A, School of EnTc Engineering, MIT Academy of Engineering, Pune, Maharashtra, 412105, India ~72: Dr. Navaneeth Bhaskar;Dr. Priyanka Tupe-Waghmare;Dr. Vijaya Rahul Pawar;Dr. Vinayak Bairagi;Mrs. Aswathy M A~

2023/04428 ~ Complete ~54:METHODS FOR TREATING MULTIPLE MYELOMA ~71:Janssen Biotech, Inc., 800/850 Ridgeview Drive, HORSHAM 19044, PA, USA, United States of America ~72: GIRGIS, Suzette;GOLDBERG, Jenna;HILDER, Brandi;MA, Xuewen;PILLARISSETTI, Kodandaram;RUSSELL, Jeffery;VERONA, Raluca;YANG, Shiyi~ 33:US ~31:63/079,294 ~32:16/09/2020;33:US ~31:63/116,549 ~32:20/11/2020;33:US ~31:63/187,888 ~32:12/05/2021

2023/04431 ~ Complete ~54:METHODS FOR THE PRODUCTION OF GENOME EDITED PLANTS ~71:Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung E.V., Hansastraße 27c, MÜNCHEN 80686, GERMANY, Germany ~72: AUGUSTINE, Sruthy Maria;COMMANDEUR, Ulrich;DI FIORE, Stefano;RAVEN, Nicole;SCHILLBERG, Stefan;SEILING, Kerstin;VADAKAN CHERIAN, Anoop~ 33:EP ~31:20196437.6 ~32:16/09/2020

2023/04436 ~ Complete ~54:A FRESH WATER FISH OVERWINTERING FEED AND ITS APPLICATION AND A SLOW RELEASE FEED ~71:TONGWEI AGRICULTURAL DEVELOPMENT CO., LTD., No.588 , Middle Section of Tianfu Avenue, High-tech Zone, Chengdu, Sichuan, 610000, People's Republic of China ~72: Gaoming Zhang;Haifeng Mi;Lu Zhang;Tao Teng;Wendian Chen~ 33:CN ~31:202310164160.9 ~32:24/02/2023

2023/04430 ~ Complete ~54:METHODS FOR PRODUCING TRANSFORMED PLANTS ~71:Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung E.V., Hansastraße 27c, MÜNCHEN 80686, GERMANY, Germany ~72: AUGUSTINE, Sruthy Maria;COMMANDEUR, Ulrich;DI FIORE, Stefano;RAVEN, Nicole;SCHILLBERG, Stefan;SEILING, Kerstin;VADAKAN CHERIAN, Anoop~ 33:EP ~31:20196444.2 ~32:16/09/2020

2023/04412 ~ Complete ~54:MIL-101(FE) FOR ADSORBING NITRATE IN WATER, PREPARATION METHOD THEREFOR AND APPLICATION THEREOF ~71:TAIYUAN UNIVERSITY OF TECHNOLOGY, No. 209 Daxue Street, Yuci District, Jinzhong, Shanxi Province, 030600, People's Republic of China ~72: KONG, Haoxuan;LIN, Yuting;SU, Bingqin;WANG, Jian;WU, Yuqi;ZHANG, Xialing~ 33:CN ~31:2022107400673 ~32:28/06/2022

2023/04416 ~ Complete ~54:REVERSE TRANSCRIPTION OF POLYNUCLEOTIDES COMPRISING UNNATURAL NUCLEOTIDES ~71:SYNTHORX, INC., 11099 North Torrey Pines Road, Suite 190, United States of America;THE SCRIPPS RESEARCH INSTITUTE, 10550 North Torrey Pines Road, United States of America ~72: DONG, Xiyu;ROMESBERG, Floyd E;ZHOU, Anne Xiaozhou~ 33:US ~31:63/104,785 ~32:23/10/2020

- APPLIED ON 2023/04/17 -

2023/04457 ~ Complete ~54:AEROSOL-GENERATING SYSTEM WITH HYBRID SUSCEPTOR ~71:PHILIP MORRIS PRODUCTS S.A., Quai Jeanrenaud 3, Switzerland ~72: FREDERICK, Guillaume;ZINOVIK, Ihar, Nikolaevich~ 33:EP ~31:20197817.8 ~32:23/09/2020

2023/04453 ~ Complete ~54:A MECHANICAL AND ELECTRICAL EQUIPMENT WITH SAFETY PROTECTION FUNCTION ~71:Jiangsu College Of Safety Technology, No.1 Yucai Road, Jiawang District, Xuzhou City, Jiangsu Province, People's Republic of China ~72: Hou Chun;Li Jiajia;Zhao Jianjun~ 33:CN ~31:202210562667.5 ~32:23/05/2022

2023/04456 ~ Complete ~54:INDUCTION OF FERROPTOSIS FOR CANCER THERAPY ~71:MEMORIAL SLOAN KETTERING CANCER CENTER, 1275 York Avenue, United States of America ~72: JIANG, Xuejun;THOMPSON, Craig B.;YI, Junmei;ZHU, Jiajun~ 33:US ~31:63/093,151 ~32:16/10/2020

2023/04452 ~ Complete ~54:BREEDING METHOD FOR CREATING WHEAT DWARF LODGING-RESISTANT MATERIAL ~71:Crop Research Institute,Shandong Academy of Agricultural Sciences, No.23788, North Industrial Road, Jinan City, Shandong, 250000, People's Republic of China;Shandong Luyan Agricultural Co.,Ltd., No.6,Sangyuan Road,Licheng District, Jinan City, Shandong, 250000, People's Republic of China ~72: Cui Zhengyong;Li Peng;Li Xinhua;Liu Ying;Song Huadong;Sun Mingzhu;Sun Xin;Yan Baiqiang;Yang Zaidong~

2023/04455 ~ Complete ~54:AN ARRANGEMENT FOR CHARGING POLARIZED ATMOSPHERIC AIR AND POLARIZED EXHAUST GAS SIMULTANEOUSLY IN INTERNAL COMBUSTION DIESEL ENGINE AND THE METHOD THEREOF ~71:VIDYARTHI, Mukesh Kumar, AwasVikas Colony, House No. 38/I, E.W.S, Near BSNL

Office, Haldwani, Dist-Nainital, Uttarakhand, 263139, India ~72: VIDYARTHI, Mukesh Kumar~ 33:IN
~31:202111006556 ~32:17/02/2021

2023/04458 ~ Complete ~54:A MOTOR STRUCTURE FOR REDUCING BEARING TEMPERATURE RISE AND A MANUFACTURING METHOD THEREOF ~71:West Anhui University, Moon Island, Yu'an District, Lu'an City, Anhui Province, 237000, People's Republic of China ~72: Chengling Lu;Gang Zhang~

2023/04462 ~ Complete ~54:HERBICIDAL COMPOSITION AND APPLICATION THEREOF ~71:INSTITUTE FOR THE CONTROL OF AGROCHEMICALS OF SHANDONG PROVINCE (SHANDONG PROVINCE AGROCHEMICALS QUALITY INSPECTION STATION), No. 200, Gongye Bei Road, Licheng District, Jinan, Shandong 250131, People's Republic of China;QINGDAO KINGAGROOT CROPS SCIENCE CO., LTD., No.53, Qinglonghe Road, Huangdao District, Qingdao, Shandong 266000, People's Republic of China ~72: CHUANJIE GAO;PENG WANG;PINGSHENG LI;QI CUI;RONGQUAN ZHANG;SHUANG CHEN;TAO JIN;XINGTAO LU;YAN JIN;YAOZHONG ZHANG~ 33:CN ~31:202210241772.9 ~32:11/03/2022

2023/04466 ~ Complete ~54:PHARMACEUTICAL PREPARATION ~71:Merck Patent GmbH, Frankfurter Strasse 250, DARMSTADT 64293, GERMANY, Germany ~72: AMBRUOSI, Alessandra;BECKER, Axel;MANNINI, Riccardo;RIEHL, Markus~ 33:EP ~31:20196904.5 ~32:18/09/2020

2023/04471 ~ Complete ~54:TORQUE ABSORBING SURFACE ~71:VICTAULIC COMPANY, 4901 Kesslersville Road, Easton, United States of America ~72: BOWMAN, Matthew A.;MADARA, Scott D.~ 33:US
~31:63/112,194 ~32:11/11/2020

2023/04447 ~ Complete ~54:ULTRASONIC-ASSISTED SOLDERING METHOD OF TIN-BASED LEAD-FREE COMPOSITE SOLDER REINFORCED WITH NICKEL-PLATING GRAPHENE ~71:HENAN UNIVERSITY OF SCIENCE AND TECHNOLOGY, Henan University of Science and Technology, NO.263, Kaiyuan Avenue, People's Republic of China ~72: LIU Peng;WANG Bingying;WANG Huigai;ZHANG Chao;ZHANG Keke~

2023/04450 ~ Complete ~54:MICROBIAL INOCULUM FOR PURIFYING BREEDING WASTEWATER AND PREPARATION METHOD THEREOF ~71:Agricultural Bio-Resources Research Institute, Fujian Academy of Agricultural Sciences, No.247 WuSi Street, Gulou district, Fuzhou city, Fujian province, People's Republic of China;Agricultural Engineering Technology Institute, Fujian Academy of Agricultural Sciences, No.247 WuSi Street, Gulou district, Fuzhou city, Fujian province, People's Republic of China ~72: RUAN Chuanqing;WU Feilong;WU Xiaomei;XU Qingxian;YE Meifeng~

2023/04451 ~ Complete ~54:UNIVERSAL METER POINTER READING RECOGNITION METHOD BASED ON TEMPLATE MATCHING ~71:Shenyang University of Technology, No. 111, Shenliao West Road, Shenyang Economic and Technological Development Zone, Shenyang City, Liaoning Province, 110870, People's Republic of China ~72: BAI, Jinshuo;LI, Dejian;LI, Shaoli~ 33:CN ~31:2022115154488 ~32:30/11/2022

2023/04459 ~ Complete ~54:BREAKAWAY FIFTH WHEEL COUPLING ~71:AXICLE, INC, 301 Via Monte Doro, Redondo Beach, United States of America ~72: KRUG, Stephen Leo~ 33:US ~31:63/085,235
~32:30/09/2020;33:US ~31:63/185,887 ~32:07/05/2021;33:US ~31:17/490,927 ~32:30/09/2021

2023/04461 ~ Complete ~54:BIOMARKERS, METHODS, AND COMPOSITIONS FOR TREATING AUTOIMMUNE DISEASE INCLUDING SYSTEMIC LUPUS ERYTHEMATOUS (SLE) ~71:XENCOR, INC., 465 North Halstead Street, Suite 200, Pasadena, California 91107, United States of America ~72: BARTHOLOMEW BURINGTON;DEBRA J ZACK;JOEL GUTHERIDGE;JOHN R DESJARLAIS;PAUL FOSTER;RAPHAEL CLYNES;YING DING~ 33:US ~31:63/088,444 ~32:06/10/2020;33:US ~31:63/108,138 ~32:30/10/2020

2023/04464 ~ Complete ~54:ANTIBODY DRUG CONJUGATES ~71:TAKEDA PHARMACEUTICAL COMPANY LIMITED, 1-1, Doshomachi 4-chome, Chuo-ku, Osaka-shi, Osaka, 541-0045, Japan ~72: CHRISTOPHER ARENDT;HE XU;HONG MYUNG LEE~ 33:US ~31:63/111,478 ~32:09/11/2020;33:US ~31:63/232,935 ~32:13/08/2021;33:US ~31:63/250,358 ~32:30/09/2021

2023/04469 ~ Complete ~54:WALL MOUNTABLE BRACKET ASSEMBLY ~71:VICTAULIC COMPANY, 4901 Kesslersville Road, Easton, United States of America ~72: SUN, Cong~ 33:US ~31:63/109,930 ~32:05/11/2020

2023/04448 ~ Complete ~54:ADJUSTABLE DOUBLE-SIDED CHINESE LANGUAGE AND LITERATURE EDUCATION EXPLANATION DEVICE ~71:Jilin Sport University, No.2476 Ziyou Road, Changchun City, Jilin Province, People's Republic of China ~72: GAO Haiyan~

2023/04460 ~ Complete ~54:TOPICAL ANTIVIRAL COMPOSITIONS COMPRISING HYALURONIC ACID AND CARRAGEENAN ~71:RICERFARMA S.R.L., Via Egadi, 7, 20144, Milano, Italy ~72: ROBERTO CERINI~ 33:IT ~31:102020000022042 ~32:18/09/2020

2023/04475 ~ Provisional ~54:QLIQEDUCATION ~71:John Mogomotsi Mogatlanyane, 6442 Segwagwa street Unit 14, South Africa ~72: John Mogomotsi Mogatlanyane~ 33:ZA ~31:3 ~32:31/10/2015

2023/04446 ~ Complete ~54:PYROLYSIS AND CARBONIZATION DEVICE FOR GRANULAR COALS ~71:FUGU TAIDA COAL CHEMICAL CO.,LTD, Shawa Village, Miaogoumen Town, Fugu County, Yulin City, Shaanxi Province, 719400, People's Republic of China ~72: GAO, Zhijun;LIU, Erzong;LIU, Haijun;LIU, Xufeng;LV, Laixiong;PENG, Yasen;YANG, Yongliang~ 33:CN ~31:2023100747220 ~32:06/02/2023

2023/04449 ~ Complete ~54:RICE YEAST SELENIUM-RICH AGENT AND PREPARATION METHOD AND APPLICATION THEREOF ~71:HEILONGJIANG GREEN FOOD SCIENCE RESEARCH INSTITUTE, NO. 2727 CHUANGXIN 1ST ROAD, People's Republic of China;NORTHEAST AGRICULTURAL UNIVERSITY, NO.600 CHANGJIANG ROAD, People's Republic of China ~72: FENG, Xu;FENG, Yanzhong;HE, Fumeng;LI, Fenglan;LI, Xiaozhong;SHI, Qihai;WANG, Xuan;WANG, Xue;XU, Yongqing;ZHANG, Ying;ZHOU, Changjun~

2023/04465 ~ Complete ~54:ANTI-HLA-DQ2.5 ANTIBODY AND ITS USE FOR THE TREATMENT OF CELIAC DISEASE ~71:Chugai Seiyaku Kabushiki Kaisha, 5-1, Ukima 5-chome, Kita-ku, TOKYO 1158543, JAPAN, Japan ~72: IKAWA, Yuri;MIZOROKI, Akihiko;OKURA, Yuu~ 33:JP ~31:2020-157873 ~32:18/09/2020

2023/04472 ~ Complete ~54:RISER ANCHOR AND INSTALLATION ~71:VICTAULIC COMPANY, 4901 Kesslersville Road, Easton, United States of America ~72: SUN, Cong~ 33:US ~31:63/110,082 ~32:05/11/2020

2023/04441 ~ Provisional ~54:SOLAR PANEL ALARM WI-FI JAMMING DETECTION ~71:Edmund Herbert, 38 Parror Street, South Africa ~72: Edmund Herbert~

2023/04442 ~ Provisional ~54:PRODUCTION OF TITANIUM METAL POWDER ~71:VAN VUUREN, David, Steyn, 274 ALBERT STREET, WATERKLOOF, 0181, PRETORIA, SOUTH AFRICA, South Africa ~72: VAN VUUREN, David, Steyn~

2023/04444 ~ Provisional ~54:BARBECUE ACCESSORY ~71:BOTHA, Johannes Rolf, Golf Beach Unit E3, Greenways Golf Estate, STRAND 7140, SOUTH AFRICA, South Africa ~72: BOTHA, Johannes Rolf~

2023/04474 ~ Complete ~54:TEMPERATURE CONTROL PROTECTION DEVICE AND CORRESPONDING CHARGING DEVICE ~71:CHANGCHUN JETTY AUTOMOTIVE TECHNOLOGY CO. LTD., No. 957, Shunda Road, High-tech Development Zone,, People's Republic of China ~72: WANG Chao~ 33:CN ~31:202022550192.7 ~32:06/11/2020

2023/04443 ~ Provisional ~54:A ROTARY KILN ~71:VAN VUUREN, David, Steyn, 274 ALBERT STREET, WATERKLOOF, 0181, PRETORIA, SOUTH AFRICA, South Africa ~72: VAN VUUREN, David, Steyn~

2023/04445 ~ Provisional ~54:PARKING SOLAR CHARGING FOR EVS ~71:BRUWER, Frederick Johannes, 1 Bergsig Avenue, South Africa ~72: BRUWER, Frederick Johannes;BRUWER, Frederick Johannes Jnr~

2023/04463 ~ Complete ~54:METHODS FOR DELIVERING MEDIUM CHAIN TRIGLYCERIDES WITH CONTROLLED PHARMACOKINETIC, SAFETY AND TOLERABILITY PROFILES ~71:CERECIN INC., 44 Cook Street, Suite 100-71, Denver, Colorado, 80206, United States of America ~72: BRUCE H MORIMOTO;JUDITH ANNE WALKER;SAMUEL T HENDERSON~ 33:US ~31:63/089,797 ~32:09/10/2020

2023/04470 ~ Complete ~54:COUPLING HAVING ROTATION LIMITED SEGMENTS ~71:VICTAULIC COMPANY, 4901 Kesslersville Road, Easton, United States of America ~72: BOWMAN, Matthew A.;NUNNALLY, Thomas~ 33:US ~31:63/110,433 ~32:06/11/2020

2023/04473 ~ Complete ~54:A SELF-MAINTENANCE BEARING FOR ELECTRIC VEHICLE ASYNCHRONOUS MOTOR ~71:Lu'an Maotongchang Technology Co., Ltd., No.108-05, Building 6, Qingwang science and technology park, Yu'an District, Lu'an City, Anhui Province, 237000, People's Republic of China ~72: Xiulian Liu;Yiguo Bao~ 33:CN ~31:202211381062.2 ~32:06/11/2022

2023/04454 ~ Complete ~54:CONSTRUCTION METHOD OF HYDRODYNAMIC SIMULATION PLATFORM BASED ON DIRECTX DISPLAY TECHNOLOGY ~71:CHINA INSTITUTE OF WATER RESOURCES AND HYDROPOWER RESEARCH, 20, Chegongzhuang West Road, Haidian District, People's Republic of China;CHINA WATER RESOURCES BEI FANG INVESTIGATION, DESIGN&RESEARCH CO.LTD, 60, Dongting Road, Hexi District, People's Republic of China;HAIHE RIVER WATER CONSERVANCY COMMISSION, MWR, 15, Longtan Road, Hedong District, People's Republic of China;POWERCHINA BEIJING ENGINEERING CORPORATION LIMITED, 1 Dingfuzhuang West Street, Chaoyang District, People's Republic of China ~72: CAO Daling;JIAO Ying;LI Chenliang;MA Jianming;MU Jie;NIE Wenli;WANG Kaifeng;WANG Tong;WU Binbin;YU Haijun;YU Wangyang;ZHANG Dawei;ZHANG Hongbin;ZHANG Jiabin;ZHANG Xin~

2023/04467 ~ Complete ~54:LOW-DENSITY FOAM AT LEAST PARTIALLY COVERED WITH A SKIN MATERIAL ~71:NMC SA, Gert-Noël-Strasse, EYNATTEN B-4731, BELGIUM, Belgium ~72: KRIESCHER, Gerhard;MEESSEN, Silvain;NAVEZ, Vincent~ 33:IB ~31:2021/069636 ~32:14/07/2021

2023/04468 ~ Complete ~54:METHOD FOR PRODUCING A GRINDING TOOL, AND GRINDING TOOL ~71:August Rüggeberg GmbH & Co. KG, Hauptstrasse 13, MARIENHEIDE 51709, GERMANY, Germany ~72: SCHMITT, Fabian~

- APPLIED ON 2023/04/18 -

2023/04486 ~ Complete ~54:EARLY WARNING AND MONITORING SYSTEM FOR INSTABILITY OF DANGEROUS ROCK MASSES ~71:Shenyang University of Technology, No.111, Shenliao West Road, Economic and Technological Develop ment Zone, Shenyang City, Liaoning Province, People's Republic of China ~72: LIU Guoyang;LIU Jianping;LIU Junjie;LUO Shouyi;MENG Jin;NING Baokuan;ZHAO Shengze;ZHONG Zhirui~ 33:CN ~31:2022104335831 ~32:24/04/2022

2023/04491 ~ Complete ~54:A NOVEL FORMULATION FOR THE TREATMENT OF MUCOR MYCOSIS AND PROCESS THEREOF ~71:LOVELY PROFESSIONAL UNIVERSITY, JALANDHAR-DELHI G.T. ROAD, PHAGWARA, India ~72: Dr. Bhupinder Kapoor;Dr. Monica Gulati;Dr. Naresh Kumar;Dr. Runjhun Tandon;Dr. Sachin Kumar Singh~ 33:IN ~31:202111036008 ~32:10/02/2022

2023/04510 ~ Complete ~54:WINDING IRON CORE, METHOD FOR MANUFACTURING WINDING IRON CORE, AND WINDING IRON CORE MANUFACTURING APPARATUS ~71:NIPPON STEEL CORPORATION, 6-1, Marunouchi 2-chome, Chiyoda-ku, TOKYO 1008071, JAPAN, Japan ~72: IWAKI, Masataka;MIZUMURA, Takahito;MOGI, Hisashi~ 33:JP ~31:2020-178561 ~32:26/10/2020

2023/04516 ~ Complete ~54:MASTERING OF TRIMMING KNIVES POSITION ~71:ARCELOMITTAL, 24-26, Boulevard d'Avranches, Luxembourg ~72: Jean-Marc HEMMEN;Sébastien;CHAMPEMAUD;Stéphane ERTZ;Thomas TOUCHE~ 33:IB ~31:PCT/IB2020/061933 ~32:15/12/2020

2023/04480 ~ Complete ~54:IMPURITY-REMOVING AND WATER-SAVING PURIFICATION DEVICE FOR WATER QUALITY OF WATER CONSERVANCY PROJECT ~71:Institute of Water Resources for Pastoral Area, MWR, No. 128, University East Street, Saihan District, Hohhot, Inner Mongolia, 010010, People's Republic of China ~72: CHEN, Xiaojun;LI, Wei;MIAO, Henglu;QUAN, Qiang;SUN, Lixin;WANG, Sinan;WANG, Wenjun;WU, Yingjie;YIN, Hang;ZHANG, Weijie;ZHAO, Qian;ZHAO, Shuixia;ZHOU, Quancheng~ 33:CN ~31:2022108911680 ~32:27/07/2022

2023/04484 ~ Complete ~54:BOLT LOCKS ~71:STRYDOM, Hendrik Gerhardus, 14 Dyer Street, South Africa ~72: STRYDOM, Hendrik Gerhardus~ 33:ZA ~31:2022/00792 ~32:18/01/2022

2023/04487 ~ Complete ~54:HIGHLAND BARLEY SOY SAUCE AND BREWING METHOD THEREOF ~71:Institute of Agricultural Products Processing and Food Science, Tibet Academy of Agricultural and Animal Husbandry Sciences, Tibet Agricultural Science and Technology Innovation Park, 157 Nongke Road, Chengguan District, Lhasa, Tibet, People's Republic of China ~72: Meng Shengya;Tian Yuting;Yan Yingying;Zhang Wenhui~ 33:CN ~31:2022107257783 ~32:24/06/2022

2023/04489 ~ Complete ~54:RECONSTITUTED GREEN TEA WITH HIGH GAMMA-AMINOBUTYRIC ACID CONTENT AND PREPARATION METHOD THEREOF ~71:Guizhou Provincial Tea Research Institute, Jinnong Community, Xiaohe District, Guiyang City, Guizhou Province, 550006, People's Republic of China ~72: Luo Jinlong;Shen Qiang;Yang Xiaowei;Zhang Xiaoqin;Zheng Wenjia~ 33:CN ~31:2023101285089 ~32:17/02/2023

2023/04499 ~ Complete ~54:THERMAL PUMP REFRIGERANTS ~71:RPL HOLDINGS LIMITED, 8 Murieston Road, United Kingdom ~72: POOLE, John Edward;POWELL, Richard Llewellyn~ 33:EP ~31:20203466.6 ~32:22/10/2020;33:GB ~31:2103406.1 ~32:11/03/2021

2023/04507 ~ Complete ~54:ELECTRICAL POWER TRANSMISSION ~71:ENERTECHNOS LIMITED, 19 Kingsmill Business Park Capel Mill Road Kingston Upon Thames, United Kingdom ~72: HAJILOO, Ashkan Daria;SALEHI-MOGHADAM, Mansour~ 33:GB ~31:2016055.2 ~32:09/10/2020;33:EP ~31:21164988.4 ~32:25/03/2021

2023/04514 ~ Complete ~54:IMPROVEMENTS IN OR RELATING TO EXTRACTS ~71:Givaudan SA, Chemin de la Parfumerie 5, VERNIER 1214, SWITZERLAND, Switzerland ~72: DE TOLLENAERE, Morgane;JARRIN, Cyrille;LAMBERT, Carole;REYNAUD, Romain;SCANDOLERA, Amandine;SENNELIER PORTET, Bénédict~ 33:GB ~31:2017114.6 ~32:28/10/2020

2023/04476 ~ Provisional ~54:AFRICA CONNECT ONLINE ~71:Christopher Moumakwe, E1791 Phase 4 Itsoseng, South Africa ~72: Christopher Moumakwe~

2023/04483 ~ Complete ~54:METHOD FOR CULTIVATING PEANUT BUDS ENRICHED WITH RESVERATROL ~71:Bozhou University, No.2266 Tangwang Avenue,Economic Development Zone, Bozhou City, Anhui Province, 236800, People's Republic of China ~72: LIANG Caiqing;LU Ning;PU Shunchang;WANG Jungang;XU Xianmeng~

2023/04488 ~ Complete ~54:FERTILIZING METHOD FOR IMPROVING AROMA PRECURSORS OF GREEN TEA FRESH LEAVES ~71:Guizhou Provincial Tea Research Institute, Jinnong Community, Xiaohu District, Guiyang City, Guizhou Province, 550006, People's Republic of China ~72: Liu Guanqun;Wang Jialun;Zeng Tingting;Zhang Xiaoqin~ 33:CN ~31:2023102218471 ~32:09/03/2023

2023/04500 ~ Complete ~54:AN IMPACT PROTECTIVE COMPOSITE MATERIAL ~71:IMPORT KALEIDOSCOPE CC, 14 Avocet Corner, Hazeldean Office Park, South Africa ~72: NAUD~201;, Hendrik Petrus;VAN SCHALKWYK, Marius Wilken~ 33:ZA ~31:2020/06465 ~32:19/10/2020

2023/04517 ~ Complete ~54:INTEGRATED JUNCTION SYSTEM FOR TUBULAR FLUID DISTRIBUTION ELEMENTS ~71:PIPES & FITTINGS EQUFLUIDS S.L., Poligono Industrial Palma de Gandia, C/Garbi 2, Spain ~72: CERDA~39;, Miguel;DI LIBERTO, Luca;GRANATA, Giacomo~ 33:IT ~31:10202000026242 ~32:04/11/2020

2023/04519 ~ Complete ~54:CENTRIFUGAL PUMP, PAINT SPRAY DEVICE FOR MACHINING OF SAME CENTRIFUGAL PUMP AND USE METHOD OF SAME PAINT SPRAY DEVICE ~71:ANHUI WOLONG PUMP & VALVE CO., LTD, No. 49 Yanling Road, Maolin Town, Jing County, Xuancheng City, People's Republic of China ~72: CHENG, Zhiqiang;FENG, Qi;HE, Jianjun;MEI, Jianfeng;MEI, Yitao;WANG, Weilong;ZHANG, Xiao;ZHONG, Guosheng~ 33:CN ~31:202210613999.1 ~32:01/06/2022

2023/04511 ~ Complete ~54:ANTIGEN BINDING DOMAIN WITH REDUCED CLIPPING RATE ~71:Amgen Inc., One Amgen Center Drive, THOUSAND OAKS 91320-1799, CA, USA, United States of America;Amgen Research (Munich) GmbH, Staffelseestrasse 2, MUNICH 81477, GERMANY, Germany ~72: BROZY, Johannes;DYKSTRA, Andrew;MUENZ, Markus~ 33:US ~31:63/110,840 ~32:06/11/2020

2023/04515 ~ Complete ~54:PROCESS ~71:Ineos USA LLC, 2600 South Shore Boulevard, Suite 500, LEAGUE CITY 77573, TX, USA, United States of America ~72: HOREMANS, Theo Victor~ 33:US ~31:17/099,919 ~32:17/11/2020;33:GB ~31:2019698.6 ~32:14/12/2020

2023/04485 ~ Complete ~54:BISPECIFIC ANTIBODY AGAINST ALPHA-SYN/IGF1R AND USE THEREOF ~71:ABL BIO INC, 2F, 16, Daewangpangyo-ro 712beon-gil, Bundang-gu, Seongnam-si, Gyeonggi-do, 13488, Republic of Korea ~72: BORA LEE;BYUNGJE SUNG;DAEHAE SONG;DONGIN KIM;HYESU YUN;JAEHYUN EOM;JINHYUNG AHN;JINWON JUNG;JUHEE KIM;KYUNGJIN PARK;SUNGWON AN;YONG-GYU SON~ 33:KR ~31:10-2019-0071057 ~32:14/06/2019

2023/04477 ~ Provisional ~54:THREADED FITTING ~71:Hendrik Jakobus van Wyk, 3 Ashford Crescent, Brookside Village, South Africa ~72: Hendrik Jakobus van Wyk~

2023/04497 ~ Complete ~54:ANTIBODIES AGAINST SARS-COV-2 AND USES THEREOF ~71:KYMAB LIMITED, The Bennet Building (B930), Babraham Research Campus, United Kingdom ~72: BILLAUD, Margot;BINTER, Špela;GERMASCHESKI, Volker;GRIMSHAW, Benjamin David;KELLAM, Paul;KRISHNA, Aishwarya;LIN, Huan-Chun;LIOU, Li-Ying;PALSER, Anne;ROWLANDS, Robert;SZARY, Jaroslaw Michal;WATSON, Simon James;YANG, Cheng-Yuan~ 33:GB ~31:2017058.5 ~32:27/10/2020

2023/04501 ~ Complete ~54:MEDICAL INJECTION DEVICE WITH GAS EVACUATION ~71:GUERBET, 15, rue des Vanesses, 93420, Villepinte, France ~72: JÉRÔME CACLIN;LUDOVIC ALLARD~ 33:EP ~31:20306133.8 ~32:30/09/2020

2023/04504 ~ Complete ~54:ARRANGEMENT, SYSTEM AND METHOD FOR PRODUCING HOT WATER FROM SOLAR ENERGY ~71:LEIF JILKÉN, Svinövägen 100, 392 36, Kalmar, Sweden ~72: LEIF JILKÉN~ 33:SE ~31:2051194-5 ~32:14/10/2020

2023/04496 ~ Complete ~54:AEROSOL-GENERATING SYSTEM WITH SHAPED SUSCEPTOR ~71:PHILIP MORRIS PRODUCTS S.A., Quai Jeanrenaud 3, Switzerland ~72: FREDERICK, Guillaume;ZINOVIK, Ihar, Nikolaevich~ 33:EP ~31:20197825.1 ~32:23/09/2020

2023/04503 ~ Complete ~54:PYRAZOLO DERIVATIVES AS HUMAN DIHYDROOROTATE DEHYDROGENASE (HDHODH) INHIBITORS FOR USE AS ANTIVIRALS ~71:DRUG DISCOVERY AND CLINIC S.R.L., Via Quarello 15/A, I-10135, Torino, Italy ~72: DONATELLA BOSCHI;GIOVANNI MARTINELLI;GIUSEPPE SAGLIO;MARCO LUCIO LOLLI;MARTA GIORGIS~ 33:IT ~31:102020000027251 ~32:13/11/2020

2023/04508 ~ Complete ~54:MICROFLUIDIC DEVICE AND METHOD FOR ANALYSIS OF A PARTICULATE SAMPLE ~71:UNIVERSITY OF SOUTH AUSTRALIA, North Terrace, Australia ~72: BREADMORE, Michael;KASHANI, Moein Navvab;PRIEST, Craig;SHALLAN, Aliaa~ 33:AU ~31:2020903645 ~32:08/10/2020

2023/04481 ~ Complete ~54:MANAGEMENT SYSTEM FOR SCIENTIFIC RESEARCH OF SUBJECT GROUPS IN LABORATORIES ~71:Guizhou Medical University, University Town, Gui'an New District, Guiyang City, Guizhou Province, 550025, People's Republic of China ~72: FAN, Anran;GUO, Bing;HE, Zhixu;LUO, Peng;SHENG, Changhong;SU, Min;ZENG, Zhu;ZHANG, Peng;ZHAO, Guojing;ZHOU, Yanhua~

2023/04493 ~ Complete ~54:KYNURENINE: USEFUL BIOMARKER IN ACUTE COVID-19 AND LONG COVID ~71:SALION GMBH, Sterzenweg 19, Germany ~72: ABENDROTH, Dietmar;STANGL, Manfred J.~ 33:EP ~31:22169087.8 ~32:20/04/2022

2023/04513 ~ Complete ~54:FUSION PROTEINS FOR THE TREATMENT OF DISEASE ~71:Bristol-Myers Squibb Company, Route 206 and Province Line Road, PRINCETON 08543, NJ, USA, United States of America ~72: HUR, Eun Mi;MACGORMAN, Kimberly;MADIA, Priyanka Apurva;PRICE, Karen D.;RAY, Neelanjana;SHARDA, Nidhi;STRUTHERS, Mary;WANG, Alice L.~ 33:US ~31:63/198,615 ~32:29/10/2020;33:US ~31:63/123,991 ~32:10/12/2020

2023/04495 ~ Complete ~54:STACKED SUSCEPTOR STRUCTURE ~71:PHILIP MORRIS PRODUCTS S.A., Quai Jeanrenaud 3, Switzerland ~72: FREDERICK, Guillaume;ZINOVIK, Ihar, Nikolaevich~ 33:EP ~31:20197780.8 ~32:23/09/2020

2023/04498 ~ Complete ~54:AN INDUCTIVELY HEATED AEROSOL-GENERATING SYSTEM PROVIDING EFFICIENT AND CONSISTENT HEATING OF A PLANAR SUSCEPTOR ELEMENT ~71:PHILIP MORRIS PRODUCTS S.A., Quai Jeanrenaud 3, Switzerland ~72: FREDERICK, Guillaume;ZINOVIK, Ihar, Nikolaevich~ 33:EP ~31:20197772.5 ~32:23/09/2020

2023/04505 ~ Complete ~54:HETEROCYCLIC INHIBITORS OF EGFR AND/OR HER2, FOR USE IN THE TREATMENT OF CANCER ~71:SCORPION THERAPEUTICS, INC., One Winthrop Square, Suite 400, Boston, Massachusetts, 02110, United States of America ~72: ANGEL GUZMAN-PEREZ;BENJAMIN C MILGRAM;JR. DAVID ST. JEAN;RYAN D WHITE~ 33:US ~31:63/089,965 ~32:09/10/2020;33:US ~31:63/151,468 ~32:19/02/2021

2023/04518 ~ Complete ~54:BOLTLESS FASTENER SYSTEM FOR HEAVY-HAUL RAILWAYS ~71:CHINA RAILWAY BAOJI BRIDGE GROUP CO., LTD., No. 80 Qingjiang Road, Weibin District Baoji, People's Republic of China ~72: FENG, Yi;LEI, Jie;SHI, Qingfeng;WU, Guangze;YUAN, Baojun~ 33:CN ~31:202011475303.0 ~32:15/12/2020

2023/04520 ~ Complete ~54:COMPOSITIONS AND METHODS FOR RNA-ENCODED DNA-REPLACEMENT OF ALLELES ~71:PAIRWISE PLANTS SERVICES, INC., 807 East Main Street, Suite 4-100, Durham, United States

of America ~72: HUMMEL, Aaron;KIM, Yongjoo;LAWIT, Shai Joshua;SCHWARK, David;WATTS, Joseph Matthew~ 33:US ~31:63/110,386 ~32:06/11/2020

2023/04478 ~ Provisional ~54:STREET LIGHTS AND TRAFFIC LIGHTS ELECTRICITY SAVING PLAN ~71:G.J. Cloete, 112 Nothdene st, South Africa;G.J. Cloete, 112 Nothdene st, South Africa ~72: G.J. Cloete~

2023/04490 ~ Complete ~54:COUPLING BETWEEN A STEERABLE WHEEL AND A HOUSING IN A VEHICLE WHEEL UNIT ~71:JOY GLOBAL UNDERGROUND MINING LLC, 40 Pennwood Place, Suite 100, Warrendale, United States of America ~72: HAN, Jianjun;WECKERLY, Nathan~ 33:US ~31:17/827,103 ~32:27/05/2022

2023/04521 ~ Complete ~54:DAM TIME-SHIFT MONITORING METHOD AND SYSTEM BASED ON SHALLOW TRANSIENT ELECTROMAGNETIC METHOD ~71:ANHUI UNIVERSITY OF SCIENCE AND TECHNOLOGY, NO. 168, TAIFENG STREET, People's Republic of China;ZHEJIANG GUANGCHUAN ENGINEERING CONSULTING CO.,LTD., NO. 50, FENGQI EAST ROAD, People's Republic of China;ZHEJIANG INSTITUTE OF HYDRAULICS & ESTUARY (ZHEJIANG INSTITUTE OF MARINE PLANNING AND DESIGN), NO. 50, FENGQI EAST ROAD, People's Republic of China ~72: HU, Xiaoming;JIANG, Shuhai;JIANG, Xiaoyi;LIANG, Donghui;LIU, Fuda;TAN, Lei;XU, Hu;YU, Jiongqi~ 33:CN ~31:202310359350.6 ~32:31/03/2023

2023/04502 ~ Complete ~54:CHIMERIC ANTIGEN RECEPTOR (CAR) NK CELLS AND USES THEREOF ~71:RESEARCH INSTITUTE AT NATIONWIDE CHILDREN'S HOSPITAL, 700 Children's Drive, W-148, Columbus, Ohio, 43205, United States of America ~72: DEAN ANTHONY LEE;MEISAM NAEIMI KARAROUDI~ 33:US ~31:63/105,722 ~32:26/10/2020

2023/04506 ~ Complete ~54:AIR FILTER WITH PATHOGEN MONITORING AND INACTIVATION ~71:INDUSTRIAL POLYMERS AND CHEMICALS, INC., 508 Boston Turnpike Shrewsbury, Massachusetts, 01545, United States of America ~72: RALPH G. JR DACEY;THOMAS J KENNEDY III~ 33:US ~31:63/107,388 ~32:29/10/2020;33:US ~31:63/252,514 ~32:05/10/2021

2023/04509 ~ Complete ~54:MULTIPLE HYPOTHESIS PREDICTION FOR VIDEO CODING ~71:QUALCOMM Incorporated, ATTN: International IP Administration, 5775 Morehouse Drive, SAN DIEGO 92121-1714, CA, USA, United States of America ~72: HUANG, Han;KARCZEWICZ, Marta;REUZE, Kevin;SEREGIN, Vadim~ 33:US ~31:63/130,232 ~32:23/12/2020;33:US ~31:17/644,519 ~32:15/12/2021

2023/04512 ~ Complete ~54:USE OF N-MYRISTOYL TRANSFERASE (NMT) INHIBITORS IN THE TREATMENT OF CANCER, AUTOIMMUNE DISORDERS, AND INFLAMMATORY DISORDERS ~71:Pacylex Pharmaceuticals Inc., 400 3rd Avenue SW, Suite 7000, CALGARY T2P 4H2, ALBERTA, CANADA, Canada ~72: BEAUCHAMP, Erwan;BERTHIAUME, Luc G.~ 33:US ~31:63/093,970 ~32:20/10/2020

2023/04479 ~ Provisional ~54:PRACTISE VEHICLE LEANER LICENSE PARKING POLES ~71:G.J. Cloete, 112 Nothdene st, South Africa ~72: G.J. Cloete~

2023/04482 ~ Complete ~54:SYSTEM FOR LABORATORY STANDARDIZATION ~71:Guizhou Medical University, University Town, Gui'an New District, Guiyang City, Guizhou Province, 550025, People's Republic of China ~72: FAN, Anran;GUO, Bing;HE, Zhixu;HUANG, Wenzhu;LUO, Peng;SU, Min;ZENG, Zhu;ZHANG, Peng;ZHAO, Guojing;ZHOU, Yanhua~

2023/04492 ~ Complete ~54:NUCLEAR FUEL ASSEMBLY MANUFACTURING METHOD, NUCLEAR FUEL ASSEMBLY MANUFACTURING PLANT AND METHOD OF EXPANDING SUCH A PLANT ~71:FRAMATOME, 1 place Jean Millier, Tour Areva, France ~72: FALGE, Andreas;FAYARD, Amaury;MERCIER, Lawrence~ 33:WO ~31:PCT/IB2018/001153 ~32:05/07/2018

- APPLIED ON 2023/04/19 -

2023/04529 ~ Complete ~54:COMPREHENSIBLE ARTIFICIAL INTELLIGENCE TO ASSESS CORPORATE SECURITY OPERATIONS USING EEG DATA WITHIN IOT FRAMEWORK ~71:Dr.A.S.Aneetha, Associate Professor, Department of Computer Science, Vels Institution of Science Technology and Advanced Studies, Pallavaram, Chennai, Tamil Nadu, India;Dr.Jose Reena K, Assistant Professor, Department of Computer Science, Vels Institution of Science Technology and Advanced Studies, Pallavaram, Chennai, Tamil Nadu, India;Dr.R.Priya, Assistant Professor (Senior Grade), PSG College of Technology, Coimbatore, Tamil Nadu, India;Dr.V.Mahesh Kumar Reddy, Assistant Professor, Department of Electrical & Electronics Engineering, KSRM College of Engineering, Yerramasupalli Village, YSR Kadapa District, Andhra Pradesh, India;Mr.Anandbabu Gopatoti, Department of ECE, Hindusthan College of Engineering & Technology, Coimbatore, Tamil Nadu, India;Mrs.Alina Dash, Assistant Professor, Department of Computer Science and Engineering, Veer Surendra Sai University of Technology, Burla, Sambalpur, Odisha, India;Ms.P.Tamilselvi, Assistant Professor, Department of Computer Science, Vels Institution of Science Technology and Advanced Studies, Pallavaram, Chennai, Tamil Nadu, India;Ms.S.Jayachitra, Assistant Professor, Department of ECE, PSNA College of Engineering and Technology, Dindigul, Tamil Nadu, India;Ms.Shikha Gautam, Assistant Professor, Department of Computer Engineering, Poornima Institute of Engineering & Technology, Jaipur, Rajasthan, India;Ms.Vishwa Priya V, Assistant Professor, Department of Computer Science, Vels Institution of Science Technology and Advanced Studies, Pallavaram, Chennai, Tamil Nadu, India ~72: Dr.A.S.Aneetha;Dr.Jose Reena K;Dr.R.Priya;Dr.V.Mahesh Kumar Reddy;Mr.Anandbabu Gopatoti;Mrs.Alina Dash;Ms.P.Tamilselvi;Ms.S.Jayachitra;Ms.Shikha Gautam;Ms.Vishwa Priya V~ 33:IN ~31:202341013611 ~32:28/02/2023

2023/04524 ~ Complete ~54:COLD-REGION CORN STALK DECOMPOSED MATRIX SOIL FOR CAPSICUM ANNUUM SEEDLING CULTURE AND PREPARATION METHOD AND APPLICATION THEREOF ~71:HEILONGJIANG GREEN FOOD SCIENCE RESEARCH INSTITUTE, NO. 2727 CHUANGXIN 1ST ROAD, People's Republic of China;NORTHEAST AGRICULTURAL UNIVERSITY, NO. 600 CHANGJIANG ROAD, People's Republic of China ~72: FENG, Xu;FENG, Yanzhong;HE, Fumeng;LI, Fenglan;LI, Xiaozhong;SHI, Qihai;WANG, Xuan;WANG, Xue;XU, Yongqing;ZHANG, Ying;ZHOU, Changjun~

2023/04619 ~ Provisional ~54:LEADERSPEDIA ~71:Fana Daniel Khumalo, 60 Oasis Palms, South Africa ~72: Fana Daniel Khumalo~

2023/04538 ~ Complete ~54:TRACKING AREA UPDATE PROCEDURE FOR NTN ~71:TELEFONAKTIEBOLAGET LM ERICSSON (PUBL), SE-164 83 STOCKHOLM, SWEDEN, Sweden ~72: MÄÄTTANEN, Helka-Liina;PALM, Håkan;ROMMER, Stefan;RUNE, Johan;SCHLIWA-BERTLING, Paul;VESELY, Alexander;YAVUZ, Emre~ 33:US ~31:63/082,429 ~32:23/09/2020

2023/04540 ~ Complete ~54:SAP FC FUSION PROTEINS AND METHODS OF USE ~71:ATTRALUS, INC., 50 Francisco St, Suite 450, San Francisco, United States of America;UNIVERSITY OF TENNESSEE RESEARCH FOUNDATION, 400 W Summit Hill Dr., UT Tower 961A, United States of America ~72: PONS, Jaume;WALL, Jonathan, S.~ 33:US ~31:63/108,799 ~32:02/11/2020;33:US ~31:63/153,777 ~32:25/02/2021

2023/04551 ~ Complete ~54:SYSTEM AND METHOD FOR MONITORING MACHINE OPERATIONS AT A WORKSITE ~71:Caterpillar Inc., 100 NE Adams Street, PEORIA 61629-9510, IL, USA, United States of America ~72: MATHIVANAN, Rajeshkumar;PARKER, John D.;RAJASEKHARAN, Rajakrishnan P.;SUBRAMANI, Suthakar;VASHISHT, Sadhana P.~ 33:US ~31:17/033,527 ~32:25/09/2020

2023/04554 ~ Complete ~54:WRIST BRACE ~71:Essity Hygiene and Health Aktiebolag, GÖTEBORG 405 03, SWEDEN, Sweden ~72: GENGLER, Daphne;HASS, Oliver;KRAJEWSKI, Stephan;VAN DEN BERG, Emma~ 33:EP ~31:20206382.2 ~32:09/11/2020

2023/04541 ~ Complete ~54:CDK INHIBITORS AND THEIR USE AS PHARMACEUTICALS ~71:PRELUDE THERAPEUTICS, INCORPORATED, 200 Powder Mill Road, Experimental Station E440/3213, Wilmington, Delaware, 19803, United States of America ~72: ANDREW PAUL COMBS;ANDREW W BUESKING;JINCONG ZHUO;RYAN HOLMES;SARAH PAWLEY;XIAOWEI WU~ 33:US ~31:63/081,126 ~32:21/09/2020;33:US ~31:63/221,959 ~32:15/07/2021

2023/04542 ~ Complete ~54:BEVERAGE PREPARATION MACHINE HAVING A SILICONE DRIP GRID ~71:TCHIBO GMBH, Überseering 18, 22297, Hamburg, Germany ~72: ALEXANDER ERDWIENS;MICHA DANIELS~ 33:EP ~31:20203145.6 ~32:21/10/2020

2023/04556 ~ Complete ~54:ANTI-TUMOUR RESPONSES TO CYTOKERATINS ~71:Scancell Limited, Unit 202, Bellhouse Building, Sanders Road, Oxford Science Park, OXFORD OX4 4GP, OXFORDSHIRE, UNITED KINGDOM, United Kingdom ~72: BRENTVILLE, Victoria Anne;COOK, Katherine;DURRANT, Linda Gillian;SYMONDS, Peter~ 33:GB ~31:2018395.0 ~32:23/11/2020

2023/04561 ~ Complete ~54:A BRAKING SYSTEM ~71:NELMS, Charan, Ground Floor Flat, 72 Osborne Villas Hove, United Kingdom ~72: NELMS, Charan~ 33:GB ~31:2016583.3 ~32:19/10/2020

2023/04536 ~ Complete ~54:USE OF THERAPEUTIC ENZYME FUSION PROTEIN IN PREVENTING AND TREATING NEUROPATHY ATTRIBUTED TO OR ASSOCIATED WITH FARBRY'S DISEASE ~71:HANMI PHARM. CO., LTD., 214, MUHA-RO, PALTAN-MYEON, HWASEONG-SI, GYEONGGI-DO 18536, REPUBLIC OF KOREA, Republic of Korea ~72: KIM, Jin Young;KIM, Sang, Yun;KIM, Won, Ki;PARK, Cho Rong;PARK, Su, Yeon~ 33:KR ~31:10-2020-0152246 ~32:13/11/2020

2023/04543 ~ Complete ~54:FREQUENCY MODULATION CONTROL METHOD AND DEVICE FOR 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: MEILING ZUO~ 33:CN ~31:202011002768.4 ~32:22/09/2020

2023/04544 ~ Complete ~54:METHOD, DEVICE, AND SYSTEM FOR CELL MEASUREMENT AND REPORT IN WIRELESS NETWORKS ~71:ZTE CORPORATION, ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, Nanshan, Shenzhen, Guangdong, 518057, People's Republic of China ~72: BO DAI;LI NIU;TING LU;XIUBIN SHA~

2023/04548 ~ Complete ~54:ALPHA STIRLING ENGINE ~71:Azelio AB, Forsbrogatan 4, ÅMÅL 662 34, SWEDEN, Sweden ~72: NILSSON, Martin~ 33:SE ~31:2051260-4 ~32:30/10/2020

2023/04523 ~ Complete ~54:COLD-REGION CORN STALK DECOMPOSED MATRIX SOIL FOR CUCUMIS SATIVUS SEEDLING CULTURE AND PREPARATION METHOD AND APPLICATION THEREOF ~71:HEILONGJIANG GREEN FOOD SCIENCE RESEARCH INSTITUTE, NO. 2727 CHUANGXIN 1ST ROAD, People's Republic of China;NORTHEAST AGRICULTURAL UNIVERSITY, NO. 600 CHANGJIANG ROAD, People's Republic of China ~72: FENG, Xu;FENG, Yanzhong;HE, Fumeng;LI, Fenglan;LI, Xiaozhong;WANG, Xuan;WANG, Xue;XU, Yongqing;ZHANG, Ying;ZHOU, Changjun~

2023/04530 ~ Complete ~54:AN AI AND ML MODELS FOR CARDIOVASCULAR DISEASE DIAGNOSTICS, READMISSION, AND SURVIVAL PREDICTION ~71:Dr. Dillip Kumar Brahma, Professor & HOD, Academic Coordinator, Department of Pharmaceutics, HIMT College of Pharmacy, AKTU Knowledge Park-1, Greater Noida,

Uttar Pradesh, India;Dr. L. Rajesh Patro, Professor & Principal, Ranchi College of Pharmacy, Kute Toli, Tetri, Namkum, Ranchi, Jharkhand, India;Dr.A.Venkateshwar Reddy, Professor and Principal, Department of Pharmacology, Anwarul Uloom College of Pharmacy, New Mallepally, Osmania University, Hyderabad, Telangana, India;Dr.Bhaskar Jimidi, Associate Professor, Department of Pharmaceutics, Bharat Institute of Technology, Jawaharlal Nehru Technological University-Hyderabad, Telangana,, India;Dr.Chinmaya Mahapatra, Associate Professor, Department of Pharmaceutics, IMT Pharmacy College, Puri, Odisha, India;Dr.Goje Arjun, Associate Professor and HOD, Department of Pharmaceutics, Teegala Ram Reddy College of Pharmacy, Meerpet, Saroornagar, Hyderabad, (JNTUH, Hyderabad), Rangareddy District, Hyderabad, Telangana, India;Dr.Niranjan Panda, Professor and HOD, Department of Pharmaceutics, Anwarul Uloom College of Pharmacy, Osmania University, New Mallepally, Hyderabad, Telangana, India;Dr.V.Kiran Kumar, Principal & HOD, Department of Pharmaceutical Analysis, Mother Teresa College of Pharmacy, Affiliated to Osmania University, Ghatkesar, Hyderabad, Telangana, India;Dr.Vurathi Sreenivasulu, Professor, Department of Pharmaceutics, St.Johns College of Pharmaceutical Sciences, JNTUA-Ananthapuramu, Yerrakota, Yemmiganur, Kurnool District, Andhra Pradesh, India;Mr.Satyabrata Jena, Associate Professor, Department of Pharmaceutics, Bhaskar Pharmacy College, Hyderabad, Yenkapally, Moinabad, (JNTUH, Hyderabad), Rangareddy District, Hyderabad, Telangana, India ~72: Dr. Dillip Kumar Brahma;Dr. L. Rajesh Patro;Dr.A.Venkateshwar Reddy;Dr.Bhaskar Jimidi;Dr.Chinmaya Mahapatra;Dr.Goje Arjun;Dr.Niranjan Panda;Dr.V.Kiran Kumar;Dr.Vurathi Sreenivasulu;Mr.Satyabrata Jena~ 33:IN ~31:202341008072 ~32:08/02/2023

2023/04546 ~ Complete ~54:BLOCKING AND AUTOCLOSING ARRANGEMENT ~71:AUTIDA AB, Skarpövägen 31, 132 32 Saltsjö-Boo, Sweden ~72: PETER STENLUND~ 33:SE ~31:2050755-4 ~32:24/06/2020

2023/04557 ~ Complete ~54:TELESCOPING SMOKE EVACUATION DEVICE FOR USE WITH HANDHELD SURGICAL INSTRUMENT ~71:Pathy Medical, LLC, 1000 Bridgeport Avenue, Suite 400, SHELTON 06484, CT, USA, United States of America ~72: KLEYMAN, Gennady;SILVER, Mikiya~ 33:US ~31:17/072,331 ~32:16/10/2020

2023/04563 ~ Complete ~54:A BRAKING SYSTEM ~71:NELMS, Charan, Ground Floor Flat, 72 Osborne Villas Hove, United Kingdom ~72: NELMS, Charan~ 33:GB ~31:2016582.5 ~32:19/10/2020;33:GB ~31:2016583.3 ~32:19/10/2020;33:GB ~31:2108678.0 ~32:17/06/2021

2023/04526 ~ Complete ~54:GOLF VEHICLE ~71:PARATRAK (PTY) LTD, 325 Waterfall Hills Estate, South Africa ~72: WOOD, Richard Roy;WOOD, Roy Constant~ 33:ZA ~31:2022/00848 ~32:19/01/2022;33:ZA ~31:2022/00849 ~32:19/01/2022

2023/04533 ~ Complete ~54:INSTALLATION DEVICE HAVING POWER-ENGINEERING OR BUILDING-SERVICES MODULES, AND METHOD FOR REMOVING A MODULE FROM AN INSTALLATION DEVICE OF THIS TYPE ~71:ENVOLA GMBH, MAX-BORN-STRASSE 2-4, 89081 ULM, GERMANY, Germany ~72: IHLE, Gerhard;SCHECHNER, Alexander~ 33:DE ~31:10 2020 125 017.7 ~32:25/09/2020

2023/04534 ~ Complete ~54:USE OF THERAPEUTIC ENZYME FUSION PROTEIN FOR PREVENTING AND TREATING KIDNEY DISEASE CAUSED OR ACCOMPANIED BY FABRY'S DISEASE ~71:HANMI PHARM. CO., LTD., 214, MUHA-RO, PALTAN-MYEON, HWASEONG-SI, GYEONGGI-DO 18536, REPUBLIC OF KOREA, Republic of Korea ~72: CHOI, Jae Hyuk;JANG, Doo, Seo;KIM, Jeong, A;KIM, Jin Young;KIM, Sang Yun;PARK, Cho Rong~ 33:KR ~31:10-2020-0152247 ~32:13/11/2020

2023/04537 ~ Complete ~54:USE OF SPHINGOSINE-1-PHOSPHATE RECEPTOR AGONIST ~71:LG CHEM, LTD., 128, YEOUI-DAERO, YEONGDEUNGPO-GU, SEOUL 07336, REPUBLIC OF KOREA, Republic of Korea ~72: KIM, Ki Chan;KIM, Tae Hun~ 33:KR ~31:10-2020-0125583 ~32:28/09/2020

2023/04545 ~ Complete ~54:AGRICULTURAL COMPOSITION OF INDOLEACETIC ACID WITH ENHANCED PHOTOSTABILITY, PRODUCTION METHOD, AND USE THEREOF ~71:TOTAL BIOTECNOLOGIA INDÚSTRIA E COMÉRCIO S/A, Rua Emilio Romani, nº 1.190 CIC, Curitiba - PR, 81460-020, Brazil ~72: DOUGLAS FABIANO GOMES;JONAS HIPOLITO DE ASSIS FILHO;JOSIANE FUKAMI;JULIANA MARCOLINA GOMES~

2023/04549 ~ Complete ~54:OXYANIONIC TEMPLATES FOR SURFACE REPLICATION ~71:Dickinson Corporation, 31 Commercial Blvd., NOVATO 94949, CA, USA, United States of America ~72: BISHOP, Matthew;BRILL, David Andrew;THOMAS, Abhay V.~ 33:US ~31:63/129,154 ~32:22/12/2020

2023/04555 ~ Complete ~54:NOVEL HYDROXYPHENYLPYRUVATE DIOXYGENASE POLYPEPTIDES AND METHODS OF USE THEREOF ~71:Syngenta Crop Protection AG, Rosentalstrasse 67, BASEL 4058, SWITZERLAND, Switzerland ~72: BLAIN, Rachael Elizabeth;CALLAGHAN, Fiona;DALE, Richard;HORTA SIMOES, Maria Andreia~ 33:US ~31:63/119,226 ~32:30/11/2020

2023/04562 ~ Complete ~54:A BRAKING SYSTEM ~71:NELMS, Charan, Ground Floor Flat, 72 Osborne Villas Hove, United Kingdom ~72: NELMS, Charan~ 33:GB ~31:2016582.5 ~32:19/10/2020;33:GB ~31:2016583.3 ~32:19/10/2020

2023/04522 ~ Complete ~54:A PREPARATION METHOD OF HEALTHY AND ENVIRONMENTALLY FRIENDLY BROWN GOLD GLASS FOR PACKAGING ~71:Shandong Jingyao Glass Group Co.Ltd, Huanghai Fifth Road, Pingshang Town, Lingang District, Linyi City, Shandong Province, 276624, People's Republic of China ~72: Guoming YU;Shoulu ZHANG;Wencai BO;Yong TANG;Zhen FU~

2023/04535 ~ Complete ~54:EFFICIENT INDIRECT ELECTRICAL HEATING ~71:BASF SE, CARL BOSCH STRASSE 38, 67056 LUDWIGSHAFEN AM RHEIN, GERMANY, Germany;LINDE GMBH, DR.-CARL-VON-LINDE-STRAßE 6-14, 82049 PULLACH, GERMANY, Germany ~72: JENNE, Eric;KOCHENDOERFER, Kiara, Aenne;SHUSTOV, Andrey~ 33:EP ~31:20199923.2 ~32:02/10/2020

2023/04539 ~ Complete ~54:CONCRETE ADMIXTURE ~71:CONSTRUCTION RESEARCH & TECHNOLOGY GMBH, DR.- ALBERT-FRANK- STRASSE 32, TROSTBERG 83308, GERMANY, Germany ~72: KAMESHIMA Kenta;KOIZUMI, Shinichi;SAKUE Jiro~ 33:JP ~31:2020-178200 ~32:23/10/2020

2023/04547 ~ Complete ~54:A SYSTEM FOR TREATING AND PROCESSING A PRIMARY PACKAGING CONTAINER ~71:Anheuser-Busch InBev S.A., Grand Place 1, BRUSSELS 1000, BELGIUM, Belgium ~72: DEKOCKER, Wim;DUPERRAY, Philippe Jean Marie;FERREIRA, Glenn;PETRAMALE, Marcelo~ 33:BE ~31:2020/5756 ~32:27/10/2020

2023/04560 ~ Complete ~54:COMPOSITIONS AND METHODS FOR PRODUCING BICARBONATE AND MINERALS ~71:ANDES AG, INC., 1210 Marina Village Parkway, United States of America ~72: FUENZALIDA, Gonzalo;LEON, Lina;PANDEY, Naresh;SINGH, Raghuveer;TIMMERMANN, Tania;TRAAG, Bjorn~ 33:US ~31:63/094,870 ~32:21/10/2020;33:US ~31:63/257,079 ~32:18/10/2021

2023/04552 ~ Complete ~54:METHOD AND DEVICE FOR MANUFACTURING WOUND IRON CORE ~71:NIPPON STEEL CORPORATION, 6-1, Marunouchi 2-chome, Chiyoda-ku, TOKYO 1008071, JAPAN, Japan ~72: MIZUMURA, Takahito;TAKAHASHI, Masaru~ 33:JP ~31:2020-178569 ~32:26/10/2020

2023/04553 ~ Complete ~54:CHIMERIC ANTIGEN COMPRISING THE EXTRACELLULAR DOMAIN OF PD-L1 ~71:Centro de Ingeniería Genética y Biotecnología, Avenida 31 No. 15802 entre 158 y 190, Cubanacan, Playa, LA HABANA 11600, CUBA, Cuba ~72: AYALA ÁVILA, Marta;BEQUET ROMERO, Mónica;BESADA PÉREZ, Vladimir Armando;CANAÁN-HADEN AYALA, Camila;ESPINOSA

RODRIGUEZ, Luis Ariel; GAVILONDO COWLEY (Deceased), Jorge Victor; GONZALEZ BLANCO, Sonia; GONZALEZ MOYA, Isabel; LIMONTA FERNANDEZ, Milady; MORERA DIAZ, Yanelys; NCHEZ RAMIREZ, Javier ~ 33:CU ~31:2020-0075 ~32:22/10/2020

2023/04564 ~ Complete ~54:STEEL FOR RAILS AND A METHOD OF MANUFACTURING OF A RAIL THEREOF ~71:ARCELOMITTAL, 24-26, Boulevard d'Avranches, Luxembourg ~72: David ALVAREZ DIEZ; Diego CARRASCAL; JORGE ARANCON ALVAREZ; Wilberth SOLANO ALVAREZ ~

2023/04532 ~ Complete ~54:COBALT TELLURIUM OXIDE AS A PHOTOCARGED ELECTROCATALYST ~71:NORTH-WEST UNIVERSITY, 1 Hoffman Street, Joon van Rooy Building, South Africa ~72: KRIEK, Roelof Jacobus; OYETADE, Oluwaseun Akinwole ~ 33:NL ~31:2027004 ~32:27/11/2020

2023/04525 ~ Complete ~54:GASTRODIA ELATA PRE-TREATMENT DEVICE AND PRODUCTION METHOD BASED ON GASTRODIA ELATA ENZYME BEVERAGE PRODUCTION ~71:Shaanxi Wuding Biotechnology Co. Ltd, Industrial Park, Ningqiang County, Hanzhong, Shaanxi, People's Republic of China ~72: Cunli ZHANG; Jianzhong LI; Xiaojun CHEN; Younan ZHOU ~ 33:CN ~31:202210601577.2 ~32:30/05/2022

2023/04527 ~ Complete ~54:AN EDGE CLOUD - BASED SYSTEM WITH HYBRIDIZED RANDOM FOREST DEEP LEARNING CLASSIFICATION MODEL FOR PNEUMONIA IDENTIFICATION ~71:Dr.Farhad F Mehta, Assistant Professor C, School of Pharmaceutical Sciences, University Teaching Department, R.G.P.V University, Bhopal, Madhya Pradesh, India. Pin Code:462033, India; Dr.J.Deepika Roselind, Assistant Professor, School of Computer Science and Engineering, Vellore Institute of Technology-Chennai Campus, Chennai, Tamil Nadu, India. Pin Code:600041, India; Dr.Kazi Kutubuddin Sayyad Liyakat, S/o Dilshadbegam Kazi, At- Khed, Kegaon Post, Tal-North Solapur, Solapur District, Maharashtra, India. Pin Code: 413255, India; Dr.Phani Kumar Solleti, Associate Professor, Department of Information Technology, Sasi Institute of Technology & Engineering, Tadepalligudem, Andhra Pradesh, India. Pin Code:534101, India; Dr.Sushma Jaiswal, Assistant Professor, Department of Computer Science & Information Technology (CSIT), Guru Ghasidas Vishwavidyalaya (A Central University), Koni, Bilaspur, Chhattisgarh, India. Pin Code: 495009, India; Mr. Anandbabu Gopatoti, Department of ECE, Hindusthan College of Engineering & Technology, Coimbatore, Tamil Nadu, India. Pin Code: 641032, India; Mr.Neeraj Kumar, Ph.D Research Scholar in School of Information Technology, University Teaching Department (UTD), Rajiv Gandhi Proudhyogiki Vishwavidyalaya (RGPV), Bhopal, Madhya Pradesh, India. Pin Code:462033, India; Mr.Tarun Jaiswal, Research Scholar, Department of Computer Application, National Institute of Technology (NITRR), Raipur, Chhattisgarh, India. Pin Code:492010, India; Mrs.Divya Mishra, Assistant Professor, Department of CSE, Swami Vivekanand Subharti University, Meerut, Uttar Pradesh, India. Pin Code:250001, India; Mrs.Reena Singh, Assistant Professor, Department of CSE, Swami Vivekanand Subharti University, Meerut, Uttar Pradesh, India ~72: Dr.Farhad F Mehta; Dr.J.Deepika Roselind; Dr.Kazi Kutubuddin Sayyad Liyakat; Dr.Phani Kumar Solleti; Dr.Sushma Jaiswal; Mr. Anandbabu Gopatoti; Mr.Neeraj Kumar; Mr.Tarun Jaiswal; Mrs.Divya Mishra; Mrs.Reena Singh ~ 33:IN ~31:202321009160 ~32:12/02/2023

2023/04528 ~ Complete ~54:A METHOD OF CHARACTERIZING AND EVALUATING A TARGETED DRUG DELIVERY FOR MALIGNANT TUMOURS ~71:Dr.B.Ravindra Babu, Professor, Department of Pharmaceutics, Pulla Reddy Institute of Pharmacy, Domadugu (V), Gummadidala (M), Sangareddy District, Hyderabad, Telangana, India; Dr.Richa Sood, Assistant Professor, College of Pharmaceutical Sciences, Dayananda Sagar University, Bengaluru, Karnataka, India; Dr.Santhisree. Vemulapalli, Associate Professor, Department of Pharmaceutics, Vijaya college of Pharmacy, Hyderabad, Telangana, India; Dr.Shaheena Sohi, Associate Professor, Department of Pharmacy, RIMT University, Mandi Gobindgarh, Punjab, India; Dr.Swapna Velivela, Associate Professor, Department of Pharmaceutics, Pulla Reddy Institute of Pharmacy, Domadugu (V), Gummadidala mandal, Sangareddy District, Hyderabad, Telangana, India; Dr.V.Kiran Kumar, Principal & HOD, Department of Pharmaceutical Analysis, Mother Teresa College of Pharmacy, NFC Nagar, Ghatkesar, Hyderabad, Telangana, India; Mr.Bikash Ranjan Jena, Associate Professor, Department of Pharmaceutical

Analysis, School of Pharmacy & Life Sciences, Centurion University of Technology and Management, Jatani, Odisha, India;Mr.Mayankesh Pandey, Associate Professor, Department of Pharmacology, Vidya Bhavan College of Pharmacy, Rautapur, Chaubeypur, Kanpur, Uttar Pradesh, India;Mr.Satyabrata Jena, Associate Professor, Bhaskar Pharmacy College, Hyderabad, Yenkapally, Moinabad, (JNTUH, Hyderabad), Rangareddy District, Hyderabad, Telangana, India;Prof(Dr.).Arnabaditya Mohanty, Principal, The Pharmaceutical College, Samaleswari Vihar, Tingipali, Barpali, Bargarh District, Odisha, India ~72: Dr.B.Ravindra Babu;Dr.Richa Sood;Dr.Santhisree. Vemulapalli;Dr.Shaheena Sohi;Dr.Swapna Velivela;Dr.V.Kiran Kumar;Mr.Bikash Ranjan Jena;Mr.Mayankesh Pandey;Mr.Satyabrata Jena;Prof(Dr.).Arnabaditya Mohanty~ 33:IN ~31:202341013115 ~32:27/02/2023

2023/04531 ~ Complete ~54:APPLICATION OF OXYBERBERINE IN PREPARATION OF DRUGS FOR METABOLIC DISEASES, AND PHARMACEUTICAL COMPOSITION COMPRISING OXYBERBERINE ~71:GUANGZHOU UNIVERSITY OF CHINESE MEDICINE (GUANGZHOU INSTITUTE OF CHINESE MEDICINE), No. 12, Airport Road, Baiyun District Guangzhou, People's Republic of China ~72: CHEN, Jiannan;HUANG, Xiaoqi;LI, Yucui;LIU, Yuhong;SU, Ziren;XIE, Jianhui;XIE, Youliang~ 33:CN ~31:202011006419.X ~32:23/09/2020

2023/04550 ~ Complete ~54:COMPOSITIONS AND METHODS FOR TREATING ISCHEMIC CONDITIONS ~71:The Regents of the University of California, 1111 North Franklin Street, 5th Floor, OAKLAND 94607-5200, CA, USA, United States of America ~72: FERRARA, Napoleone;ZHONG, Cuiling~ 33:US ~31:63/094,032 ~32:20/10/2020

2023/04558 ~ Complete ~54:SYSTEMS AND METHODS FOR WATER TREATMENT AND STORAGE ~71:Source Global, PBC, 1465 North Scottsdale Road, Suite #600, SCOTTSDALE 85284, AZ, USA, United States of America ~72: ARMIJO, Susan;FRIESEN, Grant;JOHNSON, Paul~ 33:US ~31:63/106,093 ~32:27/10/2020

- APPLIED ON 2023/04/20 -

2023/04565 ~ Provisional ~54:A SOLAR PANEL ~71:BAIOCCO, Massimo, 4 TUSCAN PLACE, 138 DYTCHLEY ROAD, KYALAMI, 1684, JOHANNESBURG, SOUTH AFRICA, South Africa ~72: BAIocco, Massimo~

2023/04577 ~ Complete ~54:WATER TREATMENT SYSTEM ~71:TAYLORMADE WATER SOLUTIONS (PTY) LTD., Plot 234 Clowyn Crescent Chelsea, Port Elizabeth, Eastern Cape, 6001, South Africa ~72: CHAYTEN RICHARD HAASBROEK;RICHARD PETER TAYLOR~ 33:ZA ~31:2022/01392 ~32:31/01/2022

2023/04581 ~ Complete ~54:COMPOSITIONS COMPRISING TETRAHYDROCANNABINOL FOR TREATING ACUTE RESPIRATORY FAILURE AND/OR ACUTE RESPIRATORY DISTRESS SYNDROME ~71:NAGY, Aurangzeb Nafees, 3012 S. Durango Dr., United States of America ~72: NAGY, Aurangzeb Nafees~ 33:US ~31:63/107,201 ~32:29/10/2020;33:US ~31:63/107,873 ~32:30/10/2020;33:US ~31:63/128,755 ~32:21/12/2020;33:US ~31:63/134,919 ~32:07/01/2021;33:US ~31:63/235,659 ~32:20/08/2021;33:US ~31:63/252,912 ~32:06/10/2021

2023/04583 ~ Complete ~54:STABLE FORMULATIONS FOR RADIONUCLIDE COMPLEXES ~71:ITM SOLUCIN GMBH, Lichtenbergstrasse 1, Germany ~72: ANDREOLLI, Elena Maria;HEAMES, Luke;LEIB, Oliver;MARX, Sebastian~ 33:EP ~31:PCT/EP2020/083363 ~32:25/11/2020

2023/04596 ~ Complete ~54:A REFRACTORY SPOUT ~71:WAGSTAFF, INC., 3910 N. Flora Rd., Spokane Valley, Washington, 99216, United States of America ~72: NICHOLAS RYAN TEBBE~ 33:US ~31:63/089,130 ~32:08/10/2020;33:US ~31:63/121,436 ~32:04/12/2020

2023/04604 ~ Complete ~54:IN VIVO TARGETING OF CD4+-T CELLS FOR MRNA THERAPEUTICS ~71:The Trustees of the University of Pennsylvania, 3600 Civic Center Boulevard, 9th Floor, PHILADELPHIA 19104, PA, USA, United States of America ~72: MUZYKANTOV, Vladimir;PARDI, Norbert;PARHIZ, Hamideh;TOMBACZ, Istvan;WEISSMAN, Drew~ 33:US ~31:63/091,010 ~32:13/10/2020

2023/04607 ~ Complete ~54:FUSED HETEROARYL COMPOUNDS AND THEIR USE AS CAMKII INHIBITORS ~71:Cardurion Pharmaceuticals, Inc., 78 Blanchard Road, Suite 200 Burlington, Massachusetts 01803, Massachusetts 01803 02111, USA, United States of America ~72: KAWADA, Akira;MACCOSS, Malcolm;MATSUNAGA, Nobuyuki;MIYAMOTO, Yasufumi;NAKAHATA, Takashi;OKAWA, Tomohiro;SHIBUYA, Akito;SHIOKAWA, Zenyu;SHIRAI, Junya~ 33:US ~31:63/084,217 ~32:28/09/2020

2023/04616 ~ Complete ~54:METHODS AND COMPOSITIONS FOR TARGETED PROTEIN DEGRADATION ~71:Ranok Therapeutics (Hangzhou) Co., Ltd., Suite 1005, Building 1, 501 2nd Avenue, Hangzhou Eco-Tech Development Area, HANGZHOU 310000, ZHEJIANG, CHINA (P.R.C.), People's Republic of China ~72: FOLEY, Kevin Paul;WANG, Mingkai;YE, Long;YIN, Wei;YING, Chenghao;YING, Weiwen;ZHANG, Lingjie~ 33:IB ~31:2020/120911 ~32:14/10/2020

2023/04600 ~ Complete ~54:BICYCLIC 1,4-DIAZEPANONES AND THERAPEUTIC USES THEREOF ~71:Cytokinetics, Inc., 350 Oyster Point Blvd, SOUTH SAN FRANCISCO 94080, CA, USA, United States of America ~72: COLLIBEE, Scott;EVANS, Chris;HONJO, Eriko;KATOH, Naoto;KOIZUMI, Yuka;KURIWAKI, Ikumi;KUROSAKI, Toshio;LU, Pu-Ping;MAKINO, Takuya;MORGAN, Bradley P.;SEKIOKA, Ryuichi;TSUCHIYA, Kazuyuki;WANG, Wenye;YAMAKI, Susumu;YAMASAKI, Makoto~ 33:US ~31:63/110,776 ~32:06/11/2020

2023/04615 ~ Complete ~54:PROCESS ~71:Ineos USA LLC, 2600 South Shore Boulevard, Suite 500, LEAGUE CITY 77573, TX, USA, United States of America ~72: MOHN, Robert Norman~ 33:US ~31:17/099,973 ~32:17/11/2020;33:GB ~31:2019701.8 ~32:14/12/2020

2023/04573 ~ Complete ~54:A PREPARATION METHOD OF FLUORITE-TYPE HIGH ENTROPY CERAMICS ~71:Taiyuan University of Technology, No. 79, Yingze West Street, Taiyuan City, Shanxi Province, 030000, People's Republic of China ~72: Bei REN;Chufei CHENG;Wenyi LI;Xiaomin WANG;Yang MIAO~ 33:CN ~31:2023103371445 ~32:31/03/2023

2023/04572 ~ Complete ~54:AN ENGLISH LEARNING MACHINE WITH INTERACTION FUNCTION ~71:Bozhou University, 2266 Tangwang Avenue, Economic Development Zone, Bozhou City, Anhui Province, 236800, People's Republic of China ~72: Cheng Zhongfang~

2023/04620 ~ Provisional ~54:PROPERTY WEB APPLICATION ~71:Thato Matima, 39 Grand National Boulevard, South Africa ~72: Thato Matima~

2023/04584 ~ Complete ~54:METHODS AND RAPID TEST KITS FACILITATING EPIDEMIOLOGICAL SURVEILLANCE ~71:BIOLYTICAL LABORATORIES INC., 406-13251 Delf Place Richmond, Canada ~72: HEYDE, Ron P;ZAHARIK, Michelle L~ 33:US ~31:17/026,643 ~32:21/09/2020

2023/04589 ~ Complete ~54:PRE-FORMS FOR MAKING BIODEGRADABLE CONTAINERS AND RESIN THEREFOR ~71:MERIDIAN, INC., 140 Industrial Boulevard, Bainbridge, Georgia, 39817, United States of America ~72: KARSON DURIE;MICHAEL MANG~ 33:US ~31:63/082,570 ~32:24/09/2020

2023/04593 ~ Complete ~54:MODULAR LIGHT DEVICE FOR A BIOLOGICAL FLUID TREATMENT SYSTEM ~71:CERUS CORPORATION, 1220 Concord Avenue, Concord, California, 94520, United States of America ~72: DANIEL CHURCH;LLOYD ISON~ 33:US ~31:63/093,722 ~32:19/10/2020

2023/04599 ~ Complete ~54:IRON-ALUMINUM ALLOY COMPOSITE-REINFORCED ALUMINUM-BASED MATERIAL, AND PREPARATION METHOD AND USE THEREOF ~71:HUNAN XIANGTOU LIGHT MATERIAL TECHNOLOGY CO., LTD., Wu Xi Zhen Jin Tian Nan Lu, Luxi County, Xiangxi Tujia and Miao Autonomous Prefecture, Hunan 416100, People's Republic of China ~72: CAO, Liuxu;JIANG, Zhaoru;LIU, Chunxuan;LUO, Ren;QIU, Jinwen;QIU, Zhenyu;WU, Yun;ZHANG, Jie;ZHANG, Yang~ 33:CN ~31:202011374650.4 ~32:30/11/2020

2023/04603 ~ Complete ~54:METHODS AND COMPOSITIONS FOR TARGETED PROTEIN DEGRADATION ~71:Ranok Therapeutics (Hangzhou) Co. Ltd., Suite 1005, Building 1, 501 2nd Avenue, Hangzhou Eco-Tech Development Area, HANGZHOU 310000, ZHEJIANG, CHINA (P.R.C.), People's Republic of China ~72: FOLEY, Kevin Paul;WANG, Mingkai;YE, Long;YIN, Wei;YING, Chenghao;YING, Weiwen;ZHANG, Lingjie~ 33:IB ~31:2020/120927 ~32:14/10/2020

2023/04571 ~ Complete ~54:CEMENTITIOUS REAGENTS, METHODS OF MANUFACTURING AND USES THEREOF ~71:TERRA CO2 TECHNOLOGY HOLDINGS, INC., 601 16th Street Suite C #324, Golden, United States of America ~72: LAKE, Donald John~ 33:US ~31:62/867,480 ~32:27/06/2019;33:US ~31:63/004/673 ~32:03/04/2020;33:US ~31:63/025,148 ~32:14/05/2020

2023/04575 ~ Complete ~54:FERTILIZATION AND IRRIGATION SYSTEM FOR MOUNTAIN TEA GARDEN ~71:Guizhou Provincial Tea Research Institute, Jinnong Community, Xiaohe District, Guiyang City, Guizhou Province, 550006, People's Republic of China ~72: Jiang Yanyan;Shen Qiang;Wang Jialun;Zhang Xiaoqin~ 33:CN ~31:2023101285055 ~32:17/02/2023

2023/04585 ~ Complete ~54:CHICKEN ANEMIA VIRUS (CAV)-BASED VECTORS ~71:FLAGSHIP PIONEERING INNOVATIONS V, INC., 55 Cambridge Parkway, 8th Floor, Suite 800E, United States of America ~72: BOISVERT, Nicole, Marie;DELAGRAVE, Simon;DIAZ, Fernando, Martin;LEBO, Kevin, James;PITTS, Jared David;TIMPONA, Joseph, Louis~ 33:US ~31:63/107,149 ~32:29/10/2020;33:US ~31:63/147,087 ~32:08/02/2021

2023/04587 ~ Complete ~54:SATURATED WATER COMPACTION VIBRATING CONSTRUCTION PROCESS OF GRADED CRUSHED STONE ~71:CHINA HARBOUR ENGINEERING COMPANY LTD., No. 9, Chunxiu Road, Dongcheng District, Beijing, 100027, People's Republic of China ~72: YINZHAN BAI~ 33:CN ~31:2022113542900 ~32:01/11/2022

2023/04592 ~ Complete ~54:PNA PROBES FOR PRETARGETED IMAGING AND THERAPY ~71:ZYTOX THERAPEUTICS AB, c/o Marianne Hansson, Blåsutvägen 13 nb lgh 1003, 121 36 Johanneshov, Sweden ~72: AMELIE ERIKSSON KARLSTRÖM;HANNA TANO;KRISTINA WESTERLUND~ 33:SE ~31:2051204-2 ~32:16/10/2020

2023/04613 ~ Complete ~54:ALPHA STIRLING ENGINE ~71:Azelio AB, Forsbrogatan 4, ÅMÅL 662 34, SWEDEN, Sweden ~72: NILSSON, Martin~ 33:SE ~31:2051261-2 ~32:30/10/2020

2023/04568 ~ Provisional ~54:PNEUMATIC JACK ~71:Michael Marx, 3 Maglin Place, Cruise Crescent, Rynfield, South Africa ~72: MARX, Michael;PURDON, John Gregory~

2023/04569 ~ Provisional ~54:SYSTEM AND METHOD FOR REPORTING OFFENCES ~71:OLINSKY, Lauren Barbara, Unit 1 Brookend Office Park, 30 Brookend Close, South Africa ~72: DA FONSECA, Ricardo;OLINSKY, Kevin;OLINSKY, Lauren Barbara;SWALES, Warren~

2023/04578 ~ Complete ~54:THE INVENTION RELATES TO AN EXTRACTION METHOD OF EUCOMMIA ULMODIES LEAF FLAVONOIDS AND ITS APPLICATION IN ACUTE LIVER INJURY ~71:HUNAN ACADEMY

OF CHINESE MEDICINE, No. 58 Lushan Road, Yuelu District, Changsha, Hunan Province, 410000, People's Republic of China ~72: HE, Dan;XIE, Yi;ZENG, Hongliang;ZHANG, Shuihan;ZHOU, Rongrong~

2023/04574 ~ Complete ~54:PREPARATION METHOD OF HEAT-INSULATING AND REFLECTIVE ARTIFICIAL COLOR SAND FOR BUILDINGS ~71:Institute of Applied Chemistry, Jiangxi Academy of Sciences, No. 7777, Changdong Avenue, High-tech Zone, Nanchang City, Jiangxi Province, 330012, People's Republic of China ~72: DONG, Xiaona;FU, Jianping;SUN, Fuqian;XIA, Jun;YOU, Shengyong~

2023/04601 ~ Complete ~54:A SYSTEM FOR HANDLING INDIVIDUAL PRIMARY PACKAGING CONTAINERS ~71:Anheuser-Busch InBev S.A., Grand Place 1, BRUSSELS 1000, BELGIUM, Belgium ~72: DEKOCKER, Wim;DUPERRAY, Philippe Jean Marie;FERREIRA, Glenn;PETRAMALE, Marcelo~ 33:BE ~31:2020/5757 ~32:27/10/2020

2023/04566 ~ Provisional ~54:MYCROKLEEN FORMULATIONS2 ~71:Adolf Menezes, 91/1 Glen Norton Rd, Norton Home Estates, South Africa ~72: Adolf Menezes~

2023/04576 ~ Complete ~54:WATER-SOLUBLE FERTILIZER DILUTING DEVICE ~71:Guizhou Provincial Tea Research Institute, Jinnong Community, Xiaohe District, Guiyang City, Guizhou Province, 550006, People's Republic of China ~72: Jiang Yanyan;Luo Jinlong;Shen Qiang;Zhang Xiaoqin~ 33:CN ~31:2023101285036 ~32:17/02/2023

2023/04586 ~ Complete ~54:A DRYING APPARATUS ~71:GAWLER, John, Dycer, PLOT 30, HOLDING 60 OUKLIPMUUR, EQUESTRIA, PRETORIA, 0184, SOUTH AFRICA, South Africa ~72: LOUW, Andre~ 33:ZA ~31:2020/06786 ~32:30/10/2020

2023/04588 ~ Complete ~54:LINE-1 INHIBITORS TO TREAT DISEASE ~71:TRANSPOSON THERAPEUTICS, INC., 285 Riverside Avenue Suite 250 Westport, Connecticut 06880, United States of America ~72: CLAUDIO STURINO;ECKARD WEBER;MALAY DOSHI;MICHAEL G CORDINGLEY~ 33:US ~31:63/082,185 ~32:23/09/2020;33:US ~31:63/161,055 ~32:15/03/2021

2023/04591 ~ Complete ~54:ANTI-CD73 ANTIBODY AND USE THEREOF ~71:AKESO BIOPHARMA, INC, 6 Shennong Road, Torch Development Zone, Zhongshan, Guangdong 528437, People's Republic of China;AKESO PHARMACEUTICALS, INC., 158 Kangyao Road South, Huangpu, Guangzhou, Guangdong 510799, People's Republic of China ~72: BAIYONG LI;YU XIA;ZHONGMIN WANG~ 33:CN ~31:202011152518.9 ~32:23/10/2020

2023/04594 ~ Complete ~54:FUSIONS WITH CD8 ANTIGEN BINDING MOLECULES FOR MODULATING IMMUNE CELL FUNCTION ~71:ASHER BIOTHERAPEUTICS, INC., 650 Gateway Blvd., Suite 100, South San Francisco, California, 94080, United States of America ~72: DANIELLE C PAPPAS;HENRY C NGUYEN;IRENE NI;IVANA DJURETIC;KELLY DARE MOYNIHAN;PAUL BESSETTE;SHERMAN MICHAEL CHIN;TERRENCE PARK;WEI CHEN;YIK ANDY YEUNG~ 33:US ~31:63/105,162 ~32:23/10/2020;33:US ~31:63/121,663 ~32:04/12/2020;33:US ~31:63/190,669 ~32:19/05/2021

2023/04598 ~ Complete ~54:BIODEGRADABLE CONTAINER CLOSURE AND RESIN THEREFOR ~71:MEREDIAN, INC., 140 Industrial Boulevard, Bainbridge, Georgia, 39817, United States of America ~72: ADAM JOHNSON;ERIC MCCLANAHAN;KARSON DURIE~ 33:US ~31:63/082,558 ~32:24/09/2020

2023/04610 ~ Complete ~54:A STABLE HERBICIDAL COMPOSITION ~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: HAWKINS, Emma Louise;PIROTTE, Alan~ 33:GB ~31:2014872.2 ~32:21/09/2020

2023/04614 ~ Complete ~54:SYSTEM AND METHOD FOR ACQUIRING VEHICLE INFORMATION, AND VEHICLE ~71:Chery Automobile Co., Ltd., No 8, Changchun Road, Economy & Technology Development Zone, WUHU 241006, ANHUI, CHINA (P.R.C.), People's Republic of China ~72: CHEN, Feifeng;ZHOU, Dan~ 33:CN ~31:202011329712.X ~32:24/11/2020

2023/04570 ~ Provisional ~54:MR ~71:Paul Harper, 40 First Street, Springs , 40 First Street Springs , Gauteng, South Africa ~72: Paul Harper~

2023/04590 ~ Complete ~54:BIODEGRADABLE LABELS AND RESIN THEREFOR ~71:MEREDIAN, INC., 140 Industrial Boulevard, Bainbridge, Georgia, 39817, United States of America ~72: ADAM JOHNSON;KARSON DURIE;SATYABRATA SAMANTA~ 33:US ~31:63/082,565 ~32:24/09/2020

2023/04595 ~ Complete ~54:MONITORING SYSTEM FOR PUMP WITH MECHANICAL SEAL LUBRICATION ARRANGEMENT ~71:CORNELL PUMP COMPANY LLC, 16261 Southeast 130th Avenue, Clackamas, Oregon, 97015, United States of America ~72: ADAM LINDEMAN;ANDREW ENTERLINE;COLIN O'CALLAGHAN;LUKE AMSTAD;WILLIAM JAMES WARREN~ 33:US ~31:63/104,800 ~32:23/10/2020

2023/04602 ~ Complete ~54:IN VIVO TARGETING OF T CELLS FOR MRNA THERAPEUTICS ~71:The Trustees of the University of Pennsylvania, 3600 Civic Center Boulevard, 9th Floor, PHILADELPHIA 19104, PA, USA, United States of America ~72: PARHIZ, Hamideh;TOMBACZ, Istvan;WEISSMAN, Drew~ 33:US ~31:63/090,985 ~32:13/10/2020

2023/04606 ~ Complete ~54:DEUTERATED AMINOTHIAZOLE COMPOUNDS AS ANTIVIRAL COMPOUNDS ~71:Innovative Molecules GmbH, Dachauer Str. 65, MÜNCHEN 80335, GERMANY, Germany ~72: GEGE, Christian;KLEYMANN, Gerald~ 33:EP ~31:20204545.6 ~32:29/10/2020

2023/04617 ~ Complete ~54:HERPESVIRUS POLYPEPTIDE VACCINES ~71:The Council of the Queensland Institute of Medical Research, 300 Herston Rd., HERSTON 4006, QLD, AUSTRALIA, Australia ~72: KHANNA, Rajiv;VIJAYENDRA, Dasari~ 33:US ~31:63/088,766 ~32:07/10/2020

2023/04567 ~ Provisional ~54:ANTI-INFLAMMATORY, ANALGESIC AND ANTIPYRETIC SUPPOSITORY ~71:3Gi Investments (Pty) Limited, 13 Helderzichtstraat, Proteahoop, South Africa ~72: GIE, Christo~

2023/04579 ~ Complete ~54:FULL-HYDRAULIC FORMWORK DEVICE FOR SHAFT WALLING ~71:CHANGZHOU WEITONG MINING EQUIPMENT CO., LTD, No. 16, Fukang Road, Xinbei District, Changzhou City, Jiangsu Province, People's Republic of China;CHINA COAL NO. 71 ENGINEERING COMPANY LIMITED, No. 8, North Jianshe Road, Suzhou City, Anhui Province, People's Republic of China;HEFEI DESIGN & RESEARCH INSTITUTE OF COAL INDUSTRY CO., LTD., No. 355, Fuyang North Road, Hefei, Anhui Province, People's Republic of China ~72: BAO, Tingting;CAO, Chuangguo;CHANG, Long;HU, Senxu;LI, Zheng;LIU, Yingcan;LV, Lin;MAN, Donghui;TIAN, Ye;XU, Bin;XU, Huidong;YE, Jinghui;ZHANG, Peng;ZHANG, Yong;ZHOU, Guozheng~ 33:CN ~31:2022110246182 ~32:25/08/2022

2023/04580 ~ Complete ~54:MACHINE LEARNING FOR VEHICLE ALLOCATION ~71:DRIVERDO LLC, 7900 College Boulevard, Suite 141, United States of America ~72: BARTON, Kyri, Elyse;BURKE, Kevin, Michael;HAQUE, Mashhur, Zarif~ 33:US ~31:63/104,582 ~32:23/10/2020

2023/04582 ~ Complete ~54:PHARMACEUTICAL COMPOSITIONS OF A KINASE INHIBITOR ~71:EXELIXIS, INC., 1851 Harbor Bay Parkway, Alameda, CA, United States of America ~72: CHEN, Tzu-Yuan;LIEJANTO, Iswadi~ 33:US ~31:63/110,124 ~32:05/11/2020

2023/04597 ~ Complete ~54:BIODEGRADABLE CONTAINERS AND RESIN THEREFOR ~71:MEREDIAN, INC., 140 Industrial Boulevard, Bainbridge, Georgia, 39817, United States of America ~72: KARSON DURIE;MICHAEL MANG~ 33:US ~31:63/082,551 ~32:24/09/2020

2023/04605 ~ Complete ~54:WOUND IRON CORE, MANUFACTURING METHOD FOR WOUND IRON CORE, AND WOUND IRON CORE MANUFACTURING DEVICE ~71:NIPPON STEEL CORPORATION, 6-1, Marunouchi 2-chome, Chiyoda-ku, TOKYO 100-8071, JAPAN, Japan ~72: MIZOKAMI, Masato;MIZUMURA, Takahito;MOGI, Hisashi;TAKAHASHI, Masaru~ 33:JP ~31:2020-178562 ~32:26/10/2020

2023/04608 ~ Complete ~54:PHARMACEUTICAL FORMULATION ~71:Agios Pharmaceuticals, Inc., 88 Sidney Street, CAMBRIDGE 02139, MA, USA, United States of America ~72: LEUNG, Cheuk-Yui;SIMONE, Eric;YIN, Ophelia Qiping~ 33:US ~31:63/083,834 ~32:25/09/2020;33:US ~31:63/107,196 ~32:29/10/2020;33:US ~31:63/238,483 ~32:30/08/2021

2023/04609 ~ Complete ~54:STABLE HERBICIDAL COMPOSITIONS ~71:UPL Corporation Limited, 5th Floor, New Port 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: HAWKINS, Emma Louise;PIROTTE, Alan~ 33:GB ~31:2014871.4 ~32:21/09/2020

2023/04611 ~ Complete ~54:HETEROARYL HETEROCYCLIC 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: DAI, Guangxiu;XIAO, Kun~ 33:CN ~31:202010993583.8 ~32:21/09/2020;33:CN ~31:202110175357.3 ~32:07/02/2021;33:CN ~31:202111077860.1 ~32:15/09/2021

2023/04612 ~ Complete ~54:NOVEL SERINE PROTEASES ~71:Bayer CropScience LP, 800 North Lindbergh Boulevard, ST. LOUIS 63167, MO, USA, United States of America ~72: BUGG, Kevin;CURTIS, Damian;GINGRICH, Phillip~ 33:US ~31:63/081,271 ~32:21/09/2020

2023/04618 ~ Complete ~54:LIGHT-CURABLE ARTIFICIAL NAILS, METHODS OF PREPARATION AND METHODS OF USE THEREOF ~71:Brilliance of Beauty, Inc., 63 Greene Street, NEW YORK 10012, NY, USA, United States of America ~72: LOTTI, Sahara~ 33:US ~31:63/110,218 ~32:05/11/2020

- APPLIED ON 2023/04/21 -

2023/04622 ~ Complete ~54:ROTATION TILLAGE METHOD FOR PADDY FIELDS IN COLD REGIONS ~71:Institute of Crop Cultivation and Tillage, Heilongjiang Academy of Agricultural Sciences, No. 368, Xuefu Road, Nangang District, Harbin City, Heilongjiang Province, 150086, People's Republic of China ~72: CHEN, Lei;CHENG, Xiaojuan;DONG, Guozhong;DONG, Qinghui;DONG, Wenjun;FENG, Yanzhong;GE, Xuliang;HE, Miao;HUANG, Chengliang;JIANG, Hao;LAI, Yongcai;LI, Fenglan;LI, Jiarui;LI, Kun;LI, Liang;LI, Yongchao;LI, Yuming;LI, Zhugang;LIU, Guibin;LIU, Haiying;LIU, Kai;LIU, Lichao;LIU, Youhong;LUO, Chunhua;MA, Rui;MEN, Longnan;MENG, Qingdong;MENG, Ying;PAN, Wei;REN, Yang;SUN, Bing;SUN, Fuping;SUN, Zhonghua;TANG, Ao;TIAN, Shugang;WANG, Baolin;WANG, Jiangxu;WANG, Lizhi;WANG, Xun;XIA, Tianshu;XIE, Shupeng;YANG, Xianli;YANG, Zhongliang;YANG, Zhongsheng;ZHANG, Jun;ZHANG, Shihong;ZHANG, Weijian;ZHANG, Wenpeng;ZHANG, Xijuan;ZHAO, Pu~ 33:CN ~31:2023102616197 ~32:17/03/2023

2023/04630 ~ Complete ~54:A SENSOR, SYSTEM AND METHOD FOR DETECTING OR SENSING MOISTURE OR WETNESS OF AN ARTICLE ~71:TILKOBLEDE BELGIUM BVBA, Kloosterstraat 180, 1702, Dilbeek, Belgium ~72: BENOIT VAN DE SANDE;BRAM VAN DE SANDE~ 33:NZ ~31:748811 ~32:28/11/2018

2023/04634 ~ Complete ~54:A METHOD FOR SUSTAINABLE GREEN ENERGY OPTIMIZATION FOR EDGE CLOUD COMPUTING WITH RENEWABLE ENERGY RESOURCES ~71:JENA, Soumya Ranjan, FACULTY

ASSOCIATE, DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, MAHINDRA UNIVERSITY, HYDERABAD, TELANGANA, 500043, India; MANOHARAN, S. N., ASSOCIATE PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, VEL TECH RANGARAJAN, DR. SAGUNTHALA R&D INSTITUTE OF SCIENCE AND TECHNOLOGY, AVADI, CHENNAI, TAMIL NADU, 600062, India; PATEL, Shrikant, ASSOCIATE PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE AND APPLICATIONS, DELHI SKILL AND ENTREPRENEURSHIP UNIVERSITY, SECTOR-9, DWARKA, NEW DELHI, 110077, India; SAIBABA, Ch. M. H., ASSISTANT PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING, KONERU LAKSHMAIAH EDUCATION FOUNDATION, GREEN FIELDS, VADDESWAREM, ANDHRA PRADESH, 522302, India; SINGH, Harmandeep, ASSISTANT PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING, CHANDIGARH UNIVERSITY, GHARUAN, SAHIBZADA, AJIT SINGH NAGAR, PUNJAB, 140413, India; SINGH, Jatinder Pal, ASSISTANT PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING, SANT LONGOWAL INSTITUTE OF ENGINEERING & TECHNOLOGY, LONGOWAL, SANGRUR, PUNJAB, 148106, India ~72: JENA, Soumya Ranjan; MANOHARAN, S. N.; PATEL, Shrikant; SAIBABA, Ch. M. H.; SINGH, Harmandeep; SINGH, Jatinder Pal~

2023/04625 ~ Complete ~54: PREPARATION METHOD FOR A ZIF-DERIVED POROUS CARBON-SUPPORTED CO/SE BIATOMIC SITE ORR CATALYST ~71: Taiyuan University of Technology, No. 79 Yingzexi Avenue, Taiyuan City, Shanxi Province, 030000, People's Republic of China ~72: Jie LIAN; Jinyu ZHAO; Xiaomin WANG; Yongzhen WANG; Zhenxin ZHAO ~ 33:CN ~31:202310359916.5 ~32:06/04/2023

2023/04641 ~ Complete ~54: BICYCLIC COMPOUNDS AND USES THEREOF FOR THE TREATMENT OF DISEASES ~71: ATHIRA PHARMA, INC., 18706 Northcreek Parkway, Suite 104, United States of America ~72: BOATMAN, Douglas; CHURCH, Kevin; JOHNSTON, Jewel; KAWAS, Leen; TAYLOR, Robert ~ 33:US ~31:63/108,660 ~32:02/11/2020

2023/04643 ~ Complete ~54: A FOG (FATS, OIL, OR GREASE) SEPARATOR APPARATUS ~71: ECO CLARITY LTD., Office 123, 210 Upper Richmond Road, LONDON SW15 6NP, UNITED KINGDOM, United Kingdom ~72: CLEMES, Christopher Charles ~ 33:ZA ~31:2020/05234 ~32:21/10/2020

2023/04652 ~ Complete ~54: SEALING SYSTEM WITH AUTOMATIC COMPENSATION FOR THERMAL EXPANSION FOR A ROTARY CYLINDRICAL REACTOR ~71: Tecnoored Desenvolvimento Tecnológico S.A., Rua Marechal Deodoro n°186, 18, salas 05 e 06, Pindamonhangaba, S&O PAULO 12401-010, BRAZIL, Brazil ~72: BRASIL, Ludmila Lopes Nascimento; DA SILVA, Ezequiel; DE OLIVEIRA, Ronald Lopes; FR&IS, Fabr&cio Tin&co; GON&ALVES, Guilherme Francisco; POTTER, Stephen Michael; SOARES, &Ivaro Guedes ~ 33:BR ~31:BR102020019375-9 ~32:24/09/2020

2023/04657 ~ Complete ~54: ARTICLES FOR USE IN NON-COMBUSTIBLE AEROSOL PROVISION SYSTEMS ~71: Nicoventures Trading Limited, Globe House, 1 Water Street, LONDON WC2R 3LA, UNITED KINGDOM, United Kingdom ~72: AYINA, Gilbert; DAVIS, Peter; FORD, Hudson; JUMAN, Nadine; SEBOLD, Valerio; WALPOLE, Nicholas ~ 33:GB ~31:2016880.3 ~32:23/10/2020; 33:GB ~31:2103099.4 ~32:05/03/2021

2023/04638 ~ Complete ~54: METHOD OF AUTO-CONVERTING FLUID ENTHALPY TO FLUID JET KINETIC ENERGY THROUGH A CONVERGENT NOZZLE ~71: MAREDI WILSON MPHAHLELE, 7 Firelilly Crescent, Countryview Ext 1, South Africa ~72: MAREDI WILSON MPHAHLELE ~ 33:ZA ~31:2020/06597 ~32:23/10/2020

2023/04646 ~ Complete ~54: INFORMATION PROCESSING DEVICE, METHOD, AND PROGRAM ~71: Sony Group Corporation, 1-7-1, Konan, Minato-ku, TOKYO 1080075, JAPAN, Japan ~72: CHINEN, Toru; HATANAKA, Mitsuyuki ~ 33:JP ~31:2020-168944 ~32:06/10/2020

2023/04658 ~ Complete ~54:OVERSHOT ASSEMBLY ~71:LONGYEAR TM, INC., 2455 South 3600 West, United States of America ~72: BRUBACHER, Adrian;DRENT, Christopher L.;PRIMEVERT, Vincent~ 33:US ~31:63/085,572 ~32:30/09/2020;33:US ~31:63/235,951 ~32:23/08/2021

2023/04628 ~ Complete ~54:FLUID FILTRATION DEVICE ~71:LEWTHWAITE, John Edward, 250 Brakpan Road, Boksburg East, South Africa;LEWTHWAITE, John Michael, 250 Brakpan Road, Boksburg East, South Africa ~72: LEWTHWAITE, John Edward;LEWTHWAITE, John Michael~ 33:ZA ~31:2022/01439 ~32:01/02/2022

2023/04631 ~ Complete ~54:PORTABLE DRINK BLENDER ~71:DART INDUSTRIES INC., 14901 S. Orange Blossom Trail, Orlando, Florida, 32837, United States of America ~72: BAVO DE ZUTTER;DIMITRI M C J BACKAERT;INE M K VANDAELE;JUNYU YE;SANDER SCHELFOUT;WIM DE VOS~ 33:US ~31:17/744,544 ~32:13/05/2022

2023/04635 ~ Complete ~54:METHODS FOR ADAPTING A RADIO LINK PROCEDURE FOR UE POWER SAVING ~71:TELEFONAKTIEBOLAGET LM ERICSSON (PUBL), SE-164 83, Sweden ~72: KAZMI, Muhammad Ali;THANGARASA, Santhan;UESAKA, Kazuyoshi~ 33:US ~31:63/104,177 ~32:22/10/2020

2023/04642 ~ Complete ~54:DATA MANAGEMENT METHOD, DATA MANAGEMENT APPARATUS, AND STORAGE MEDIUM ~71:ZTE CORPORATION, ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, People's Republic of China ~72: WANG, Aijun;YU, Zhen;ZHENG, Xingquan~ 33:CN ~31:202011002790.9 ~32:22/09/2020

2023/04653 ~ Complete ~54:WOUND CORE ~71:NIPPON STEEL CORPORATION, 6-1, Marunouchi 2-chome, Chiyoda-ku, TOKYO 100-8071, JAPAN, Japan ~72: KAWAMURA, Yusuke;MIZUMURA, Takahito~ 33:JP ~31:2020-179266 ~32:26/10/2020

2023/04656 ~ Complete ~54:MECHANICAL BREAKUP ACTUATOR WITH DISRUPTIVE VORTEX CHAMBER ~71:Precision Valve Corporation, 5711 Old Buncombe Road, GREENVILLE 29609, SC, USA, United States of America ~72: FORE, John B.~ 33:US ~31:63/108,669 ~32:02/11/2020

2023/04624 ~ Complete ~54:MOBILE BASKET FOR BRIDGE GUARDRAIL CONSTRUCTION ~71:China Railway Seventh Group Co., LTD, No.1225, Hanghai East Road, Zhengzhou City, Henan Province, 450016, People's Republic of China;Zhengzhou Engineering Co.,LTD of China Railway Seventh Group, No.8, Middle-Longhai Road, Zhengzhou City, Henan Province, 450052, People's Republic of China ~72: CHEN, Xiangyang;JIANG, Yang;LI, Dongyuan;LI, Quanxin;LU, Ping;MA, Shuqiang;SHI, Lei;SUN, Meng;WANG, Haigang;WANG, Junpeng;YANG, Haitao;YANG, Zhi~ 33:CN ~31:202320689672.2 ~32:31/03/2023

2023/04649 ~ Complete ~54:JAK INHIBITORS HAVING A SPECIFIC PARTICLE SIZE DISTRIBUTION ~71:Elanco US Inc., 2500 Innovation Way, GREENFIELD 46140, IN, USA, United States of America ~72: STIRM, Stephen~ 33:US ~31:63/105,147 ~32:23/10/2020

2023/04626 ~ Complete ~54:DEVICE FOR RAPIDLY DETECTING ANTHOCYANINS IN COLORED RICE IN FIELD ~71:Institute of Grain Crops, Yunnan Academy of Agricultural Sciences, 2238 Beijing Road, Panlong District, Kunming City, Yunnan Province, 650205, People's Republic of China ~72: DENG Wei;DONG Wei;GU Anyu;KUI Limei;LI Xiaolin;TU Jian;XU Yuran;ZHANG Jianhua~

2023/04640 ~ Complete ~54:POWER LINE STRINGING SYSTEM AND METHOD ~71:INFRAVISION HOLDINGS PTY LTD, 4 Australia Street, Australia ~72: VAN DER BERG, Cameron;VAN DER BERG, Daniel~ 33:AU ~31:2020903435 ~32:24/09/2020;33:AU ~31:2021902353 ~32:30/07/2021;33:AU ~31:2021106947 ~32:24/08/2021

2023/04644 ~ Complete ~54:SUBSTITUTED N-(2-(2,6-DIOXOPIPERIDIN-3-YL)-1,3-DIOXOISOINDOLIN-5-YL)ARYLSULFONAMIDE ANALOGS AS MODULATORS OF CEREBLON PROTEIN ~71:ST. JUDE CHILDREN'S RESEARCH HOSPITAL, INC., 262 Danny Thomas Place, Memphis, Tennessee, 38105, United States of America ~72: CHARLES G MULLIGHAN;DAS SOURAV;FATEMEH KERAMATNIA;GISELE A NISHIGUCHI;JAEKI MIN;JEANINE PRICE;KEVIN MCGOWAN;MARCUS FISHER;YUNCHAO CHANG;ZORAN RANKOVIC~ 33:US ~31:63/082,365 ~32:23/09/2020

2023/04655 ~ Complete ~54:WOUND CORE ~71:Nippon Steel Corporation, 6-1, Marunouchi 2-chome, Chiyoda-ku, TOKYO 100-8071, JAPAN, Japan ~72: KAWAMURA , Yusuke;MIZUMURA, Takahito~ 33:JP ~31:2020-178898 ~32:26/10/2020

2023/04623 ~ Complete ~54:WATER-PHASE SYNTHESIS METHOD OF TETRABROMO PHENOL TETRAHALOGENATED SUOFONEPHTHALEIN ~71:Jilin Medical University, No.5 Jilin Street, Jilin City, Jilin Province, People's Republic of China ~72: Boyan Jia;Hongwei Lai;Lianhai Jin;Meiyan Sun;Moli Yin;Qing Zhang;Wei Liu;Weilong Yang;Zhiming Xiu~

2023/04627 ~ Complete ~54:A MULTISTAGE HAMMER MILL AND A RESIDUE PROCESSING SYSTEM INCORPORATING SAME ~71:SEED TERMINATOR HOLDINGS PTY LTD, 12 EWEN STREET, KINGSCOTE, SOUTH AUSTRALIA 5223, AUSTRALIA, Australia ~72: BERRY, Nicholas, Kane~ 33:AU ~31:2016903873 ~32:23/09/2016

2023/04633 ~ Complete ~54:METHOD FOR PREPARING FEED FOR IMPROVING BLUE FOX FUR QUALITY ~71:NORTHEAST AGRICULTURAL UNIVERSITY, No. 600 Changjiang Road, Xiangfang District, Harbin, Heilongjiang Province, 250399, People's Republic of China ~72: BI, Chongpeng;LIU, Shusheng;NING, Fangyong;SUN, Jinhua;XIE, Jiajun;XU, Liangmei~

2023/04637 ~ Complete ~54:TES-BASED CATIONIC LIPIDS ~71:TRANSLATE BIO, INC., 200 West Street, Waltham, MA, United States of America ~72: DEROSA, Frank;KARVE, Shrirang~ 33:US ~31:63/082,090 ~32:23/09/2020

2023/04647 ~ Complete ~54:METHOD FOR PRODUCING A PACKAGING FROM A RECYCLABLE MATERIAL ~71:Société des Produits Nestlé S.A., Avenue Nestlé 55, VEVEY 1800, SWITZERLAND, Switzerland ~72: ALLAPICHAH, Sheik Abdullah;GAILLARD, Julien;VISHTAL, Alexey~ 33:EP ~31:20198593.4 ~32:28/09/2020

2023/04650 ~ Complete ~54:COMPOSITION FOR PROMOTING THE SKIN MICROBIOME ~71:Beiersdorf AG, Unnastraße 48, HAMBURG 20253, GERMANY, Germany ~72: FÖLSTER, Heike;HÜPEDEN, Jennifer;LASCHET, Mirja;SELLCKAU, Sabine;TOM DIECK, Karen~ 33:EP ~31:20197602.4 ~32:22/09/2020;33:EP ~31:20197604.0 ~32:22/09/2020;33:EP ~31:21160322.0 ~32:02/03/2021;33:EP ~31:21160323.8 ~32:02/03/2021;33:US ~31:17/189,496 ~32:02/03/2021

2023/04639 ~ Complete ~54:CHARACTERIZATION OF IMPURITIES IN ADENO-ASSOCIATED VIRUS (AAV) SAMPLES AND FORMULATION COMPOSITIONS TO STABILIZE AAV ~71:REGENERON PHARMACEUTICALS, INC., 777 Old Saw Mill River Road, Tarrytown, United States of America ~72: JIANG, Bowen;LIU, Dingjiang;TZUL, Franco~ 33:US ~31:63/108,480 ~32:02/11/2020

2023/04645 ~ Complete ~54:PROTECTIVE PACKAGING FOR SUITCASES ~71:VINGBOX IBÉRICA, S.L., Centro Comercial Puerta de Banús bloque D-1ª, Marbella (Málaga), 29660, Marbella Málaga, Spain ~72: JORGE FERNÁNDEZ CARMONA;JOSÉ IGNACIO GÓMEZ NÚÑEZ~ 33:ES ~31:U202032200 ~32:09/10/2020

2023/04651 ~ Complete ~54: COSMETIC COMPOSITION OF LOW OSMOLALITY ~71: Beiersdorf AG, Unnastrasse 48, HAMBURG 20253, GERMANY, Germany ~72: FÖLSTER, Heike; HAMANN, Tina; RICHTER, Daniel; SCHÖNDIENST, Petra ~ 33: EP ~31: 20197603.2 ~32: 22/09/2020

2023/04654 ~ Complete ~54: CENTRE BYPASS MUD HAMMER ~71: Good Water Holdings Pty Ltd, 32A Second Avenue, CLAREMONT 6010, WESTERN AUSTRALIA, AUSTRALIA, Australia ~72: STRANGE, Warren Ross ~ 33: AU ~31: 2020903569 ~32: 02/10/2020

2023/04659 ~ Complete ~54: REGIMENS FOR THE TREATMENT OF HAIR LOSS DISORDERS WITH DEUTERATED JAK INHIBITORS ~71: SUN PHARMACEUTICAL INDUSTRIES, INC., 2 Independence Way, United States of America ~72: CASSELLA, James V. ~ 33: US ~31: 63/106,790 ~32: 28/10/2020; 33: US ~31: 63/155,637 ~32: 02/03/2021

2023/04621 ~ Complete ~54: A METHOD FOR MULTIMODAL LOGISTICS DELIVERY OF GOODS BASED ON BLOCKCHAIN TECHNOLOGY ~71: Zhejiang Wanli University, No. 8, South Qian Hu Road, Ningbo, Zhejiang, 315100, People's Republic of China ~72: YanLing Wang; ZiWei Zheng ~

2023/04629 ~ Complete ~54: METHOD OF TREATING MELANOCORTIN-4 RECEPTOR PATHWAY-ASSOCIATED DISORDERS ~71: CHARITÉ-UNIVERSITÄTSMEDIZIN BERLIN, Charitéplatz 1, 10117, Berlin, Germany; RHYTHM PHARMACEUTICALS, INC., 500 Boylston Street, 11th Floor, Boston, Massachusetts, 02116, United States of America ~72: BART HENDERSON; LEONARDUS H.T. VAN DER PLOEG; PETER KUHNEN ~ 33: US ~31: 62/235,003 ~32: 30/09/2015

2023/04632 ~ Complete ~54: ASSEMBLED SPECIAL-SHAPED PARTITION WALL STRUCTURE ~71: JIANGSU VOCATIONAL INSTITUTE OF ARCHITECTURAL TECHNOLOGY, No.26 Xueyuan Street, Xuzhou, Jiangsu, 221116, People's Republic of China ~72: DEPING JIANG; DONG WANG; GUOHUA TIAN; JIE ZHANG; XIANG JI ~ 33: CN ~31: 2023102083991 ~32: 07/03/2023

2023/04636 ~ Complete ~54: PIPERAZINE-BASED CATIONIC LIPIDS ~71: TRANSLATE BIO, INC., 200 West Street, Waltham, MA, United States of America ~72: DASARI, Ramesh; KARMAKAR, Saswata; LANDIS, Ryan ~ 33: US ~31: 63/082,101 ~32: 23/09/2020

2023/04648 ~ Complete ~54: COMPOSITION, CORE AND MOULD FOR CASTING AND MOULDING PROCESSES ~71: Foseco International Limited, 1 Midland Way, Central Park, BARLBOROUGH LINKS S43 4XA, DERBYSHIRE, UNITED KINGDOM, United Kingdom ~72: HAANAPPEL, Vincent; LINKE, Thomas ~ 33: IB ~31: 2020/079890 ~32: 23/10/2020

ASSIGNMENTS IN TERMS OF SECTION 60-REGULATIONS 58-60 AND 64 (1)

Application Number	Assignor	Assignee
2021/09199	ENOVIX OPERATIONS INC.	ENOVIX CORPORATION
2007/02767	OUTOTEC OYJ	OUTOTEC (FINLAND) OY
2007/02767	OUTOTEC (FINLAD) OY	METSO MINERALS OY
2018/08293	MOUDGIL, RAJEEV	DPI DAYLIGHTING PRIVATE LIMITED
2019/01165	AVAX SA 407 CC	GLOBAL SPECIALISED SYSTEMS (KZN) (PTY) LTD
2019/00987	MOUDGIL, RAJEEV	DPI DAYLIGHTING PRIVATE LIMITED
2023/03609	BEIJING UNIVERSITY OF AERONAUTICS AND ASTRONAUTICS	BEIHANG UNIVERSITY

Application Number	Assignor	Assignee
2021/04935	JIN HUILONG	HEBEI NORMAL UNIVERSITY
2014/02402	MASTER BLASTER PROPRIETARY LIMITED	SAEXCO PTY LTD (HYPOTHECATION)
2007/02767	OUTOTEC OYJ	OUTOTEC (FINLAND) OY
2007/02767	OUTOTEC (FINLAND) OY	METSO MINERALS OY
2021/04935	JIN HUILONG	HEBEI NORMAL UNIVERSITY
2014/02402	MASTER BLASTER PROPRIETARY LIMITED	SAEXCO PTY LTD (HYPOTHECATION)
2016/03352	MASTER BLASTER PROPRIETARY LIMITED	SAEXCO PTY LTD (HYPOTHECATION)
2021/09005	ANTIOS THERAPEUTICS, INC.	OSPEDALE SAN RAFFAELE S.R.L. IRBM S.P.A. ISTITUTO NAZIONALE DI GENETICA MOLECOLARE - INGM
2020/05860	FU ZHOU UNIVERSITY	FUJIAN HOTION CONSTRUCTION QUALITY INSPECTION CO., LTD.
2023/03851	BEIJING UNIVERSITY OF AERONAUTICS AND ASTRONAUTICS	BEIHANG UNIVERSITY
2022/08202	SUQIAN UNIVERSITY	HUZHOU HEALTH TECHNOLOGY INNOVATION CO. LTD.
2023/02073	KAHN, ARI	STARLOGIK IP LLC
2021/03926	PAUL SAAD	FUTURELIFE HEALTH PRODUCTS PROPRIETARY LIMITED
2005/07421	OUTOTEC OYJ	OUTOTEC (FINLAND) OY
2021/07069	ARETHA BAUWENS HOLDINGS (PTY) LTD	MARTIN-JEAN BAUWENS
2016/03732	PLANTPAPER HOLDING APS	ELLEPOT A/S
2018/05977	GUANGZHOU INSTITUTES OF BIOMEDICINE AND HEALTH, CHINESE ACADEMY OF SCIENCES	GUANGDONG GOOD MEDICINE AND HEALTH TECHNOLOGY CO, LTD.
2018/03518	CHENANGO TWO LLC	CURRAHEE HOLDING COMPANY INC.
2019/08405	SUDWOLLE GMBH & CO. KG and SUDWOLLE GROUP GMBH	SUDWOLLE GROUP GMBH
2022/06055	ANAKURIA THERAPEUTICS, INC.	JANSSEN PHARMACEUTICS, INC.
2016/07764	ANAKURIA THERAPEUTICS, INC.	JANSSEN PHARMACEUTICS, INC.
2021/09307	THE UNIVERSITY OF NOTTINGHAM, PBD BIOTECH LIMITED	PBD BIOTEVH LIMITED
2018/00921	METSO MINERALS INDUSTRIES, INC.	METSO OUTOTEC USA INC.
2016/00871	METSO MINERALS INDUSTRIES, INC.	METSO OUTOTEC USA INC.
2009/01512	CHIYODA CORPORATION	KELLOGG BROWN & ROOT LLC
2013/03134	CATALYST BIOSCIENCES, INC.	GC BIOPHARMA CORP.
2020/00905	CHENANGO ZERO LLC	CHENANGO TWO LLC
2022/10072	CS CATALYST SERVICES (PTY) LTD, JAKOBUS BARNARD,	CATTRACER UK LIMITED

Application Number	Assignor	Assignee
	RIAAN DANIEL OOSTHUIZEN AND CONAN COLE	
2022/10072	CATTRACER UK LIMITED	CS CATALYST SERVICES (PTY) LTD, JAKOBUS BARNARD, RIAAN DANIEL OOSTHUIZEN AND CONAN COLE
2022/10072	CS CATALYST SERVICES (PTY) LTD, JAKOBUS BARNARD, RIAAN DANIEL OOSTHUIZEN AND CONAN COLE	CATTRACER UK LIMITED
2017/08065	JANSSEN PHARMACEUTICA NV	RAPPORT THERAPEUTICS, INC.
2019/03291	JANSSEN PHARMACEUTICA NV	RAPPORT THERAPEUTICS, INC.
2015/01520	VELOS INTERNATIONAL LIMITED	SUN PATENT TRUST
2018/02775	MAKHENE EZEKIEL RATSHEPHE WRIGHT	BELOSHOANE DEVELOPMENT HUB NPO
2021/05066	IDAC HOLDINGS, INC.	INTERDIGITAL PATENT HOLDINGS, INC.
2022/01800	IDAC HOLDINGS, INC.	INTERDIGITAL PATENT HOLDINGS, INC.
2020/02856	IDAC HOLDINGS, INC.	INTERDIGITAL PATENT HOLDINGS, INC.
2021/01187	IDAC HOLDINGS, INC.	INTERDIGITAL PATENT HOLDINGS, INC.
2021/00865	IDAC HOLDINGS, INC.	INTERDIGITAL PATENT HOLDINGS, INC.
2020/04261	IDAC HOLDINGS, INC.	INTERDIGITAL PATENT HOLDINGS, INC.
2019/07281	IDAC HOLDINGS, INC.	INTERDIGITAL PATENT HOLDINGS, INC.
2019/05120	IDAC HOLDINGS, INC.	INTERDIGITAL PATENT HOLDINGS, INC.
2019/01618	GREG LOUIS GUYE	MAGIC ORANGE (PTY) LTD
2021/05707	IDAC HOLDINGS, INC.	INTERDIGITAL PATENT HOLDINGS, INC.
2020/02892	IDAC HOLDINGS, INC.	INTERDIGITAL PATENT HOLDINGS, INC.
2020/06233	IDAC HOLDINGS, INC.	INTERDIGITAL PATENT HOLDINGS, INC.
2021/00768	IDAC HOLDINGS, INC.	INTERDIGITAL PATENT HOLDINGS, INC.
2021/00817	IDAC HOLDINGS, INC.	INTERDIGITAL PATENT HOLDINGS, INC.
2021/01984	IDAC HOLDINGS, INC.	INTERDIGITAL PATENT HOLDINGS, INC.
2019/08359	HUNTLEIGH TECHNOLOGY LIMITED	ARJO IP HOLDING AKTIEBOLAG
2019/04929	PHASEBIO PHARMACEUTICALS, INC.	JI XING PHARMACEUTICALS HONG KONG LIMITED
2019/06011	SHANGHAI FOCHON PHARMACEUTICALS, LTD.	FOCHON PHARMACEUTICALS, LTD.
2022/06774	JIANGUO ZHU; PANFENG REN and PEIPEI WANG	JIANGSU OCEAN UNIVERSITY+
2017/06971	SOCIETE NATIONALE SNCF	SNCF VOYAGEURS
2017/07921	SOCIETE NATIONALE SNCF	SNCF VOYAGEURS
2009/05440	PROMINDUS (ACTIONS PROMOTIONELLES DANS L'INDUSTRIE ET LE COMMERCE)	LAPROPHAN
2022/03411	K-GEN, INC.	K-GEN THERAPEUTICS, INC.
2015/03146	SESEN BIO, INC.	F. HOFFMANN-LA ROCHE LTD
2017/02985	SESEN BIO, INC.	F. HOFFMANN-LA ROCHE LTD

CHANGE OF NAME IN TERMS OF REGULATION 39

Application Number	In the name of	New name
2021/09199	ENOVIX CORPORATION	ENOVIX OPERATIONS INC.
2007/02767	METSO MINERALS OY	METSO OUTOTEC FINLAND OY
2020/03615	PSIOXUS THERAPEUTICS LIMITED	AKAMIS BIO LIMITED
2020/00388	PSIOXUS THERAPEUTICS LIMITED	AKAMIS BIO LIMITED
2019/07351	PSIOXUS THERAPEUTICS LIMITED	AKAMIS BIO LIMITED
2019/00644	PSIOXUS THERAPEUTICS LIMITED	AKAMIS BIO LIMITED
2018/03523	PSIOXUS THERAPEUTICS LIMITED	AKAMIS BIO LIMITED
2018/01589	PSIOXUS THERAPEUTICS LIMITED	AKAMIS BIO LIMITED
2017/07269	PSIOXUS THERAPEUTICS LIMITED	AKAMIS BIO LIMITED
2016/03646	PSIOXUS THERAPEUTICS LIMITED	AKAMIS BIO LIMITED
2006/10763	PSIOXUS THERAPEUTICS LIMITED	AKAMIS BIO LIMITED
2023/03443	SOMERSET INTERNATIONAL FINANCE LIMITED	SOMERSET INTERNATIONAL FINANCE DESIGNATED ACTIVITY COMPANY
2014/03783	MODERNA THERAPEUTICS, INC.	MODERNATX, INC.
2021/06519	CONATUS PHARMACEUTICALS INC.	HISTOGEN INC.
2014/02547	MODERNA THERAPEUTICS, INC.	MODERNATX, INC.
2012/00962	MONTEAGLE TRUCKING (PTY) LIMITED	CONNECT INVESTMENTS (PTY) LIMITED
2019/04714	MONTEAGLE TRUCKING (PTY) LIMITED	CONNECT INVESTMENTS (PTY) LIMITED
2007/03054	MCNEILL-PPC INC.	JOHNSON & JOHNSON CONSUMER INC.
2018/03518	CURRAHEE HOLDING COMPANY INC.	JOHNSON & JOHNSON CONSUMER INC.
2016/00743	LEONARDO MW LTD	LEONARDO UK LTD
2012/07045	MCNEILL-PPC	JOHNSON & JOHNSON CONSUMER INC.
2013/06683	CASAR DRAHTSEILWERK SAAR GMBH	WIRECO GERMANY GMBH
2019/03868	KME SPECIAL PRODUCTS & SOLUTIONS GMBH	CUNOVA GMBH
2021/01967	KME SPECIAL PRODUCTS & SOLUTIONS GMBH	CUNOVA GMBH
2021/01455	KME SPECIAL PRODUCTS & SOLUTIONS GMBH	CUNOVA GMBH
2021/05340	KME SPECIAL PRODUCTS & SOLUTIONS GMBH	CUNOVA GMBH
2005/08073	CASAR DRAHTSEILWERK SAAR	WIRECO GERMANY GMBH

Application Number	In the name of	New name
	GMBH	
2009/08380	CASAR DRAHTSEILWERK SAAR GMBH	WIRECO GERMANY GMBH
2008/04090	CASAR DRAHTSEILWERK SAAR GMBH	WIRECO GERMANY GMBH
2017/06971	SNCF MOBILITED	SOCIETE NATIONALE SNCF
2017/0792	SNCF MOBILITED	SOCIETE NATIONALE SNCF
2015/03146	ELEVEN BIOTHERAPEUTICS, INC.	SESEN BIO, INC.

PATENT LICENSES IN TERMS OF SECTION 53 (7)-REGULATIONS 62 AND 63

No records available

PATENT APPLICATIONS ABANDONED OR WITHDRAWN

No records available

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 that **BEIJING KAWIN TECHNOLOGY SHARE-HOLDING CO., LTD**, whose address for service is **ADAMS & ADAMS, LYNNWOOD MANOR, PRETORIA** has applied to the registrar for the restoration of Patent No: **2020/04861** entitled **IL-4RA ANTIBODY AND USE THEREOF**, dated **01/02/2018**, which lapsed on **01/02/2022** owing to the non-payment of the prescribed renewal fee.

Any person may oppose the restoration of the patent by lodging form P19 within two months of the date of this advertisement.

Notice is hereby given that **KONINKLIJKE PHILIPS ELECTRONICS N.V.**, whose address for service is **ADAMS & ADAMS, LYNNWOOD MANOR, PRETORIA** has applied to the registrar for the restoration of Patent No: **2016/06173** entitled **IMPROVED FREQUENCY BAND EXTENSION IN AN AUDIO SIGNAL DECODER**, dated **04/02/2015**, which lapsed on **04/02/2020** owing to the non-payment of the prescribed renewal fee.

Any person may oppose the restoration of the patent by lodging form P19 within two months of the date of this advertisement.

Notice is hereby given that **KONINKLIJKE PHILIPS ELECTRONICS N.V.**, whose address for service is **ADAMS & ADAMS, LYNNWOOD MANOR, PRETORIA** has applied to the registrar for the restoration of Patent No: **2017/02631** entitled **WIRELESS INDUCTIVE POWER TRANSFER**, dated **11/09/2015**, which lapsed on **26/12/2019** owing to the non-payment of the prescribed renewal fee.

Any person may oppose the restoration of the patent by lodging form P19 within two months of the date of this advertisement.

Notice is hereby given that **KONINKLIJKE PHILIPS ELECTRONICS N.V.**, whose address for service is **ADAMS & ADAMS, LYNNWOOD MANOR, PRETORIA** has applied to the registrar for the restoration of Patent No:

2017/00690 entitled **SYSTEM FOR ANTI-BIOFOULING**, dated **30/06/2015**, which lapsed on **30/06/2019** owing to the non-payment of the prescribed renewal fee.

Any person may oppose the restoration of the patent by lodging form P19 within two months of the date of this advertisement

Notice is hereby given that **KONINKLIJKE PHILIPS ELECTRONICS N.V.**, whose address for service is **ADAMS & ADAMS, LYNNWOOD MANOR, PRETORIA** has applied to the registrar for the restoration of Patent No: **2017/08368** entitled **IMPROVED FREQUENCY BAND EXTENSION IN AN AUDIO SIGNAL DECODER**, dated **04/02/2015**, which lapsed on **28/11/2018** owing to the non-payment of the prescribed renewal fee.

Any person may oppose the restoration of the patent by lodging form P19 within two months of the date of this advertisement

Notice is hereby given that **SURGICAL SPECIALITIES CORPORATION**, whose address for service is **ADAMS & ADAMS, LYNNWOOD MANOR, PRETORIA** has applied to the registrar for the restoration of Patent No **2017/03442** entitled **BRAIDED SUTURE COAT**, dated **04/11/2015**, which lapsed on **31/01/2020** owing to the non-payment of the prescribed renewal fee.

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Any person may oppose the restoration of the patent by lodging form P19 within two months of the date of this advertisement.

Notice is hereby given that **KONINKLIJKE PHILIPS ELECTRONICS N.V.**, whose address for service is **ADAMS & ADAMS, LYNNWOOD MANOR, PRETORIA** has applied to the registrar for the restoration of Patent No: **2014/03081** entitled **APPARATUS AND METHOD FOR DYNAMIC RANGE TRANSFORMING OF IMAGES**, dated **20/09/2012**, which lapsed on **25/05/2016** owing to the non-payment of the prescribed renewal fee.

Any person may oppose the restoration of the patent by lodging form P19 within two months of the date of this advertisement.

Notice is hereby given that **KONINKLIJKE PHILIPS ELECTRONICS N.V.**, whose address for service is **ADAMS & ADAMS, LYNNWOOD MANOR, PRETORIA** has applied to the registrar for the restoration of Patent No: **2017/04623** entitled **OPTIMIZING HIGH DYNAMIC RANGE IMAGES FOR PARTICULAR DISPLAYS**, dated **02/09/2015**, which lapsed on **30/07/2021** owing to the non-payment of the prescribed renewal fee.

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Any person may oppose the restoration of the patent by lodging form P19 within two months of the date of this advertisement.

Notice is hereby given that **KONINKLIJKE PHILIPS ELECTRONICS N.V.**, whose address for service is **ADAMS & ADAMS, LYNNWOOD MANOR, PRETORIA** has applied to the registrar for the restoration of Patent No:

2016/07453 entitled **WIRELESS INDUCTIVE POWER TRANSFER**, dated **20/03/2015**, which lapsed on **30/04/2019** owing to the non-payment of the prescribed renewal fee.

Any person may oppose the restoration of the patent by lodging form P19 within two months of the date of this advertisement.

Notice is hereby given that **KONINKLIJKE PHILIPS ELECTRONICS N.V.**, whose address for service is **ADAMS & ADAMS, LYNNWOOD MANOR, PRETORIA** has applied to the registrar for the restoration of Patent No: **2017/03636** entitled **WIRELESS INDUCTIVE POWER TRANSFER**, dated **13/10/2015**, which lapsed on **30/07/2019** owing to the non-payment of the prescribed renewal fee.

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THE PATENTS ACT, No. 57 OF 1978

VOLUNTARY SURRENDER OF A PATENT UNDER SECTION 64 (1), REGULATION 67 OF THE ACT

No records available

APPLICATIONS TO AMEND SPECIFICATION

THE PATENTS ACT, 1978

APPLICATIONS TO AMEND SPECIFICATION

Applicant: ALSTOM TRANSPORT TECHNOLOGIES 48 Rue Albert Dhalenne 93400 Saint-Ouen. Request permission to amend the specification of letters no: **2017/06343** of **20/09/2017** for **AN OBSTACLE DETECTION DEVICE, FOR A RAILWAY VEHICLE.**

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

Applicant: LANXESS Deutschland GmbH Kennedyplatz 1, KÖLN 50569, GERMANY. Request permission to amend the specification of letters no: **2021/03841** of **04/06/2021** for **CAPS WITH SAFETY FUNCTION FOR PREVENTION OF EXCESSIVE PRESSURE.**

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

Applicant: J & J GREEN PAPER, INC P O BOX 911, HALLANDALE, FL 33008, USA. Request permission to amend the specification of lettersn no: **2020/07252** of **20/11/2020** for **RECYCLABLE COMPOSITION FOR WATERPROOFING PAPER UTILIZING PLANT DERIVED WAXES, AND PELLETS UTILIZING SAID COMPOSITION.**

A copy of the original specification on which the proposed amendment is indicated inred, is now available for public inspection at the Patent Office .

Any notice of opposition (on Patent Form 19) must be lodged at the Patent Office within two months from the date hereof.

Registrar of Patents

Applicant: BYRNA TECHNOLOGIES INC. 100 Burt Road, Suite 115, Andover, MA 01810. Request permission to amend the specification of letters no: **2016/03657** of **26/5/2016** for **A PROJECTILE.**

A copy of the original specification on which the proposed amendment is indicated inred, is now available for public inspection at the Patent Office .

Any notice of opposition (on Patent Form 19) must be lodged at the Patent Office within two months from the date hereof.

Registrar of Patents

Applicant: UNIVERSITY OF CAPE TOWN Lovers Walk 7700 Rondebosch, Cape Town. Request permission to amend the specification of letters no: **2019/03018** of **14/05/2019** for **A METHOD OF COATING A MEMBRANE WITH A CATALYST.**

A copy of the original specification on which the proposed amendment is indicated inred, is now available for public inspection at the Patent Office .

Any notice of opposition (on Patent Form 19) must be lodged at the Patent Office within two months from the date hereof.

Registrar of Patents

Applicant: UNIVERSITY OF CAPE TOWN Lovers Walk 7700 Rondebosch, Cape Town. Request permission to amend the specification of letters no: **2019/03017** of **14/05/2019** for **PIPE LEAK MEASUREMENT AND ASSESSMENT.**

A copy of the original specification on which the proposed amendment is indicated inred, is now available for public inspection at the Patent Office .

Any notice of opposition (on Patent Form 19) must be lodged at the Patent Office within two months from the date hereof.

Registrar of Patents

Applicant: TEXAS TECH UNIVERSITY SYSTEM P.O. Box 42007 Lubbock TX 79409-2007., MCGLONE, John, J. P.O. Box 777 Slaton TX 79364 Request permission to amend the specification of letters no:

2019/01285 of 28/02/2019 for METHODS AND COMPOSITIONS FOR MODIFYING THE BEHAVIOR OF ANIMALS.

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

Applicant: HEIDELBERG PHARMA RESEARCH GMBH Gregor-Mendel-Strasse 22, 68526 Ladenburg. Request permission to amend the specification of letters no: 2019/08158 of 09/12/2019 for NOVEL METHOD FOR SYNTHESIZING AMANITINS.

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

Applicant: ESCO Group LLC 2141 NW 25th Avenue, PORTLAND 97210-2578, OR, USA. Request permission to amend the specification of letters no: 2018/07814 of 20/11/2018 for HANDLING SYSTEM FOR GROUND-ENGAGING WEAR PARTS SECURED TO EARTH WORKING EQUIPMENT.

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

Applicant: XINJIANG GOLDWIND SCIENCE & TECHNOLOGY CO., LTD. No. 107 Shanghai Road, Economic & Technological Development Zone Urumqi, Xinjiang 830026. Request permission to amend the specification of letters patent no: 2022/06893 of 21/06/2022 for ASSEMBLY METHOD AND FIXING DEVICE FOR ELECTRIC MOTOR.

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

Applicant: REGENERON PHARMACEUTICALS INC. 777 Old Saw Mill River Road, Tarrytown, NY 10591.
Request permission to amend the specification of letters patent no: **2015/06601** of **14/03/2014** for **SERUM-FREE CELL CULTURE MEDIUM**.

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

Applicant: ESCO Group LLC 2141 NW 25th Avenue, PORTLAND 97210, OR, USA. Request permission to amend the specification of letters patent no: **2018/07356** of **02/11/2018** for **A WEAR PART FOR EARTH WORKING EQUIPMENT**.

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

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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Photocopies: **R1, 00 per page**

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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: 2007/10975. 22: 2007/12/18. 43: 2023/02/14

51: A61K; C07K; G01N

71: Dana-Farber Cancer Institute, Emory University, The Brigham and Women's Hospital, Inc., The President and Fellows of Harvard College

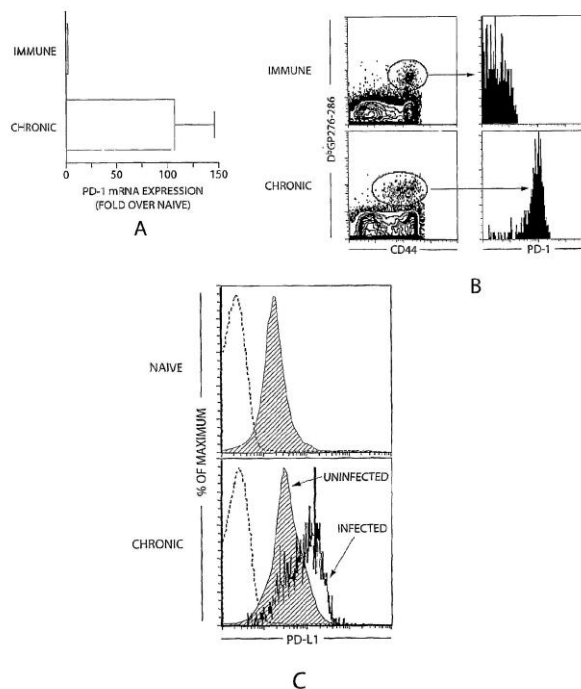
72: BARBER, Daniel, WHERRY, E. John, AHMED, Rafi, FREEMAN, Gordon, DORFMAN, David M., SHARPE, Arlene

33: US 31: 60/688,872 32: 2005-06-08

54: METHODS AND COMPOSITIONS FOR THE TREATMENT OF PERSISTENT INFECTIONS AND CANCER BY INHIBITING THE PROGRAMMED CELL DEATH 1 (PD-1) PATHWAY

00: -

The present invention provides methods and compositions for the treatment, prevention, or reduction of persistent infections, such as chronic infections, latent infections, and slow infections and cancer. The methods and compositions of the invention are also useful for the alleviation of one or more symptoms associated with such infections and cancer.



21: 2008/02500. 22: 2008/03/18. 43: 2023/02/28

51: A61K; A61P; C07K; C12N

71: Roche Glycart AG

72: UMANA, Pablo, MOESSNER, Ekkehard

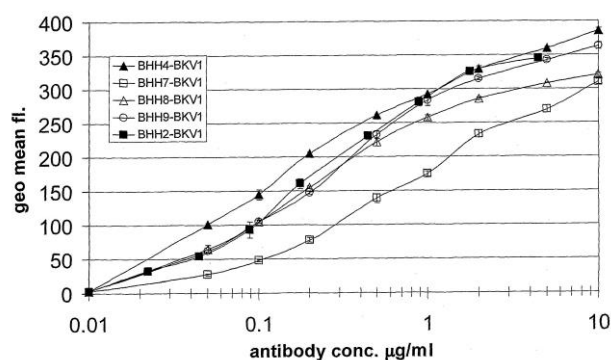
33: US 31: 60/711,454 32: 2005-08-26

54: MODIFIED ANTIGEN BINDING MOLECULES WITH ALTERED CELL SIGNALING ACTIVITY

00: -

The present invention relates to modified antigen binding molecules (ABMs). In particular embodiments, the present invention relates to recombinant monoclonal antibodies or fragments, including chimeric, primatized or humanized antibodies or fragments, having altered ability to mediate cell signaling activity by a target antigen, and/or altered ability to mediate cross-linking of one or more target antigens. In addition, the present invention relates to nucleic acid molecules encoding

such modified ABMs, and vectors and host cells comprising such nucleic acid molecules. The invention further relates to methods for producing the modified ABMs of the invention, and to methods of using these modified ABMs in treatment of disease. In addition, the present invention relates to modified ABMs with modified glycosylation having improved therapeutic properties, including antibodies with increased Fc receptor binding and increased effector function.



21: 2011/08275. 22: 2011/11/10. 43: 2023/02/27
51: A61K; A61P

71: Pearl Therapeutics, Inc.

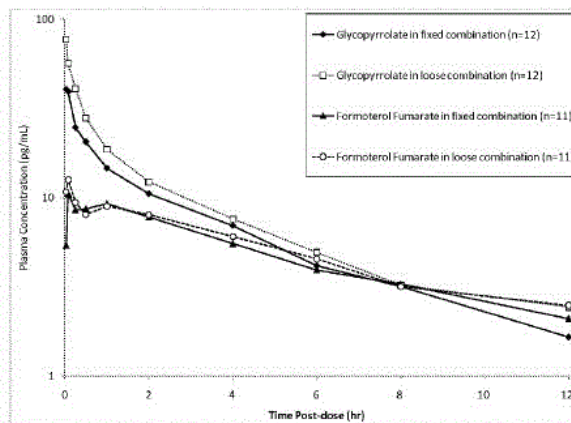
72: VEHRING, Reinhard, HARTMAN, Michael Steven, SMITH, Adrian Edward, JOSHI, Vidya B., DWIVEDI, Sarvajna Kumar, LECHUGA-BALLESTEROS, David

33: US 31: 61/182,565 32: 2009-05-29

54: RESPIRATORY DELIVERY OF ACTIVE AGENTS

00: -

Compositions, methods and systems are provided for pulmonary or nasal delivery of two or more active agents via a metered dose inhaler. In one embodiment, the compositions include a suspension medium, active agent particles, and suspending particles, in which the active agent particles and suspending particles form a co-suspension within the suspension medium.



21: 2013/01611. 22: 2013/03/04. 43: 2013/09/12
51:

71: RSC MINING (PTY) LTD

72: STEYN JOHAN

33: ZA 31: 2011/09192 32: 2011-12-14

54: ROCK BOLT

00: -

A rock bolt which includes an elongate tubular member which has an open first end and an opposing second end, and a head comprising a body which is integrally forged with the shank and which is located at the first end.

21: 2015/00247. 22: 2015/01/14. 43: 2023/03/13
51: A61K

71: BOARD OF REGENTS, THE UNIVERSITY OF TEXAS SYSTEM

72: MOLLDREM, Jeffrey, SERGEEVA, Anna

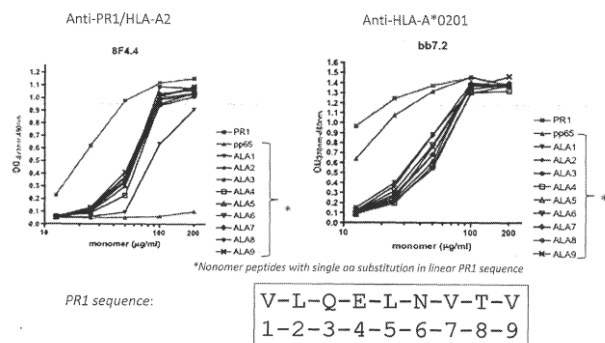
33: US 31: 61/669,967 32: 2012-07-10

33: US 31: 61/702,916 32: 2012-09-19

54: MONOCLONAL ANTIBODIES FOR USE IN DIAGNOSIS AND THERAPY OF CANCERS AND AUTOIMMUNE DISEASE

00: -

The specification describes the sequences for antibodies that recognize the HLA-A2- restricted peptide PR-1 in the context of HLA presentation on the surface of cancer cells. Use of these antibodies in the diagnosis and treatment of cancer and immune-related diseases are also provided.



21: 2015/06602. 22: 2015/09/07. 43: 2023/03/14
51: A61K; C07D; A61P
71: GENZYME CORPORATION
72: SIEGEL, CRAIG, ZHAO, JIN
33: US 31: 61/791,706 32: 2013-03-15
54: SALTS FORMS OF (S)-QUINUCLIDIN-3-YL (2-(2-(4-FLUOROPHENYL)THIAZOL-4-YL)PROPAN-2-YL)CARBAMATE

00: -

The present invention relates to novel salt forms of (S)-Quinuclidin-3-yl (2-(2-(4-fluorophenyl)thiazol-4-yl)propan-2-yl)carbamate useful as an inhibitor of glucosylceramide synthase (GCS) and for the treatment metabolic diseases, such as lysosomal storage diseases, either alone or in combination with enzyme replacement therapy, and for the treatment of cancer.

21: 2016/05027. 22: 2016/07/19. 43: 2023/02/27
51: C07D
71: Agenebio, Inc.

72: MEKONNEN, Belew, BUTERA, John A., HUANG, Jianxing

33: US 31: 61/919,394 32: 2013-12-20

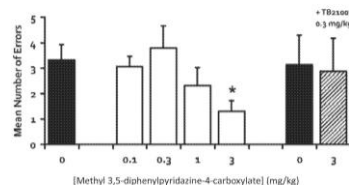
33: US 31: 61/919,390 32: 2013-12-20

54: BENZODIAZEPINE DERIVATIVES, COMPOSITIONS, AND METHODS FOR TREATING COGNITIVE IMPAIRMENT

00: -

This invention relates to benzodiazepine derivatives, compositions comprising therapeutically effective amounts of those benzodiazepine derivatives and methods of using those derivatives or compositions in treating cognitive impairment associated with central nervous system (CNS) disorders. In particular, it relates to the use of a $\alpha 5$ -containing GABAA receptor agonist (e.g., a $\alpha 5$ -containing GABAA receptor positive allosteric modulator) as described herein in treating cognitive impairment

associated with central nervous system (CNS) disorders in a subject in need or at risk thereof, including, without limitation, subjects having or at risk for age-related cognitive impairment, Mild Cognitive Impairment (MCI), amnesic MCI (aMCI), Age-Associated Memory Impairment (AAMI), Age Related Cognitive Decline (ARCD), dementia, Alzheimer's Disease (AD), prodromal AD, post traumatic stress disorder (PTSD), schizophrenia, bipolar disorder, amyotrophic lateral sclerosis (ALS), cancer-therapy-related cognitive impairment, mental retardation, Parkinson's disease (PD), autism spectrum disorders, fragile X disorder, Rett syndrome, compulsive behavior, and substance addiction.



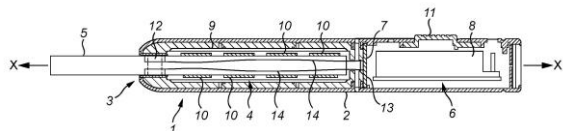
21: 2016/05859. 22: 2016/08/23. 43: 2023/02/16
51: A24F
71: Nicoventures Trading Limited
72: KAUFMAN, Duane Anthony, ROBINSON, Jesse Eugene

33: US 31: 61/968,780 32: 2014-03-21

54: APPARATUS FOR HEATING SMOKABLE MATERIAL

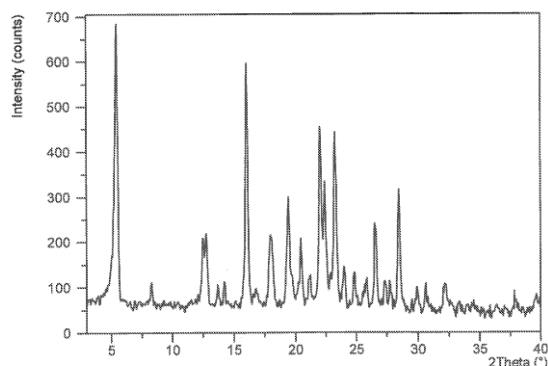
00: -

An apparatus (1) is provided for enabling smokable material to be heated to volatilise at least one component of the smokable material. In one example, the apparatus (1) has a capacitive sensor (12,13,15) arranged to sense a change in capacitance when an article of smokable material is associated with a housing (2) of the apparatus (1) in use. In another example, the apparatus (1001) has a resistive sensor (1050,1013) arranged to provide a measure of electrical resistance when an article of smokable material is associated with a housing (1002) of the apparatus (1001) in use. A combination of capacitive and resistive sensing may be used in some examples. In another example, a sensor makes use of at least two different sensing techniques.



21: 2016/08744. 22: 2016/12/19. 43: 2023/01/23
 51: A61K; C07D; A61P
 71: Gilead Sciences, Inc.
 72: CARRA, Ernest, A.; CHEN, Irene.; ZIA, Vahid;
 33: US 31: 62/015,245 32: 2014-06-20
54: SODIUM (2R, 5S, 13AR) -7, 9-DIOXO-10- (2,4,6-TRIFLUOROBENZYL) CARBAMOYL) -2, 3, 4, 5, 7, 9, 13, 13A-OCTAHYDRO-2, 5-METHANOPYRIDO [1',2' : 4.5] PYRAZINO [2, 1-B] OXAZEPIN-8-OLATE
 00: -

The present Invention relates to sodium (2R,5S,13aR)-7,9-dioxo-10-((2,4,6-trifluorobenzyl)carbamoyl)-2,3,4,5,7,9,13,13a-octahydro-2,5-methanopyrido[1',2':4,5] pyrazino[2,1-b][1,3]oxazepin-8-olate Form I.



21: 2017/01663. 22: 2017/03/08. 43: 2023/03/14
 51: C07K
 71: REGENERON PHARMACEUTICALS, INC.
 72: ORENGO, Jamie, M., ALLINNE, Jeanne
 33: US 31: 62/054,167 32: 2014-09-23
54: ANTI-IL-25 ANTIBODIES AND USES THEREOF
 00: -

The present invention provides antibodies that bind to human interleukin-25 (IL-25) and methods of using the same. According to certain embodiments, the antibodies of the invention bind human IL-25 with high affinity. In certain embodiments, the invention includes antibodies that bind human IL-25 and block IL-25-mediated cell signaling. The antibodies of the invention may be fully human, non-naturally occurring antibodies. The antibodies of the invention

are useful for the treatment of various disorders associated with IL-25 activity or expression, including asthma, allergy, chronic obstructive pulmonary disease (COPD), inflammatory bowel disease (IBD), including ulcerative colitis and Crohn's disease, atopic dermatitis (AD), and Eosinophilic Granulomatosis with Polyangiitis (EGPA), also known as Churg-Strauss Syndrome.

Binding of mAb-2 to IL-25 which is Pre-Complexed with mAb-1																	
mAb-1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	0.00	0.04	0.03	0.04	0.04	0.04	0.01	0.05	0.02	0.01	0.05	0.01	0.00	0.00	0.00	0.00	0.00
2	0.02	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.07	0.06	0.00	0.00	0.00	0.00	0.00
3	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.72	0.83	0.58	0.57	0.61	0.56	0.73
4	0.01	0.02	0.01	0.00	0.02	0.01	0.01	0.01	0.02	0.01	1.12	1.13	0.89	0.83	0.94	0.92	1.11
5	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.08	0.98	0.74	0.73	0.82	0.77	0.97
6	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.00	0.98	0.72	0.71	0.80	0.73	0.95
7	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.02	0.98	0.76	0.73	0.83	0.81	0.99
8	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.94	0.97	0.72	0.71	0.81	0.79	0.93
9	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.85	0.98	0.77	0.68	0.78	0.71	0.92
10	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.77	0.48	0.50	0.56	0.51	0.66	0.85
11	0.53	0.63	0.64	0.67	0.68	0.64	0.47	0.77	0.62	0.11	0.09	0.68	0.54	0.45	0.52	0.51	0.74
12	0.51	0.63	0.64	0.66	0.67	0.61	0.48	0.67	0.56	0.70	0.78	0.00	0.42	0.48	0.47	0.58	0.88
13	0.58	0.72	0.76	0.65	0.75	0.78	0.55	0.77	0.66	0.82	1.03	0.88	0.00	0.02	0.11	0.03	0.00
14	0.63	0.73	0.74	0.71	0.77	0.64	0.60	0.82	0.72	0.82	0.90	0.87	0.01	0.00	0.03	0.00	0.00
15	0.59	0.70	0.68	0.67	0.73	0.60	0.57	0.77	0.68	0.77	0.79	0.68	0.00	0.00	0.00	0.00	0.00
16	0.57	0.68	0.66	0.63	0.70	0.56	0.55	0.75	0.66	0.74	0.60	0.73	0.00	0.00	0.00	0.00	0.00
17	0.62	0.74	0.74	0.70	0.78	0.72	0.56	0.86	0.72	0.79	0.69	0.87	0.00	0.00	0.00	0.00	0.00
18	0.55	0.67	0.66	0.63	0.69	0.63	0.50	0.76	0.64	0.68	0.50	0.76	0.00	0.00	0.00	0.00	0.00

21: 2017/06734. 22: 2017/10/06. 43: 2023/03/17
 51: A01H; C07K; C12N
 71: MONSANTO TECHNOLOGY LLC
 72: BARTEN, Ty, Jason, BROWN, Alana, N., CARGILL, Edward, James, FOUQUET, Romain, GOMEZ, Jose, Rafael, MARENGO, Matthew, Sean, OYERVIDES GARCIA, Manuel, PEEVERS, Jeanette, M., YANG, Dennis, Hung
 33: US 31: 62/153,831 32: 2015-04-28
 33: US 31: 62/180,430 32: 2015-06-16
54: METHODS AND COMPOSITIONS FOR PRODUCING BRACHYTIC CORN PLANTS
 00: -

The present disclosure is in the field of plant breeding. The disclosure provides methods for breeding corn plants having a brachytic trait using marker-assisted selection. The disclosure further provides brachytic germplasm, markers associated with a brachytic trait for introgressing the trait into elite germplasm in a breeding program. This disclosure also provides brachytic or dwarf elite corn

varieties having yield equal to or higher than conventional non-brachytic corn varieties.

21: 2018/04275. 22: 2018/06/26. 43: 2023/02/16
51: A61K

71: HERMES PHARMA GmbH

72: GARSUCH, Verena, HAALA, Josef,
SCHIEMENZ, Wolfgang

33: RU 31: 2017122407 32: 2017-06-26

**54: ORAL PHARMACEUTICAL COMPOSITION
COMPRISING TASTE-MASKED N-
ACETYL CYSTEINE**

00: -

The invention provides coated particles with taste-masked N-acetylcysteine (NAC). The particles comprise a core with the active ingredient, or essentially consist thereof, and a coating comprising a triglyceride and a surfactant. The particles exhibit rapid drug release and a stable release profile while at the same time ensuring sufficient taste-masking even for irregularly formed NAC-cores. Moreover, the invention provides a hot-melt coating method for manufacturing such particles, and pharmaceutical compositions comprising the particles. The method allows the coating of core particles at moderate temperatures, thereby preventing the degradation of the thermolabile active ingredient.

21: 2018/05078. 22: 2018/07/27. 43: 2023/03/14
51: H04L

71: NCHAIN HOLDINGS LIMITED

72: WRIGHT, Craig Steven, SAVANAH, Stephane

33: GB 31: 1603117.1 32: 2016-02-23

33: GB 31: 1603125.4 32: 2016-02-23

33: GB 31: 1604495.0 32: 2016-03-16

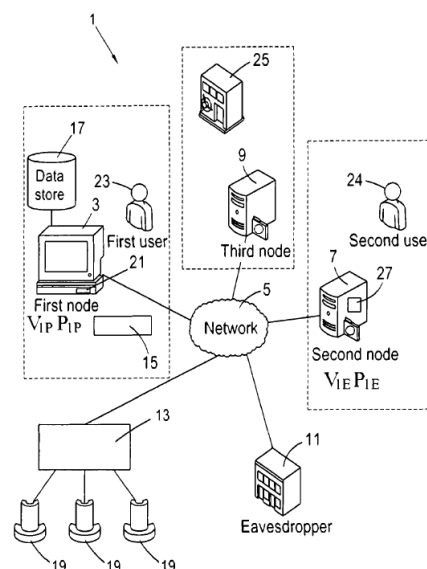
33: GB 31: 1619301.3 32: 2016-11-15

**54: METHOD AND SYSTEM FOR EFFICIENT
TRANSFER OF CRYPTOCURRENCY
ASSOCIATED WITH A PAYROLL ON A
BLOCKCHAIN THAT LEADS TO AN AUTOMATED
PAYROLL METHOD AND SYSTEM BASED ON
SMART CONTRACTS**

00: -

The invention relates to blockchain technologies such as the Bitcoin blockchain, and the tokenisation of assets or entities. It is particularly suited for implementing a payroll on a blockchain platform and comprises a method (100) and system (1) of transferring cryptocurrency from a first node (3) to a second node (7). Both nodes (3, 7) are associated with a payroll and have a respective asymmetric

cryptography pair, each pair including a master private key and a master public key. Respective additional private and public keys may be determined based on the master private key, master public key and a generator value at each node. The additional private and public keys may form a hierarchical structure. A common secret may be determined at each of the nodes (3, 7) based on the additional private and public keys. The common secret may be used to securely transmit confidential information across a communications network (5).



21: 2018/05903. 22: 2018/09/03. 43: 2023/02/22
51: B64D

71: Airborne Systems NA Inc.

72: BERLAND, Jean C.

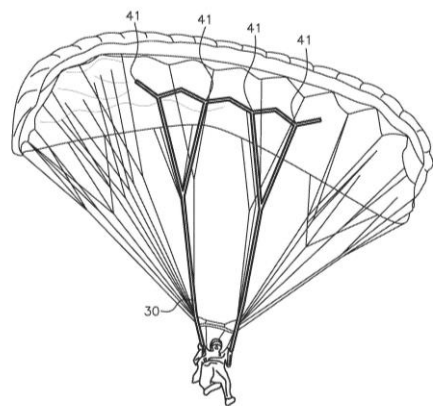
33: US 31: 15/061,804 32: 2016-03-04

**54: GLIDE MODULATOR SYSTEM AND METHOD
FOR A RAM AIR PARACHUTE**

00: -

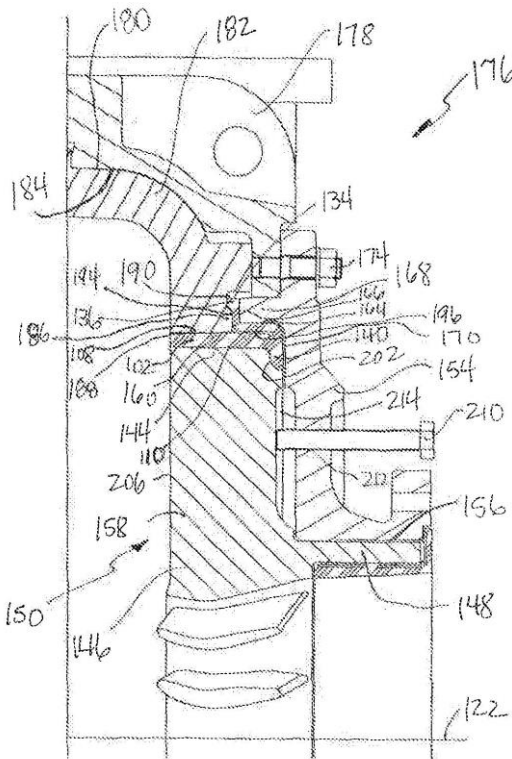
A system and method is provided for shortening specific suspension lines near the center of a ram air parachute in order to distort the airfoil section only in the center section of the canopy. This distortion of the center section results in a significant alteration of the glide ratio of the parachute by simultaneously reducing the forward speed and increasing the rate of descent. Meanwhile, because the canopy is only distorted in the center section, the wingtips remain extended and pressurized so that the steering

apparatus at the trailing edge of the canopy remains fully functional to direct the heading.



21: 2018/06401. 22: 2018/09/26. 43: 2023/02/16
51: F04D; F16J
71: Weir Slurry Group, Inc.
72: KOSMICKI, Randy J., WIRTH, Aaron, RUSSELL, Allen David
33: US 31: 62/310,094 32: 2016-03-18
54: SEALING ARRANGEMENT FOR ADJUSTABLE ELEMENTS OF A PUMP
00: -

A seal, for use with pump casing elements that are adjustable relative to each other, includes an annular band and a resilient annular flange oriented at a non-perpendicular angle to a first surface of the annular band such that the seal, in use, is able to provide greater adjustment between the adjustable pump elements while maintaining a reliable seal between the pump elements.



21: 2018/06597. 22: 2018/10/04. 43: 2023/02/03
51: A61K C07K C12N C12P
71: VIELA BIO, INC.
72: VOUSDEN, Katherine, Ann, DOUTHWAITE, Julie, Ann, DAMSCHRODER, Melissa, Marie, SANJUAN, Miguel, Angel
33: US 31: 62/306,125 32: 2016-03-10
54: ILT7 BINDING MOLECULES AND METHODS OF USING THE SAME
00: -
The present invention is directed to ILT7 binding molecules, e.g., anti-ILT7 antibodies, and methods for treating or preventing conditions and diseases associated with ILT7-expressing cells such as autoimmune diseases.

Alignment VH:		
#28-VH	QVQLQSGGAEIVKPGASVVRMSCKAFGYTFTTPIELMMKQNHGKSLRWIGNPHRYNDOTKY	60
10D10-VH	EVQLVESGGGVVQPGKSLRLSCAASGFTFSYPIEVVRQAPQGGLEWIGNPHLYNDOTKY	60
7C7-VH	EVQLVESGGGVVQPGKSLRLSCAASGFTFSYPIEVVRQAPQGGLEWIGNPHLYNDOTKY	60
#28-VH	NEKFKGAKLVKESSTVYLESLRSTSDSAVITYCARGDYMGGYWGQGTSTVTVSS	117
10D10-VH	NEKFKGRVTMTDTSTSTVYMLSSLRSEDVAVYTCIRGDDYGMGYWGQGLTVTVSS	117
7C7-VH	NEKFKGRVTMTDTSTSTVYMLSSLRSEDVAVYTCIRGDDYGMGYWGQGLTVTVSS	117

21: 2018/06767. 22: 2018/10/11. 43: 2023/02/27
51: C07K
71: AB BIOSCIENCES, INC.

72: HSU, Yen-Ming, LEE, Jeng-Shin, CHANG, Hsiu-Ching

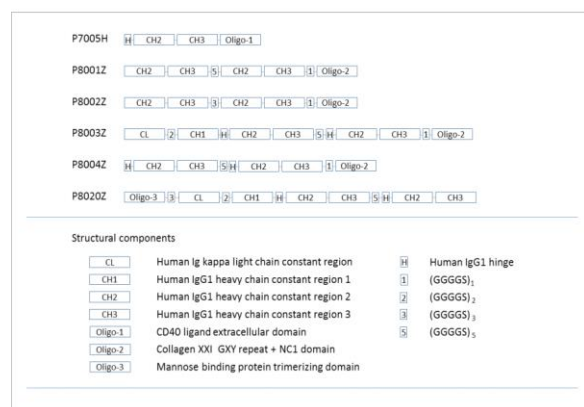
33: US 31: 62/315,483 32: 2016-03-30

54: RECOMBINANT INTRAVENOUS IMMUNOGLOBULIN (rIVIG) COMPOSITIONS AND METHODS FOR THEIR PRODUCTION AND USE

00: -

Compositions of recombinant intravenous immunoglobulin (rIVIG) proteins and methods for purification and use of rIVIG proteins. The compositions comprise oligomeric Fc molecules which bind to Fc receptors with high avidity. The rIVIG proteins are useful as immunomodulatory molecules for the treatment of immune disorders including autoimmune diseases, such as refractory immune thrombocytopenia, chronic inflammatory demyelinating polyneuropathy, multiple sclerosis, lupus, Graves Disease, Kawasaki disease, dermatomyositis, myasthenia gravis, Guillain-Barre syndrome, autoimmune hemolytic anemia, and other immune and inflammatory conditions. The rIVIG proteins can also be used as immunomodulators in patients to reduce the immune rejection of organ transplants, stem cell transplants and bone marrow transplantation. Additionally, the present invention provides rIVIG proteins of non-human origin, for use in veterinary immune disorders, such as canine rIVIG proteins for the treatment of dogs suffering from autoimmune hemolytic anemia, immune thrombocytopenia purpura, rheumatoid arthritis, or other canine immune disorder.

Figure 1. Constructs of rIVIG molecules



21: 2018/06807. 22: 2018/10/12. 43: 2023/02/27

51: A61K; A61P

71: Universiteit Maastricht, Academisch Ziekenhuis Maastricht

72: WELTING, Tim Johannes Maria, CARON, Marjolein Maria Johanna

33: EP(NL) 31: 16165106.2 32: 2016-04-13

54: METHOD FOR THE TREATMENT OR PREVENTION OF OSTEOARTHRITIS

00: -

The present invention is in the field of medicine and provides means and methods for the treatment, prevention or amelioration of osteoarthritis. More in particular, it provides a peptide for use in the treatment, amelioration or prevention of osteoarthritis, wherein the peptide consists of an amino acid sequence according to SEQ ID NO: 18 or an analogue thereof, wherein the analogue is a peptide consisting of an amino acid sequence according to formula 1 (SEQ ID NO: 29), or a fragment thereof wherein the fragment consists of at least 10 consecutive amino acids of SEQ ID NO: 18 or an amino acid sequence according to formula 1.

21: 2018/07089. 22: 2018/10/24. 43: 2023/02/27

51: G06F; G06Q

71: nChain Holdings Limited

72: WRIGHT, Craig Steven, SAVANAH, Stephane

33: GB 31: 1607553.3 32: 2016-04-29

33: GB 31: 1607541.8 32: 2016-04-29

33: GB 31: 1607566.5 32: 2016-04-29

33: GB 31: 1607584.8 32: 2016-04-29

33: GB 31: 1607537.6 32: 2016-04-29

33: GB 31: 1607520.2 32: 2016-04-29

33: GB 31: 1607561.6 32: 2016-04-29

33: GB 31: 1607555.8 32: 2016-04-29

33: GB 31: 1607530.1 32: 2016-04-29

33: GB 31: 1607527.7 32: 2016-04-29

33: GB 31: 1607564.0 32: 2016-04-29

33: GB 31: 1607569.9 32: 2016-04-29

33: GB 31: 1607472.6 32: 2016-04-29

33: GB 31: 1607539.2 32: 2016-04-29

33: GB 31: 1607538.4 32: 2016-04-29

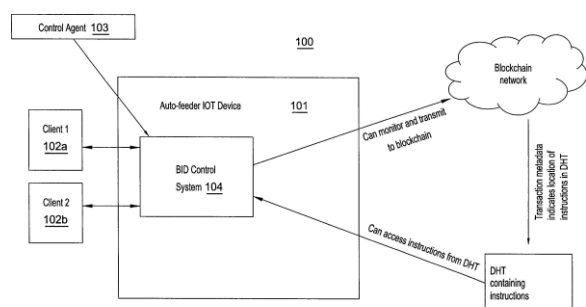
33: GB 31: 1607525.1 32: 2016-04-29

54: IMPLEMENTING LOGIC GATE FUNCTIONALITY USING A BLOCKCHAIN

00: -

The invention presents a solution in which blockchain Transactions are created to implement the functionality of a logic gate. The invention may be implemented on the Bitcoin platform or an alternative blockchain platform. The transaction includes a locking script which comprises instructions selected so as to implement the

functionality of a logic gate such as OR, AND, XOR, NOT and so on. In some examples, the instructions may be provided in a hashed form. When the script is executed (because a second transaction is attempting to spend the output associated with the locking script) the inputs will be processed by the conditional instructions to provide an output of TRUE or FALSE. The second transaction is transmitted to the blockchain network for validation and, if determined to be valid, it will be written to the blockchain. Validation of the second transaction can be interpreted as a TRUE output. Thus, the locking script of the first transaction provides the functionality of the desired logic gate. The invention provides numerous advantages and can be used in a wide variety of applications, such as for the implementation of control systems and processes.



21: 2018/07221. 22: 2018/10/29. 43: 2023/02/27

51: A61B

71: Duke University

72: RAMANUJAM, Nirmala, ASI EDU, Mercy, LAM, Christopher, MUELLER, Jenna, AGUDOGO, Julia, MIROS, Robert

33: US 31: 62/315,140 32: 2016-03-30

54: COLPOSCOPES AND MAMMOSCOPES HAVING CURVED ENDS AND FLAT ENDS, ASSOCIATED METHODS, AND SPECULUM-FREE IMAGING METHODS

00: -

Disclosed herein are colposcopes, mammoscopes, and speculum-free imaging methods (inserters) having curved ends and flat ends and associated methods. According to an aspect, an inserter includes an elongate body defining an interior space and having a distal end, a proximate end, and an axis extending between the distal end and the proximate end. The distal end is substantially funnel shaped and defines a wide portion and a narrow portion. The narrow portion is closer to the proximate

end than the wide portion. An edge of a first portion of the wide portion extends further from the proximate end than an edge of a second portion of the wide portion.

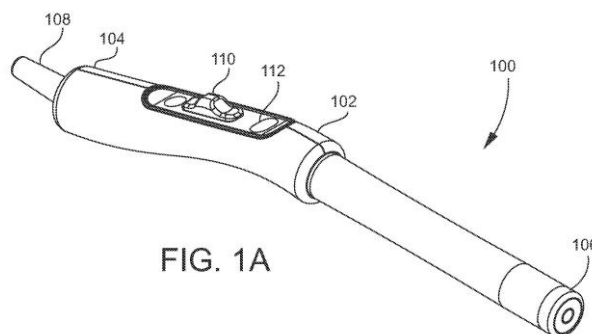


FIG. 1A

21: 2018/07767. 22: 2018/11/19. 43: 2023/02/02

51: C07K

71: Ferring B.V.

72: STALEWSKI, Jacek, CABLE, Edward Earl

33: US 31: 62/344,831 32: 2016-06-02

54: ANGIOTENSIN-1-RECEPTOR ANTAGONISTS

00: -

In one aspect, this disclosure features compounds of formula (I) or a pharmaceutically acceptable salt thereof: AA1-Arg-Val-AA4-AA5-His-Pro-AA8-OH(I), in which AA1, AA4, AA5, and AA8 are defined in the specification. The compounds of formula (I) can be used to treat hypertension (e.g., hypertension induced by pregnancy), preeclampsia, or a renal disease induced by pregnancy.

21: 2018/07770. 22: 2018/11/19. 43: 2023/02/27

51: A61K; A61Q; C11D

71: Colgate-Palmolive Company

72: SMART, Scott, PAN, Long

54: SOLID CLEANSING COMPOSITIONS WITH TAURINE AND METHODS THEREOF

00: -

A solid liquid cleansing composition and methods of preparing the same are disclosed. The solid cleansing composition may include a soap and an ionic liquid. The soap may be a sodium soap, an ammonium soap, a potassium soap, a magnesium soap, a calcium soap, or a combination thereof. The ionic liquid may include a base, taurine, and/or water.

21: 2018/07771. 22: 2018/11/19. 43: 2023/02/27

51: A61K; A61Q

71: Colgate-Palmolive Company
 72: REGE, Aarti, PRENCIPE, Michael
 33: US 31: 62/354,236 32: 2016-06-24
54: ORAL CARE COMPOSITIONS

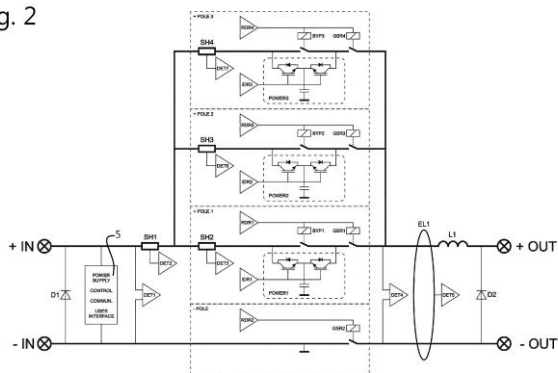
00: -
 An oral care composition comprising zinc phosphate, stannous fluoride and an organic acid buffer system, as well as methods of using the same.

21: 2018/08628. 22: 2018/12/20. 43: 2023/02/03
 51: H01H; H02H

71: Eaton Intelligent Power Limited
 72: NIEHOFF, Ronaldus
 33: GB 31: 1610901.9 32: 2016-06-22
54: HYBRID DC CIRCUIT BREAKER

00: -
 A direct current circuit breaker with a positive supply line between a positive input terminal (+IN) and a positive output terminal (+OUT), and a negative supply line between a negative input terminal (-IN) and a negative output terminal (-OUT) for connecting a direct current load to a supply. A series connection of a first galvanic separation switch (GSR1) and a bypass switch (BYP1) is present in the positive supply line, and a second galvanic separation switch (GSR2) in the negative supply line. A semiconductor switch element (POWER1) is connected parallel to the bypass switch (BYP1). The first and second galvanic separation switch (GSR1, GSR2), the bypass switch (BYP1) and the semiconductor switch element (POWER1) are controlled using a processing unit (5). The direct current circuit breaker further has a series connected inductor (L1) in the positive supply line.

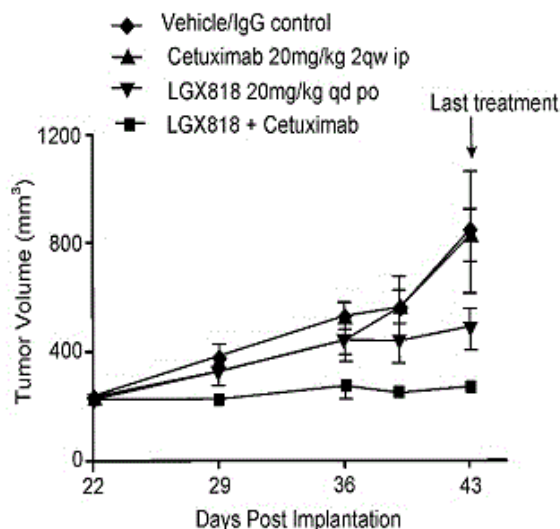
Fig. 2



21: 2019/00019. 22: 2019/01/02. 43: 2023/02/06
 51: A61K
 71: ARRAY BIOPHARMA INC.

72: CAPONIGRO, GIORDANO, CAO, ZHU
 ALEXANDER
 33: US 31: 62/345,389 32: 2016-06-03
54: PHARMACEUTICAL COMBINATIONS

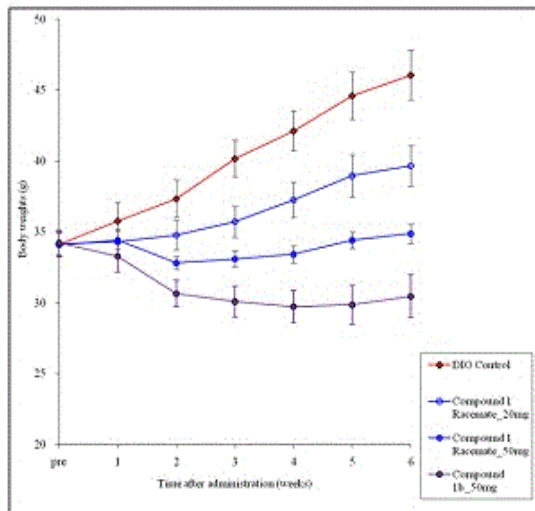
00: -
 Provided herein are pharmaceutical combinations comprising (a) a B-Raf inhibitor, or a pharmaceutically acceptable salt thereof, (b) at least one mitogen activated protein kinase (MEK) inhibitor, or a pharmaceutically acceptable salt thereof, and (c) an epidermal growth factor receptor (EGFR) inhibitor or a pharmaceutically acceptable salt thereof; and optionally at least one pharmaceutically acceptable carrier; methods for preparing the pharmaceutical combinations, and the uses of the pharmaceutical combinations in the treatment of proliferative diseases, such as cancer.



21: 2019/00121. 22: 2019/01/08. 43: 2023/02/06
 51: C07D; A61K
 71: GLACEUM, INC.
 72: YOO, SANG KU, CHUNG, JIN WOOK, JO, IN
 GEUN, KIM, JI YOUNG, IM, JEONG HO, KANG, KU
 SUK, KIM, JIN YOUNG
 33: KR 31: 10-2016-0081674 32: 2016-06-29
**54: OPTICALLY ACTIVE PYRANOCHROMENYL
 PHENOL DERIVATIVE AND PHARMACEUTICAL
 COMPOSITION COMPRISING SAME**
 00: -

The present invention relates to a pyranochromenyl phenol derivative which has a different effect according to the direction of optical activity, and a pharmaceutical composition comprising same. R isomer of the pyranochromenyl phenol derivative

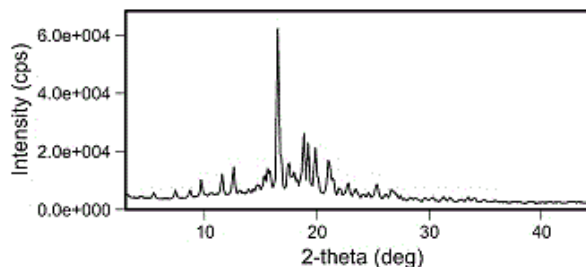
has an excellent anti-diabetic effect by suppressing an increase of blood sugar, and S isomer has an excellent anti-obesity effect by suppressing an increase of weight.



21: 2019/00150. 22: 2019/01/09. 43: 2023/02/06
 51: C07D; A61K; A61P
 71: VITAE PHARMACEUTICALS, LLC
 72: CACATIAN, SALVACION, CLAREMON, DAVID A, DILLARD, LAWRENCE WAYNE, DONG, CHENGGUO, FAN, YI, JIA, LANQI, LOTESTA, STEPHEN D, MARCUS, ANDREW, MORALES-RAMOS, ANGEL, SINGH, SURESH B, VENKATRAMAN, SHANKAR, YUAN, JING, ZHENG, YAJUN, ZHUANG, LINGHANG, PARENT, STEPHAN D, HOUSTON, TRAVIS L
 33: US 31: 62/348,496 32: 2016-06-10
54: INHIBITORS OF THE MENIN-MLL INTERACTION

00: -

The present invention is directed to inhibitors of the interaction of menin with MLL and MLL fusion proteins, pharmaceutical compositions containing the same, and their use in the treatment of cancer and other diseases mediated by the menin-MLL interaction.



21: 2019/00181. 22: 2019/01/10. 43: 2023/02/06
 51: C07K; A61K; A61P
 71: NANJING LEGEND BIOTECH CO., LTD.
 72: CHOU, CHUAN-CHU, ZHANG, YAFENG, WU, SHU, LIU, ZHENYU, LI, ZHONGDAO, ZHANG, FANGLIANG
 33: CN 31: PCT/CN2016/090703 32: 2016-07-20
54: MULTISPECIFIC ANTIGEN BINDING PROTEINS AND METHODS OF USE THEREOF
 00: -

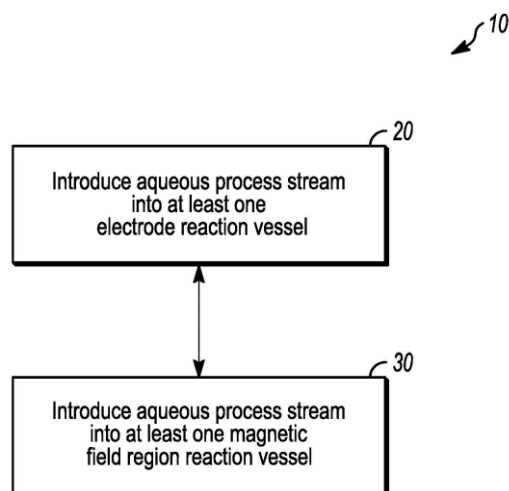
Disclosed herein are multispecific, such as bispecific, antigen binding proteins comprising a first antigen binding domain comprising a heavy chain variable domain and a light chain variable domain, and a second antigen binding domain comprising a single-domain antibody. Pharmaceutical compositions comprising the multispecific antigen binding proteins, kits and methods of use thereof are further provided.

21: 2019/00474. 22: 2019/01/23. 43: 2023/02/06
 51: C02F
 71: Tygrus, LLC
 72: CARLSON, Lawrence
 33: US 31: 62/354,556 32: 2016-06-24
54: COMPOSITION AND METHOD FOR TREATING AND REMEDIATING AQUEOUS WASTE STREAMS

00: -

An apparatus for treating a stream of contaminated water having an elevated concentration of at least one of light metals, heavy metals, sulfates that includes at least one process fluid inlet communicating with a process conduit; at least one electrode reaction vessel in fluid communication with the process conduit, the reaction vessel having an interior chamber and at least one electrode positioned in the reaction chamber, the electrode powered by a alternating current source; and at least one magnetic field reaction vessel in fluid communication with the process conduit, the

magnetic field reaction vessel having an outwardly oriented surface and an opposed inwardly oriented surface, the magnetic field reaction vessel having at least one magnet in contact with the inwardly oriented surface of the magnetic field reaction vessel.

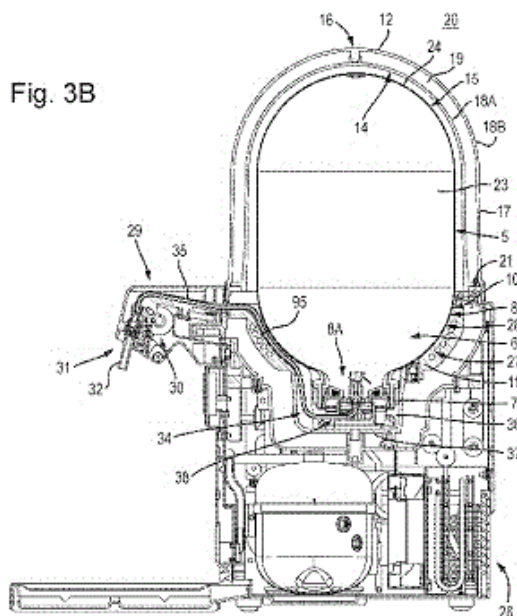


21: 2019/00507. 22: 2019/01/24. 43: 2023/02/06
 51: C07K; A61K
 71: PFIZER INC., INSERM (INSTITUT NATIONAL DE LA SANTÉ ET DE LA RECHERCHE MÉDICALE), UNIVERSITÉ CÔTE D'AZUR
 72: GOUZE, ELVIRE, GARCIA, STÉPHANIE
 33: US 31: 62/359,607 32: 2016-07-07
 33: US 31: 62/467,478 32: 2017-03-06
54: SOLUBLE FIBROBLAST GROWTH FACTOR RECEPTOR 3 (SFGFR3) POLYPEPTIDES AND USES THEREOF

00: -
 The invention features soluble fibroblast growth factor receptor3 (sFGFR3) polypeptides. The invention also features methods of using sFGFR3 polypeptides to treat skeletal growth retardation disorders, such as achondroplasia.

21: 2019/00697. 22: 2019/02/01. 43: 2023/02/14
 51: B67D
 71: HEINEKEN SUPPLY CHAIN B.V.
 72: PAAUWE, ARIE MAARTEN, WITTE, PIETER GERARD
 33: NL 31: 2017109 32: 2016-07-05
54: BEVERAGE DISPENSING ASSEMBLY AND BEVERAGE CONTAINER
 00: -

Beverage dispensing assembly, comprising a dispenser and a beverage container, wherein the beverage container has a neck portion and a shoulder portion adjacent the neck portion, wherein the neck portion is provided with at least an outflow opening and at least one gas inlet opening and wherein the dispenser comprises a housing, wherein the housing is provided with a receptacle for receiving at least part of the container, wherein the container is positioned in the dispenser with the neck and shoulder portion facing downward, such that the neck portion and at least part of the shoulder portion are received in the receptacle, wherein part of the shoulder portion extends close to and/or is in contact with a wall of the receptacle, wherein preferably a lid is provided over the container, enclosing a part of the container extending outside the receptacle.



21: 2019/00790. 22: 2019/02/07. 43: 2023/02/28
 51: A01N
 71: MONSANTO TECHNOLOGY LLC
 72: DYSZLEWSKI, Andrew D., FRIEDMAN, Todd, C., LEE, Phillip, K., MACINNES, Alison
 33: US 31: 62/372,586 32: 2016-08-09
54: SOLID HERBICIDAL CONCENTRATE COMPOSITIONS
 00: -
 The present invention generally relates to solid herbicidal concentrate compositions comprising one or more herbicide salts, particularly salts of acidic herbicides such as glyphosate salts, glufosinate

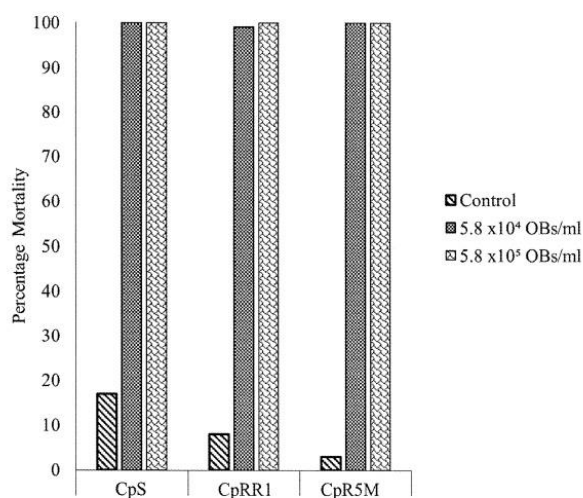
salts, and/or various auxin herbicide salts. The present invention further relates to various processes for preparing the solid herbicidal concentrate compositions as well as methods of using the solid herbicidal concentrate compositions to prepare herbicidal application mixtures.

21: 2019/00791. 22: 2019/02/07. 43: 2023/02/06
51: A01N; C12N
71: RHODES UNIVERSITY, CITRUS RESEARCH INTERNATIONAL (PTY) LTD, RIVER BIOSCIENCE (PTY) LTD
72: MOORE, SEAN, HILL, MARTIN, KNOX, CAROLINE, MARSBERG, TAMRYN, JUKES, MICHAEL, SZEWCZYK, BOGUSLAW, RABALSKI, LUKASZ, CHAMBERS, CRAIG
33: ZA 31: 2016/05197 32: 2016-07-26

54: A BIOPESTICIDE

00: -

A nucleopolyhedrovirus (NPV), a composition comprising the NPV, and a method comprising the use of the NPV is provided. The NPV was isolated from *Cryptophlebia peltastica* and has insecticidal activity against several species of moths within the tortricid tribe, Grapholitini. The NPV or composition may be suitable for use in controlling insect populations, particularly populations of insects that infest plants.



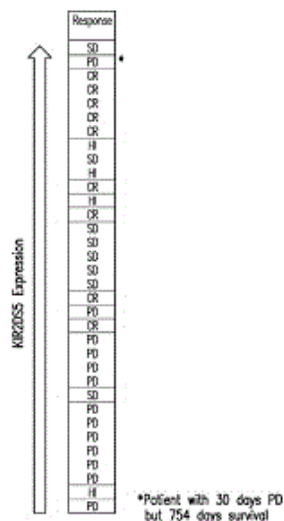
21: 2019/00858. 22: 2019/02/11. 43: 2023/02/28
51: C12Q
71: KURA ONCOLOGY, INC.
72: GUALBERTO, ANTONIO, SCHOLZ, CATHERINE ROSE

33: US 31: 62/241,019 32: 2015-10-13
33: US 31: 62/372,662 32: 2016-08-09
33: US 31: 62/218,927 32: 2015-09-15
33: US 31: 62/310,582 32: 2016-03-18
33: US 31: 62/206,194 32: 2015-08-17

54: METHODS OF TREATING CANCER PATIENTS WITH FARNESYL TRANSFERASE INHIBITORS

00: -

The present invention relates to the field of molecular biology and cancer biology. Specifically, the present invention relates to methods of treating a subject with a farnesyltransferase inhibitor (FTI) that include determining whether the subject is likely to be responsive to the FTI treatment based on genotyping and expression profiling of certain immunological genes and RAS mutation status in the subject.

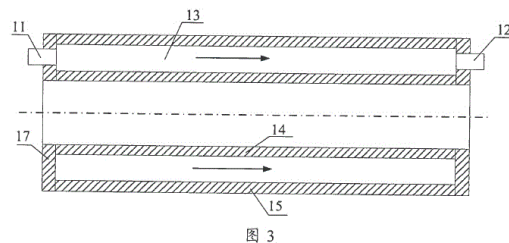
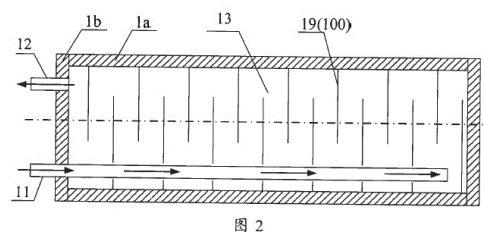
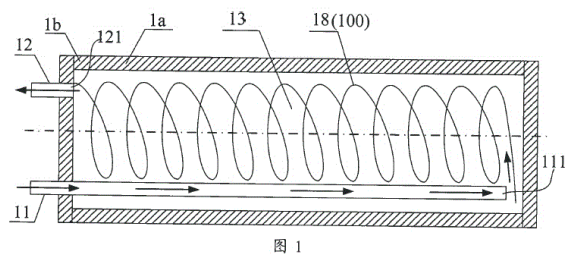
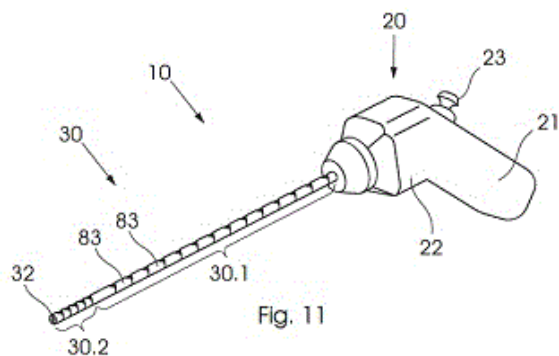


21: 2019/00931. 22: 2019/02/13. 43: 2023/02/28
51: A61B; B01J; C01B; C01G; G01D; G01T; H01L
71: Curium US LLC
72: BARBOSA, Luis Antonio M.M.
33: US 31: 62/375,641 32: 2016-08-16
54: GERMANIUM-68 SOURCE MATERIAL AND CALIBRATION DEVICES THAT INCLUDE SUCH SOURCE MATERIAL

00: -

Calibration devices including germanium-68 source material are disclosed. The source material may be a matrix material (e.g., zeolite) in which germanium-68 is isomorphously substituted for central atoms in tetrahedra within the matrix material. Methods for preparing such calibration devices are also disclosed.





21: 2019/03603. 22: 2019/06/05. 43: 2023/02/06

51: F28D F28F H01F

71: STATE GRID CORPORATION OF CHINA,
TSINGHUA UNIVERSITY

72: LIU, Shan, LU, Licheng, LIU, Zehong

33: CN 31: 201810312629.8 32: 2018-04-09

**54: FLOW-GUIDING ROD, BUSHING AND
CONVERTER TRANSFORMER SYSTEM**

00: -

A flow-guiding rod includes a cooling channel provided in a rod portion of the flow-guiding rod, and a coolant inlet pipe and a coolant outlet pipe provided on end(s) of the flow-guiding rod. The coolant inlet pipe and the coolant outlet pipe are communicated with the cooling channel.

21: 2019/03936. 22: 2019/06/18. 43: 2023/02/06

51: A01N; C07D

71: Syngenta Participations AG

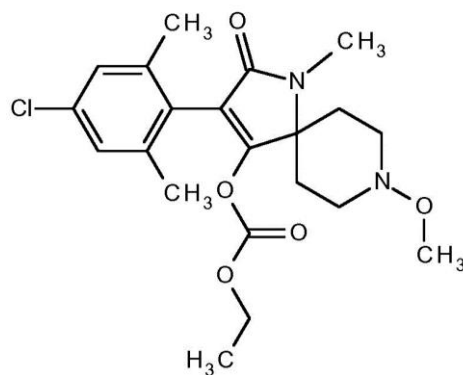
72: JONES, Ian Kevin, HONE, John, GEORGE, Neil

33: GB 31: 1622007.1 32: 2016-12-22

54: POLYMORPHS

00: -

The present invention relates to solid forms of the insecticide of formula I: I, compositions comprising the solid forms and methods of their use as insecticides.



I,

21: 2019/03946. 22: 2019/06/18. 43: 2023/02/13
 51: A61K; A61P; C12N
 71: POWER OF PLATELETS PTE. LTD.
 72: GOORIS, THEO, FAHMY, HOSSAM MOSTAFA
 33: EP 31: 16199628.5 32: 2016-11-18

54: A METHOD FOR PREPARING A GROWTH FACTORS CONTAINING PLATELET RELEASATE

00: -

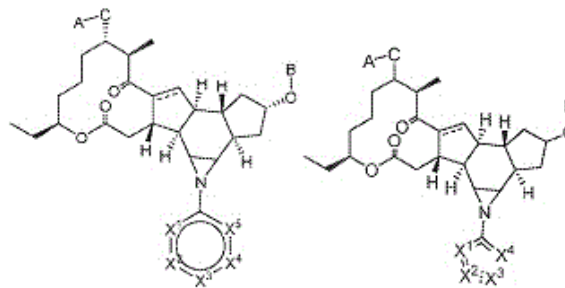
The present invention relates to a method for preparing a growth-factors containing platelet releasate from a fluid mammalian platelet concentrate, comprising the consecutive steps of subjecting the platelet concentrate to a pathogen reduction step to disrupt non-enveloped viruses; subjecting the platelet concentrate to an activation step to cause the platelets to release growth factors; recovering a fibrinogen depleted fluid platelet releasate; subjecting the fibrinogen depleted fluid platelet releasate to a second pathogen concentration reduction step to disrupt enveloped viruses; subjecting the platelet releasate to sterile filtering and recovering a filtrate liquid containing the growth factors. The platelet releasate obtained with the method of the present invention may be used as a therapeutic agent to enhance the proliferation of multi lineage cells in regenerative medicine and in the management of non healing wounds and resistant ulcers. The second indication is as a substitute to fetal bovine serum in in cell culture media.

21: 2019/04243. 22: 2019/06/27. 43: 2023/02/13
 51: C07D; A01N
 71: AGRIMETIS, LLC
 72: CALABRESE, ANDREW
 33: US 31: 62/446,177 32: 2017-01-13

54: AZIRIDINE SPINOSYN DERIVATIVES AND METHODS OF MAKING

00: -

Compositions including derivatives of spinosyns of the following formulae and methods for the production of derivatives of spinosyns are provided. The spinosyn derivatives described herein include those functionalized on the C-5,6 double bond to provide an aziridine ring system. The method produces spinosyn derivatives that exhibit activity towards insects, arachnids, and nematodes and are useful in the agricultural and animal health markets.



21: 2019/04385. 22: 2019/07/03. 43: 2023/02/06
 51: A61K; C07K
 71: WORG PHARMACEUTICALS (HANGZHOU) CO., LTD.
 72: MARTIN, KEITH, JANSSON, LISELOTTE
 33: GB 31: 1700095.1 32: 2017-01-04

54: COMPOSITION

00: -

The present invention relates to a composition comprising a peptide derived from myelin basic protein (MBP) peptide for use in treating or preventing uveitis in a subject.

21: 2019/04388. 22: 2019/07/03. 43: 2023/02/09
 51: B29C
 71: CSIR, AHRLAC INNOVATION CENTRE (PTY) LTD
 72: VERMEULEN, Marius, PREUSSLER, Dieter Rainer

33: ZA 31: 2016/08320 32: 2016-12-18
 33: ZA 31: 2016/08321 32: 2016-12-18

54: PREHEATING OF MATERIAL IN AN ADDITIVE MANUFACTURING APPARATUS

00: -

An additive manufacturing apparatus is disclosed. The apparatus includes a build platform, a scanning unit and a preheating arrangement. Material is operatively deposited on the build platform to form a material bed, with a surface of the material bed defining a material area. The scanning unit is configured to consolidate deposited material in a scan area on the surface of the material bed, wherein the scan area forms part of and is substantially smaller than the material area. The preheating arrangement is configured to focus energy onto the surface of the material bed substantially in the scan area and not in the remainder of the material area. A method of preheating material in an additive manufacturing apparatus, a method of forming an object by additive

manufacturing and a preheating arrangement for an additive manufacturing apparatus are also disclosed.

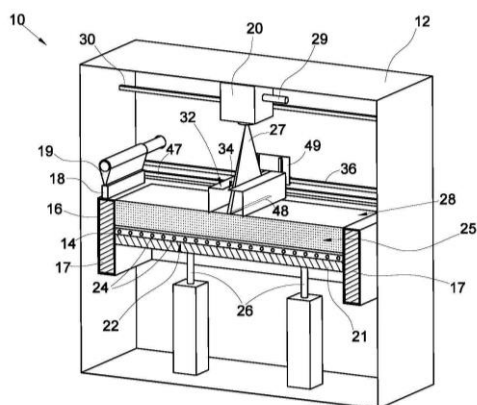


Fig.1



21: 2019/04458. 22: 2019/07/08. 43: 2023/01/26
51: A61K: A61P: C07D

71: Novartis AG

72: AMRUTKAR, Dipak Vasantrao, FOSTER, Kelly,
JACOBSEN, Thomas Amos, JEFSON, Martin R.,
KEANEY, Gregg F., LARSEN, Janus Schreiber,
NIELSEN, Karin Sandager

33: US 31: 62/449,270 32: 2017-01-23

54: POTASSIUM CHANNEL MODULATORS

00: -

Provided are compounds and pharmaceutically acceptable salts thereof, which are useful for treating a variety of diseases, disorders or conditions, associated with potassium channels.

21: 2019/04531. 22: 2019/07/10. 43: 2023/02/06
51: B02C; F16B

71: Russell Mineral Equipment Pty Ltd

72: RUBIE, Peter John. CHAPMAN, Andrew Ross

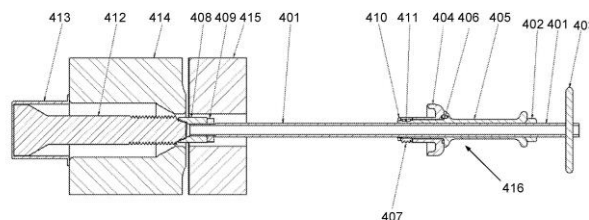
33: AU 31: 2016905248 32: 2016-12-19

54: MILL LINER INSTALLATION

00: -

The present disclosure relates to a method for use in installation of a mill liner, the method including (a) retaining a mounting bolt at least partially within a liner opening extending through the mill liner, (b) positioning the mill liner against a mill shell so that the retained mounting bolt is aligned with a mill shell opening extending through the mill shell, (c)

selectively coupling an extraction tool to the mounting bolt, the coupling performed by an operator outside of the mill shell, (d) detaching the mounting bolt from the liner using the extraction tool; (e) pulling the mounting bolt through the mill shell opening so that at least a portion of the mounting bolt protrudes outside of the mill shell, and, (e) securing a fastener onto the mounting bolt to thereby attach the mill liner to the mill.



21: 2019/04614, 22: 2019/07/15, 43: 2023/02/06

51: A61K: A61P

71: Idorsia Pharmaceuticals Ltd

72: KESSLER, Melanie, ROCH, Catherine

33: PCT/EP(CH) 31: 2016/081455 32: 2016-12-16

54: PHARMACEUTICAL COMBINATION COMPRISING A T-TYPE CALCIUM CHANNEL BLOCKER

00: -

The present invention relates to a pharmaceutical combination comprising a first active ingredient which is N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(1 - trifluoromethyl-cyclopropyl)-phenyl]-acetamide or a pharmaceutically acceptable salt thereof and a second active ingredient which has an anti-epileptic effect, or a pharmaceutically acceptable salt thereof.

21: 2019/04654. 22: 2019/07/16. 43: 2023/02/22

51: A61K: A61P: C07D

71: Betta Pharmaceuticals Co., Ltd.

72: WANG, Yiqian, WANG, Jiabing, DING, Lieming

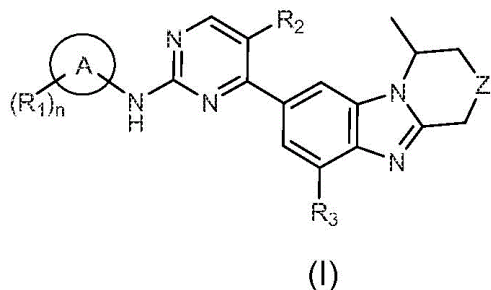
33: PCT(CN) 31: 2016/111457 32: 2016-12-22

54: BENZIMIDAZOLE DERIVATIVES, PREPARATION METHODS AND USES THEREOF

00: -

The present invention relates to benzimidazole compounds useful in treating for protein kinase-associated disorders. There is also a need for compounds useful in the treatment or prevention of one or more symptoms of cancer, transplant rejections. Furthermore, there is a need for methods

for modulating the activity of protein kinases, such as CDK4 and/or CDK6, using the compounds provided herein.



21: 2019/04670. 22: 2019/07/15. 43: 2023/02/06

51: A47K; B65H; G07B

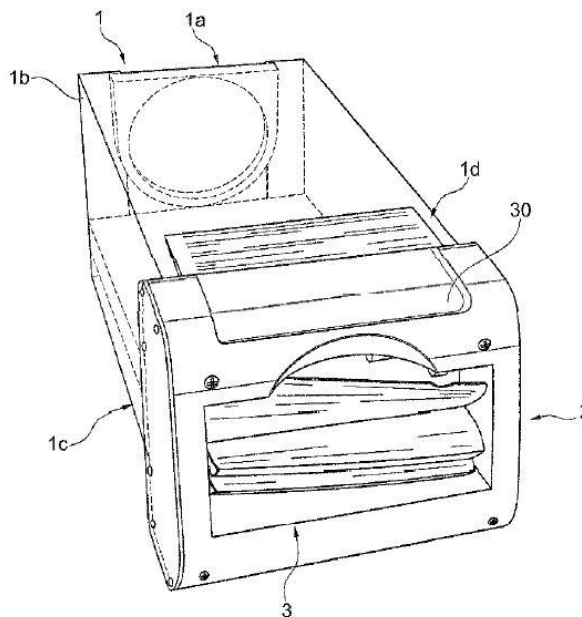
71: ESSITY HYGIENCE AND HEALTH
AKTIEBOLAG

72: ELFSTRÖM, Boris Allan, ZERWECK, Jason,
MURPHY, Kevin

**54: DISPENSER FOR SHEET PRODUCTS AND
OPERATING METHOD**

00: -

A dispenser for sheet products comprises a housing having a space inside for accommodating a stack of sheet products, wherein the housing includes a dispensing opening for dispensing a sheet product from the front of the stack; and an electronic controller, the controller being configured to receive a pull-out signal indicating the removal of a product from the front of the stack through the dispensing opening and, upon receiving said pull-out signal, to send out a drive signal to transfer a number of sheet products from the front of the stack into a presentation position. The controller is further configured to receive a low-level signal indicating that the amount of sheet products left within the housing has been reduced to below a predetermined level and, upon receiving said low-level signal, to enter into a low-level mode in which the sending of the drive signal in response to the pullout signal is disabled.



21: 2019/04851. 22: 2019/07/24. 43: 2023/02/16

51: H01H

71: Eaton Intelligent Power Limited

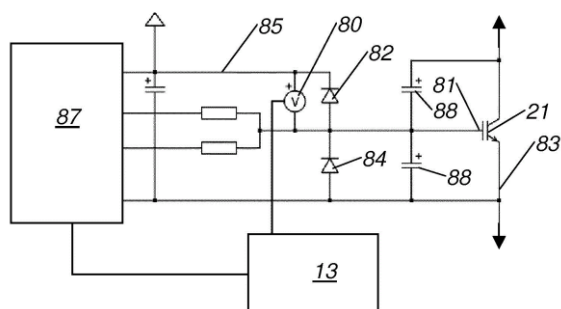
72: ASKAN, Kenan

33: DE 31: 10 2017 101 452.7 32: 2017-01-25

54: LOW-VOLTAGE CIRCUIT BREAKER DEVICE

00: -

The invention relates to a low-voltage circuit breaker device (1) having at least one phase conductor section (2) and one neutral conductor section (5). A mechanical bypass switch (8) is located in the phase conductor section (2). A first semiconductor circuit assembly (11) is connected in parallel with the bypass switch (8). The first semiconductor circuit assembly (11) has at least one power semiconductor device (21) with a control connection. A current-measuring assembly (12) is located in the phase conductor section (2) and is connected to an electronic control unit (13) of the circuit breaker device (1). The electronic control unit (13) is designed to actuate the bypass switch (8) and the first semiconductor circuit assembly (11) when a predefinable overcurrent through the current-measuring assembly (12) is detected. According to the invention, the low-voltage circuit breaker device (1) has at least one voltage-measuring assembly (80) for detecting a Miller-effect-induced voltage peak at the at least one power semiconductor device (21) of the first semiconductor circuit assembly (11).



21: 2019/04852. 22: 2019/07/24. 43: 2023/02/16

51: H01H

71: Eaton Intelligent Power Limited

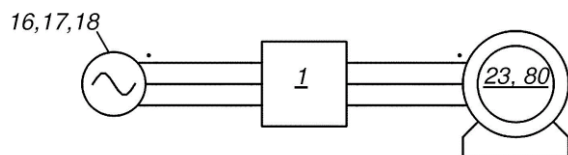
72: ASKAN, Kenan

33: DE 31: 10 2017 101 451.9 32: 2017-01-25

54: LOW-VOLTAGE CIRCUIT BREAKER DEVICE

00: -

The invention relates to a low-voltage circuit breaker device (1), in particular a motor circuit breaker, having at least one outer conductor path (2) and a neutral conductor path (5), wherein a mechanical bypass switch (8) is disposed in the outer conductor path (2); a semiconductor circuit arrangement (11) of the low-voltage circuit breaker device (1) is connected in parallel with the bypass switch (8); a current measuring arrangement (12), which is connected to an electronic control unit (13) of the circuit breaker device (1), is at least provided in the outer conductor path (2); and the electronic control unit (13) is designed to control the bypass switch (8) and the semiconductor circuit arrangement (11) in a predeterminable manner. According to the invention, a control unit (13) is designed to switch the semiconductor circuit arrangement (11) on/off in a predetermined cycle when the bypass switch (8) is open so as to limit an inrush current of a downstream load (23). The invention further relates to an electric motor connecting line comprising such a low-voltage circuit breaker device (1).



21: 2019/05078. 22: 2019/07/31. 43: 2023/02/03

51: A61K; A61P; C07D

71: HepaRegeniX GmbH

72: ALBRECHT, Wolfgang, LAUFER, Stefan, SELIG, Roland, KLÖVEKORN, Phillip, PRÄFKE, Bent

33: EP(DE) 31: 17151787.3 32: 2017-01-17

54: PROTEIN KINASE INHIBITORS FOR PROMOTING LIVER REGENERATION OR REDUCING OR PREVENTING HEPATOCYTE DEATH

00: -

The invention relates to MKK4 (mitogen-activated protein kinase 4) and their use in promoting liver regeneration or reducing or preventing hepatocyte death. The MKK4 inhibitors selectively inhibit protein kinase MKK4 over protein kinases JNK and MKK7.

21: 2019/05158. 22: 2019/08/05. 43: 2023/02/27

51: B25J

71: UNIVERSITY OF PRETORIA

72: THERON, Nicolaas Johannes, MATADIN, Sunveer

33: ZA 31: 2017/00963 32: 2017-02-08

54: A ROBOT

00: -

The invention is for a robot (10) which includes a base (12). A plurality of links (1A, 1B, 2, 3, 4 and 5) are connected in series. Six actuators are mounted on the base and drivingly connected, respectively, to the links (1A, 1B, 2, 3, 4 and 5) by means of drivetrains. At least some of the drivetrains include drive shafts and bevel gears whereby drive is transmitted from the actuator to the associated link.

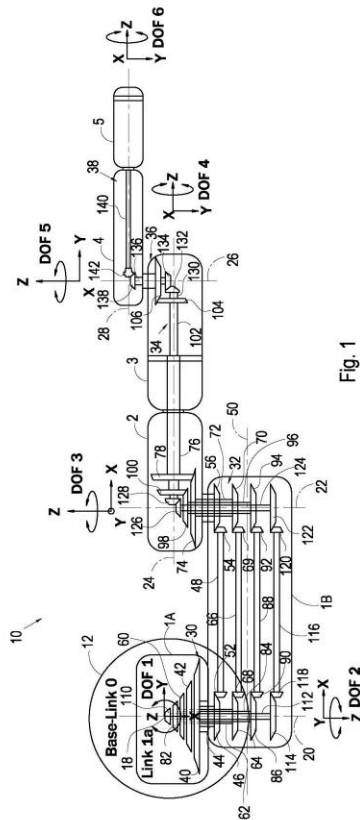
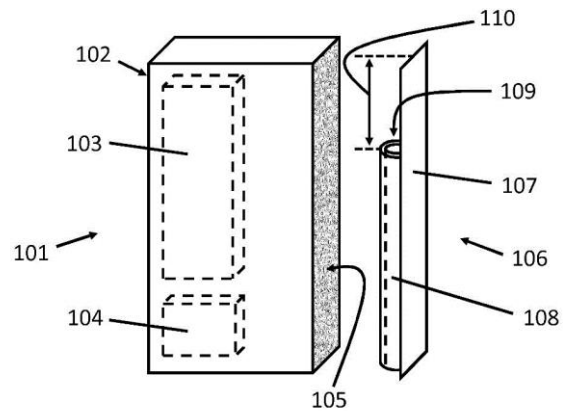


Fig. 1



21: 2019/05527. 22: 2019/08/21. 43: 2023/02/13

51: F41G

71: SURESIGHT AUTOMATIC (PTY) LTD

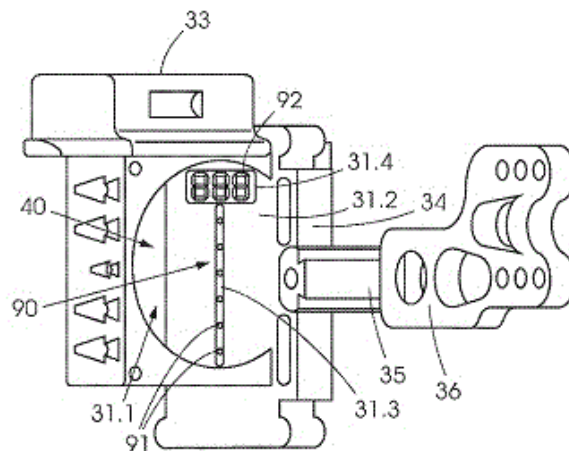
72: MACDONALD, ROGER WILLIAM, TAIT, JOHN BRUCE

33: ZA 31: 2017/01323 32: 2017-02-21

54: AUTOMATIC BOW SIGHT

00: -

THIS invention relates to a bow sight and more particularly, but not exclusively, to an automatic bow sight which is releasably securable to a bow. The bow finder includes a range finder, a range finder aiming mechanism for use in assisting to aim the range finder at a target, a display arrangement including a plurality of light sources that can be switched on independently and/or in combination, and a processor configured to receive information from the range finder, and to send an actuation signal to the display arrangement in order for at least some of the light sources to be selectively switched on.



21: 2019/05306. 22: 2019/08/12. 43: 2023/03/22

51: A24F

71: PHILIP MORRIS PRODUCTS S.A.

72: ANTONOPOULOS, Roland, FRINGELI, Jean-Luc

33: EP 31: 17169141.3 32: 2017-05-02

54: AEROSOL-GENERATING SYSTEM WITH CASE

00: -

An electrically operated aerosol-generating system comprises an aerosol-generating device (120) and a case (101) configured to receive the aerosol-generating device (120). The case (101) comprises a housing (102) having an opening (105) and a device holder (106) pivotally coupled to the housing (102) and pivotable relative to the housing (102) between an open position and a closed position. The device holder comprises an external wall (107) and one or more internal walls (108) arranged to releasably hold the aerosol-generating device (120). The device holder (106) has a first end and a second end, opposite the first end, and the device holder is pivotally coupled to the housing at or around the first end.

21: 2019/05536. 22: 2019/08/22. 43: 2023/02/13
 51: C12N
 71: BIONTECH SE
 72: BAIERSDÖRFER, MARKUS, KARIKÓ, KATALIN
 33: EP 31: PCT/EP2016/059056 32: 2016-04-22

54: METHODS FOR PROVIDING SINGLE-STRANDED RNA

00: -

The present invention relates to methods for providing single-stranded RNA (ssRNA).

Furthermore, the present invention relates to the ssRNA which is obtainable by the methods of the invention and the use of such ssRNA in therapy.

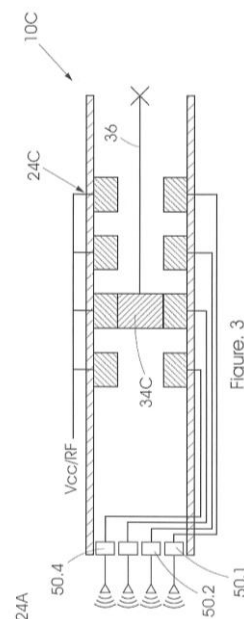
21: 2019/05781. 22: 2019/09/02. 43: 2023/03/22
 51: E21D
 71: EPIROC HOLDINGS SOUTH AFRICA (PTY) LTD

72: ABREU, Rual, CAWOOD, Martin, DE BRUIN, Pieter, SHEPPARD, James William
 33: ZA 31: 2018/05197 32: 2018-09-02

54: ROCK BOLT WITH ELONGATION MEASUREMENT MEANS

00: -

The invention provides a strain measuring rock bolt which includes a yielding rod of a malleable material which extends between a distal end and a proximal end, a bore which extends through the rod between the distal and proximal ends, a measuring device which is at least partially contained within the bore, which includes a sweeping or indicatory element and a graduated member, wherein fixed to the rod is either the element or the graduated member and attached distally to the rod is either the member or the element respectively to allow movement of the element relatively to the member when the yielding rod elongates under strain and wherein movement of the element relatively to the member manifests as a change in a physical or electronic parameter, which change is measured and communicated as an output.



21: 2019/06113. 22: 2019/09/16. 43: 2023/02/09
 51: C22B

71: METSO OUTOTEC FINLAND OY
 72: CHARITOS, ALEXANDROS, GÜNTNER, JOCHEN, HAMMERSCHMIDT, JÖRG, SCHULZ, FRANZ, WROBEL, MACIEJ, MATTICH, CHRISTIAN, SCHMIDT, EBERHARD, CHATZILAMPROU, IOANNIS

54: PROCESS AND APPARATUS FOR ROASTING OF GOLD BEARING SULFIDE CONCENTRATE

00: -

The invention is directed to a process and its relating plant for roasting gold bearing sulfide concentrate. Concentrate particles with a carbon content of more than 0.5 wt-% are fed into a roaster where they are thermally treated at a temperature in the range of 500 and 1000 °C in a fluidized bed to form a calcine, and wherein at least parts of the calcine are withdrawn from the roaster together with a gas stream as a solid fraction. Concentrate particles with a diameter at least 50 % smaller than the average diameter of the concentrate particles are separated as small particles and/or particles from the gas-solid-fraction are separated in at least one step as small calcine particles. The small particles and/ or at least part of the small calcine particles are pelletized, whereby at least 80 % of the pellets feature a diameter of at least 80 % of the concentrate particles average diameter and that the pellets are fed into the roaster (Fig. 1).

21: 2019/06130. 22: 2019/09/17. 43: 2023/02/28
51: A01N; C07D

71: FMC CORPORATION

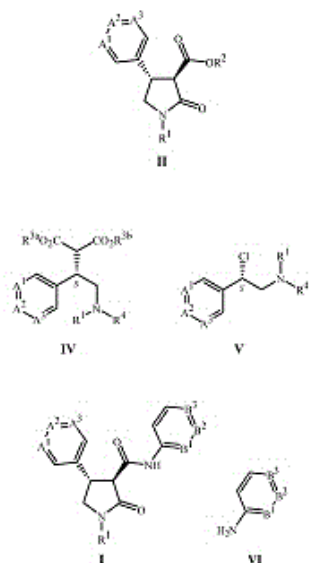
72: CHEN, YUZHONG

33: US 31: 62/474,206 32: 2017-03-21

54: PYRROLIDINONES AND A PROCESS TO PREPARE THEM

00: -

This application is directed to a compound of Formula II Also disclosed is a process for preparing a compound of Formula II comprising using the compounds of Formulae IV and V Also disclosed is a method for preparing a compound of Formula I comprising contacting a compound of Formula II with a compound of a compound of Formula VI wherein A¹, A²A³, R¹, R², R^{3a}, R^{3b}, R⁴, B¹, B²and B³, are as defined in the disclosure.



present in complex biological samples, such as feces, are disclosed. In particular, aqueous compositions for stabilizing DNA contained in biological samples at ambient temperature are disclosed, together with associated methods and kits using same. In one aspect, the compositions comprise a chelating agent present at a concentration of at least about 150 mM, and the composition has a pH of at least about 9.5.

21: 2019/06377. 22: 2019/09/27. 43: 2023/02/13
51: A01N

71: SAMUMED, LLC

72: HOOD, JOHN, WALLACE, DAVID MARK, KC, SUNIL KUMAR

33: US 31: 61/620,107 32: 2012-04-04

54: INDAZOLE INHIBITORS OF THE WNT SIGNAL PATHWAY AND THERAPEUTIC USES THEREOF

00: -

Indazole compounds for treating various diseases and pathologies are disclosed. More particularly, the present invention concerns the use of an indazole compound or analogs thereof, in the treatment of disorders characterized by the activation of Wnt pathway signaling (e.g., cancer, abnormal cellular proliferation, angiogenesis, Alzheimer's disease, lung disease and osteoarthritis), the modulation of cellular events mediated by Wnt pathway signaling, as well as genetic diseases and neurological conditions/disorders/diseases due to mutations or dysregulation of the Wnt pathway and/or of one or more of Wnt signaling components. Also provided are methods for treating Wnt-related disease states. One embodiment disclosed herein includes a compound having the structure of Formula I.

21: 2019/06139. 22: 2019/09/17. 43: 2023/01/20
51: C12N; C12Q

71: DNA GENOTEK INC.

72: BIRNBOIM, Hyman Chaim, POZZA, Lindsay, MERINO HERNANDEZ, Carlos Alberto, DOUKHANINE, Evgueni Vladimirovitch

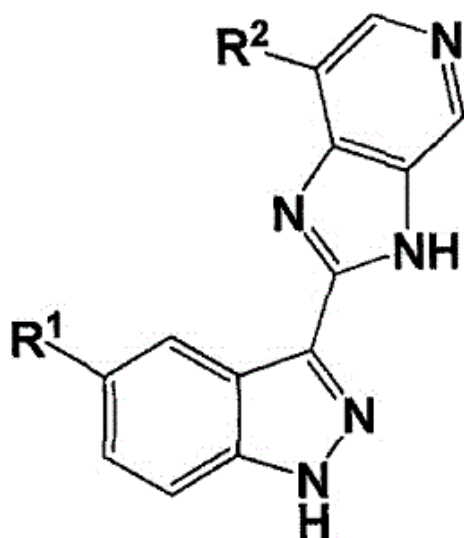
33: US 31: 61/949,692 32: 2014-03-07

33: US 31: 62/057,769 32: 2014-09-30

54: COMPOSITION AND METHOD FOR STABILIZING NUCLEIC ACIDS IN BIOLOGICAL SAMPLES

00: -

Methods, compositions, and kits for stabilizing both human and microbial deoxyribonucleic acid (DNA)



21: 2019/06431. 22: 2019/09/30. 43: 2023/03/29

51: A01G; B65G

71: BIOFEED ENVIRONMENTALLY FRIENDLY PEST CONTROL LTD

72: ISRAELY, Nimrod, MINDAL, Enrique

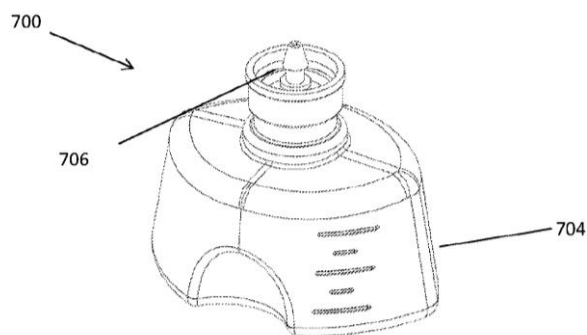
33: US 31: 62/480,457 32: 2017-04-02

33: WO 31: PCT/IL2018/050371 32: 2018-03-29

54: A DEVICE FOR SLOW RELEASE OF FLUIDS IN A UNIFORM MANNER

00: -

A device for continuous release of a fluid at a near-optimum rate, the device including: a reservoir, having dimensions such that the fluid disposed in the reservoir is held in a shape having a height to a width ratio whereby the width is greater than the height; a flow-rate regulator adapted to regulate fluid release rate of the fluid exiting the reservoir via the flow-rate regulator.



21: 2019/06437. 22: 2019/09/30. 43: 2023/03/09

51: B65D; B65G

71: CONVEYOR MANUFACTURERS AUSTRALIA PTY LTD

72: SMITH, Benjamin John

33: AU 31: 2017900388 32: 2017-02-08

54: A MODULAR CONVEYANCE SYSTEM

00: -

A conveyance system (10) including: a conveyor having a frame (22) connectable to a drive unit; and a shipping container (12) having a base (16), a top wall (14), two opposing side walls (18) and two opposing end walls (20), wherein the conveyor is fixed within the shipping container (12) in an assembled state.

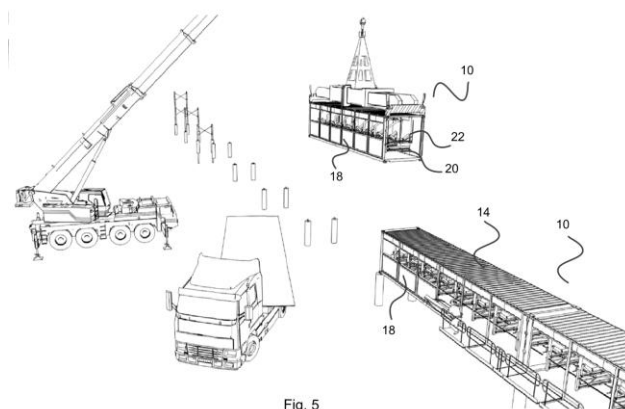


Fig. 5

21: 2019/06556. 22: 2019/10/04. 43: 2023/02/14

51: B02C

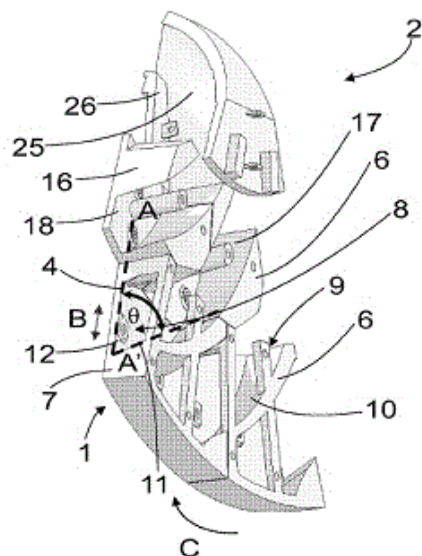
71: METSO OUTOTEC FINLAND OY

72: HEATH, ALEX, PAZ, ANDRES, DEL BIANCO, ADAM, EID, TAMER

54: GRINDING MILL, PULP LIFTER AND OUTER PULP LIFTER ELEMENT

00: -

An outer pulp lifter element (1) for a pulp lifter (2) for a rotating drum grinding mill (3) comprises a first wall (4) directed towards the discharge end of the grinding mill, and at least one vane (6) protruding from the inner surface (12) of the first wall (4) towards the inside of the drum grinding mill (3) and comprising a guiding surface (10) on the front side of the vane (6). The outer edge (11) of the guiding surface (10) is angled in relation to the inner surface (12) of the first wall (4) in such a manner, that the angle (Θ) between the inner surface (12) of the first wall (4) and the outer edge (11) of the guiding surface (10) is smaller than 90 degrees.



21: 2019/06647. 22: 2019/10/09. 43: 2023/02/14
51: G10L

71: DOLBY INTERNATIONAL AB

72: VILLEMOS, LARS, PURNHAAGEN, HEIKO, EKSTRAND, PER

33: EP 31: 15159067.6 32: 2015-03-13

33: US 31: 62/133,800 32: 2015-03-16

54: DECODING AUDIO BITSTREAMS WITH ENHANCED SPECTRAL BAND REPLICATION METADATA IN AT LEAST ONE FILL ELEMENT

00: -

Embodiments relate to an audio processing unit that includes a buffer, bitstream payload deformatter, and a decoding subsystem. The buffer stores at least one block of an encoded audio bitstream. The block includes a fill element that begins with an identifier followed by fill data. The fill data includes at least one flag identifying whether enhanced spectral band replication (eSBR) processing is to be performed on audio content of the block. A corresponding method for decoding an encoded audio bitstream is also provided.

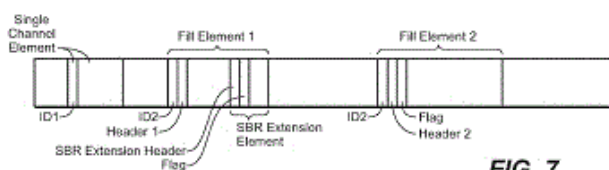


FIG. 1

21: 2019/06683. 22: 2019/10/10. 43: 2023/02/09

51: A61K; C07K; C08H

71: UNITED BIOMEDICAL, INC.

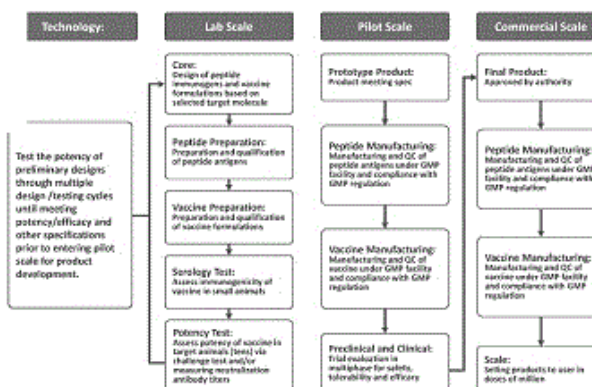
72: WANG, CHANG YI

33: US 31: 13/843,883 32: 2013-03-15

54: PEPTIDE VACCINE FOR PREVENTION AND IMMUNOTHERAPY OF DEMENTIA OF THE ALZHEIMER'S TYPE

00: -

The present disclosure is directed to individual A β peptide immunogen constructs, peptide compositions comprising these A β peptide immunogen constructs and mixtures thereof, pharmaceutical compositions including vaccine formulations comprising these A β peptide immunogen constructs, with the individual A β peptide immunogen constructs having the N-terminus of the A β peptide as the B cell (B) epitopes linked through spacer residue(s) to heterologous T helper cell (Th) epitopes derived from pathogen proteins that act together to stimulate the generation of highly specific antibodies directed against the N-terminus of the A β peptide offering protective immune responses to patients at risk for, or with, Alzheimer's Disease.



21: 2019/06730. 22: 2019/10/11. 43: 2023/02/13

51: C07K; A61K

71: ALECTOR LLC

72: SCHWABE, TINA, BROWN, ERIC, KONG, PHILIP, TASSI, ILARIA, LEE, SEUNG-JOO, ROSENTHAL, ARNON, PEJCHAL, ROBERT, NIELSON, NELS P

33: US 31: 62/636,095 32: 2018-02-27

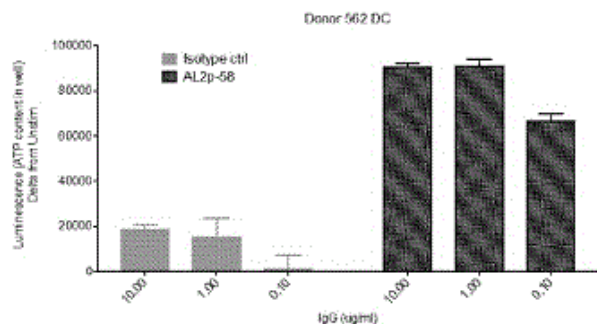
33: US 31: 62/541,019 32: 2017-08-03

54: ANTI-TREM2 ANTIBODIES AND METHODS OF USE THEREOF

00: -

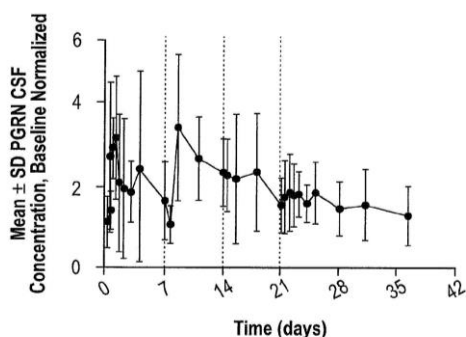
The present disclosure is generally directed to compositions that include antibodies, e.g., monoclonal, antibodies, antibody fragments, etc., that specifically bind a TREM2 protein, e.g., a

mammalian TREM2 or human TREM2, and use of such compositions in preventing, reducing risk, or treating an individual in need thereof.



21: 2019/06731. 22: 2019/10/11. 43: 2023/02/06
51: A61P; C07K
71: Alector LLC
72: SCHWABE, Tina, KURNELLAS, Michael, ROSENTHAL, Arnon, PEJCHAL, Robert, COOPER, Anthony B.
33: US 31: 62/698,007 32: 2018-07-13
54: ANTI-SORTILIN ANTIBODIES AND METHODS OF USE THEREOF

00: -
The present disclosure is generally directed to compositions that include antibodies, *e.g.*, monoclonal, chimeric, affinity-matured, humanized antibodies, antibody fragments, *etc.*, that specifically bind a Sortilin protein, *e.g.*, human Sortilin or mammalian Sortilin, and have improved and/or enhanced functional characteristics, and use of such compositions in preventing, reducing risk, or treating an individual in need thereof.



21: 2019/06762. 22: 2019/10/14. 43: 2023/02/09
51: A61K; A61P; C07D
71: TORAY INDUSTRIES, INC.
72: HARA, KOJIRO, SUZUKI, TOMOHIKO, YOSHIDA, CHIIHIRO, TAKEO, KOJI, SHIMODA,

KOJI, IZUMIMOTO, NAOKI, NISHIMURA, KAZUMI, NAGURO, RIEKO

33: JP 31: 2017-071339 32: 2017-03-31

33: JP 31: 2017-071329 32: 2017-03-31

54: THERAPEUTIC OR PROPHYLACTIC AGENT FOR PERIPHERAL NEUROPATHIES

00: -

The present invention addresses the problem of providing a compound used for treatment or prevention of peripheral neuropathies. Provided is a therapeutic or prophylactic agent for peripheral neuropathies, the agent containing, as an active ingredient, a cyclic amine derivative represented by the chemical formula indicated herein or a pharmacologically acceptable salt thereof.

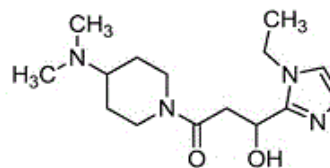
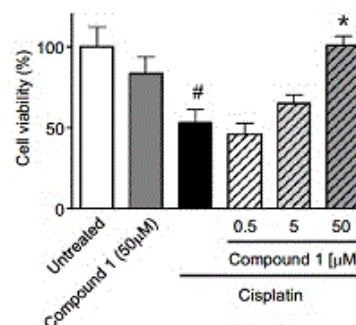


Fig. 1



21: 2019/06836. 22: 2019/10/16. 43: 2023/02/14

51: C07H; C12Q

71: ILLUMINA CAMBRIDGE LIMITED

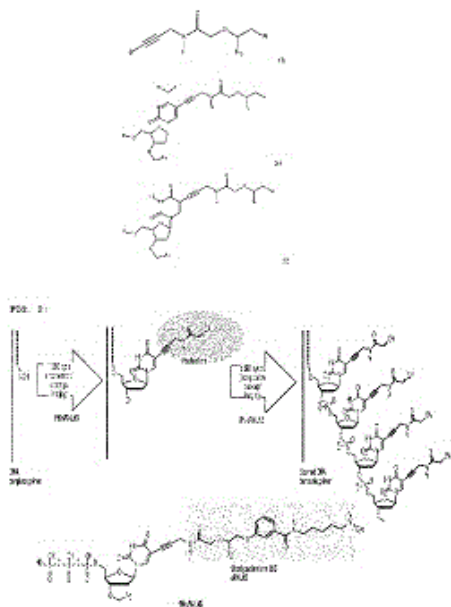
72: CRESSINA, ELENA, FRANCAIS, ANTOINE, LIU, XIAOHAI

33: GB 31: 1711219.4 32: 2017-07-12

54: SHORT PENDANT ARM LINKERS FOR NUCLEOTIDES IN SEQUENCING APPLICATIONS

00: -

The present disclosure relates to new nucleotide and oligonucleotide compounds and their use in nucleic acid sequencing applications. The compounds have formula (I) wherein B is a nucleoside base; and FI is a fluorophore attached through an optional linker. More specifically the compounds have formulas (c) or (t) wherein p is a triphosphate group; and FI is a fluorophore attached through an optional linker.



21: 2019/07390. 22: 2019/11/07. 43: 2023/02/13

51: A01N; A23C; A23L

71: WINFIELD SOLUTIONS, LLC

72: BROWN, DANNY M, COLBY, CHRISTINE M, MAGIDOW, LILLIAN, BARTA, MEGAN

33: US 31: 62/758,031 32: 2018-11-09

54: HYDROGELS AS RHEOLOGY MODIFIERS AND METHODS OF MAKING THE SAME

00: -

Hydrogels are blended with water to produce a hydrogel solution. Viscosity of the hydrogel solution is controlled by adjusting the ratio of hydrogel to water and/or by adjusting the blending conditions. The hydrogel solutions may be used to modify the rheology of agricultural compositions. The hydrogel may include lactose, which may be provided by a milk permeate waste stream from the dairy or food processing industry.

21: 2019/07405. 22: 2019/11/07. 43: 2023/02/09

51: B01J; B01D

71: RESEARCH TRIANGLE INSTITUTE

72: SHEN, JIAN-PING, NORMAN, JASON S, TURK, BRIAN S, GUPTA, RAGHUBIR

33: US 31: 62/540,028 32: 2017-08-01

54: ZINC OXIDE-BASED SORBENTS USING ALKALI METAL HYDROXIDES AND PROCESSES FOR PREPARING AND USING SAME

00: -

Zinc oxide-based sorbents, and processes for preparing and using them are provided, wherein the sorbents are preferably used to remove one or more

reduced sulfur species from gas streams. The sorbents contain an active zinc component, optionally in combination with one or more promoter components and/or one or more substantially inert components. The active zinc component is a two-phase material, consisting essentially of a zinc oxide (ZnO) phase and a zinc aluminate (ZnAl_2O_4) phase. Each of the two phases is characterized by a relatively small crystallite size of typically less than about 50 nm (500 Angstroms). Preferably the sorbents are prepared by using an alkali metal base to convert a precursor mixture, containing a precipitated zinc oxide precursor and a precipitated aluminum oxide precursor, to the two-phase, active zinc oxide containing component, with the resulting sorbent having a sodium level within a desired range.



21: 2019/07461. 22: 2019/11/11. 43: 2023/03/17

51: A61K; C07K; C12N

71: GRITSTONE BIO, INC.

72: BLAIR, Wade, JOOSS, Karin, RAPPAPORT, Amy Rachel, SCALLAN, Ciaran Daniel, GITLIN, Leonid

33: US 31: 62/503,283 32: 2017-05-08

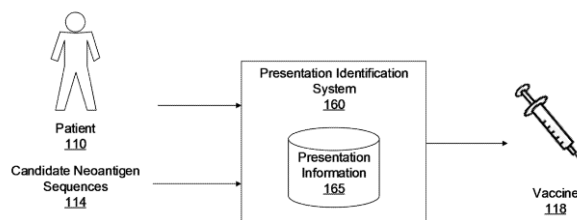
33: US 31: 62/523,201 32: 2017-06-21

33: US 31: 62/590,163 32: 2017-11-22

54: ALPHAVIRUS NEOANTIGEN VECTORS

00: -

Disclosed herein are alphavirus vectors that include neoantigen-encoding nucleic acid sequences derived from a tumor of a subject. Also disclosed are nucleotides, cells, and methods associated with the vectors including their use as vaccines.



21: 2019/07486. 22: 2019/11/12. 43: 2023/03/17

51: A42B

71: MIPS AB

72: HALLDIN, Peter, LINDBLOM, Kim

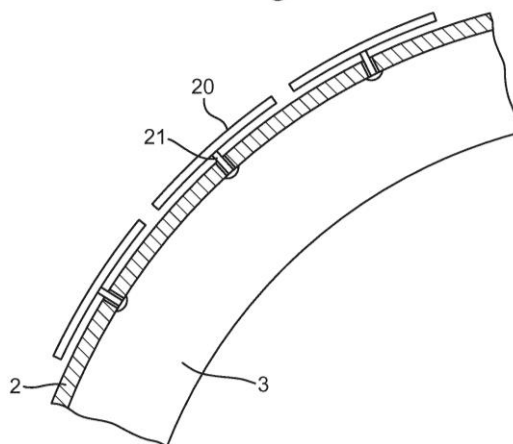
33: GB 31: 1708094.6 32: 2017-05-19

54: HELMET

00: -

A helmet (1) comprising an energy absorbing layer (3), a relatively hard layer (2) that is harder than the energy absorbing layer (3) and is formed outward of the energy absorbing layer (3) and a plurality of outer plates (20) mounted on the outer surface of the relatively hard layer (2); wherein the outer plates (20) are mounted on the relatively hard layer (2) such that, under an impact to an outer plate (20), the outer plate (20) can slide across the relatively hard layer (2) and move relative to other outer plates (20); and a low friction interface is provided between the outer surface of the relatively hard layer (2) and at least a part of the surface of the outer plates (20) that is in contact with the outer surface of the relatively hard layer (2) under an impact to an outer plate (20). Figure 6 A helmet (1) comprising an energy absorbing layer (3), a relatively hard layer (2) that is harder than the energy absorbing layer (3) and is formed outward of the energy absorbing layer (3) and a plurality of outer plates (20) mounted on the outer surface of the relatively hard layer (2); wherein the outer plates (20) are mounted on the relatively hard layer (2) such that, under an impact to an outer plate (20), the outer plate (20) can slide across the relatively hard layer (2) and move relative to other outer plates (20); and a low friction interface is provided between the outer surface of the relatively hard layer (2) and at least a part of the surface of the outer plates (20) that is in contact with the outer surface of the relatively hard layer (2) under an impact to an outer plate (20).

Fig. 6



21: 2019/07487. 22: 2019/11/12. 43: 2023/03/22

51: A61K; A61P

71: SCHAUB, Walter

72: SCHAUB, Walter

33: CH 31: 00599/17 32: 2017-05-04

54: COMPOSITIONS AND TREATMENT PROCEDURES FOR THE TREATMENT OF PATHOGENIC INFECTIONS

00: -

The invention relates to various compositions, including pharmaceutical compositions comprising an oxidation agent selected from sodium, potassium, magnesium or calcium hypochlorite, chlorite or chlorate, an artemisinin composition or a derivative or combination thereof as a primary active oxidising agent. The primary active oxidising agent is provided in a solvent or water-soluble or water-dispersible form to respectively enable release or generation within the solvent medium of a hypochlorite ion or hypochlorous acid, a chlorite ion or chlorous acid, a chlorate ion or chloric acid, neutral or ionic chlorine dioxide or other derivative thereof from the respective hypochlorite, chlorite, or chlorate. Oral or other body cavity dosage forms of the composition are described, which may be employed or administered to a warm-blooded mammalian subject to be treated for combatting pathogenic infections or invasions, more particularly represented by systemic pathogenic invasion of the subject. The composition would in general be admixed with an adequate quantity of one or more pharmaceutically acceptable excipients or carriers or other active agents sufficient to provide an admixed product having a concentration of admixed active agent which is

sufficiently low so as to render such aqueous medium pharmaceutically acceptable to a patient in need of treatment. Unit dosage forms, which may include a carboxylic acid to encourage generation of chlorine dioxide or hypochlorous acid are described. Similarly, the composition may comprise a significant proportion of a carbonate or bicarbonate and a lesser amount of a chloride. Use of dosage forms of the composition are indicated to include treatment of patients suffering from the effects of various parasitic or viral infections or invasions.

21: 2019/07491. 22: 2019/11/12. 43: 2023/02/13

51: C09J; B27D; B32B

71: WOOD ONE CO., LTD.

72: HORITO, MASAYOSHI, KURUSHIMA, NAOKO, MATSUMAE, TOMOYUKI, YAZAKI, YOSHIKAZU

33: JP 31: 2017-086627 32: 2017-04-25

54: ADHESIVE

00: -

Provided is an adhesive that effectively utilizes bark and demonstrates superior adhesion performance. The adhesive of the present invention comprises at least one adhesive resin (A) selected from the group consisting of phenolic resin, urea resin, and melamine resin, and finely pulverized bark (B) comprising cellulose nanofibers.

21: 2019/07524. 22: 2019/11/13. 43: 2023/02/09

51: C07K; G01N; A61K

71: AUTOLUS LIMITED

72: CORDOBA, SHAUN, THOMAS, SIMON, ONUOHA, SHIMOB, JHA, RAM, LIM, WEN CHEAN

33: GB 31: 1709203.2 32: 2017-06-09

54: ANTI TRBC1 ANTIGEN BINDING DOMAINS

00: -

The present disclosure relates to anti-TRBC1 antigen binding domains characterized by the sequences of the variable chains. The CDRs sequences of the variable chains are : (VH CDR1) GYTFT, (VH CDR2) NPYNDIQS, (VH CDR3) GAGYNFDGAYRFFDF; and (VL CDR1) RSSQRLVHSNGNTYL, (VL CDR2) RVSNRFP, (VL CDR3) SQSTHVPYT. The claimed humanized antibodies derive from the murine JOVI antibody. Uses in cancer therapy.

21: 2019/07570. 22: 2019/11/15. 43: 2023/02/09

51: G01N; B01L; C12M

71: ILLUMINA, INC., ILLUMINA, SINGAPORE PTE. LTD.

72: LEMOINE, RICHARD L, OSMUS, JAMES, LIN, SZ-CHIN STEVEN, ANG, BENG KEONG

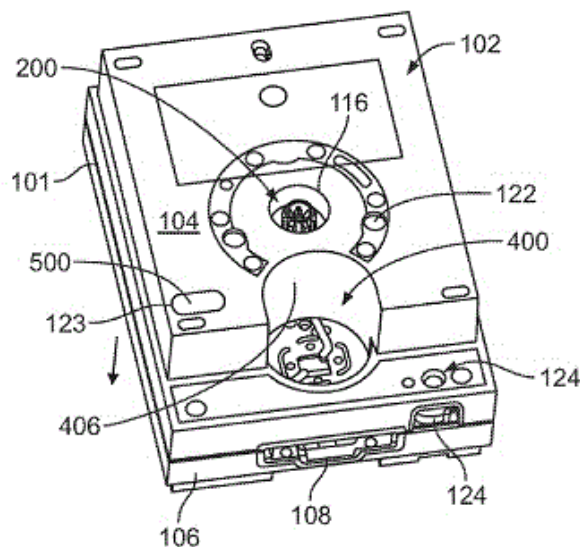
33: NL 31: 2017959 32: 2016-12-08

33: US 31: 62/408,631 32: 2016-10-14

54: CARTRIDGE ASSEMBLY

00: -

A cartridge assembly that comprises a housing, including a flow cell chamber to receive a flow cell, and a well plate having liquid wells to receive desired amounts of liquids. The well plate includes a valve station, a pump station and a fluidics analysis station, and channels associated therewith. A pump assembly to manage fluid flow through the channels between the pump station and the fluidics analysis station. A rotary valve assembly that includes a rotor shaft and rotor valve positioned to rotate about a rotational axis and to selectively couple the wells to the pump station. The rotor shaft includes a dual spline configuration at the distal end thereof. The dual spline configuration has first and second sets of splines. The first set of splines forms a drive interface and the second set of splines forms a position encoding interface.



21: 2019/07687. 22: 2019/11/20. 43: 2023/02/28

51: A61K; C07D

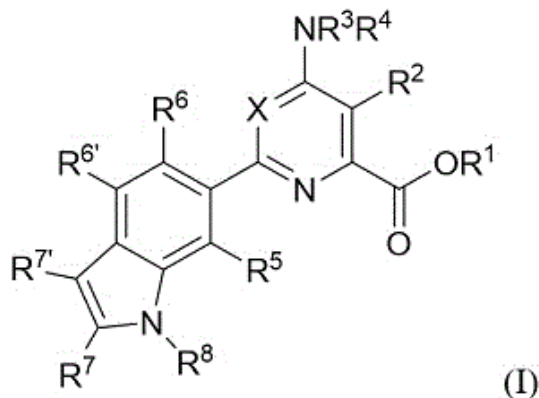
71: Yuhan Corporation

72: OH, Sang Ho, KIM, Jong Gyun, OH, Se-Woong, HAN, Tae Dong, CHUNG, Soo Yong, LEE, Seong Ran, KIM, Kyeong Bae, LEE, Young Sung, SHIN, Woo Seob, JU, Hyun, KANG, Jeong Ki, PARK, Su Min, KIM, Dong Kyun

33: KR 31: 10-2017-0051687 32: 2017-04-21

54: SALT OF AN AMINOPYRIDINE DERIVATIVE COMPOUND, A CRYSTALLINE FORM THEREOF, AND A PROCESS FOR PREPARING THE SAME
00: -

The present invention relates to novel mesylate salt of N-(5-(4-(4-((dimethylamino)methyl)-3-phenyl-1H-pyrazol-1-yl)pyrimidine-2-ylamino)-4-methoxy-2-morpholinophenyl)acrylamide, a novel crystalline form thereof, and a process for preparing the same. More specifically, the present invention relates to mesylate salt of N-(5-(4-(4-((dimethylamino)methyl)-3-phenyl-1H-pyrazol-1-yl)pyrimidine-2-ylamino)-4-methoxy-2-morpholinophenyl)acrylamide, which is excellent in stability, solubility, and bioavailability when it is administered not only alone but also in combination with other drugs and which has a high purity, a crystalline form thereof, and a process for preparing the same.



21: 2019/07981. 22: 2019/11/29. 43: 2023/02/09
51: A61K; C07D

71: G1 THERAPEUTICS, INC.

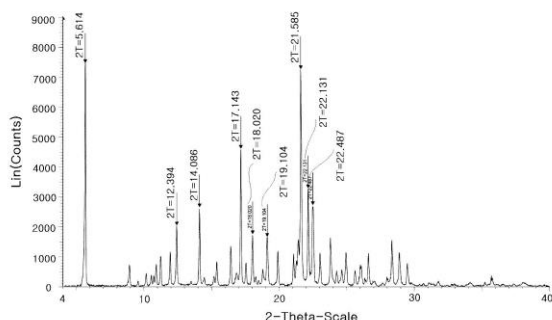
72: SMITH, ALEXANDER, WHITE, HANNAH S, ANDRES, PATRICIA, SUN, XUFENG, ZHU, LEI, VLAHOVA, PETINKA I

33: US 31: 62/526,937 32: 2017-06-29

54: MORPHIC FORMS OF G1T38 AND METHODS OF MANUFACTURE THEREOF

00: -

This invention provides an unexpectedly stable, highly crystalline form of the di-HCl salt of 2'-((5-(4-isopropylpiperazin-1-yl)pyridin-2-yl)amino)-7',8'-dihydro-6'H-spiro[cyclohexane-1,9'-pyrazino[1'2':1'5]pyrrolo[2,3-d]pyrimidin]-6'-one for advantageous therapeutic pharmaceutical efficacy and dosage form stability.



21: 2019/07710. 22: 2019/11/21. 43: 2023/02/09
51: A01N

71: CORTEVA AGRISCIENCE LLC

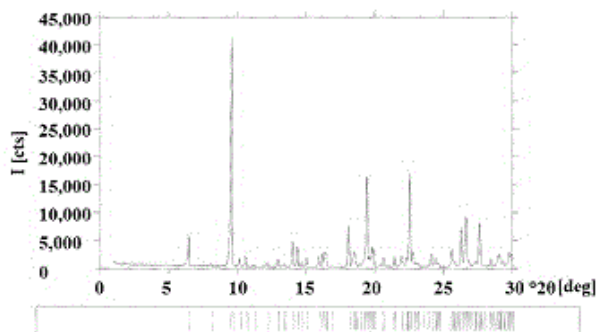
72: KISTER, JEREMY, SATCHIVI, NORBERT M, EPP, JEFFREY B, ROTH, JOSHUA

33: US 31: 62/504,148 32: 2017-05-10

54: 4-AMINO-6-(HETEROCYCLIC)PICOLINATES AND 6-AMINO-2-(HETEROCYCLIC)PYRIMIDINE-4-CARBOXYLATES AND THEIR USE AS HERBICIDES

00: -

4-Amino-6-(heterocyclic)picolinates and their derivatives; 6-amino-2-(heterocyclic)pyrimidine-4-carboxylates and their derivatives; and methods of using the same as herbicides.



21: 2019/08071. 22: 2019/12/04. 43: 2023/02/16
51: C07C; C07F

71: CENTRE FOR PROBE DEVELOPMENT AND COMMERCIALIZATION

72: BURAK, ERIC STEVEN, MAHONEY, STUART JAMES, SIMMS, RYAN WAYNE, VALLIANT, JOHN FITZMAURICE, DARWISH, ALLA

33: US 31: 62/502,260 32: 2017-05-05

54: PHARMACOKINETIC ENHANCEMENTS OF BIFUNCTIONAL CHELATES AND USES THEREOF

00: -

The present invention relates to conjugates including a chelating moiety of a metal complex thereof and a therapeutic or targeting moiety, methods for their production, and uses thereof.

21: 2019/08072. 22: 2019/12/04. 43: 2023/02/06

51: A61K; A61P

71: CENTRE FOR PROBE DEVELOPMENT AND COMMERCIALIZATION

72: BURAK, ERIC STEVEN, FORBES, JOHN RICHARD, MORAN, MATTHEW DAVID BURR, SIMMS, RYAN WAYNE, VALLIANT, JOHN FITZMAURICE, DARWISH, ALLA

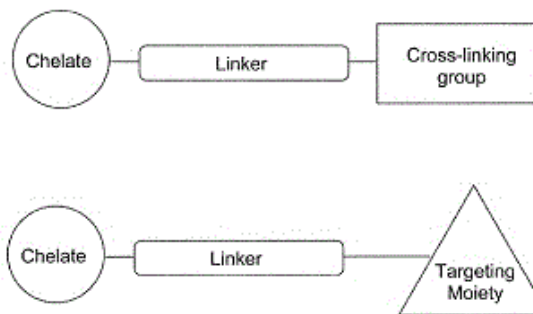
33: US 31: 62/545,945 32: 2017-08-15

33: US 31: 62/502,288 32: 2017-05-05

54: IGF-1R MONOCLONAL ANTIBODIES AND USES THEREOF

00: -

The present invention relates to conjugates including a chelating moiety of a metal complex thereof and a therapeutic or targeting moiety, methods for their production, and uses thereof. The present invention is directed to monoclonal antibodies that target the insulin-like growth factor-1 receptor and the radioimmunoconjugates thereof that demonstrate increased potency and enhance the excretion of a chelating moiety, or a metal complex thereof, when conjugated to a therapeutic moiety, a targeting moiety, or a cross-linking group. In another aspect, the invention features a pharmaceutical composition comprising a compound of the invention; and a pharmaceutically acceptable excipient. In another aspect, the invention features a method of radiation treatment planning and/or radiation treatment, the method comprising administering to a subject in need thereof a compound or pharmaceutical composition of the invention.



21: 2019/08075. 22: 2019/12/04. 43: 2023/02/14

51: C01B; C01C; C25B

71: HALDOR TOPSØE A/S

72: HAN, PAT A, KRØLL JENSEN, ANNETTE E

33: DK 31: PA 2017 00425 32: 2017-07-25

54: METHOD FOR THE PREPARATION OF AMMONIA SYNTHESIS GAS

00: -

Method for the preparation of ammonia synthesis gas by a combination of ATR or secondary reforming process using oxygen from an air separation unit and electrolysis of water for the production of ammonia synthesis gas.

21: 2019/08115. 22: 2019/12/05. 43: 2023/02/07

51: C01B; C01C; C25B

71: HALDOR TOPSØE A/S

72: HAN, PAT A, KRØLL JENSEN, ANNETTE E

33: DK 31: PA 2017 00425 32: 2017-07-25

33: DK 31: PA 2017 00522 32: 2017-09-25

54: METHOD FOR IMPROVING EFFICIENCY OF AN AMMONIA SYNTHESIS GAS PLANT

00: -

Method for improving efficiency of an existing ammonia synthesis gas plant or a new ammonia synthesis gas plant by establishing a combination of secondary steam reforming using oxygen from electrolysis of water for the production of ammonia synthesis gas.

21: 2019/08175. 22: 2019/12/09. 43: 2023/02/14

51: C01B; C01C; C07C; C25B

71: HALDOR TOPSØE A/S

72: HAN, PAT A

33: DK 31: PA 2017 00425 32: 2017-07-25

33: DK 31: PA 2017 00522 32: 2017-09-25

33: DK 31: PA 2018 00345 32: 2018-07-06

33: DK 31: PA 2018 00352 32: 2018-07-06

33: DK 31: PA 2018 00237 32: 2018-05-28

33: DK 31: PA 2018 00351 32: 2018-07-06

54: PROCESS FOR THE CO-PRODUCTION OF METHANOL AND AMMONIA

00: -

A process for the combined preparation of methanol and ammonia based on primary steam reforming a hydrocarbon feed stock and adiabatic secondary reforming with oxygen enriched air from electrolysis of water.

21: 2019/08177. 22: 2019/12/09. 43: 2023/02/14

51: C12N; C12P

71: UNIVERSITY OF CAPE TOWN

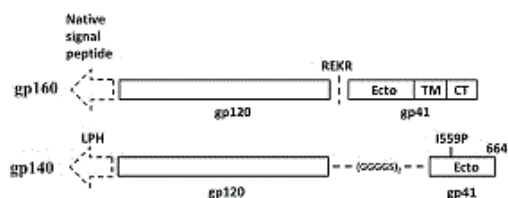
72: MEYERS, ANN ELIZABETH, RYBICKI, EDWARD PETER, MARGOLIN, EMMANUEL AUBREY

33: GB 31: 1708866.7 32: 2017-06-02

54: CO-EXPRESSION OF HUMAN CHAPERONE PROTEINS IN PLANTA FOR INCREASED EXPRESSION OF HETEROLOGOUS POLYPEPTIDES OF INTEREST

00: -

The present invention relates to a method for increasing the expression and/or promoting correct folding of a heterologous polypeptide of interest in a plant cell, comprising co-expressing the heterologous polypeptide of interest with a polypeptide encoding a mammalian chaperone protein. The invention also relates to plant cells and plants, which either transiently or stably, co-express the heterologous polypeptide of interest and the chaperone protein.



21: 2019/08181. 22: 2019/12/09. 43: 2023/02/07

51: G01N; H01L

71: ILLUMINA, INC.

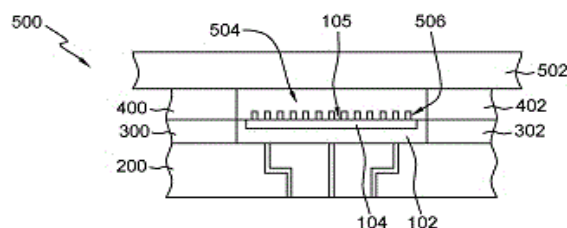
72: LU, DONGLAI, CAI, XIUYU, FENG, WENYI, TRAN, HAI

33: US 31: 62/626,021 32: 2018-02-03

54: STRUCTURE AND METHOD TO USE ACTIVE SURFACE OF A SENSOR

00: -

Disclosed is an apparatus and method of forming, including a supporting structure, a sensor on the supporting structure, a pair of columns on the supporting structure at opposite sides of the sensor, the pair of columns having a column height relative to a top surface of the supporting structure, the column height being higher than a height of the active surface of the sensor relative to the top surface of the supporting structure, and a lidding layer on the pair of columns and over the active surface, the lidding layer being supported at opposite ends by the pair of columns. The active surface of the sensor, the lidding layer and the pair of columns form an opening above at least more than about half of the active surface of the sensor, and the supporting structure, the sensor, the lidding layer and the pair of columns together form a flow cell.



21: 2019/08183. 22: 2019/12/09. 43: 2023/02/07

51: C01B; C07C; C25B

71: HALDOR TOPSØE A/S

72: AASBERG-PETERSEN, KIM, HAN, PAT A

33: DK 31: PA 2018 00237 32: 2018-05-28

33: DK 31: PA 2017 00522 32: 2017-09-25

33: DK 31: PA 2018 00351 32: 2018-07-06

33: DK 31: PA 2017 00425 32: 2017-07-25

54: METHOD FOR THE PREPARATION OF SYNTHESIS GAS

00: -

Method for the preparation of synthesis gas based on a combination of the ATR process or partial oxidation of hydrocarbon feed stock using oxygen from the electrolysis of water and an air separation unit to produce the synthesis gas.

21: 2019/08216. 22: 2019/12/10. 43: 2023/02/07

51: C01B; C01C; C25B; C07C

71: HALDOR TOPSØE A/S

72: HAN, PAT A

33: DK 31: PA 2017 00425 32: 2017-07-25

33: DK 31: PA 2018 00237 32: 2018-05-28

33: DK 31: PA 2018 00351 32: 2018-07-06

33: DK 31: PA 2018 00352 32: 2018-07-06

33: DK 31: PA 2017 00522 32: 2017-09-25

33: DK 31: PA 2018 00345 32: 2018-07-06

54: PROCESS FOR THE CO-PRODUCTION OF METHANOL AND AMMONIA IN PARALLEL

00: -

A process for co-production of methanol and ammonia in parallel based on autothermal reforming with oxygen enriched air from electrolysis of water and separation of air and preparation of ammonia with hydrogen from the electrolysis of water and nitrogen from the separation of air.

21: 2019/08325. 22: 2019/12/12. 43: 2023/02/07
51: A61K

71: ZAVANTE THERAPEUTICS, INC.

72: ELLIS-GROSSE, EVELYN

33: US 31: 62/567,599 32: 2017-10-03

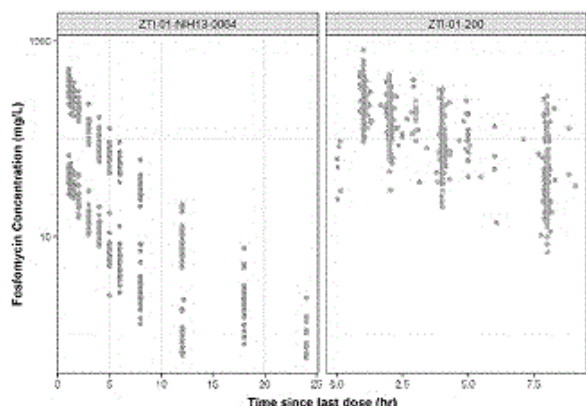
33: US 31: 62/512,655 32: 2017-05-30

33: US 31: 62/582,880 32: 2017-11-07

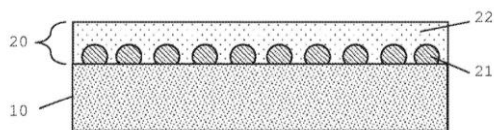
54: METHODS OF IDENTIFYING NOVEL DOSING REGIMENS

00: -

Methods for identification of new dosing strategies which optimize positive treatment outcomes and patient safety. Specifically, new dosing strategies for fosfomycin and pharmaceutically acceptable salt thereof which have improved treatment outcomes in mammals. For example, a method of treating mammals having a bacterial infection with fosfomycin or a pharmaceutically acceptable salt thereof using improved dosing regimens.



mixtures thereof. In an embodiment, the near infrared absorbing coating (20) further includes an inorganic matrix (22, 23, 24).



21: 2019/08409. 22: 2019/12/17. 43: 2023/02/06
51: C01B; C25B
71: HALDOR TOPSØE A/S
72: AASBERG-PETERSEN, KIM, HAN, PAT A, HULTQVIST, MICHAEL, MORTENSEN, PETER MØLGAARD

33: DK 31: PA 2017 00425 32: 2017-07-25
33: DK 31: PA 2018 00237 32: 2018-05-28
33: DK 31: PA 2017 00522 32: 2017-09-25
33: DK 31: PA 2018 00352 32: 2018-07-06

54: METHOD FOR THE PREPARATION OF SYNTHESIS GAS

00: -

Method for the preparation of synthesis gas combining electrolysis of water, tubular steam reforming and autothermal reforming of a hydrocarbon feed stock.

21: 2019/08491. 22: 2019/12/19. 43: 2023/02/16
51: A61C

71: Johnson & Johnson Consumer Inc.
72: DORWARD, Brian, FOURRE, Tara, MCDONOUGH, Justin, MIKSA, Davide, SEO, Jin, SHARMA, Deepak
33: US 31: 15/611,057 32: 2017-06-01

54: ORAL CARE CLEANING SYSTEM UTILIZING ENTRAINED FLUID

00: -

The present invention provides for oral care systems (1100) comprising: an appliance comprising a first (1132) and second (1134) plurality of nozzles, the appliance configured to be held in the mouth of a user with the first and second plurality of nozzles in fluid communication with one or more surfaces of the user's oral cavity; a source of gas; a source of liquid; and a fluid controller for directing entrained fluid to the appliance. Also disclosed are methods of cleaning, or otherwise providing benefits to, one or more surfaces of the oral cavity using a system of the present invention.

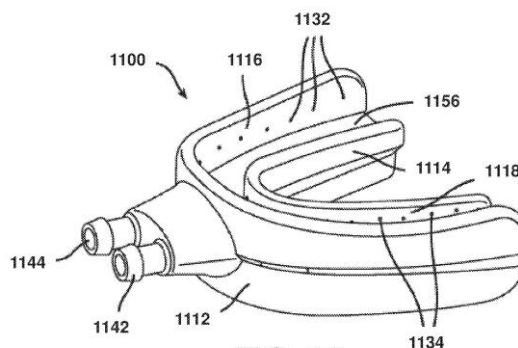


FIG. 13

21: 2019/08605. 22: 2019/12/23. 43: 2023/02/13
51: A61K

71: CELGENE CORPORATION

72: BUCHHOLZ, TONIA J, CARMICHAEL, JAMES, CARRANCIO, SORAYA, FAN, JINHONG, GUPTA, RAJAN, LU, GANG, MACBETH, KYLE, PACE, EMILY, PIERCE, DANIEL, POURDEHNAD, MICHAEL, PU, YU, WANG, PENG, WU, NAIJUN, YAO, SHEENA

33: US 31: 62/653,436 32: 2018-04-05

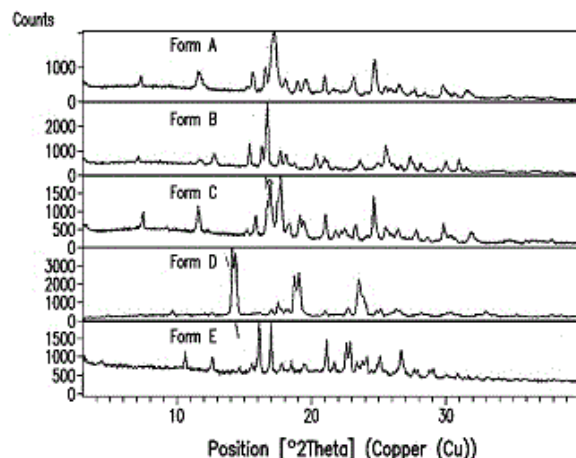
33: US 31: 62/527,744 32: 2017-06-30

33: US 31: 62/673,064 32: 2018-05-17

54: COMPOSITIONS AND METHODS OF USE OF 2-(4-CHLOROPHENYL)-N-((2-(2,6-DOXOPIPERIDIN-3-YL)-1-OXISOINDOLIN-5-YL) METHYL) -2,2-DIFLUOROACETAMIDE

00: -

Provided herein are formulations and methods of use of 2-(4-chlorophenyl)-N-((2-(2,6-dioxopiperidin-3-yl)-1-oxoisoindolin-5-yl)methyl)-2,2-difluoroacetamide or a stereoisomer or mixture of stereoisomers, pharmaceutically acceptable salt, tautomer, prodrug, solvate, hydrate, co-crystal, clathrate, or polymorph thereof.



21: 2020/00904. 22: 2020/02/12. 43: 2023/02/01

51: A61K; A61P

71: AstraZeneca AB

72: WHITTAKER, Andrew, SANGANEE, Hitesh Jayantilal

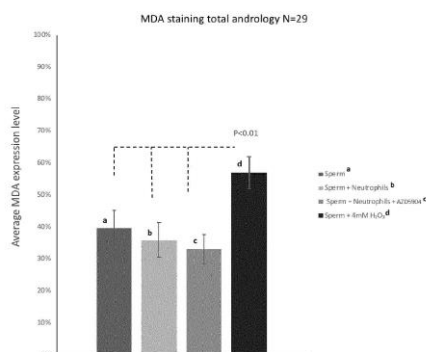
33: US 31: 62/533,448 32: 2017-07-17

54: MPO INHIBITORS FOR USE IN MEDICINE

00: -

The present disclosure relates to new therapeutic uses of MPO inhibitors and methods of treatment involving the same.

Figure 6 Average MDA staining by flow cytometric analysis



21: 2020/00926. 22: 2020/02/13. 43: 2023/02/09

51: E03B; E04C; F16L

71: GOVENDER, Preevin

72: GOVENDER, Preevin

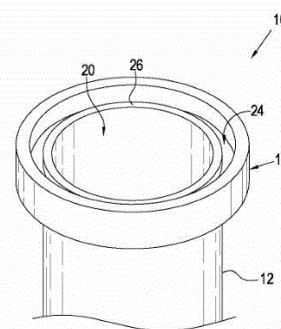
33: ZA 31: 2018/07606 32: 2018-11-13

54: A PIPE FITTING AND METHOD OF JOINING PIPES

00: -

This invention relates to a pipe fitting which comprises a plastically deformable body comprising

an internal wall defining a bore extending along a longitudinal axis; and a fitment portion. The fitment portion is located adjacent a free end of the body and comprises an inner fitment wall spaced from the internal wall of the body so as to define a seat therebetween. In use, the fitment wall is heated to a predetermined temperature or deformable extent, and an outer surface of an end portion of a pipe is heated to a predetermined temperature or deformable extent. The end portion of the pipe is inserted into the fitting in a co-axial fashion so that the heated outer surface of the end portion of the pipe comes into contact with the heated fitment wall of the fitting. The pipe and fitting is allowed to cool so as to form an integrated unit.



21: 2020/01028. 22: 2020/02/18. 43: 2023/02/03

51: B42D

71: SICPA HOLDING SA

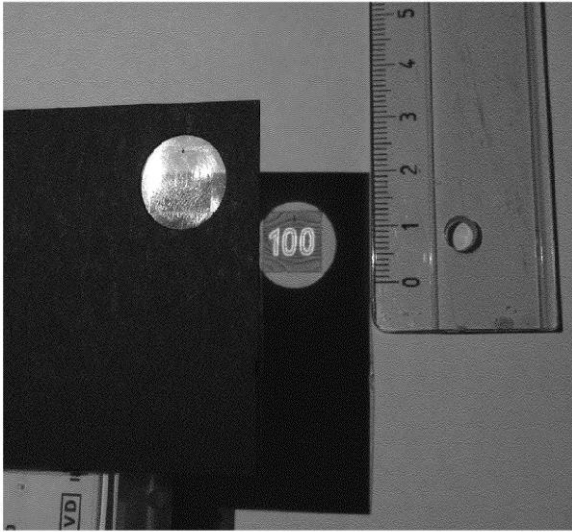
72: CALLEGARI, Andrea, DEGOTT, Pierre, DINOEV, Todor, GARNIER, Christophe, MAYER, Alain, SCHWARTZBURG, Yuliy, TESTUZ, Romain, PAULY, Mark

33: EP(CH) 31: 17194207.1 32: 2017-09-29

54: THIN OPTICAL SECURITY ELEMENT AND METHOD OF DESIGNING IT

00: -

The invention relates to a thin optical security element comprising a reflective or refractive light-redirecting surface having a relief pattern operable to redirect incident light from a light source and form a projected image on a projection surface, the projected image comprising a caustic pattern reproducing a reference pattern that is easily visually recognizable by a person. The invention also relates to a method for designing a relief pattern of a light-redirecting surface of a thin optical security element.



21: 2020/01080. 22: 2020/02/20. 43: 2023/02/02
51: H04W

71: QUALCOMM Incorporated

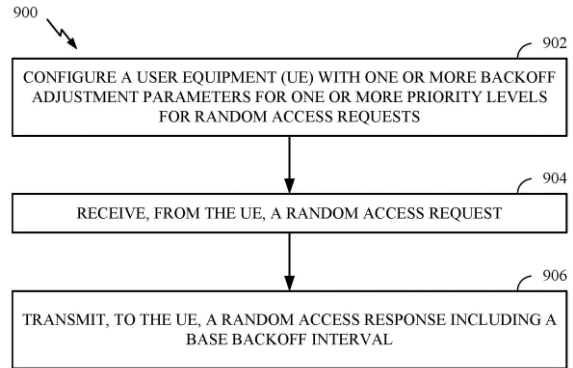
72: HE, Linhai, HORN, Gavin Bernard

33: US 31: 62/548,291 32: 2017-08-21

54: PRIORITIZED RANDOM ACCESS PROCEDURE

00: -

Aspects of the present disclosure relate to prioritized random access procedures in wireless systems. An exemplary method generally includes receiving, from a user equipment, a random access request including information identifying a type of a random access event being invoked, identifying one or more parameters associated with a backoff interval to be observed at the user equipment based, at least in part, on a priority associated with the type of the random access event, and transmitting, to the user equipment, a random access response including the identified one or more parameters.



21: 2020/01105. 22: 2020/02/21. 43: 2023/02/01
51: B42D

71: SICPA HOLDING SA

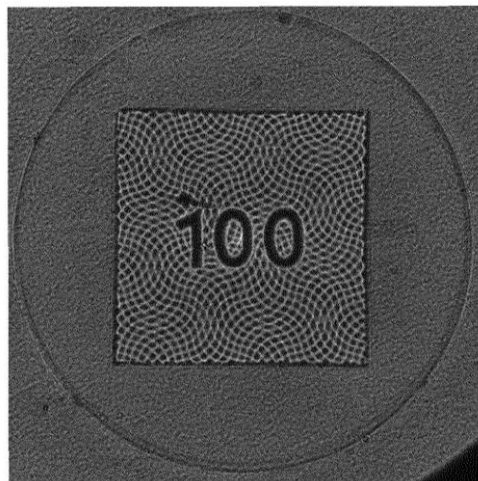
72: CALLEGARI, Andrea, DEGOTT, Pierre,
DINOEV, Todor, GARNIER, Christophe, MAYER,
Alain, SCHWARTZBURG, Yuliy, TESTUZ, Romain,
PAULY, Mark

33: EP(CH) 31: 17194209.7 32: 2017-09-29

54: OPTICAL SECURITY ELEMENT

00: -

The invention relates to a thin optical security element comprising a reflective or refractive light-redirecting surface having a relief pattern operable to redirect incident light from a light source and form a projected image on a projection surface, the optical parameters of this optical security element fulfilling a specific projection criterion such that the projected image comprises a caustic pattern reproducing a reference pattern that is easily visually recognizable by a person. The invention also relates to a method for designing a relief pattern of an optical security element.



21: 2020/01219. 22: 2020/02/26. 43: 2023/02/01

51: A61K; A61P; C07K

71: MedImmune, LLC

72: KINNEER, Krista, VARKEY, Reena, XIAO, Xiaodong, HURT, Elaine M., TICE, David

33: US 31: 62/539,825 32: 2017-08-01

54: BCMA MONOCLONAL ANTIBODY-DRUG CONJUGATE

00: -

The disclosure is directed to an antibody-drug conjugate (ADC) comprising a monoclonal antibody, or an antigen-binding fragment thereof, directed against B-cell maturation antigen (BCMA) conjugated to a cytotoxin. The disclosure also provides compositions comprising the antibody-drug conjugate and methods of killing multiple myeloma cells (including multiple myeloma stems cells) that express BCMA by contacting multiple myeloma cells with the ADC.

21: 2020/01248. 22: 2020/02/27. 43: 2023/02/01

51: A61K; C07D

71: Yuhan Corporation

72: OH, Sang-Ho, KHOO, Ja-Heouk, LIM, Jong-Chul, LEE, Doo-Byung, LEE, Jung-Ae, LEE, Jun-Sup, JU, Hyun, SHIN, Woo-Seob, JEON, Sang-Seol

54: NOVEL INTERMEDIATES USEFUL FOR THE SYNTHESIS OF AMINOPYRIMIDINE DERIVATIVES, PROCESS FOR PREPARING THE SAME, AND PROCESS FOR PREPARING AMINOPYRIMIDINE DERIVATIVES USING THE SAME

00: -

The present invention provides a novel process for preparing an aminopyrimidine derivative or pharmaceutically acceptable salt thereof having a selective inhibitory activity against protein kinases, especially against the protein kinases for mutant epidermal growth factor receptors. And also, the present invention provides novel intermediates useful for said process and processes for preparing the same.

21: 2020/01250. 22: 2020/02/27. 43: 2023/02/03

51: A61K; C07D

71: Yuhan Corporation

72: OH, Sang-Ho, KHOO, Ja-Heouk, LIM, Jong-Chul, LEE, Seong-Ran, JU, Hyun, SHIN, Woo-Seob, PARK, Dae-Gyu, PARK, Su-Min, HWANG, Yoon-Ah

33: KR 31: 10-2017-0096212 32: 2017-07-28

54: IMPROVED PROCESS FOR PREPARING AMINOPYRIMIDINE DERIVATIVES

00: -

The present invention provides an improved process for preparing an aminopyrimidine derivative or pharmaceutically acceptable salt thereof having a selective inhibitory activity against protein kinases, especially against the protein kinases for mutant epidermal growth factor receptors. And also, the present invention provides novel intermediates useful for said process and processes for preparing the same.

21: 2020/01300. 22: 2020/02/28. 43: 2023/02/02

51: A61K; A61Q

71: GlaxoSmithKline Consumer Healthcare (UK) IP Limited

72: HIPPALGOANKAR, Kanchan, PRIME, Constance Anne Marie

33: GB 31: 1715400.6 32: 2017-09-22

54: NOVEL COMPOSITION

00: -

The invention relates to a dentifrice composition comprising at least 50% w/w of sodium bicarbonate and 2% to 4% w/w of a surfactant system consisting of a betaine in combination with sodium lauryl sulphate.

21: 2020/01302. 22: 2020/02/28. 43: 2023/02/01

51: G21C; H05B

71: Joint Stock Company "Experimental and Design Organization "Gidropress" Awarded the Order of the Red Banner of Labour and

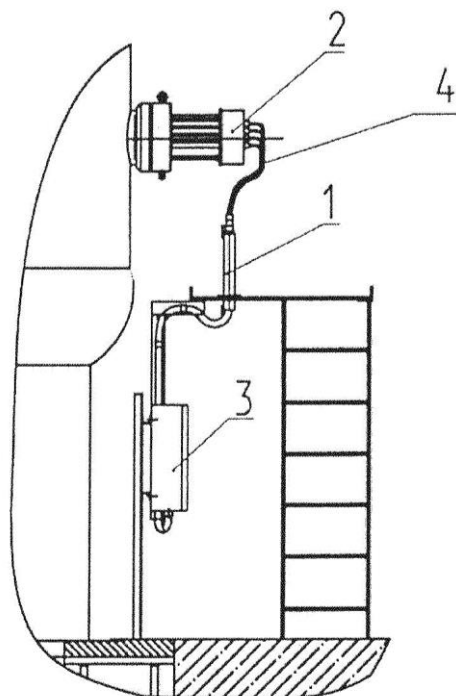
72: GAVRILIN, Viktor Alekseevich

33: RU 31: 2018124791 32: 2018-07-06

54: BUS ARRANGEMENT FOR A TUBULAR ELECTRIC HEATING ELEMENT ASSEMBLY

00: -

The invention relates to nuclear engineering, and more particularly to electric heating elements in nuclear power plant reactor safety systems. In a bus arrangement for a tubular electric heating element assembly, said arrangement containing a tubular electric heating element assembly, a sealed terminal box, and assemblies for connecting supply leads to terminals of tubular electric heating elements arranged in groups, an assembly for connecting a supply lead to a terminal of a tubular electric heating element is configured in the form of a heat-resistant sealed bayonet plug connector, the male side of which is the terminal of a tubular electric heating element, the pins of the bayonet connector being configured on the body of the tubular electric heating element, and the slots of the bayonet connector being configured in the form of inclined profiled surfaces. The technical result of the present invention is a device which provides for the simplified installation and use of a tubular electric heating element assembly, a reduction in installation time and dose-intensive work carried out by maintenance personnel, and an increase in the heat resistance of the power supply assembly of a tubular electric heating element.



Фиг. 1

21: 2020/01600. 22: 2020/03/13. 43: 2023/02/02

51: A61K; A61P

71: Janssen Vaccines & Prevention B.V.

72: WIDJOJOATMODJO, Myra Noorely, GODEAUX, Olivier, WILLIAMS, Kristi Lynn, CALLENDRET, Benoit C.S., SADOFF, Jerald

33: US 31: 62/558,994 32: 2017-09-15

54: METHOD FOR THE SAFE INDUCTION OF IMMUNITY AGAINST RSV

00: -

The present invention relates to methods of inducing a safe immune response against respiratory syncytial virus (RSV) in a human subject in need thereof, comprising administering to the subject a composition comprising recombinant adenovirus comprising nucleic acid encoding an RSV Fusion (F) protein comprising the amino acid sequence of SEQ ID NO: 1, and a pharmaceutically acceptable carrier, in a total dose of from about 1×10^{10} to about 2×10^{11} viral particles (vp).

21: 2020/01722. 22: 2020/03/18. 43: 2023/01/31

51: A61K; A61Q

71: GlaxoSmithKline Consumer Healthcare (UK) IP Limited

72: LUCAS, Robert Anthony

33: GB 31: 1715949.2 32: 2017-10-02

54: NOVEL COMPOSITION

00: -

The present invention relates to dentifrice compositions comprising spherical, anhydrous, amorphous, silica gel particles having a pore volume of less than 0.1ml/g and an orally acceptable carrier. Such compositions can effectively clean, polish and remove stains from the surface of teeth or dentures without a high degree of abrasion thereby reducing scratching and damage to the tooth or denture surface. Such compositions thereby provide superior cleaning, polishing, gentle stain removal and whitening of tooth surfaces or dentures.

21: 2020/02172. 22: 2020/05/04. 43: 2023/01/31
51: A61K; A61P; C07D

71: Nanjing TransThera Biosciences Co., Ltd.

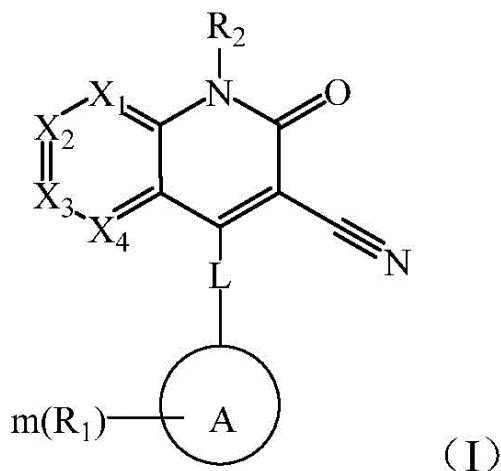
72: WU, Frank, LI, Lin, YANG, Xiaoju

33: CN 31: 201710900197.8 32: 2017-09-28

54: PDE9 INHIBITOR AND USE THEREOF

00: -

The present invention falls within the technical field of medicine, and in particular relates to PDE9 inhibitor compounds as shown in formula (I) or pharmaceutically acceptable salts or stereoisomers thereof, and also relates to pharmaceutical preparations and pharmaceutical compositions of the compounds and the uses thereof. X_1 , X_2 , X_3 , X_4 , R_1 , R_2 , ring A, L and m are as defined in the description. The compounds can be used to prepare drugs for treating or preventing related diseases mediated by PDE9.



21: 2020/02623. 22: 2020/05/11. 43: 2023/01/31
51: G06Q; H04L

71: nChain Holdings Limited

72: BARTOLUCCI, Silvia, JOSEPH, Daniel, MADEO, Simone

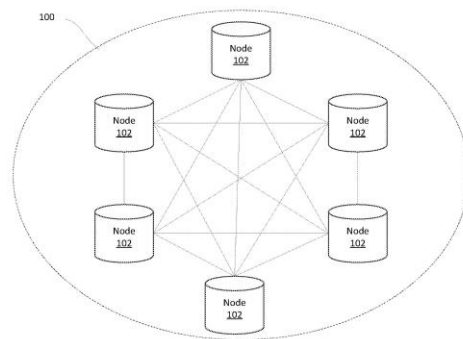
33: GB 31: 1719654.4 32: 2017-11-27

54: COMPUTER-IMPLEMENTED SYSTEM AND METHOD FOR PROPAGATION AND COMMUNICATION OF DATA IN A NETWORK SUCH AS A BLOCKCHAIN NETWORK

00: -

A method of propagating data packets in a network of nodes is disclosed. The method, implemented at

one of the nodes, includes: generating at least one data packet of a first type; collecting a set of data packets of the first type during a first time period, the set including the at least one generated data packet and at least one data packet of the first type received from one or more first nodes in the network; and for each data packet in the set: randomly select two or more neighbouring nodes connected to said one of the nodes; transmit, to each of the two or more selected neighbouring nodes: the data packet, wherein the two or more selected neighbouring nodes are configured to relay the data packet to one or more second nodes in the network using a mode of data propagation that is arbitrarily selected for that neighbouring node. The invention is particularly suited for implementation on a blockchain network such as, for example, the Bitcoin blockchain.



21: 2020/02690. 22: 2020/05/12. 43: 2023/01/31
51: E04F

71: Fortress Iron, LP

72: TIMMONS, Evan

33: US 31: 15/790,814 32: 2017-10-23

54: RAKING RAIL PANEL AND BRACKET SYSTEM AND METHOD

00: -

A raking rail panel system includes a raking rail panel that is supported by four pivotable bracket assemblies. Each pivotable bracket assembly includes a rail support bracket that is hinged to a post bracket. Each post bracket is configured to be coupled to a vertical support post. The post brackets each include a gap filling portion that extends from a mounting face of the vertical support posts. The gap filling portions are sized to either fill a long or a short gap between an end baluster and the vertical support post. The four pivotable bracket assemblies facilitate drop-in installation of the rail panel pivoted in a range of rake angles.

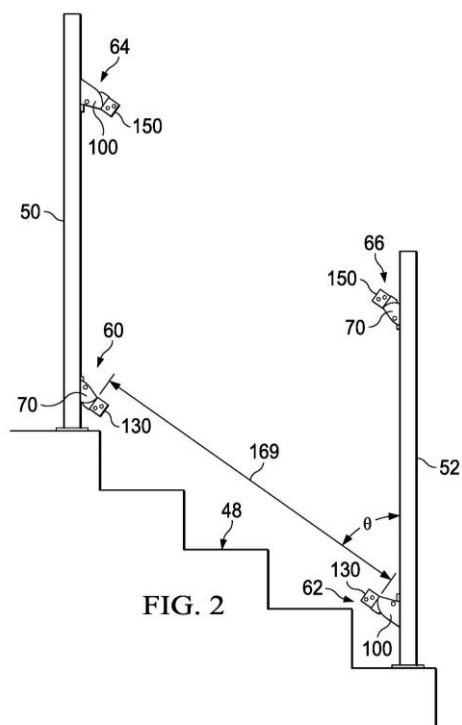
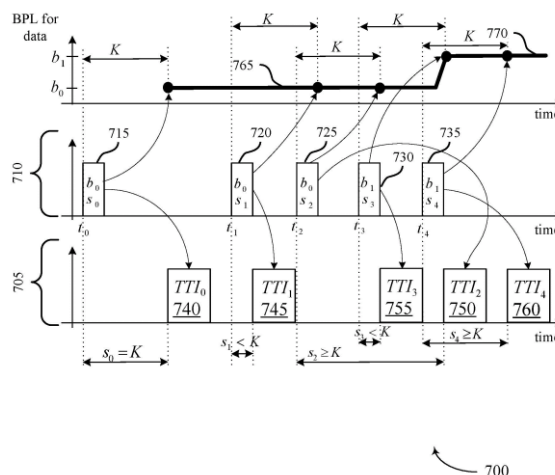


FIG. 2



21: 2020/02837. 22: 2020/05/15. 43: 2023/01/31
51: H04B; H04W

71: QUALCOMM Incorporated

72: SUBRAMANIAN, Sundar, WANG, Xiao Feng, CEZANNE, Juergen, SADIQ, Bilal, ISLAM, Muhammad Nazmul, LI, Junyi

33: US 31: 62/588,180 32: 2017-11-17

54: METHODS FOR BEAM DETERMINATION AFTER BEAM PAIR LINK INDICATION

00: -

Methods, systems, and devices for wireless communications are described that provide for signaling and switching of beam pair links (BPLs) for directional transmission beams between a base station and a user equipment (UE). A threshold value may be determined, which corresponds to an amount of time for a UE to receive and decode control information, and apply a different BPL than a current BPL that that is in use. The UE may maintain a BPL for data, which is used during data transmission time intervals (TTIs) until an indication is received to change the BPL for data. The UE and the base station may determine to change between BPLs based at least in part on the threshold value and a scheduling offset between a control channel transmission that allocates resources for a data TTI and a start of the data TTI.

21: 2020/03132. 22: 2020/05/27. 43: 2023/02/01
51: A61K

71: Adocia

72: SOULA, Olivier, SOULA, Gérard, DAUTY, Emmanuel, CHARVET, Richard

33: FR 31: 12/60808 32: 2012-11-13

33: US 31: 61/725,775 32: 2012-11-13

54: QUICK-ACTING INSULIN FORMULATION INCLUDING A SUBSTITUTED ANIONIC COMPOUND

00: -

The invention relates to a composition in an aqueous solution, including insulin and at least one substituted anionic compound selected among the substituted anionic compounds consisting of a backbone made of a discrete number u comprised between 1 and 8 ($1 = u = 8$) of identical or different saccharide units, bonded by identical or different glycosidic bonds, said saccharide units being selected from the group comprising hexoses, in cyclic form or in open reduced form, said compound comprising partially substituted carboxyl functional groups, the non-substituted carboxyl functional groups being salifiable. The invention also relates to a pharmaceutical formulation including a composition according to any one of the preceding claims.

21: 2020/03198. 22: 2020/05/29. 43: 2023/01/31
51: B01F; C09C

71: SunCoal Industries GmbH

72: WITTMANN, Tobias, BERGEMANN, Klaus

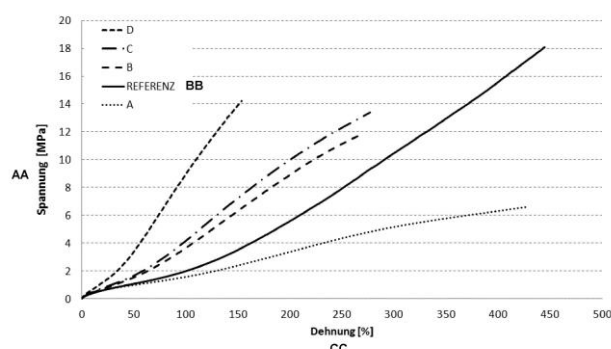
33: DE 31: 10 2015 014 956.3 32: 2015-11-21

54: PARTICULATE CARBON MATERIAL PRODUCIBLE FROM RENEWABLE RAW

MATERIALS AND METHOD FOR ITS PRODUCTION

00: -

The present invention relates to a particulate carbon material that can be produced from renewable raw materials, in particular from biomass containing lignin, comprising: a ^{14}C content that corresponds to that of the renewable raw materials, said content being preferably greater than 0.20 Bq/g carbon, especially preferably greater than 0.23 Bq/g carbon, but preferably less than 0.45 Bq/g carbon in each case; a carbon content in relation to the ash-free dry substance of between 60 ma.% and 80 ma. %; an STSA surface area of the primary particles of at least 5 m²/g and at most 200 m²/g; and an oil absorption value (OAN) of between 50 ml/100g and 150ml/100g. The present invention also relates to a method for producing said carbon material and to the use thereof.



FIGUR 1

AA Stress [MPa]
BB Reference
CC Strain

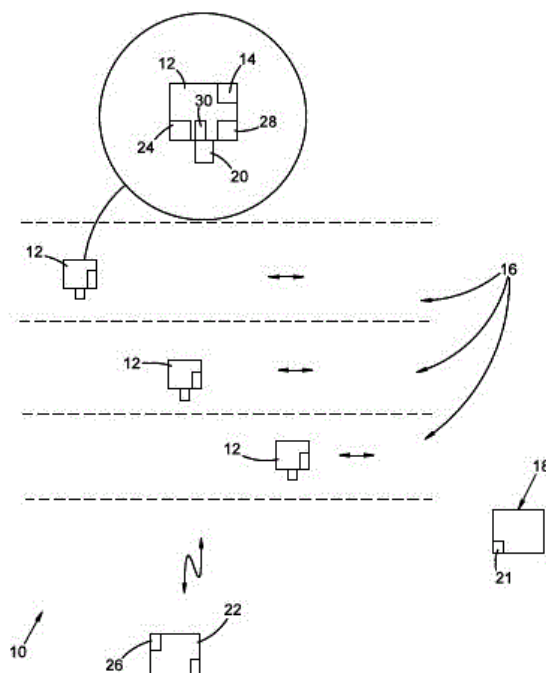
21: 2020/03727. 22: 2020/06/19. 43: 2023/02/16
51: F41J; G01S; G04R; G05D; H04N
71: WALKER, Grant Robert James
72: WALKER, Grant Robert James
33: ZP 31: 2017/07879 32: 2017-11-21

54: DRONE TRAFFIC MANAGEMENT SYSTEM AND METHOD

00: -

A drone traffic management system is provided, the system comprising a mapping module, which is either installed or fitted on each drone or which is accessible by each drone before and/or during flight, the mapping module defining a flying level (or airway) in respect of which the drone is obliged to fly

within during a particular flight. A controller is provided at each drop off zone to control the exit of the drone from its designated flying level to enable it to arrive at its destination. In an embodiment, the system includes a central control station to monitor the flying drones, and to detect when a drone is off course and/or not flying at its designated flying level for its particular flight. Regarding the latter, the control station is allowed to take over control of the drone, but typically only under certain conditions and in accordance with determined regulations.



21: 2020/04208. 22: 2020/07/09. 43: 2023/02/27
51: G06Q

71: LENZING AKTIENGESELLSCHAFT
72: KLAUS-NIETROST, Christoph, HERCHL, Richard, WEILACH, Christian
33: EP 31: 18151679.0 32: 2018-01-15

54: CODING OF A CELLULOSE PRODUCT

00: -

The invention relates to a method for identifying a product (150) containing cellulose. In said method, a dataset (180) is determined indicating multiple components of the product (150) or a preform of said product (150), and the data set (180) correlating to the product (150) or preform is stored in a data bank (152).

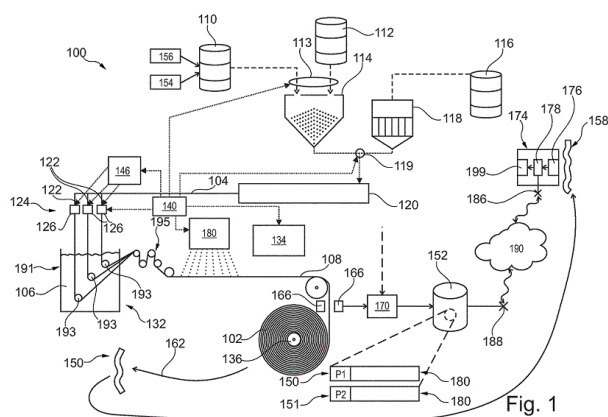


Fig. 1

21: 2020/04210. 22: 2020/07/09. 43: 2023/02/27

51: D01F C08B C08J

71: LENZING AKTIENGESellschaft

72: KLAUS-NIETROST, Christoph, HERCHL, Richard, WEILACH, Christian

33: EP 31: 18151674.1 32: 2018-01-15

54: MOLDED BODY WHICH HAS ELASTANE INCORPORATED INTO CELLULOSE, AND PRODUCTION METHOD

00: -

The invention relates to a method for producing a cellulose-containing molded body (102). The method has the steps of: i) providing (78) a starting material (110) which has cellulose and elastane, said elastane being provided in the starting material (110) separately from the cellulose in particular, wherein the starting material (110) is a solid body, and ii) producing (80) the cellulose-containing molded body (102), in particular by means of a lyocell method or a viscous method, on the basis of the starting material (110) such that the regenerated cellulosic molded body (112) has at least a proportion of the elastane of the starting material (110). The proportion of the elastane of the starting material (110) is incorporated into the regenerated cellulosic molded body (102). The invention additionally relates to a regenerated cellulosic molded body (102) which has elastane incorporated into the cellulose and which is produced according to a lyocell method or a viscous method.

21: 2020/04935. 22: 2020/08/11. 43: 2023/03/14

51: A61K; A61P

71: REGENERON PHARMACEUTICALS, INC.

72: PORTY, Robert, C., DONAHUE, Stephen, HERMAN, Gary

33: US 31: 62/637,017 32: 2018-03-01

54: METHODS FOR ALTERING BODY COMPOSITION

00: -

The present invention relates to compositions and methods for altering body composition in a subject, wherein the alteration of body composition is an increase in muscle mass and a reduction of fat mass simultaneously. The present invention also relates to compositions and methods for reducing fat mass in a subject. The compositions and methods also increase muscle volume and lean body mass in the subject. The present invention also relates to compositions that comprise a GDF8 inhibitor and an Activin A inhibitor and the use of such compositions to treat diseases and disorders characterized by increased fat mass, and/or decreased muscle volume.

21: 2020/05741. 22: 2020/09/16. 43: 2023/03/14

51: C12M; G01N

71: GENZYME CORPORATION

72: WANG, Jonathan, SHAH, Neha, WALTHER, Jason, LU, Jiuyi, JOHNSON, Timothy, REN, Yukun, MCLARTY, Jean

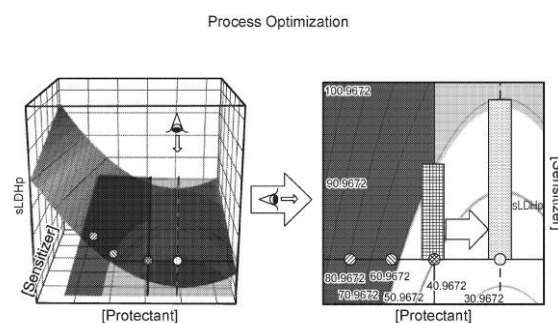
33: US 31: 62/644,339 32: 2018-03-16

33: US 31: 62/645,755 32: 2018-03-20

54: METHODS FOR IMPROVING CELL VIABILITY IN A PRODUCTION BIOREACTOR

00: -

Provided herein are methods of predicting the effect of a concentration of a sensitizer on cell viability in a production bioreactor, methods of improving cell viability in a production bioreactor, methods of predicting cell viability in a production bioreactor, and methods for culturing a cell in a production bioreactor.



21: 2020/06065. 22: 2020/09/30. 43: 2023/02/03

51: H04L

71: nChain Holdings Limited

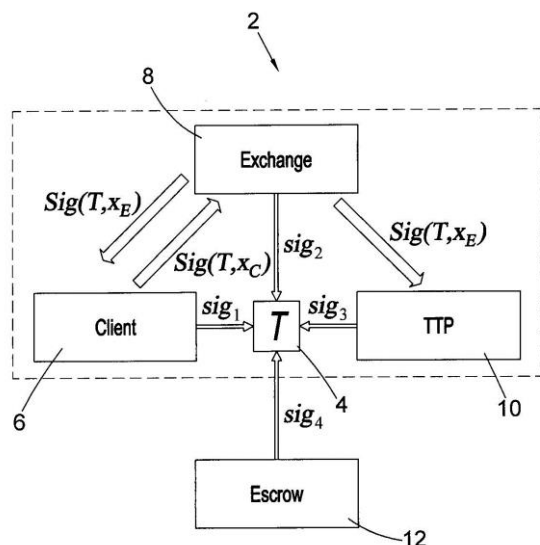
72: FLETCHER, John, TREVETHAN, Thomas

33: GB 31: 1805633.3 32: 2018-04-05

54: COMPUTER IMPLEMENTED METHOD AND SYSTEM FOR TRANSFERRING ACCESS TO A DIGITAL ASSET

00: -

A method of transferring access to a digital asset is disclosed. The method comprises receiving a first blockchain transaction (4) from a first participant (6) by each of a plurality of second participants (8), (10). The first participant (6) has a first private key of a first private- public key pair of a cryptography system, and each participant (6), (8), (10) has a respective first share of a second private key of a second private-public key pair of the cryptography system, and the first blockchain transaction is signed with the first private key. Signature of the first blockchain transaction with the first private key is verified by each second participant (8), (10). A respective first share is applied to the first blockchain transaction to generate a respective second share of a second blockchain transaction signed with the second private key. Signature with the second private key is possible by means of a first threshold number of second shares and is inaccessible to less than the first threshold number of second shares. The first threshold number of second shares is combined from the first participant (6) and a plurality of the second participants (8), (10) generate the signature.



21: 2020/06569. 22: 2020/10/22. 43: 2023/03/13
51: A61K; A61P

71: CIPLA TECHNOLOGIES LLC

72: PERRY, Jason M., HAVA, David L., CURRAN, Aidan

33: US 31: 62/659,601 32: 2018-04-18

33: US 31: 62/696,510 32: 2018-07-11

54: METHODS OF TREATING FUNGAL INFECTIONS

00: -

The invention relates to methods of treating fungal infections by administering to the respiratory tract of a patient in need thereof an effective amount of an anti-fungal agent, preferably itraconazole, wherein said anti-fungal agent is administered in an amount sufficient to concurrently achieve a) a lung concentration of anti-fungal agent of at least 500 ng/g or ng/mL and b) a plasma concentration of anti-fungal agent of no more than 25 ng/mL. The preferred form is as dry powder inhalation.

21: 2020/06604. 22: 2020/10/23. 43: 2023/02/01

51: C12N

71: AMICUS THERAPEUTICS, INC.

72: DO, HUNG V, GOTSCHALL, RUSSELL

33: US 31: 62/315,400 32: 2016-03-30

33: US 31: 15/473,994 32: 2017-03-30

33: US 31: 62/457,584 32: 2017-02-10

54: METHOD FOR SELECTION OF HIGH M6P RECOMBINANT PROTEINS

00: -

Methods for the production, capturing and purification of recombinant human lysosomal proteins are described. Such recombinant human lysosomal proteins can have high content of mannose-6-phosphate residues. Also described are pharmaceutical compositions comprising such recombinant human lysosomal proteins, as well as methods of treatment and uses of such recombinant human lysosomal proteins.



21: 2020/06646. 22: 2020/10/26. 43: 2023/02/01

51: B01D

71: KICKSTART INTERNATIONAL, INC.

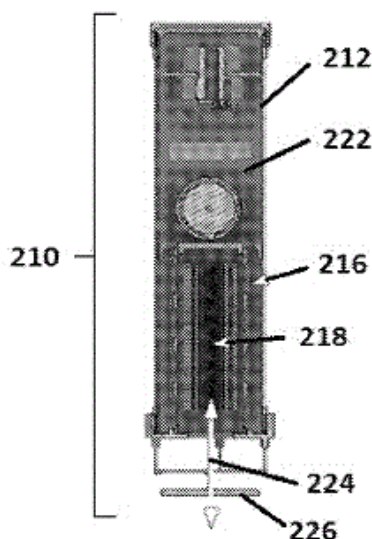
72: FISHER, MARTIN JOHN, SPYBEY, ALAN CHARLES, MUGO, SIMON MAINA

33: US 31: 62/662,504 32: 2018-04-25

54: PUMP ASSEMBLY

00: -

Improved systems and methods for cleaning a filter are described, including apparatuses that include a built-in mechanism for cleaning a filter screen. The system can include a brush mounted in contact with a filter screen, adapted so that the brush can be moved to clean the filter screen. In some versions, the brush rotates with an axis of rotation perpendicular to a plane defined by a substantially planar filter screen. In other versions, the brush is adapted to be moved by a gravitational force along a surface of a filter screen upon removal of a pump housing from a pump well. In still other versions, a substantially cylindrical brush is mounted nested with a substantially semi-cylindrical filter screen, and the brush can be rotated while in contact with the filter screen and with an axis of rotation aligned with a longitudinal axis of the filter screen.



21: 2020/06730. 22: 2020/10/28. 43: 2023/02/01

51: B29C; B65D; B29L

71: CSP TECHNOLOGIES, INC.

72: HUBER, DONALD, FREEDMAN, JONATHAN R, TIFFT, BRIAN, LUCAS JR., FRANKLIN LEE

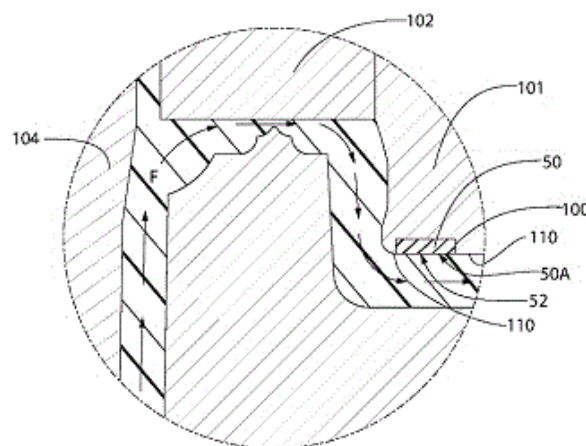
33: US 31: PCT/US2018/025325 32: 2018-03-30

54: METHODS OF OVERMOLDING SOFTER MATERIAL WITH HARDER MATERIAL AND MOISTURE TIGHT CONTAINER ASSEMBLIES MADE BY THE METHODS

00: -

A method of over-molding materials includes: providing a first material in a groove in a first portion

of a mold such that only a single surface of the first material is exposed to a vacant portion of the mold; providing, via an injection molding process, a second material in a liquid form in the vacant portion of the mold adjacent to, and in engagement with, the first material; and allowing the second material to solidify and become directly coupled to the first material, thus forming a single component. During the method, the entire single surface of the first material is flush with a plane defined by outer surface of the first portion of the mold. The second material has one or both of a greater hardness when solidified than the first material and/or a higher melting temperature than the first material.



21: 2020/06737. 22: 2020/10/28. 43: 2023/02/01

51: C07K; A61P; A61K

71: ALECTOR LLC

72: PINCETIC, ANDREW, HO, WEI-HSIEN, CULP, PATRICIA, ROSENTHAL, ARNON

33: US 31: 62/676,813 32: 2018-05-25

54: ANTI-SIRPA ANTIBODIES AND METHODS OF USE THEREOF

00: -

The present disclosure is generally directed to compositions that include antibodies, e.g., monoclonal, antibodies, antibody fragments, etc., that specifically bind a SIRPA polypeptide, e.g., a mammalian SIRPA or human SIRPA, and use of such compositions in preventing, reducing risk, or treating an individual in need thereof.

FIGURE 10A

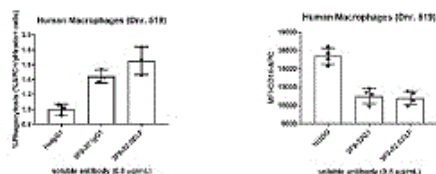
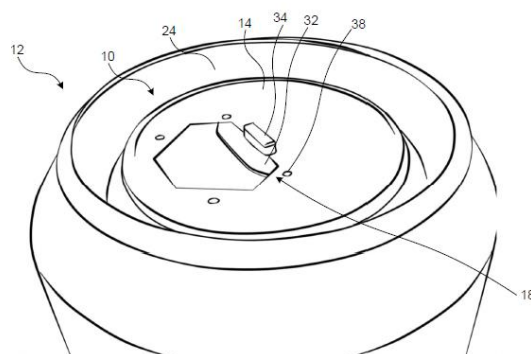
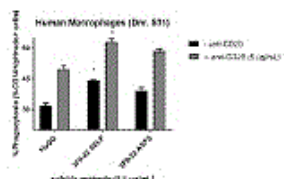


FIGURE 10B



21: 2020/06899. 22: 2020/11/05. 43: 2023/04/12
 51: B65D
 71: BESTINN BUSINESS SOLUTIONS (PTY) LTD
 72: Simphiwe Malibongwe VELA, Tawananyasha Mukumbareza

54: RESEALABLE COVER FOR A BEVERAGE CONTAINER

00: -

A resealable cover for a beverage container is disclosed. The cover has a mounting section connected or connectable to a body of the beverage container, a slide holder connected to the mounting section, and a slider located between the mounting section and the slide holder. The slider is held captive in the beverage container while being slidably displaceable relative to the mounting section and the slide holder between a closed position, in which the slider closes or seals off an internal volume of the beverage container, and an open position, in which the internal volume is exposed. The cover further includes at least one sealing member secured to the slide holder and/or the slider. The sealing members may be shaped and configured to create a liquid impermeable seal between the slide holder and the slider when the slider is in the closed position.

21: 2020/06904. 22: 2020/11/05. 43: 2023/02/01
 51: C07K; A61K; A61P
 71: BEIJING WISDOMAB BIOTECHNOLOGY CO., LTD, GENRIX (SHANGHAI)
 BIOPHARMACEUTICAL CO., LTD., CHONGQING GENRIX BIOPHARMACEUTICAL CO., LTD.
 72: LIU, ZHIGANG, LIU, YULAN, HAO, XIAOBO, JIANG, LEI, GUO, JINGJING

33: CN 31: 201810360234.5 32: 2018-04-20

54: ANTI-IL-4R ANTIBODY AND USE THEREOF

00: -

Disclosed in the present application are an antibody or an antigen-binding portion thereof binding to human IL-4R, a polynucleotide encoding the antibody or antigen-binding portion thereof, a vector comprising the polynucleotide, a host cell comprising the polynucleotide or vector, a method for preparing and purifying the antibody, and the use of the antibody or antigen-binding portion thereof.

21: 2020/06988. 22: 2020/11/10. 43: 2023/02/01
 51: A23K; A61P
 71: MARS, INCORPORATED
 72: BAYLE, JULIE, MONIOT, DELPHINE, BIOURGE, VINCENT, QUEAU, YANN, DANIEL, GEOFFREY

33: EP 31: 18177847.3 32: 2018-06-14

54: COMPOSITION FOR SUPPORTING ANIMAL WITH CANCER

00: -

The present disclosure relates to a dog food composition comprising from about 10% by weight to about 20% by weight of fat, from about 5% by weight to about 15% by weight of fibers and from about 30% by weight to about 60% by weight proteins, the weight percentages being based on the total weight of dry matter of the composition.

21: 2020/06989. 22: 2020/11/10. 43: 2023/02/01
51: C10L; C01B

71: HALDOR TOPSØE A/S

72: DAHL, PER JUUL

33: DK 31: PA 2018 00302 32: 2018-06-27

54: A PROCESS FOR START-UP OF THE HYDRODESULFURIZATION SECTION OF A NATURAL GAS FIRED REFORMER

00: -

In a process for the start-up of a hydrodesulfurization section, comprising the steps of providing a natural gas feed, passing the natural gas feed through the waste heat section of a reformer, thereby heating the natural gas feed, and passing the heated natural gas feed through a hydrodesulfurization section, thereby heating the hydrodesulfurization section while producing a desulfurized natural gas stream, a part of the desulfurized natural gas stream is provided as fuel for the reformer, while the remainder of the desulfurized natural gas is recycled to at least one point upstream the waste heat section.

21: 2020/07039. 22: 2020/11/11. 43: 2023/02/01
51: F04D

71: RESOURCE WEST, INC.

72: BALLANTYNE, ROBERT, MACDONALD, WILLIAM

33: US 31: 62/656,887 32: 2019-04-12

33: US 31: 62/656,906 32: 2019-04-12

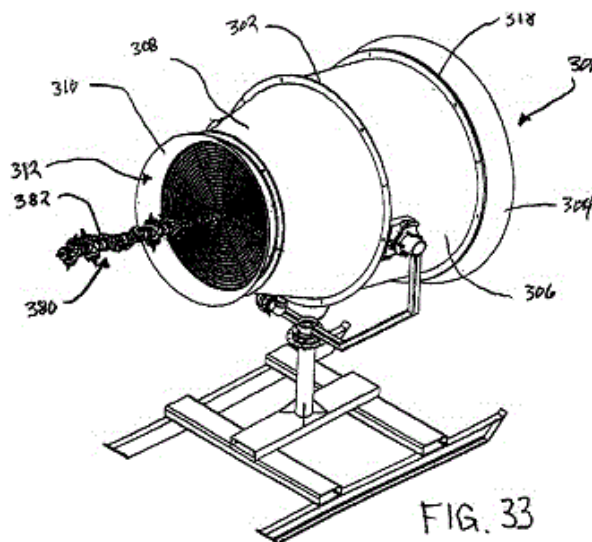
33: US 31: 62/656,856 32: 2019-04-12

54: EVAPORATOR FOR AMBIENT WATER BODIES, AND RELATED SYSTEM AND METHOD

00: -

An evaporator is provided for evaporating water from an ambient water body. The evaporator includes a housing that in turn includes an air flow channel and an air flow exit. The evaporator also includes an air flow induction device, such as a fan or impeller, that facilitates the directing of an air flow stream through the air flow channel and out the air flow exit. A water injection device is in fluid communication with the air flow channel and is disposed to inject the water from the water body into the air flow stream at a water injection location within the air flow stream and proximate to the air flow exit. A water injection system for injecting water from an ambient water body into an air flow stream directed by an air flow channel of an evaporator also is disclosed, wherein the air flow channel is disposed about a longitudinal axis. The water injection system includes an

elongated tubular member disposed parallel with respect to the longitudinal axis, a plurality of water injection nodes disposed at the tubular member and spaced from one another longitudinally, and a support for positioning the elongated tubular member within or proximate to the air flow channel so that the plurality of water injection nodes are positioned within the air flow stream.



21: 2020/07046. 22: 2020/11/11. 43: 2023/02/01
51: F04D

71: RESOURCE WEST, INC.

72: BALLANTYNE, ROBERT, MACDONALD, WILLIAM

33: US 31: 62/656,887 32: 2018-04-12

33: US 31: 62/656,906 32: 2018-04-12

33: US 31: 62/656,856 32: 2018-04-12

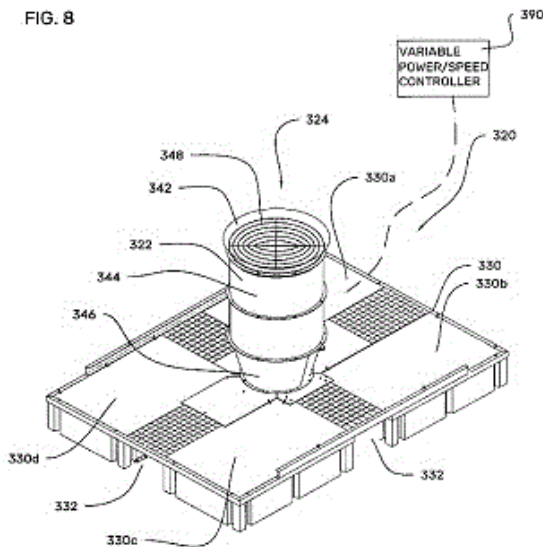
54: EVAPORATOR FOR AMBIENT WATER BODIES, AND RELATED SYSTEM AND METHOD

00: -

An evaporator is provided for evaporating water from an ambient body of water having a water surface. The evaporator includes a housing that has a proximal end proximate to the water surface, a distal end distal to the water surface, and a housing air flow channel directed toward the water surface. The housing is disposed on a support, such as a float assembly, that positions the housing above the water surface. The evaporator also includes an air flow induction device, preferably an impeller, disposed to direct an air flow stream from the distal end toward the proximal end through the housing air

flow channel and toward the water surface so that the air contacts the water. The impeller preferably is made of a fiberglass material. The support preferably includes at least one float assembly air flow channel that receives the air flow stream from the housing and directs it outwardly from the evaporator. Water injection devices such as spray nozzles or atomizing nozzles preferably are disposed in the float assembly channel or channels to inject the water into the air flow stream.

FIG. 8



21: 2020/07047. 22: 2020/11/11. 43: 2023/02/01
51: F04D
71: RESOURCE WEST, INC.
72: MACDONALD, WILLIAM, BALLANTYNE, ROBERT

33: US 31: 62/656,856 32: 2018-04-12

33: US 31: 62/656,887 32: 2018-04-12

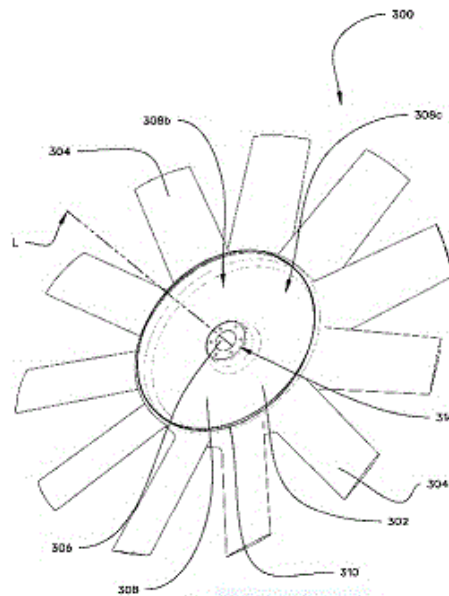
33: US 31: 62/656,906 32: 2018-04-12

54: IMPELLER FOR AMBIENT WATER EVAPORATORS, AND RELATED SYSTEM AND METHOD

00: -

An impeller design is provided for use in evaporating water from an ambient water body. The impeller includes a hub and a plurality of impeller blades. The blades have one or more profiles that correspond to certain profiles characterized by the National Advisory Committee for Aeronautics parameters known as NACA 4 parameters. One or more blade angles also may more specifically identify the blade profiles. The impeller blades also may be identified by a plurality of profiles on a given blade, preferably

including a base profile and a tip profile. The impeller optionally but preferably is made of a fiberglass material. In preferred embodiments it constitutes an integrated unit, such as a unitary molded or cast unit. It may be coated by a suitable corrosion-resistant coating, for example, such as a clear coat or gel coat. Various features of the impeller hub also are disclosed. An impeller system also is disclosed. The system includes an impeller as described above and means for mitigating non-longitudinal flow in the air flow channel in which the impeller caused air movement. The means for mitigating non-longitudinal flow preferably includes a plurality of guide vanes disposed downstream of the impeller.



21: 2020/07234. 22: 2020/11/19. 43: 2023/02/01
51: A61G; A47C

71: HEADOVATIONS LTD

72: COHEN GAZIT, BEN, SHAHAM, KALMAN, LIBRUS, MICHAEL

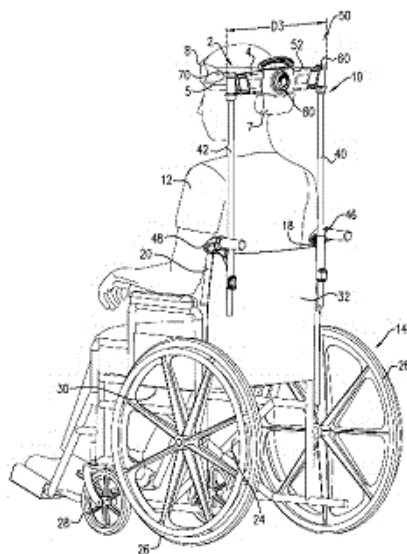
33: IL 31: 258832 32: 2018-04-22

54: HEAD SUPPORT ASSEMBLY AND SUPPORT UNIT

00: -

A support unit for a modular head support assembly having a right support post and a left support post, said support unit comprising: a support body; a right attachment element and a left attachment element configured for articulation with said right support post and said left support post, respectively, said right attachment element and said left attachment element being disposed at opposite sides of the

support body; and an adjustment mechanism configured for selectively adjusting the position of the right attachment element and the left attachment element with respect to each other, at least from an extended position towards a retracted position.



21: 2020/07259. 22: 2020/11/20. 43: 2023/02/01
51: C07K; A61K; A61P
71: BEIJING WISDOMAB BIOTECHNOLOGY CO., LTD, GENRIX (SHANGHAI) BIOPHARMACEUTICAL CO., LTD., CHONGQING GENRIX BIOPHARMACEUTICAL CO., LTD.
72: LIU, ZHIGANG, HAO, XIAOBO, LIU, YULAN, GUO, JINGJING
33: CN 31: 201810901518.0 32: 2018-08-09
54: BISPECIFIC ANTIBODY AGAINST RABIES VIRUS, AND APPLICATION THEREOF

00: -
The present application provides a bispecific antibody against rabies virus, and an application thereof. The bispecific antibody comprises two antigen-binding fragments binding to different epitopes of G protein of rabies virus, and has rabies virus neutralization activity.

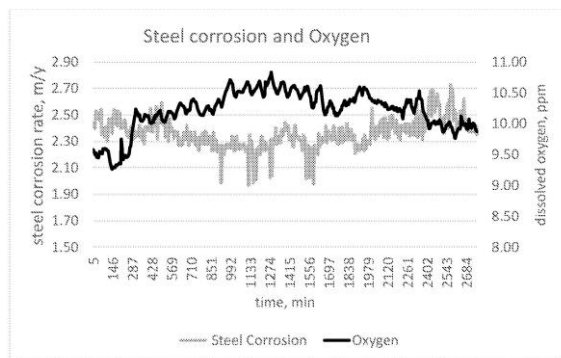
21: 2020/07287. 22: 2020/11/23. 43: 2023/02/28
51: C09K; H05B
71: Diamond Innovations, Inc.
72: DALIS, Adamos, VAGARALI, Suresh Shankarappa
33: US 31: 62/661,813 32: 2018-04-24
54: LUMINESCENT DIAMOND MATERIAL AND METHOD OF PRODUCING THE SAME

00: -
Provided are a luminescent diamond material and method of producing the same. The method may include the steps of providing a catalyst selected from one or more of the group of cobalt, iron, manganese and nickel; providing an enhancer selected from one or more of the group of boron, germanium, phosphorous, silicon and tin; providing graphite; blending the catalyst, enhancer and graphite to form a homogenized blend; and subjecting the homogenized blend to a high temperature, high pressure process to form a luminescent diamond material having a plurality of diamond particles having a plurality of defect centers, wherein the luminescent diamond material luminesces at a wavelength of about 700 nm to about 950 nm and energy of about 1.77 eV to about 1.30 eV.

21: 2020/07447. 22: 2020/11/30. 43: 2023/02/28
51: C02F
71: A.Y. Laboratories Ltd.
72: BARAK, Ayala
33: US 31: 62/684,305 32: 2018-06-13

54: SYSTEM AND METHOD FOR MONITORING PROCESS WATER TREATED WITH A BIOCIDES USING AN OXYGEN SENSOR

00: -
A system and method for monitoring process water treated with a biocide is provided. The system includes a biocide feeding unit and a dissolved oxygen sensor. The dissolved oxygen sensor works in two modes, a biocide feeding mode and a background mode, and alerts an operator when the dissolved oxygen value indicates a fault in the system. A drop in dissolved oxygen during feeding can indicate faulty production of biocide or biocide degradation, both of which can lead to unwanted disinfection by-products.



21: 2020/07621. 22: 2020/12/07. 43: 2023/02/01

51: B02C; G01B

71: METSO SWEDEN AB

72: HOFFMANN, ANDREAS, FURTENBACH, LARS

33: SE 31: 1850660-0 32: 2018-05-31

54: SYSTEM AND METHOD FOR ANALYSING A SURFACE THAT IS SUBJECT TO WEAR

00: -

The invention refers to a system for analysing a wear surface in a material handling system. The system including a scanner and a processor configured generate measurement data. The method further comprises a corresponding method.

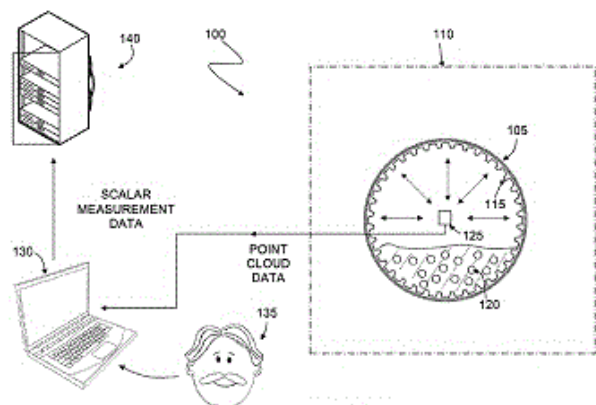


Figure 1

21: 2020/07683. 22: 2020/12/09. 43: 2023/02/01

51: G06T; H04N

71: INTERDIGITAL VC HOLDINGS, INC.

72: RICARD, JULIEN, GUEDE, CELINE, LLACH, JOAN

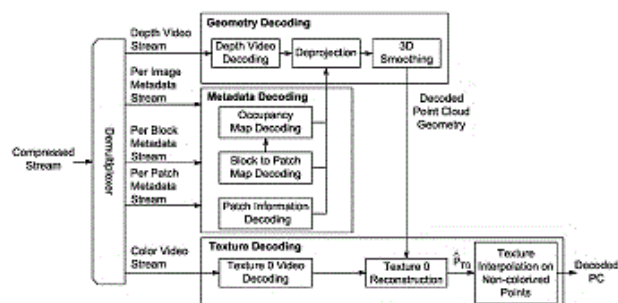
33: EP 31: 18305936.9 32: 2018-07-11

54: METHOD FOR ENCODING/DECODING TEXTURE OF POINTS OF A POINT CLOUD

00: -

At least one of the embodiment provides a method and device for generating and encoding in a

bitstream an interpolation texture coding mode indicating that the bitstream contains color information data representative of a texture image and that texture interpolation has to be done on point of a reconstructed point cloud that are not colorized from said color information data.



21: 2020/07838. 22: 2020/12/15. 43: 2023/02/01

51: C12N; C12Q

71: ILLUMINA, INC., ILLUMINA SINGAPORE PTE. LTD.

72: GOLYSKIY, MISHA, MCDONALD, SETH, NIRANTAR, SAURABH, KELLINGER, MATTHEW, PREVITE, MICHAEL, PEISAJOVICH, SERGIO, HE, MOLLY

33: US 31: 62/753,558 32: 2018-10-31

54: POLYMERASES, COMPOSITIONS, AND METHODS OF USE

00: -

Presented herein are altered polymerase enzymes for improved incorporation of nucleotides and nucleotide analogues, in particular altered polymerases that maintain high fidelity under reduced incorporation times, as well as methods and kits using the same.

21: 2020/07841. 22: 2020/12/15. 43: 2023/02/01

51: C07H; C12Q

71: ILLUMINA CAMBRIDGE LIMITED

72: FRANCAIS, ANTOINE, CRESSINA, ELENA, CULLEY, ADAM, MARIANI, ANGELICA, WU, XIAOLIN, LIU, XIAOHAI

33: US 31: 62/784,970 32: 2018-12-26

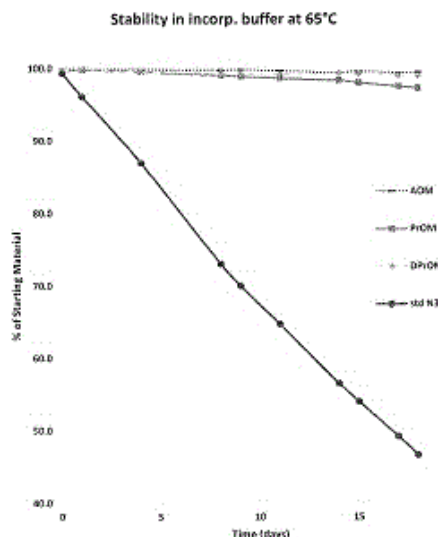
33: US 31: 62/784,994 32: 2018-12-26

54: SEQUENCING METHODS USING NUCLEOTIDES WITH A 3'-AOM BLOCKING GROUP

00: -

Embodiments of the present disclosure relate to sequencing methods using nucleotide molecules with a 3'-AOM blocking group, which can provide

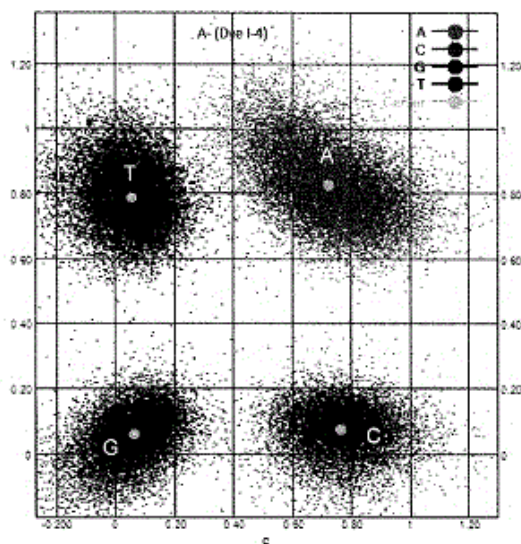
reduced phasing and pre-phasing values. Also provided herein are kits related to such sequencing methods.



21: 2020/07842. 22: 2020/12/15. 43: 2023/02/01
 51: C09B; C12Q; G01N; C07H
 71: ILLUMINA CAMBRIDGE LIMITED
 72: ROMANOV, NIKOLAI, ANASTASI, CAROLE, MCCAULEY, PATRICK
 33: US 31: 62/812,837 32: 2019-03-01
54: EXOCYCLIC AMINE-SUBSTITUTED COUMARIN COMPOUNDS AND THEIR USES AS FLUORESCENT LABELS

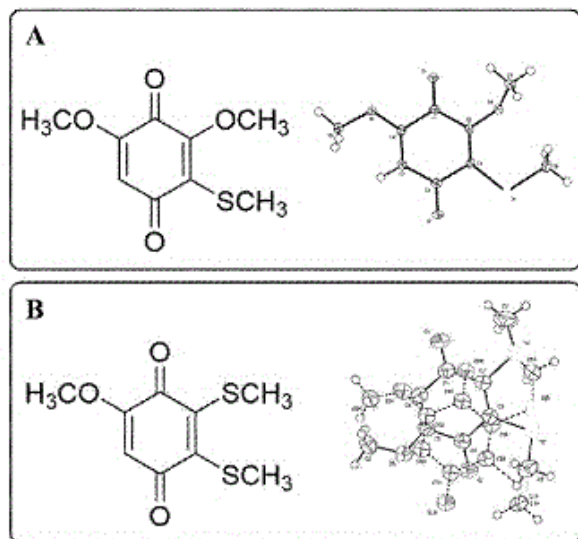
00: -

The present application relates to exocyclic amine-substituted coumarin derivatives and their uses as fluorescent labels. These compounds may be used as fluorescent labels for nucleotides in nucleic acid sequencing applications.



21: 2020/07958. 22: 2020/12/18. 43: 2023/02/01
 51: A61P; C07C
 71: THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY, UNIVERSIDAD NACIONAL AUTONOMA DE MEXICO, INSTITUTO NACIONAL DE CIENCIAS MEDICAS Y NUTRICION SALVADOR ZUBIRAN
 72: ZARE, RICHARD NEIL, VEYTIA-BUCHELI, JOSE IGNACIO, NORIEGA, EDSON NORBERTO CARCAMO, ELUMALAI, GNANAMANI, SATHYAMOORTHY, SHYAM, POSSANI POSTAY, LOURIVAL DOMINGOS, BANERJEE, SHIBDAS, HERNANDEZ PANDO, ROGELIO ENRIQUE
 33: US 31: 62/678,156 32: 2018-05-30
54: SCORPION VENOM BENZOQUINONE DERIVATIVES AND USES THEREOF
 00: -

Provided are colored 1,4-benzoquinone compounds obtained by oxidation of precursor molecules from the venom of the scorpion *Diplocentrus melici* (Diplocentridae family). Schemes for the chemical synthesis of these compounds using reagents commercially available are also provided. Biological assays show that the red compound (3,5-dimethoxy-2-(methylthio)cyclohexa-2,5-diene-1,4-dione) is very effective at killing *Staphylococcus aureus* and that the blue compound (5-methoxy-2,3-bis(methylthio)cyclohexa-2,5-diene-1,4-dione) has remarkable activity against *Mycobacterium tuberculosis*. The blue compound is effective against multi-drug-resistant tuberculosis (MDR-TB) and is not detrimental to lung epithelium. Both compounds were found to be cytotoxic to human neoplastic cell lines and to mononuclear cells (PBMCs).



21: 2020/08011. 22: 2020/12/22. 43: 2023/02/01
 51: C08G
 71: P2 SCIENCE, INC.
 72: FOLEY, PATRICK, YANG, YONGHUA, SALAM, TANIA

33: US 31: 62/617,924 32: 2018-01-16

33: US 31: 62/662,177 32: 2018-04-24

33: US 31: 62/539,319 32: 2017-07-31

54: POLYETHER DERIVATIVES, USES, AND METHODS OF MAKING THE SAME

00: -

The invention contemplates certain polyethers, polyether derivatives, and methods of making and using those same polymers. For example, the starting materials can, e.g., citronellol, prenol, isocitronellol and isoprenol.



21: 2020/08045. 22: 2020/12/22. 43: 2023/02/01
 51: C12N
 71: LIFEEDIT THERAPEUTICS, INC.
 72: BOWEN, TYSON D, ELICH, TEDD D, CRAWLEY, ALEXANDRA BRINER, BARRANGOU, RODOLPHE, COYLE, MICHAEL

33: US 31: 62/680,845 32: 2018-06-05

33: US 31: 62/680,853 32: 2018-06-05

33: US 31: 62/680,863 32: 2018-06-05

33: US 31: 62/805,041 32: 2019-02-13

33: US 31: 62/680,859 32: 2018-06-05

33: US 31: 62/680,846 32: 2018-06-05

33: US 31: 62/805,045 32: 2019-02-13

33: US 31: 62/686,901 32: 2018-06-19

33: US 31: 62/680,862 32: 2018-06-05

54: RNA-GUIDED NUCLEASES AND ACTIVE FRAGMENTS AND VARIANTS THEREOF AND METHODS OF USE

00: -

Compositions and methods for binding to a target sequence of interest are provided. The compositions find use in cleaving or modifying a target sequence of interest, visualization of a target sequence of interest, and modifying the expression of a sequence of interest. Compositions comprise RNA-guided nuclease polypeptides, CRISPR RNAs, trans-activating CRISPR RNAs, guide RNAs, and nucleic acid molecules encoding the same. Vectors and host cells comprising the nucleic acid molecules are also provided. Further provided are CRISPR systems for binding a target sequence of interest, wherein the CRISPR system comprises an RNA-guided nuclease polypeptide and one or more guide RNAs.

21: 2020/08062. 22: 2020/12/23. 43: 2023/02/01

51: C07D

71: PTC THERAPEUTICS MP, INC.

72: LEVY, DANIEL E, SMITH, NEIL, REIS, JONATHAN, YOSHINO, HIROSHI, KOMODA, TAICHI, SHIRO, YUICHI, MURATA, SHUNICHI, MATSUMOTO, TAKAYOSHI, KISHIMOTO, KAITO

33: GC 31: 2019/37661 32: 2019-05-28

33: US 31: 62/726,612 32: 2018-09-04

33: US 31: 62/822,336 32: 2019-03-22

33: US 31: 62/678,025 32: 2018-05-30

54: PHARMACEUTICALLY ACCEPTABLE SALTS OF SEPIAPTERIN

00: -

The present invention relates to new pharmaceutical salts and/or co-crystals of sepiapterin which exhibit improved properties. In particular, the invention relates to salts of sepiapterin with improved stability. The invention also relates to pharmaceutical compositions including a pharmaceutically effective amount of one or more salts and/or co-crystals of sepiapterin, as well as methods of treating tetrahydrobiopterin-related disorders including

administration of a sepiapterin salt and/or co-crystal of the invention to a subject in need thereof.

21: 2021/00071. 22: 2021/01/05. 43: 2023/02/27

51: A61K; C07K

71: AMYL THERAPEUTICS SRL

72: KRISHNAN, RAJARAMAN, ASP, EVA, PROSCHITSKY, MING, FISHER, RICHARD

33: US 31: 62/749,499 32: 2018-10-23

33: US 31: 62/685,757 32: 2018-06-15

54: GENERAL AMYLOID INTERACTION MOTIF (GAIM)

00: -

The present invention relates to variants of the general amyloid interaction motif (GAIM) of bacteriophage gene 3 protein (g3p) and fusion proteins thereof. The GAIM variants and fusion proteins of the invention are partially or fully deimmunized and demonstrate superior binding and specificity to a diverse array of amyloid proteins, and exhibit enhanced amyloid remodeling and inhibition of amyloid aggregation. The present invention further relates to nucleic acids, vectors, host cells, and methods of making the GAIM variants and fusion proteins thereof. The present invention also relates to pharmaceutical compositions and methods of increasing bacteriophage infectivity, methods of detecting amyloid aggregates, and methods of diagnosing and/or treating a disease associated with misfolded and/or aggregated amyloid protein.

21: 2021/00217. 22: 2021/01/13. 43: 2023/04/03

51: A43B

71: BBF SAFETY GROUP (PTY) LTD

72: BEIER, Hermann Hans-Heinrich

33: ZA 31: 2019/07701 32: 2019-11-21

54: HEAT SHIELD FOR FOOTWEAR

00: -

Footwear which includes a perforated layer of heat-reflective material which has an open area which is less than 5% and which is bonded to an air-permeable material.

21: 2021/00373. 22: 2021/01/19. 43: 2023/02/27

51: C07C; A61K; A61P

71: LES LABORATOIRES SERVIER

72: LEMIEUX, RENE M, POPOVICI-MULLER, JANETA, TRAVINS, JEREMY, CAI, ZHENWEI, CUI, DAWEI, ZHOU, DING

33: CN 31: PCT/CN2012/070601 32: 2012-01-19

54: THERAPEUTICALLY ACTIVE COMPOUNDS AND THEIR METHODS OF USE

00: -

Provided are methods of treating a cancer characterized by the presence of a mutant allele of IDH1/2 comprising administering to a subject in need thereof a compound described here.

21: 2021/00507. 22: 2021/01/25. 43: 2023/04/11

51: F42D

71: KILLASSY, Natalie

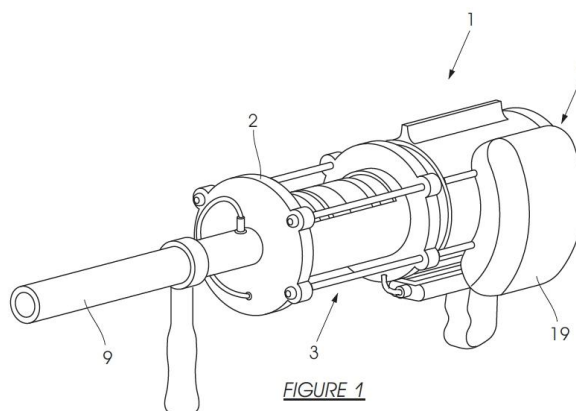
72: MCINTYRE, Marc Norman Albert, KILLASSY, Luke Peter

33: ZA 31: 2018/04186 32: 2018-06-22

54: EXPLOSIVE MATRIX MIXER AND DISPENSER

00: -

There is disclosed an explosive matrix mixer and dispenser which comprises a frame supporting an emulsion dispenser chamber and a sensitizer dispenser chamber, each chamber including a piston movable between a first end and second end thereof, and each chamber having an exit extending from its second end into a barrel that extends from the frame; the mixer and dispenser including means to move each piston from the first end to the second end of each chamber to simultaneously dispense emulsion and sensitizer from the two chambers into the barrel and the barrel including an array of spaced apart laminar flow disrupting members extending at least partly into barrel from its sidewalls operatively to mix the emulsion and sensitizer within the barrel to form an explosive matrix, and the barrel having a diameter sized to fit into a blast hole to dispense explosive matrix into the blast hole.



21: 2021/01246. 22: 2021/02/24. 43: 2023/01/26

51: A61K; A61P; C07K

71: Eli Lilly and Company

72: DEMAREST, Stephen John, KOESTER, Anja, MEHTA, Payal, POTTER, Scott Charles, RUIZ, Diana Isabel, WITCHER, Derrick Ryan, WU, Xiufeng

33: US 31: 62/731,204 32: 2018-09-14

54: CD200R AGONIST ANTIBODIES AND USES THEREOF

00: -

The present invention relates to anti-human CD200R agonist antibodies, and uses thereof for treating diseases such as atopic dermatitis, chronic spontaneous urticaria, allergy, asthma, scleroderma, IBD, SLE, MS, RA, GvHD, or psoriasis.

21: 2021/01314. 22: 2021/02/26. 43: 2023/01/26

51: A41G

71: DASHWOOD, Delia Elizabeth

72: DASHWOOD, Delia Elizabeth

33: ZA 31: 2020/01329 32: 2020-03-02

54: A HAIR EXTENSION STRIP

00: -

There is disclosed a process for the creation of a hair extension strip, and a hair extension strip manufactured according to the process, with the process including steps of forming a strip of hair, stitching the ends of the hairs together, securing the ends of the hair with glue to an edge of a first length of firm plastics material, securing a strip of open weave lace onto the layer of glue, locating a second length of firm plastics material on top of the lace strip, compressing the second length of plastics material to ensure spreading of the layer of glue between the two lengths of firm plastics material, allowing the glue to cure and then removing two lengths of firm plastics material from the strip of hair, applying a layer of double-side tape on a side of the cured glue; and trimming excess glue and ends of hair from around the double-sided tape.



21: 2021/01391. 22: 2021/03/01. 43: 2023/03/22

51: C07C; C08K; C08L

71: PMC ORGANOMETALLIX, INC.

72: ROSS, Kevin, John, NORRIS, Gene Kelly, DUNLAP, Jeremy

33: US 31: 62/723,943 32: 2018-08-28

33: US 31: 62/878,040 32: 2019-07-24

54: LOW FREE 2-MERCAPTOETHANOL ESTER AND USES THEREOF

00: -

A novel Low Free 2-MercaptoEthanol Ester has been used to prepare Alkyl Tin Reverse Ester Stabilizers as well as used to enhance the thermal performance of those Alkyl Tin Reverse Ester Stabilizers or Alkyl Tin Thioglycolate Stabilizers or Alkyl Tin Mercaptides for PVC applications where odor during PVC compounding, processing, or of the final PVC article has prevented widespread use of Alkyl Tin Reverse Ester Stabilizers.

21: 2021/01615. 22: 2021/03/10. 43: 2023/03/23

51: A61K; C07K; C12N; A61P

71: STICHTING WAGENINGEN RESEARCH

72: WILLEMSSEN, Petrus Theodorus Johannes, PEETERS, Bernardus Petrus Hubertus

33: EP 31: 18195280.5 32: 2018-09-18

33: CN 31: 201910239547.X 32: 2019-03-27

54: AFRICAN SWINE FEVER VIRUS VACCINE

00: -

The invention is directed to a recombinant nucleic acid molecule comprising an expression cassette encoding a polypeptide comprising T-cell antigens from proteins of African Swine Fever Virus. The invention further relates to a viral particle, comprising said recombinant nucleic acid molecule, and to a viral particle comprising B-cell antigens of African

Swine Fever Virus. The invention further relates to methods of stimulating an immune response in a pig comprising administering the recombinant molecule of the invention, and/or the viral particle of the invention, to the pig in an amount effective to induce an immune response.

21: 2021/01715. 22: 2021/03/15. 43: 2022/05/26

51: G06T; G06Q

71: Zensar Technologies Limited

72: Sudeep Choudhari, PVS Chanakya Yadav, Prem Manoj Mehta, Aditi Yaduvanshi, Shreshtha Mitra

33: IN 31: 202021010885 32: 2020-03-13

54: A SYSTEM AND METHOD FOR TRANSFORMING A CONTRACT INTO A DIGITAL CONTRACT

00: -

Disclosed is a system (101) and a method (500) for transforming a contract into a digital contract for deployment over a decentralized platform. The system (101) uses blockchain and artificial intelligence to automatically execute contracts. The system (101) is configured to capture the intent, milestones and events of a contract in smart contract codes. In order to achieve this without any imposing transition costs on users, natural language processing is utilized to draft contract and the system (101) generates the same contract in a pre-defined standardized form (204). The contract in standardized form (204) is converted to respective parse tree (205) and abstract syntax tree (206). The abstract syntax tree (206) is converted to digital contract (207). The digital contract (207) is compiled and deployed on to a blockchain network (210).

21: 2021/02613. 22: 2021/04/20. 43: 2023/01/27

51: F16D G01N G01B

71: METSO OUTOTEC FINLAND OY

72: CALLAGHAN, Mark, HOUSTON, Rodney

33: AU 31: 2018903627 32: 2018-09-26

54: SYSTEM FOR FORECASTING WEAR AND A WEAR SENSOR

00: -

A wear sensor for use in a wear sensing fastener, the wear sensor fastener comprising a head which in use is exposed to wear, the head has a shank extending therefrom, a sensor portion having a probe received within the shank such that an end of the probe terminates at or adjacent an exposed surface of the head, the probe comprising a plurality

of resistive elements positioned along the probe, wherein each resistive element is individually measurable, whereby in use those resistive elements which do not return a result provide an indication of wear experienced by the probe.

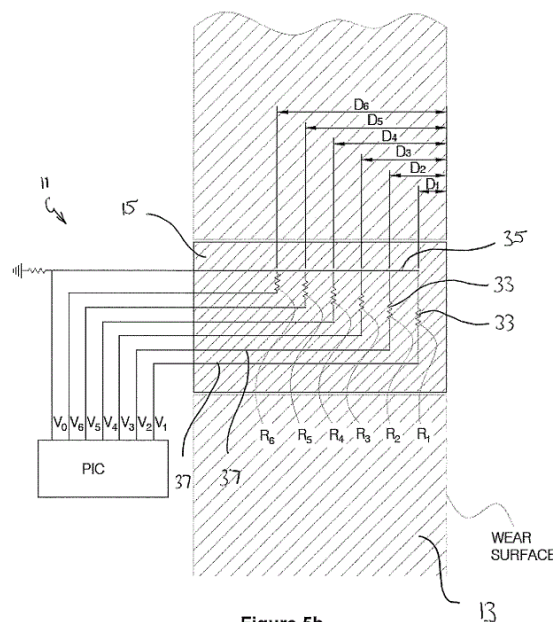


Figure 5b

21: 2021/02871. 22: 2021/04/29. 43: 2023/03/13

51: A61K

71: CIPLA LIMITED

72: MALHOTRA, Geena Vinod, RAUT, Preeti Prashant, DESHMUKH, Vaibhav Panditrao, DATE, Dipak Narayan

54: PHARMACEUTICAL FORMULATION

00: -

Soft gelatin capsules comprising a suspension composition of nintedanib or a pharmaceutically acceptable salt thereof in medium chain triglycerides and carrier system, wherein the carrier system comprises solubilizers, phospholipids, thickeners and mixtures thereof.

21: 2021/02905. 22: 2021/04/30. 43: 2023/01/26

51: A61K; C07K; G01N

71: New York University, PureTech Health, LLC

72: KOIDE, Shohei, MILLER, George, KOIDE, Akiko, CHEN, Linxiao, FILIPOVIC, Aleksandra, ELENKO, Eric, BOLEN, Joseph

33: US 31: 62/578,111 32: 2017-10-27

54: ANTI-GALECTIN-9 ANTIBODIES AND USES THEREOF

00: -

Disclosed herein are anti-Galectin-9 antibodies and methods of using such for inhibiting a signaling pathway mediated by Galectin-9 or eliminating pathologic cells expressing Galectin-9. Such anti-Galectin-9 antibodies may also be used to diagnose and/or to treat diseases associated with Galectin-9, such as autoimmune diseases and solid tumors.

21: 2021/03442. 22: 2021/05/20. 43: 2023/03/22

51: A61K; A61P

71: DE LA SALLE MEDICAL AND HEALTH SCIENCES INSTITUTE, PHARMALYTICS CORPORATION

72: ALVERO, Rita Grace

33: PH 31: 12019000387 32: 2019-10-08

54: A HERBAL MEDICINE COMPOSITIONS FOR TREATMENT OF DENGUE AND THEIR PRODUCTION

00: -

This invention relates to herbal medicine compositions for the treatment of dengue and their production. The herbal medicine compositions consist of dried and finely powdered leaves of *Lagerstroemia speciosa*; dried and finely powdered aerial parts of *Euphorbia hirta*; dried and finely powdered rhizome of *Zingiber officinale*; and a fixed-dose combination of all three. In another version of the formulation, the spray-dried aqueous, ethanolic, methanolic or hydroalcoholic extract of the mentioned plants were used instead.

21: 2021/03704. 22: 2021/05/31. 43: 2023/03/02

51: G06Q

71: REID AND VERWEY CC

72: REID, James Michael Cedric

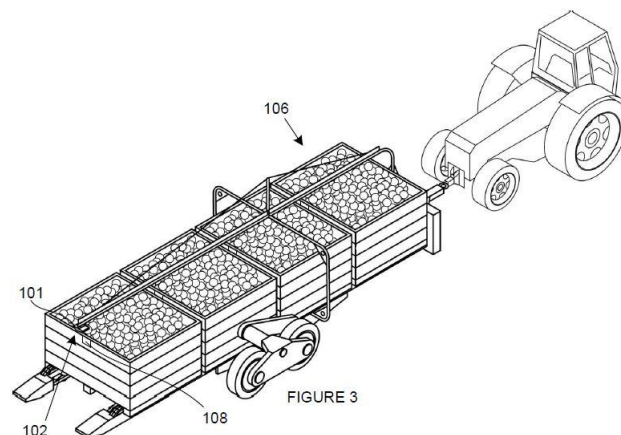
33: ZA 31: 2019/06528 32: 2020-04-04

54: SYSTEM AND METHOD FOR MONITORING AGRICULTURAL HARVESTING CONTAINERS

00: -

A system and method for monitoring a plurality of agricultural harvesting containers during harvesting of agricultural produce, such as hand-picked fruit and vegetables, are provided. The agricultural produce may be harvested according to a bin-on-the-ground approach, in which harvesting containers or bins are placed on an orchard floor and fruit from immediately surrounding trees are picked and placed into the containers. The containers, each having a unique marker, are then loaded onto a mobile support, which is typically a trailer, and towed

or pushed, to a packing shed for processing. The mobile support includes a reader mounted thereto which is configured to read the marker and generate marker data during loading and/or offloading of the containers. The system and method may be used to generate data associated with the containers and harvested produce to generate a yield map of a location, typically a farm, from which the produce is harvested.



21: 2021/03806. 22: 2021/06/03. 43: 2023/04/03

51: E21B; E21C; E21D

71: NOVATEK MINING (PTY) LIMITED

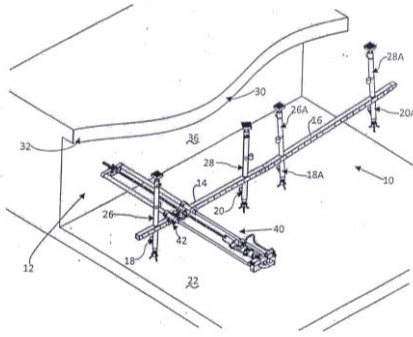
72: WILLS, Julian Howard

33: ZA 31: 2020/01431 32: 2020-03-06

54: DRILLING RIG MOUNTING SYSTEM

00: -

A mounting system for a drill feed which includes at least a first traverse beam which is configured to be engaged with the drill feed, at least first and second ground-engaging supports of adjustable length which are secured to and which extend from the first traverse beam at spaced apart locations, each ground-engaging support comprising a guide tube and a foot piece which is threadably engaged with the guide tube, and a second traverse beam which is attached to the first traverse beam by a respective component associated with the second traverse beam which is configured to engage with the foot piece associated with each ground-engaging support secured to the first traverse beam.



21: 2021/04251. 22: 2021/06/21. 43: 2023/03/13
51: H04L; H04W

71: FLEET SPACE TECHNOLOGIES PTY LTD
72: NARDINI, Flavia Tata, PEARSON, Matthew, AJAZ, Sabooh

33: AU 31: 2018904671 32: 2018-12-07
33: AU 31: 2019200432 32: 2019-01-22

54: REMOTE LPWAN GATEWAY WITH BACKHAUL OVER A HIGH-LATENCY COMMUNICATION SYSTEM

00: -

A terrestrial data communication gateway device for satellite communication comprising: at least one processor; memory accessible to the at least one processor; a LPWAN wireless communication subsystem for communication with multiple remote devices; a satellite communication subsystem for communication with at least one low earth orbit satellite. The memory stores program code executable by the processor to cause the processor to: perform server functions in relation to the multiple remote devices, and configure an edge computing module to perform data processing operations on signals received by the LPWAN communication subsystem. The data processing operations comprise compression of data received by the LPWAN communication subsystem to generate a compressed payload for transmission by the satellite communication subsystem. The memory comprises a backhaul scheduling module to schedule communication of a transmission by the satellite communication subsystem to the low earth orbit satellite.

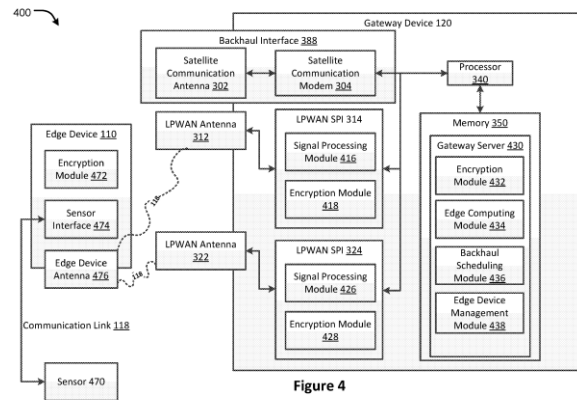


Figure 4

21: 2021/04592. 22: 2021/07/01. 43: 2023/03/22
51: A24D; A24F

71: PHILIP MORRIS PRODUCTS S.A.

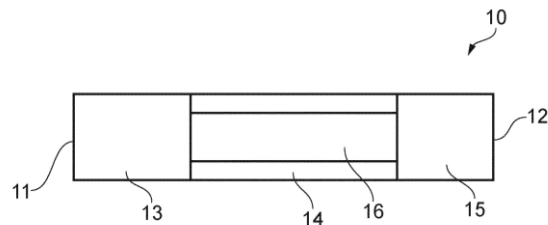
72: PAPAKYRILLOU, Stefanos

33: EP 31: 19167405 32: 2019-04-04

54: AEROSOL-GENERATING ARTICLE COMPRISING A HOLLOW TUBULAR SUPPORT ELEMENT

00: -

An aerosol-generating article (10) having an upstream end (11) and a downstream end (12), the aerosol-generating article (10) defining a longitudinal direction between the upstream end (11) and the downstream end (12), the aerosol-generating article (10) comprising an aerosol-forming substrate (13) and a hollow tubular support element (14) disposed downstream of the aerosol-forming substrate (13) and extending along the longitudinal direction; wherein the hollow tubular support element (14) defines an opening (16) extending in the longitudinal direction and adapted for aerosol to flow towards the downstream end (12); wherein the hardness of the aerosol-generating article (10) at the hollow tubular support element (14) is at least about 60% and, preferably, between about 80% and about 90%.



21: 2021/04655. 22: 2021/07/05. 43: 2023/03/22
51: C07C; C08G; C08J; C08L

71: IFP ENERGIES NOUVELLES

72: GAUTHIER, Thierry, THINON, Olivier

33: FR 31: 1901023 32: 2019-02-01

54: METHOD FOR PRODUCING A TEREPHTHALATE POLYESTER FROM A MONOMERIC MIXTURE COMPRISING A DIESTER
00: -

The aim of the invention is a method for producing a terephthalate polyester, comprising a step a) of preparing an esterification charge comprising at least one mixing section fed with at least one terephthalic acid charge and a diester monomer charge, so that the ratio of the total number of moles of diol units introduced into said mixing section to the total number of moles of terephthalate units introduced into said mixing section is between 1.0 and 2.0, said mixing section being operated at a temperature between 25 and 250°C and at a pressure that is greater than or equal to 0.1 MPa; a step b) of esterification for producing at least one reaction effluent and one aqueous effluent; a step c) of polycondensation for obtaining at least said terephthalate polyester and an effluent comprising at least one diol monomer; and a step d) of treating diols in order to obtain a purified diol stream.

21: 2021/04703. 22: 2021/07/06. 43: 2023/03/22

51: B01D; C07C; C08G; C08J

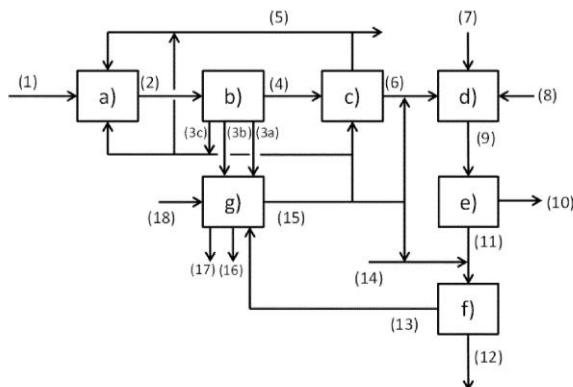
71: IFP ENERGIES NOUVELLES

72: GAUTHIER, Thierry, THINON, Olivier

33: FR 31: 1901024 32: 2019-02-01

54: METHOD FOR PRODUCING A POLYESTER TEREPHTHALATE INCORPORATING A DEPOLYMERIZATION METHOD
00: -

The invention relates to a method for producing a polyester terephthalate from at least one polyester filler to be recycled, incorporating a depolymerization method, advantageously by glycolysis, of the polyester to be recycled in order to produce a diester intermediate which is compatible with the specifications of the polymerization steps and comprising an optimized flow recycling system.



21: 2021/04821. 22: 2021/07/09. 43: 2023/02/27

51: A23F; A23N

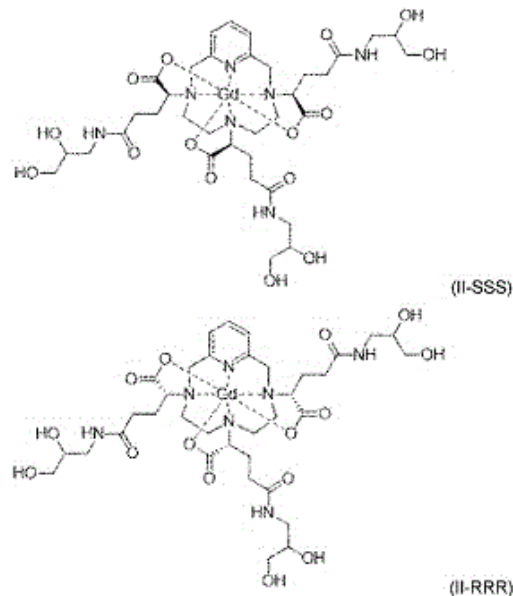
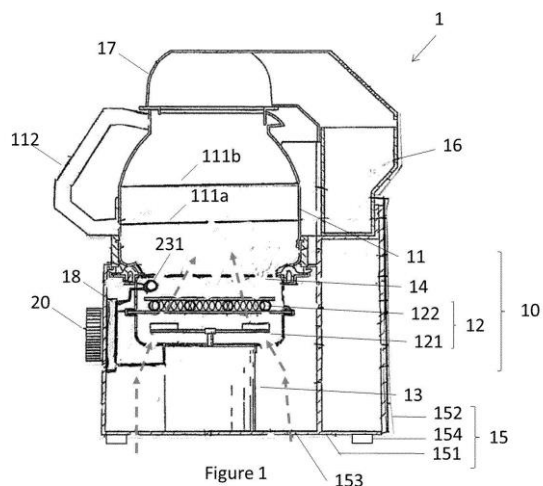
71: Société des Produits Nestlé S.A.

72: DUBIEF, Flavien Florent, BIGLER, Nicolas, CECCAROLI, Stefano

33: EP(CH) 31: 18215248.8 32: 2018-12-21

54: APPARATUS AND METHOD FOR ROASTING COFFEE BEANS
00: -

The invention concerns an apparatus for roasting coffee beans comprising : - a vessel (1) to contain coffee beans, - a heating device (12) to heat coffee beans contained in the vessel, - a control system (180) operable to control the heating device and configured to apply a roasting recipe (R), wherein for a customised quantity m of coffee beans of type Ny introduced inside the vessel, - the control system is configured to obtain at least the quantity m of coffee beans introduced inside the vessel and the type Ny of coffee beans introduced inside the vessel, and - based on the obtained type Ny, the control system is configured to get access at least to a roasting recipe Ry, said recipe being adapted to the roasting of one pre-determined quantity M of beans of type Ni, and to said pre-determined quantity M, and - based on the accessible roasting recipe Ry and on said obtained quantity m of coffee beans introduced inside the vessel, the control system is configured to determine the roasting recipe (R) to be applied to the quantity m of coffee beans of type Ny introduced inside the vessel.



21: 2021/04994. 22: 2021/07/15. 43: 2023/02/23

51: C07D; A61K

71: GUERBET

72: LE GRENEUR, SOIZIC, CHÉNEDÉ, ALAIN, CERF, MARTINE, PETTA, MYRIAM, MARAIS, EMMANUELLE, FRANÇOIS, BRUNO, ROBIC, CAROLINE, LOUGUET, STÉPHANIE

33: FR 31: 1900432 32: 2019-01-17

54: COMPLEX OF GADOLINIUM AND A CHELATING LIGAND DERIVED FROM A DIASTEREOISOMERICALLY ENRICHED PCTA AND PREPARATION AND PURIFICATION PROCESS

00: -

The present invention relates to a complex having formula (II), consisting of at least 90% of a diastereoisomeric excess comprising a mixture of II-RRR and II-SSS isomers having the formulas: (II-SSS) (II-RRR). The present invention also relates to a process for preparing and purifying said complex of formula (II) and to a composition comprising said complex.

21: 2021/05372. 22: 2021/07/29. 43: 2023/03/23

51: B01D; B01J; B65B; B65D; B65G; C01B

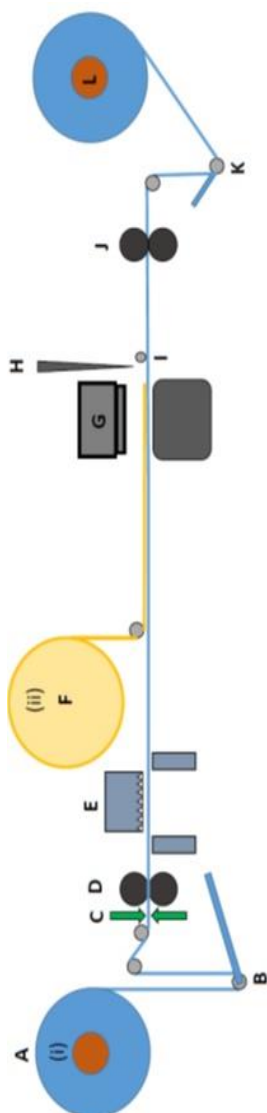
71: Vortex Innovation Worx (Pty) Ltd

72: Michael DOLLMAN, Pieter VAN STRYP

54: DESICCANT MANUFACTURING ARRANGEMENT

00: -

The invention discloses a desiccant manufacturing arrangement, which includes a material unwind station; an infeed accumulator arm to control tension before draw rollers; an eye mark sensor to verify pull length and reparability; a first set of draw rollers; a tooth punch adapted to punch window in a first film; a material unwind station; a sealing head adapted to seal a second film to a first film; a trimming blade adapted to trim the second film; an accumulator arm adapted to take up slag in the first film and ensure space for trimming blade to cut; a second set of draw rollers; an accumulator arm to control upwind tension after draw rollers; and an upwind motor.



21: 2021/05478. 22: 2021/08/02. 43: 2023/03/09
51:

71: LOCUS IP COMPANY, LLC

72: ALIBEK, Ken, FARMER, Sean, KRAVTSOV, Sergey

33: US 31: 62/987,529 32: 2020-03-10

54: COMPOSITIONS FOR REPLACING CHEMICAL SURFACTANTS

00: -

The subject invention provides methods and compositions for replacing chemical surfactants for use in a wide variety of industrial applications. More specifically, the subject invention provides for the production of multi-functional biological surface-active compositions having one or more precise functional characteristics based on the desired use.

21: 2021/05623. 22: 2021/08/10. 43: 2023/02/27
51: H04W

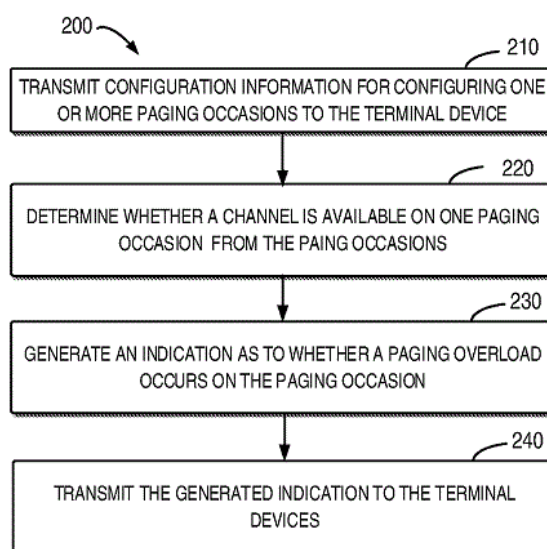
71: NOKIA TECHNOLOGIES OY

72: LIU, Jianguo, TAO, Tao, LUO, Zhe, MENG, Yan, SHEN, Gang

54: METHOD, DEVICE AND COMPUTER READABLE MEDIUM FOR PAGING IN NEW RADIO SYSTEMS

00: -

Embodiments of the disclosure provide a method, device and computer readable medium for paging in new radio systems. According to embodiments of the present disclosure, the network device transmits an indication to multiple terminal devices to indicate whether the paging overload occurs on the PO. The terminal device determines whether to continue monitoring the paging message based on the indication. In this way, the power consumption is reduced.



21: 2021/05637. 22: 2021/08/10. 43: 2023/02/09
51: F41A

71: Rheinmetall Waffe Munition GmbH

72: SCHWIEGER, Florian, BAUMANN, Berthold, BORCHERT, Rüdiger

33: DE 31: 10 2019 100 579.5 32: 2019-01-11

54: GUN BARREL MOUNTING AND GUN

00: -

The invention relates to a gun barrel mounting for a gun barrel (1), comprising a cradle (2) with at least one gun mounting (5, 6) for mounting the gun barrel (1) and a base part (3) that can be connected to the gun barrel (1).



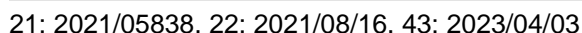
21: 2021/05654. 22: 2021/08/05. 43: 2023/01/27
51: C07K: C12N

72: MAGY, Bertrand, HOURY, Max

33: EP(BE) 31: 19157839.2 32: 2019-02-18

00: -

The present invention relates to a method of producing a binder-toxin fusion protein comprising at least, one protein binder selected from the group consisting of an antibody, an antibody fragment or derivative retaining target binding capacity, or an antibody mimetic, optionally, a peptide linker, and at least one protein toxin or protein protoxin. The method comprises the steps of: contacting a plant cell or a whole plant with a nucleic acid construct comprising in operational linkage at least the following (A) at least one polynucleotide encoding for the protein binder, or a target binding chain or domain thereof, and either B1) a polynucleotide encoding for a cleavable peptide linker and a polynucleotide encoding for a protein toxin, or B2) a polynucleotide encoding for a protein protoxin, which protoxin comprises a cleavable domain for activation thereof, allowing the construct to integrate into the nucleus of the plant cell, or of one or more cells of the whole plant, and expressing the fusion protein encoded by the nucleic acid construct (Fig. 7).



51: A61M

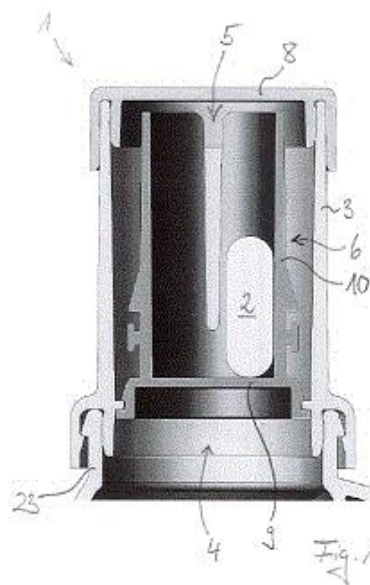
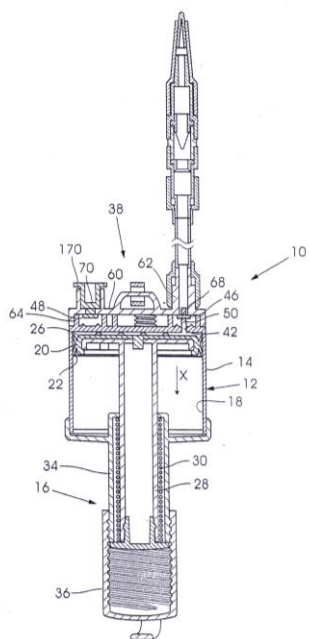
71: XPELLA (PTY) LTD

72: SCHMITT, Karl-Heinz, SHAHIM, Clinton
Frederick

33: ZA 31: 2019/00880 32: 2019-02-11

00: -

A fluid drainage device which includes a fluid-receiving volume, a cover which is movable between a first limiting position at which an inlet port is in fluid communication with the volume and a second limiting position at which an outlet port is in fluid communication with the volume, a piston which is movable inside the volume between a first position and a second position, a handle which is moveable in a first direction to cause the piston to move to the first position and to store energy in a spring so that, when the cover is in the first limiting position the piston is moveable by energy released from the spring to reduce pressure in the volume, allowing fluid flow through the inlet port, and wherein movement of the handle in a second direction causes the piston to move to the second position thereby expelling fluid from the volume.



21: 2021/05848. 22: 2021/08/16. 43: 2023/02/28

51: A61B; A61J

71: ESOCAP AG

72: STANGIER, PETER, KRAUSE, JULIUS,
ROSENBAUM, CHRISTOPH

33: EP 31: 19162947.6 32: 2019-03-14

54: APPLICATOR FOR ORAL ADMINISTRATION OF A SWALLOWABLE OBJECT TO A PATIENT

00: -

The application relates to an applicator (1) for oral administration of a swallowable object (2), in particular a solid dosage form, to a patient, wherein the applicator comprises a housing (3) having a first opening (4) and a second opening (5), the first opening of the housing being configured to be coupled with a liquid reservoir, in particular a drinking vessel, and the second opening of the housing being configured such that the patient can drink therefrom, and a holder (6) disposed within the housing and configured to accommodate the swallowable object, the holder being further configured to allow the swallowable object to be conveyed towards the second opening of the housing when liquid is flowing through the housing from the first opening to the second opening of the housing.

21: 2021/05940. 22: 2021/08/18. 43: 2023/02/27

51: A61K

71: The University of Birmingham

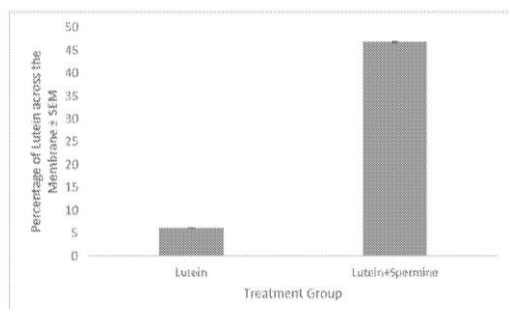
72: DE COGAN, Felicity, PEACOCK, Anna, NIKOI,
Naa Dei

33: GB 31: 1900728.5 32: 2019-01-18

54: DRUG DELIVERY SYSTEM

00: -

The present invention relates to a drug delivery system and methods of using the delivery system, particularly a delivery system for transporting pharmaceutically active agents across, for example, the skin, the surface of the eye or mucosal membranes. The drug delivery system comprises a pharmaceutically effective moiety and a polyamine or amine moiety, wherein the polyamine or amine moiety does not comprise two or more contiguous basic amino acid residues. The drug delivery system may be provided for use as a medicament, or for use in the treatment of a disease or condition selected from eye disease, burns, infection, and trauma. The invention also provides a method comprising administering a pharmaceutically effective amount of the drug delivery system of the invention to a patient in need thereof.



21: 2021/05964. 22: 2021/08/19. 43: 2023/02/22

51: G06F

71: Apex Data Solutions, LLC

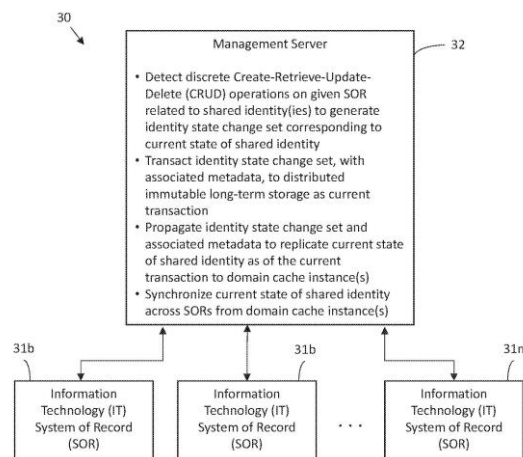
72: CALCO, Bob, MATTON, Gregory E.

33: US 31: 62/800,715 32: 2019-02-04

54: COMPUTING SYSTEM PROVIDING BLOCKCHAIN-FACILITATED SEMANTIC INTEROPERABILITY BETWEEN MULTIPLE DISPARATE SYSTEMS OF RECORD (SORs) AND RELATED METHODS

00: -

A system for propagating an identity state change set about shared identities may include a plurality of systems of record (SORs), and a management server cooperating with the plurality of SORs and configured to: detect discrete Create-Retrieve-Update-Delete (CRUD) operations on a given SOR related to at least one shared identity to generate an identity state change set corresponding to a current state of the at least one shared identity; transact the identity state change set, with associated metadata, to a distributed immutable long-term storage as a current transaction; propagate the identity state change set and associated metadata to replicate a current state of the at least one shared identity as of the current transaction to at least one domain cache instance, and; synchronize the current state of the at least one shared identity across the plurality of SORs from the at least one domain cache instance.



21: 2021/05976. 22: 2021/08/19. 43: 2023/02/28

51: A61K

71: ESOCAP AG

72: KRAUSE, JULIUS

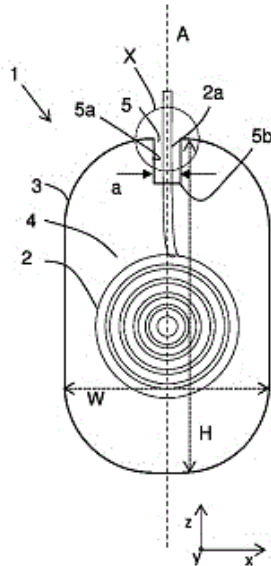
33: EP 31: 19162908.8 32: 2019-03-14

33: EP 31: 19192961.1 32: 2019-08-21

54: PHARMACEUTICAL DOSAGE FORM FOR APPLICATION TO MUCOUS MEMBRANES AND METHODS FOR PRODUCING SAME

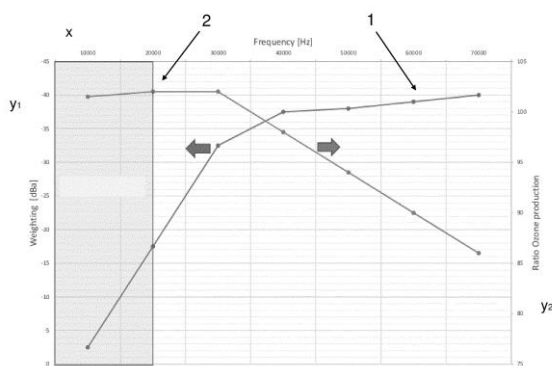
00: -

The present invention relates to a pharmaceutical dosage form for application to a mucous membrane, in particular to a buccal, intestinal, rectal or vaginal mucous membrane, comprising at least one string-like or strip-like preparation comprising the active pharmaceutical ingredient, the dosage form being configured to be wettable during a step of administration to a patient. The invention also relates to a method of producing the pharmaceutical dosage form.



21: 2021/05981. 22: 2021/08/19. 43: 2023/03/13
 51: H01F; H05H
 71: PRIMOZONE PRODUCTION AB
 72: SCOTT, Mikael
 33: EP 31: 19159104.9 32: 2019-02-25
54: A LOW FREQUENCY OZONE GENERATOR
 00: -

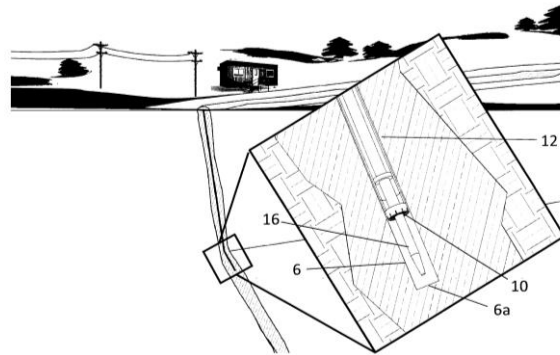
The present invention relates to a method of operating an ozone generator, a transformer assembly and an ozone generator apparatus configured to be operated at an operational frequency range between 25-40 kHz, such as between 30 and 40 kHz.



21: 2021/06110. 22: 2021/08/24. 43: 2023/03/13
 51: E21B; E21C
 71: NOVAMERA INC.
 72: BUTT, Stephen Douglas, CRAMM, Allan R., DE MOURA JUNIOR, Jeronimo
 33: US 31: 62/810,818 32: 2019-02-26
54: METHOD AND SYSTEM FOR MINING

00: -

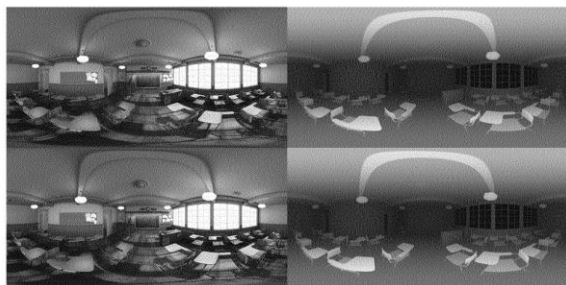
A method for mining narrow vein deposit of ore, the narrow vein deposit having a hanging wall and a foot wall, the method comprising: drilling a pilot hole into the narrow vein deposit along a path substantially centrally between the hanging wall and the foot wall to a depth within the vein; following the pilot hole with a larger diameter drilling assembly to fragment the ore into drill cuttings; circulating the drill cuttings to a wellhead; and collecting the drill cuttings for processing to recover the ore therefrom.



21: 2021/06244. 22: 2021/08/27. 43: 2023/02/27
 51: H04N

71: Koninklijke Philips N.V.
 72: BRULS, Wilhelmus Hendrikus Alfonsus, VAREKAMP, Christiaan, KROON, Bart
 33: EP(NL) 31: 19154195.2 32: 2019-01-29
54: IMAGE SIGNAL REPRESENTING A SCENE
 00: -

An apparatus comprises a receiver (301) receiving an image signal representing a scene. The image signal includes image data comprising a number of images where each image comprises pixels that represent an image property of the scene along a ray having a ray direction from a ray origin. The ray origins are different positions for at least some pixels. The image signal further comprises a plurality of parameters describing a variation of the ray origins and/or the ray directions for pixels as a function of pixel image positions. A renderer (303) renders images from the number of images based on the plurality of parameters.



21: 2021/06250. 22: 2021/08/27. 43: 2023/01/27
 51: A61K; A61P
 71: Eli Lilly and Company
 72: RIESMEYER, Jeffrey S., WOODWARD, David Bradley

33: US 31: 62/829,717 32: 2019-04-05

54: THERAPEUTIC USES OF DULAGLUTIDE

00: -

The present invention relates to methods for reducing the risk of major adverse cardiovascular events in type 2 diabetes mellitus (T2DM) patients with multiple cardiovascular risk factors without established cardiovascular disease or with established cardiovascular disease comprising administering the glucagon like peptide-1 (GLP-1) receptor agonist dulaglutide.

21: 2021/06260. 22: 2021/08/27. 43: 2023/01/27
 51: A01N

71: Monsanto Technology LLC
 72: DENG, Wenjin, FRIEDMAN, Todd, HEMMINGHAUS, John W., THATIPARTI, Thimmareddy, ZHANG, Junhua

33: US 31: 62/798,835 32: 2019-01-30

54: MICROENCAPSULATED ACETAMIDE HERBICIDES

00: -

The present invention relates to various herbicidal compositions comprising microcapsules containing an acetamide herbicide. The present invention also relates to processes for preparing these compositions and methods of using these compositions for controlling weeds.

21: 2021/06277. 22: 2021/08/30. 43: 2023/03/02
 51: G01N

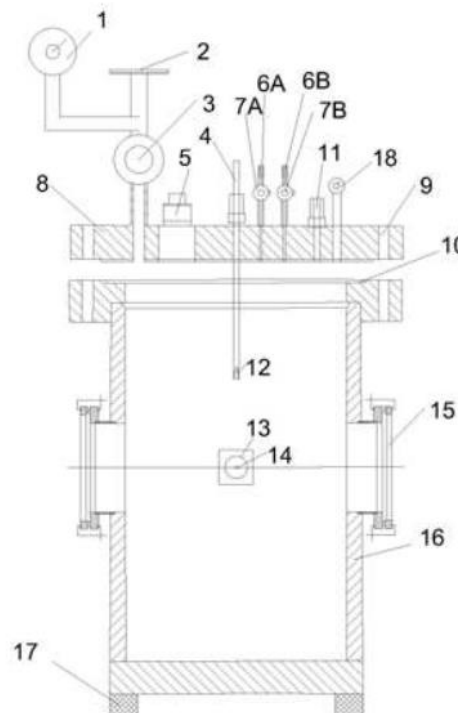
71: ANHUI UNIVERSITY OF SCIENCE & TECHNOLOGY

72: WANG, Quan, LI, Zhimin, LU, Junwei, WANG, Xuguang, WANG, Yinjun, CHENG, Yangfan, LIN, Chaojian, LIU, Wenzhen

54: VACUUM EXPLOSION EXPERIMENT DEVICE

00: -

Disclosed is a vacuum explosion experiment device. The vacuum explosion experiment device comprises a tank body, wherein a detonating support is arranged on the inner wall of the tank body, detachable ignition electrodes are arranged on the detonating support, and the ignition electrodes can be mounted or dismounted according to experiment needs. Integral detachable observation windows are arranged on the tank body in a direction perpendicular to the radial direction of the detonating support, the heights of the integral detachable observation windows are consistent with the height of the detonating support, a sealing cover is arranged at the upper end of the tank body, and a digital display type pressure gauge, a vacuum interface, a vacuum socket, a safety valve, a PCB sensor sleeve and two gas distribution tubes are installed on the sealing cover.



21: 2021/06472. 22: 2021/09/03. 43: 2023/02/27
 51: A61K; A61P; C07D

71: Albireo AB

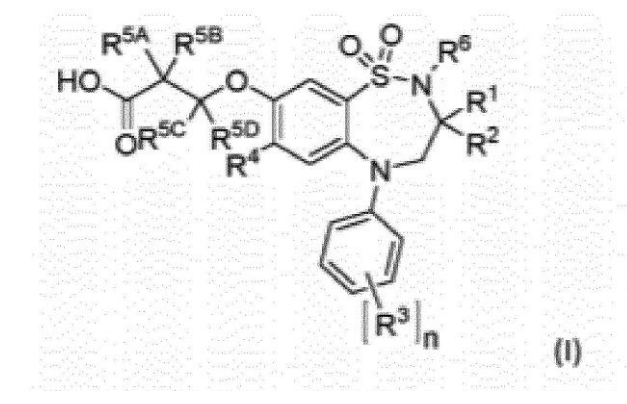
72: GILLBERG, Per-Göran, MATTSSON, Jan, STARKE, Ingemar, KULKARNI, Santosh S.

33: IN 31: 201911004690 32: 2019-02-06

54: BENZOTHIADIAZEPINE COMPOUNDS AND THEIR USE AS BILE ACID MODULATORS

00: -

The invention relates to 1,2,5-benzothiadiazepine derivatives of formula (I). These compounds are bile acid modulators having apical sodium-dependent bile acid transporter (ASBT) and/or liver bile acid transport (LBAT) inhibitory activity. The invention also relates to pharmaceutical compositions comprising these compounds and to the use of these compounds in the treatment of cardiovascular diseases, fatty acid metabolism and glucose utilization disorders, gastrointestinal diseases and liver diseases.



21: 2021/06663. 22: 2021/09/09. 43: 2023/03/22
51: B01J

71: YILKINS B.V

72: BERGMAN, Peter, Christiaan, Albert,
OLTVOORT, Evert-Jan, BOERS, Robert, Johan

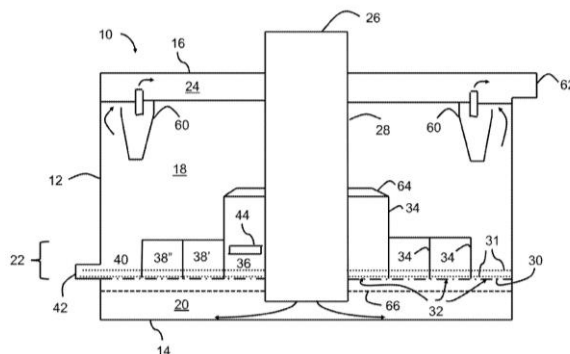
33: NL 31: 2022774 32: 2019-03-20

54: GAS-SOLID CONTACTING DEVICE

00: -

A device (10) for processing a flow of particulate material by contact with a gas flow comprises a housing (12) defining a processing chamber (18). This chamber (18) comprises a gas distribution plate (30) having openings (32). The gas distribution plate (30) separates a lower gas plenum (18) from a solid-gas contact zone (22). The contact zone (22) has at least one cylindrical partition (34) upstanding from the gas distribution plate (30) dividing an inner section (36) from an adjacent annular outer section (38; 40). The at least one partition (34) is provided with a transfer opening (50) for the particulate material. The housing (12) is also provided with an inlet (44) for supplying particulate material to the inner section (36) and an outlet (42) for discharging

processed particulate material from the annular outer section (40).



21: 2021/06718. 22: 2021/09/10. 43: 2023/03/14

51: A61K; C12N

71: SANOFI

72: DUMAS, Bruno Louis, LOUNIS Mohammed Nabil

33: EP 31: 19305331.1 32: 2019-03-19

54: NOVEL SELECTION MARKER-COMPRISING CELL LINE AND USES THEREOF FOR PROTEIN PRODUCTION

00: -

The present invention concerns a cell line comprising an endogenous dehydroorotate dehydrogenase (DHODH) gene which is partially or fully inactivated, and its use for producing recombinant proteins

21: 2021/06722. 22: 2021/09/10. 43: 2022/10/03

51: C25C

71: ELYSIS LIMITED PARTNERSHIP

72: MEYER, Michel, GLISAN, Roy A.

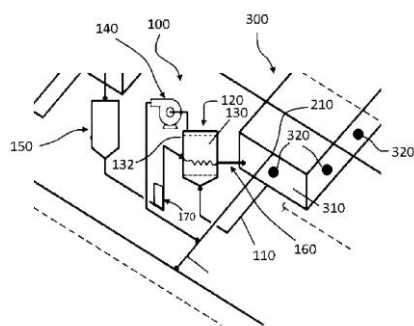
33: US 31: 62/820,917 32: 2019-03-20

54: SYSTEM AND METHOD FOR COLLECTING AND PRE-TREATING PROCESS GASES GENERATED BY AN ELECTROLYSIS CELL

00: -

Apparatus and method for collecting and pretreating process gases produced in an electrolytic cell during aluminum production are disclosed. The apparatus comprises a collecting unit configured to draw off primary process gases from the electrolytic cell, for instance by drawing-off primary process gases from orifices purposely made over the electrolytic bath; and a pre-treating unit fluidly connected to the collecting unit and configured to receive a fluid bed of fluorinated alumina for pre-treating the primary process gases. The collecting and pre-treating units are within or immediately aside the electrolytic cell,

in the potroom. The apparatus can be combine with a gas treatment center (GTC) located outside the potroom. Among other advantages, the technology allows collecting primary process gases directly at electrolytic bath level, separating primary process gases and hoodspace process gases to pretreat the primary process gases with alumina before the GTC, and using fluid bed reactors without filter bags.



21: 2021/06802. 22: 2021/09/14. 43: 2023/04/03
51: C12Q

71: CRIME SOLUTIONS LIMITED

72: MAXWELL, Paul

33: GB 31: 1819256.7 32: 2018-11-27

54: SECURITY MARKERS

00: -

A security marker for cooperation with a detector, the detector including a molecular probe, the probe including a predetermined probe nucleotide sequence. The security marker comprises a target oligonucleotide. The target oligonucleotide comprises a pair of primer regions and a marker region located between the primer regions. The marker region comprises a predetermined marker nucleotide sequence which is fully or partially complementary to the probe nucleotide sequence.

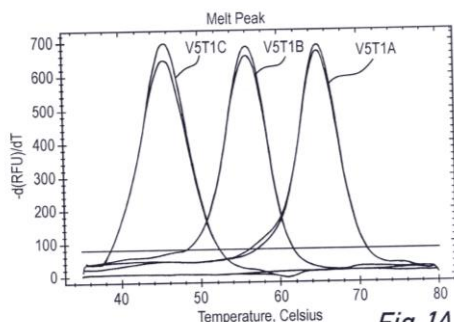


Fig. 1A

21: 2021/06929. 22: 2021/09/17. 43: 2023/02/16
51: H01H

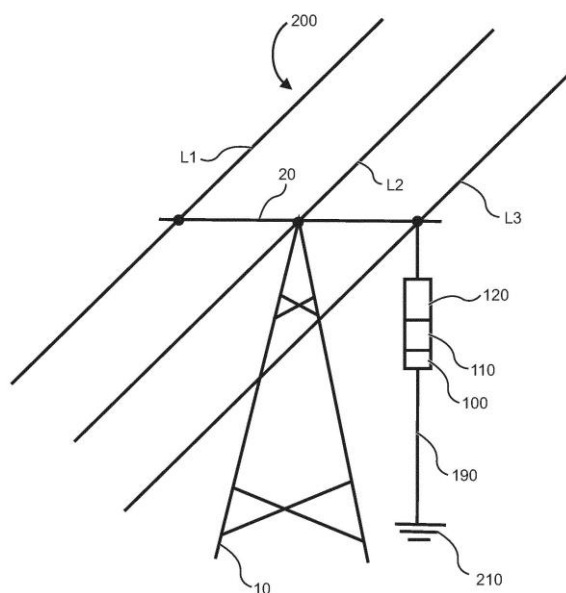
71: Hitachi Energy Switzerland AG

72: MARET, Yannick, FACH, Alexander, MADONNA, Gian-Luigi, KORNMAN, Xavier, BERTOLI, Stefano, SOTIROPOULOS, Ektor, NEESER, Daniel, SCHICK-PAULI, Martin

54: DISCONNECTOR DEVICE WITH PASSIVE RADIO DEVICE, GRID PROTECTION SYSTEM HAVING THE DISCONNECTOR DEVICE, AND METHOD FOR INDICATING A STATE OF THE DISCONNECTOR DEVICE

00: -

A disconnector device (110) is connectable to pole-mounted equipment (120) in a power grid. The disconnector device is activated in case of an overload condition, thereby disconnecting the pole-mounted equipment (120). The disconnector device (110) comprises a passive radio device (100) to be enabled via an incoming radio signal. The passive radio device (100), upon being enabled, transmits, in at least one state of the disconnector device, an indicator radio signal indicative of the respective state of the disconnector device (110), the state being one of an activated state and a deactivated state of the disconnector device (110).



21: 2021/06939. 22: 2021/09/17. 43: 2023/01/27
51: G01R; H02H; H02J

71: Hitachi Energy Switzerland AG

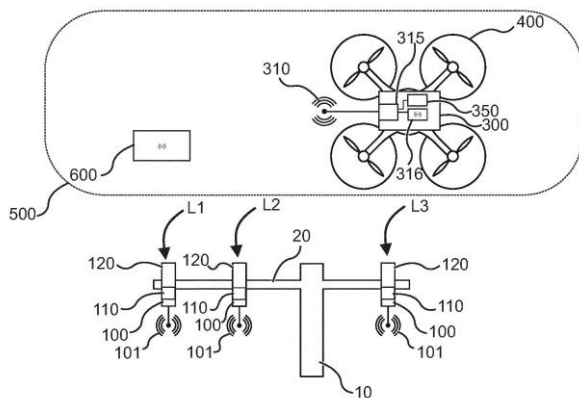
72: MARET, Yannick, KORNMAN, Xavier, NEESER, Daniel, BERTOLI, Stefano, SOTIROPOULOS, Ektor, SCHICK-PAULI, Martin,

MADONNA, Gian-Luigi, SOMMER, Philipp, FACH, Alexander

54: MONITORING SYSTEM FOR REMOTELY MONITORING A STATE OF POLE-MOUNTED EQUIPMENT IN A POWER DISTRIBUTION OR TRANSMISSION GRID, GRID EQUIPMENT HAVING THE MONITORING SYSTEM, AND CORRESPONDING METHOD

00: -

A monitoring system (500) for remotely monitoring a state of pole-mounted equipment (110, 120) in a power distribution or transmission grid (200) is provided. The pole-mounted equipment (110, 120) comprises an indicator device (100) configured to present state information indicative of a state of the pole-mounted equipment (110, 120). The monitoring system (500) comprises a status monitoring device (300) movable via a drive or propulsion system (400, 450). The status monitoring device (300) is configured to obtain the state information from the indicator device (100) when located within a communication range (R) of the indicator device (100).



21: 2021/06991. 22: 2021/09/20. 43: 2023/02/22
51: H04N

71: Huawei Technologies Co., Ltd.

72: GAO, Han, ESENLIK, Semih, WANG, Biao, KOTRA, Anand Meher, CHEN, Jianle

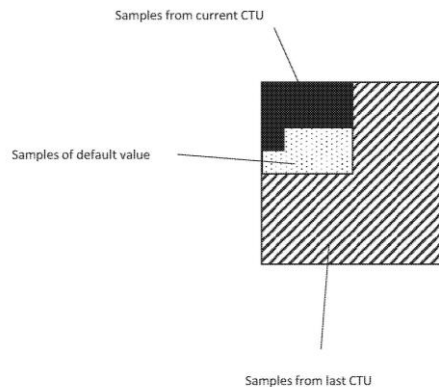
33: US 31: 62/849,119 32: 2019-05-16

54: AN ENCODER, A DECODER AND CORRESPONDING METHODS USING IBC DEDICATED BUFFER AND DEFAULT VALUE REFRESHING FOR LUMA AND CHROMA COMPONENT

00: -

A method of coding implemented by a decoding device, comprising initializing a dedicated buffer for

intra block copy (IBC) referencing, when a current coding tree unit (CTU) to be decoded is a first CTU of a CTU row, determining whether a current block in the current CTU is predicted using IBC mode, obtaining an IBC block vector for the current block when the current block is predicted using IBC mode, and obtaining predicted sample values for the current block, based on reference samples from the dedicated buffer and the IBC block vector for the current block.



21: 2021/07002. 22: 2021/09/20. 43: 2023/03/23

51: B62K; B62M

71: CLIP.BIKE INC

72: RAY, Somnath

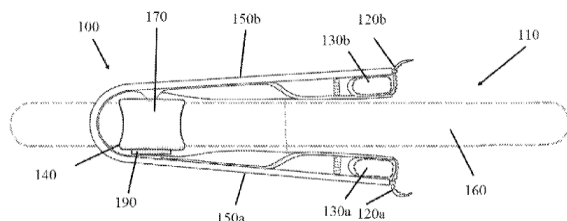
33: US 31: 62/826,712 32: 2019-03-29

33: US 31: 62/906,434 32: 2019-09-26

54: SYSTEMS, DEVICES, AND METHODS FOR DRIVING A WHEEL OF A BICYCLE

00: -

A clamping mechanism is provided, the clamping mechanism have two clamps, a tensioning conduit corresponding to each of the clamps, and an actuator for simultaneously tensioning the two clamps by way of the tensioning conduits. Each clamp has a bracing element and a gripping segment, and when the clamps are tensioned along the tensioning conduit, the gripping segment of each clamp is drawn towards the corresponding bracing element. Also provided is a bicycle drive assembly, the assembly has two clamps for fixing to a bicycle, a drive mechanism for driving a bicycle wheel, and two elongate supports extending from the drive mechanism to corresponding clamps. When applied to a bicycle, a wheel of the bicycle passes partially between the elongate supports.



21: 2021/07027. 22: 2021/09/21. 43: 2023/03/09

51: A24D

71: PHILIP MORRIS PRODUCTS S.A.

72: JOYEUX, Thierry

33: EP 31: 19179254.8 32: 2019-06-10

54: STABLE WRAPPER FOR AEROSOL GENERATING ARTICLE

00: -

An aerosol generating article (10) includes an aerosol generating substrate (12) comprising nicotine and a first paper layer (50) disposed about the aerosol generating substrate. The first paper layer has a first thickness/grammage value. A second paper layer (20) is disposed about the first paper layer. The second paper layer has a second thickness/grammage value. The first thickness/grammage value is less than the second thickness/grammage value.

21: 2021/07200. 22: 2021/09/23. 43: 2023/03/09

51: A24D; D21H

71: PHILIP MORRIS PRODUCTS S.A.

72: JOYEUX, Thierry

33: EP 31: 19179241.5 32: 2019-06-10

54: STABLE WRAPPER FOR AEROSOL GENERATING ARTICLE

00: -

A wrapper used in smoking articles. The wrapper has a low grease penetration or visual spotting and may be utilized with an aerosol generating substrate. The aerosol generating article (10) includes an aerosol generating substrate (12) comprising nicotine and a gel composition. The wrapper is disposed about and in contact with the aerosol generating substrate. The wrapper comprise a paper layer (50) comprising a surface treatment such that the paper has a negative result for at least one kit oil sample of method Tappi 559cm-02, classical method 2002.

21: 2021/07340. 22: 2021/09/29. 43: 2023/03/22

51: A61L; B01D; C12M; C12N

71: GENZYME CORPORATION

72: VETTER, Tarl, BROWER, Kevin

33: US 31: 62/816,786 32: 2019-03-11

54: TANGENTIAL VIRAL FILTRATION

00: -

Viral filters include a filter member featuring a first surface and a second surface and having a thickness extending between the first and second surfaces in a first direction, and a plurality of channels formed in the filter member, each of the channels having a channel axis, where during use, a solution carrying a viral load flows in a direction parallel to the first surface, and at least a portion of the viral load enters the membrane through the first surface and propagates in the first direction, and where for at least 50% of the channels in the filter member, the channel axis is oriented at an angle of between 5 degrees and 85 degrees relative to the first direction.

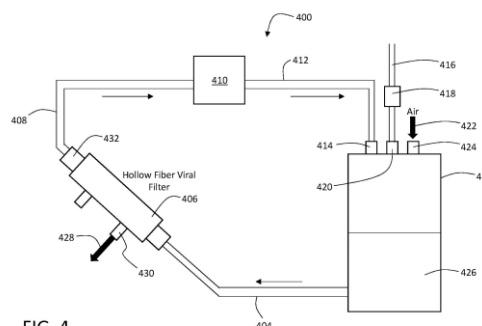


FIG. 4

21: 2021/07377. 22: 2021/09/30. 43: 2023/03/31

51: B62D

71: ARCELORMITTAL

72: Gilson DONYA

33: IB 31: PCT/IB2019/053328 32: 2019-04-23

54: TUNNEL HAVING INTEGRATED LATERAL REINFORCEMENTS

00: -

Tunnel 1 for a motor vehicle 2 made of a single part and comprising a main tunnel portion 3 and at least one lateral reinforcement element 5 located on the side of said main tunnel portion 3, wherein the lateral reinforcement element 5 is equipped with a groove 19 to provide high stiffness and high crash resistance and wherein said groove 19 extends over at least part of an inflexion region 15 between the longitudinally oriented part of the tunnel 1 and the upward oriented part of the tunnel 1 and extends over at least part of the front portion of the longitudinally oriented part of the tunnel 1.

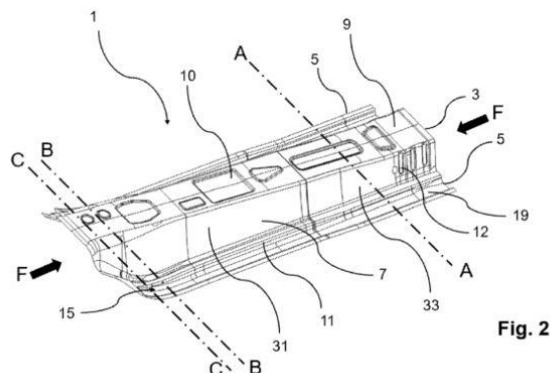


Fig. 2

21: 2021/07392. 22: 2021/09/30. 43: 2023/04/03
51: C07C; C10G

71: CHINA PETROLEUM & CHEMICAL CORPORATION, RESEARCH INSTITUTE OF PETROLEUM PROCESSING, SINOPEC

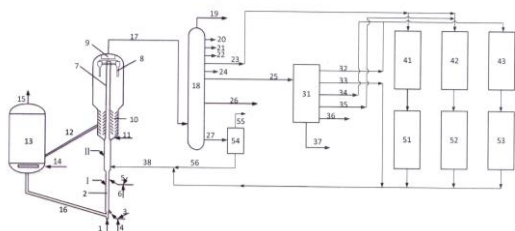
72: XU, Youhao, BAI, Xuhui, WEN, Langyou, WANG, Xin, HE, Mingyuan

33: CN 31: 201910224119.X 32: 2019-03-22

54: CATALYTIC CONVERSION PROCESS AND SYSTEM WITH INCREASED PROPYLENE PRODUCTION

00: -

A catalytic conversion method and system for producing more propylene. The method comprises the following steps: 1) providing an initial raw material containing an olefin having four or more carbon atoms; 2) pre-treating the initial raw material to obtain a propylene precursor, the propylene precursor containing an olefin having $3 \times 2n$ carbon atoms, wherein n is an integer greater than or equal to 1; and subjecting the propylene precursor to a catalytic cracking reaction to obtain a reaction product containing propylene. The method and system can effectively improve the yield of propylene.



21: 2021/07429. 22: 2021/10/01. 43: 2023/03/13
51: E04B

71: SAINT-GOBAIN PLACO

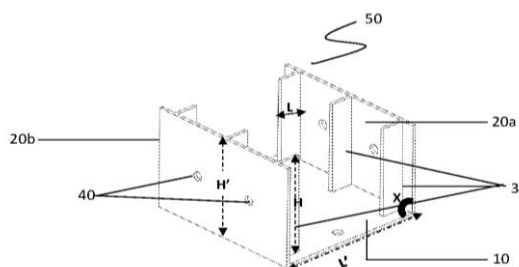
72: SAMINATHAN, Kanakavel, S, Vikram, AHMED, Rizwan

33: IN 31: 201941016268 32: 2019-04-24

54: STIFFENER FOR CONSTRUCTION ELEMENTS

00: -

A stiffener 50 for construction elements for providing resistance against deflection and cracking is disclosed comprising a U-shaped cross-section with a web 10 and two flanges 20a, 20b extending transversely from the web 10 and having ribs 30 rising parallel, perpendicular or diagonal from the flanges 20a, 20b. The stiffener 50 is configured to be fixed within the construction element. A drywall stud and a ceiling section provided with a plurality of stiffeners 50 of the present disclosure spaced at desired locations along their length is also disclosed. Such drywall studs and ceiling sections comprising stiffeners 50 of the present disclosure reduce deflection of drywall partition and suspended ceiling system, respectively by up to 50%.



21: 2021/07443. 22: 2021/10/04. 43: 2023/03/14
51: E01F

71: PETTERS, Karl

72: PETTERS, Karl

33: GB 31: 1903442.0 32: 2019-03-13

33: GB 31: 1915350.1 32: 2019-10-23

33: GB 31: 2000170.7 32: 2020-01-07

33: GB 31: 2000852.0 32: 2020-01-21

54: APPARATUS AND METHOD FOR INSTALLATION OF SUPPORT POSTS FOR A VEHICLE RESTRAINT SYSTEM

00: -

Disclosed is apparatus for installing a vehicle restraint at a desired location, the apparatus comprising a length of pre-fabricated a base unit locatable in or on the ground at the desired location, the base unit having a plurality of attachment positions at intervals for attachment thereto of at least one substantially vertical support post for supporting the vehicle restraint.

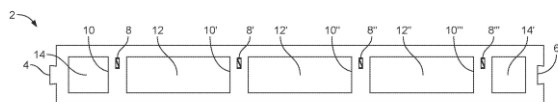


FIG. 1A



FIG. 1B

21: 2021/07549. 22: 2021/10/07. 43: 2023/03/22

51: B65D

71: REEND SPÓŁKA Z OGRANICZONĄ
ODPOWIEDZIALNOŚCIĄ

72: LEWANDOWSKI, Dariusz, SOBECKI, Roman

33: PL 31: P.429610 32: 2019-04-11

54: LID FOR CONTAINERS, PARTICULARLY BEVERAGE CONTAINERS

00: -

A lid of a container, particularly beverage container, having an opening for emptying the container, fitted with guides formed on two opposite walls and with a slide piece for opening and reclosing the said opening, where there are two catches formed on the top surface of the slide piece, the catches fitted slidingly in the opening on the said guides, and where the slide piece is fitted with technical means for shifting the slide piece from the closed position to the open position and backwards, is characterised in that the surfaces (2a) of the catches (2) of the slide piece (1) which cooperate with the guides (4) are inclined at an acute angle (a) with respect to the top surface of the slide piece (1) positioned under the said surfaces (2a) of the catches (2), with the slope in the direction in which the slide piece (1) shifts to the open position, and where formed on the bottom side of the lid around the opening (3) is a socket (5) for the slide piece (1) with profiled surfaces (5a) to seal the slide piece (1) when in the socket (5) in the closed position formed around its circumference, where the profiled surfaces (5a) match the profile of the circumferential surfaces (1a) of the slide piece (1), and where in the process of uncovering the opening (3) the slide piece (1) is moved downwards with respect to the socket (5).

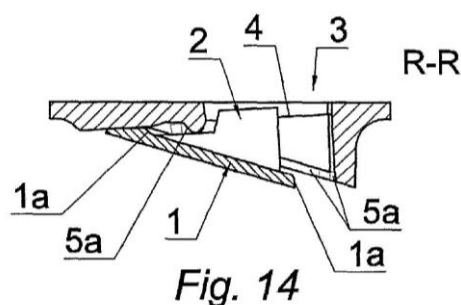


Fig. 14

21: 2021/07695. 22: 2021/10/12. 43: 2023/03/22

51: C07D; A61P

71: PFIZER INC.

72: BHATTACHARYA, Samit, Kumar, BEHENNA, Douglas, Carl, CAMERON, Kimberly, O., CHEN, Ping, CURTO, John, M., FREEMAN-COOK, Kevin Daniel, JALAIE, Mehran, KANIA, Robert, Steven, LIAN, Yajing, NAIR, Sajiv, Krishnan, PALMER, Cynthia, Louise, PETTERSSON, Martin, Youngjin, RUI, Eugene, Yuanjin, SAMMONS, Matthew, Forrest, YANG, Qingyi, ZHANG, Liying

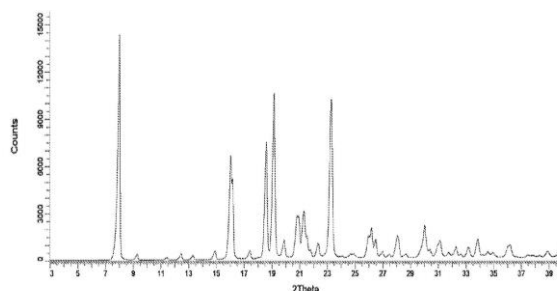
33: US 31: 62/836,340 32: 2019-04-19

33: US 31: 62/981,620 32: 2020-02-26

54: ANTI-PROLIFERATIVE AGENTS FOR TREATING PAH

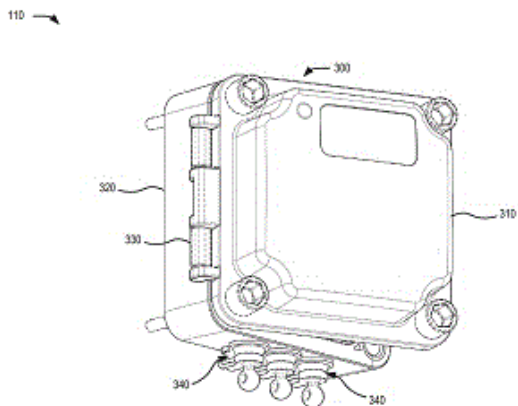
00: -

This invention relates to compounds of general Formula I in which A, R1, R2, R3 and R4 are as defined herein, and the pharmaceutically acceptable salts thereof; to pharmaceutical compositions comprising such compounds and salts; to methods of using such compounds, salts and compositions for treating pulmonary hypertension and related diseases, like pulmonary arterial hypertension; to methods of using such compounds, salts and compositions for treating abnormal cell growth, such as cancer; and to processes to make such compounds, salts and compositions.



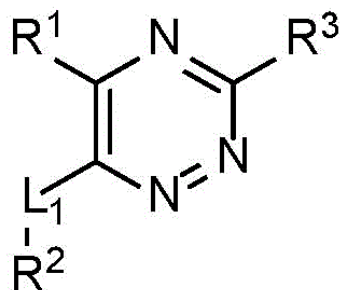
21: 2021/08163. 22: 2021/10/22. 43: 2023/02/28
 51: G05B; H04W
 71: CORNELL PUMP COMPANY LLC
 72: LINDEMAN, ADAM, ENTERLINE, ANDREW,
 DAVI, MARCUS
 33: US 31: 62/840,025 32: 2019-04-29
54: REMOTE EQUIPMENT MONITORING SYSTEM
 00: -

A device, system, and methods are provided for remotely monitoring pump equipment. A monitoring device is mechanically mounted to a pump. The monitoring device includes internal vibration, temperature, and location sensors to periodically monitor a pump and upload data samples via cellular connection to a provider network. The monitoring device additionally includes connections to external sensors that can be sampled and uploaded with the other data samples, when the monitoring device is connected to external power. Authenticated users access the pump data through a user device that connects to the provider network.



21: 2021/08443. 22: 2021/10/29. 43: 2023/02/28
 51: A61K; A61P; C07D
 71: Array BioPharma Inc.
 72: BLAKE, James F., BOYS, Mark Laurence,
 CHICARELLI, Mark Joseph, COOK, Adam W.,
 ELSAYED, Mohamed S.A., FELL, Jay Bradford,
 FISCHER, John P., HINKLIN, Ronald Jay, JIANG,
 Yutong, MCNULTY, Oren T., MEJIA, Macedonio J.,
 RODRIGUEZ, Martha E., WONG, Christina E.
 33: US 31: 62/828,356 32: 2019-04-02
**54: PROTEIN TYROSINE PHOSPHATASE
 INHIBITORS**
 00: -

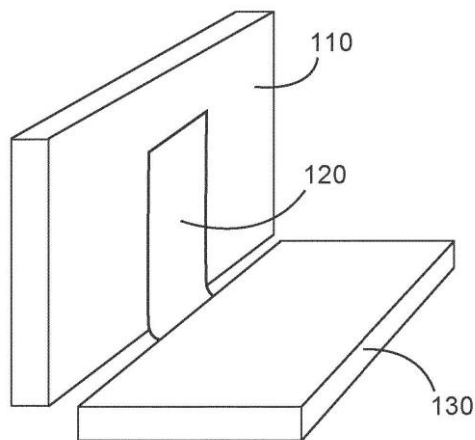
Compounds of Formula I or a stereoisomer, tautomer, prodrug or pharmaceutically acceptable salt thereof are provided, which are useful for the treatment of hyperproliferative diseases. Methods of using compounds of Formula I or a stereoisomer, tautomer, prodrug or pharmaceutically acceptable salt thereof, for *in vitro*, *in situ*, and *in vivo* diagnosis, prevention or treatment of such disorders in mammalian cells, or associated pathological conditions are disclosed.



I

21: 2021/08526. 22: 2021/11/02. 43: 2023/02/27
 51: A47C
 71: Sleep Smart Solutions GmbH
 72: HUBRIG, Jörg
 33: PCT/EP(DE) 31: 2019/063130 32: 2019-05-21
**54: PIECE OF FURNITURE FOR SITTING OR
 LYING ON**
 00: -

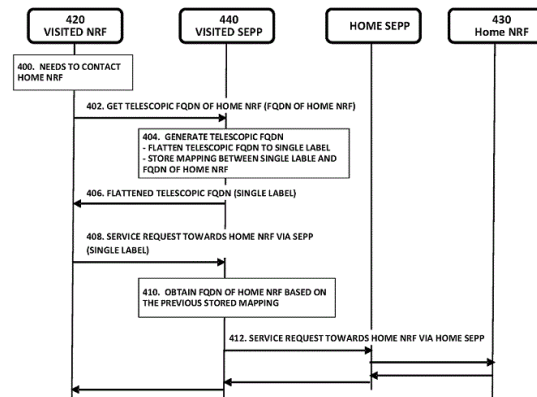
The present invention relates to a piece of furniture (100) for sitting or lying on, comprising a frame (110) and a base (130) for a mattress or a seat cushion. The base (130) defines a horizontal surface area and has a thickness which extends in the vertical direction. The base (130) is coupled resiliently to the frame (110). The invention is characterized by the provision of a guide element (150), which ensures that a vertically downwardly directed external force applied to the base (130) results in the base (130) being moved in a guided manner vertically downwards relative to the frame (110).



21: 2021/08576. 22: 2021/11/03. 43: 2023/02/27
 51: H04L H04W
 71: TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)
 72: DE-GREGORIO-RODRIGUEZ, Jesus-Angel, KUJANEN, Juha, CASTELLANOS ZAMORA, David
 33: US 31: 62/830,999 32: 2019-04-08
54: SYSTEMS AND METHODS FOR HANDLING TELESCOPIC FQDNS

00: -

Disclosed herein is a method performed by a first node (420) implementing a first NF in a visited network (VPLMN) for communicating with a third node implementing a second NF in a home network (HPLMN). The method comprises: determining (400) that the third node should be communicated with; sending (402) towards a second node (440) implementing a Security Edge Protection Proxy (SEPP) in the visited network, a request for a telescopic FQDN for the third node in the home network to be used by the first node in the visited network to communicate with the third node in the home network, which request comprises a FQDN of the third node in the home network; receiving, from the second node, a telescopic FQDN for the third node wherein the FQDN for the third node in the home network is flattened to a single label to be used by the first node to communicate with the third node.



21: 2021/08581. 22: 2021/11/03. 43: 2023/03/22
 51: A47J

71: JURA ELEKTROAPPARATE AG

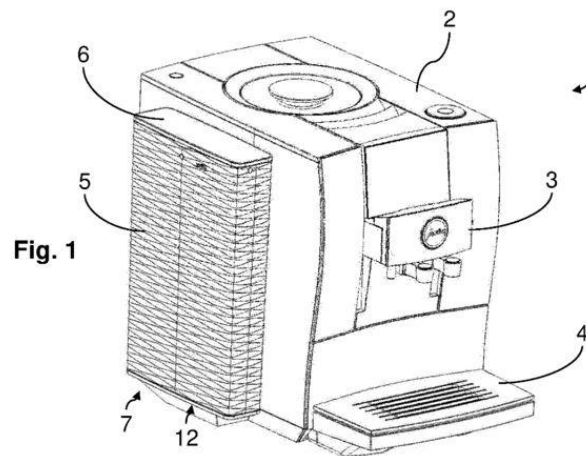
72: Philipp BAUR

33: EP 31: 19188196.0 32: 2019-07-24

54: FULLY AUTOMATIC COFFEE MACHINE

00: -

For a fully automatic coffee machine (1), according to the invention a detachable water tank (5) can be retained by a magnetic holding force on a main device (2) of the fully automatic coffee machine (1).



21: 2021/08582. 22: 2021/11/03. 43: 2023/02/22
 51: H04M; H04W

71: NoCell Technologies, LLC

72: MCKEFFERY, Donald, THEIL, Frederick, PATEL, Himanshu

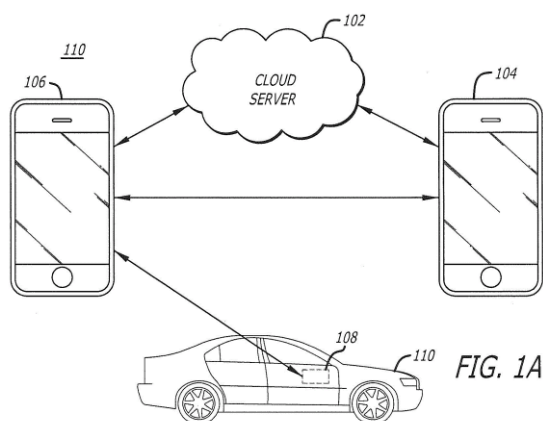
33: US 31: 16/398,120 32: 2019-04-29

33: US 31: 16/398,127 32: 2019-04-29

54: SYSTEM, METHOD AND APPARATUS FOR RESTRICTING USE OF A NETWORK DEVICE THROUGH AUTOMATED POLICY ENFORCEMENT

00: -

A computerized method for enforcing a set of policies on a first network device is disclosed. The computerized method includes operations by logic processing on the first network device including detecting movement of the first network at a speed above a predetermined threshold and presence of a wireless transceiver, implementing the set of policies on the first network device, wherein implementation of the set of policies is configured to restrict functionality of the first network device according to a predefined list of functionalities, monitoring sensory data associated with the first network device, determining that the sensory data violates a first policy of the set of policies, and responsive to determining that the sensory data violates the first policy, transmitting an alert to an administrator. An additional operation includes transmitting a message to the wireless transceiver to perform a scan for additional network devices.



21: 2021/08584. 22: 2021/11/03. 43: 2023/02/27

51: A61P; C12N

71: EdiGene (GuangZhou) Inc.

72: FANG, Riguo, YU, Lingling, YANG, Huihui

33: PCT/CN 31: 2019/085116 32: 2019-04-30

54: METHOD FOR PREDICTING EFFECTIVENESS OF TREATMENT OF HEMOGLOBINOPATHY

00: -

The present invention relates to a method for treating hemoglobinopathy in an individual, comprising: (a) an evaluation step: the evaluation step comprises evaluating the ability of a first population of modified CD34-positive hematopoietic stem cells/progenitor cells to produce a desired level of γ -globin or fetal hemoglobin after differentiation, the modified CD34-positive HSPCs of the first population being derived from the individual and being modified to reduce BCL11A function; and (b) a treatment step: the treatment step comprises administering to the individual a second population of modified CD34-positive HSPCs, the modified CD34-positive HSPCs being derived from the individual and being modified to reduce BCL11A function. At the same time, the invention also relates to a method for treating hemoglobinopathy in individuals, a method for selecting individuals suffering from hemoglobinopathy for treatment using the modified CD34-positive HSPCs of the second population, and a method for determining whether an individual suffering from hemoglobinopathy is suitable or unsuitable for treatment using the second population of modified CD34-positive HSPCs derived from the individual and modified to reduce the function of BCL11A.

21: 2021/08753. 22: 2021/11/08. 43: 2023/02/27

51: A61B A61C

71: HUWAIS IP HOLDING, LLC.

72: HUWAIS, Salah

33: US 31: 62/831,303 32: 2019-04-09

54: HOLLOW-POINT CONDENSING-COMPACTION TOOL

00: -

A rotary tool configured for high speed condensing and/or cutting action to form a hole. The tool has a body around which is formed a plurality of flutes. Each flute has a cutting face on one side and a densifying face on the other side. A land between adjacent flutes establishes a substantially marginless working edge along each cutting face. The working edges are configured to produce osseodensification when the tool is operated in the condensing mode. A cavity is formed inside the body with access through its apical end. A plurality of spurs rim the apical end. Each spur has a grinding edge that is offset from said longitudinal axis in the cutting direction of rotation. Some of the flutes open directly into a gullet formed between adjacent spurs. Some of the flutes open directly into leading flanks that fall away from each grinding edge.

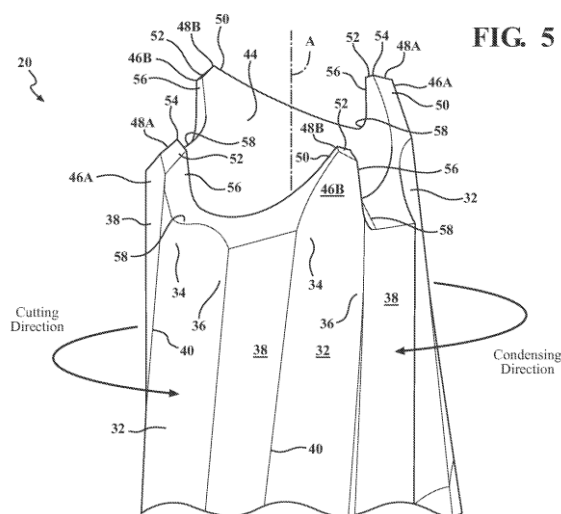


FIG. 5

21: 2021/08754. 22: 2021/11/08. 43: 2023/02/27
51: B61K E01B

71: RAILWAY ROBOTICS AS

72: TORGERSEN, Jørgen

33: NO 31: 20190487 32: 2019-04-09

54: DEVICE, SYSTEM AND METHOD FOR LUBRICATING A RAILWAY SWITCH

00: -

The invention relates to a device for lubricating a railway switch, the device being remotely controllable and configured for moving on a railway track, wherein the device comprises a container for lubricant and at least one nozzle configured for lubricating the railway switch with the lubricant. The invention further relates to a system comprising the device and a controller for remotely controlling said device. The invention also relates to a method for lubricating a railway switch, wherein the method comprises the steps of remotely directing the device to the railway switch; remotely instructing the device to lubricate the railway switch; and remotely directing the device away from the railway switch to avoid hindering train traffic through said switch.

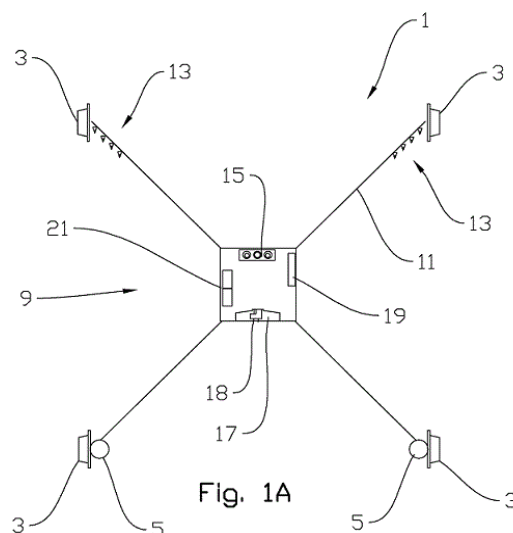


Fig. 1A

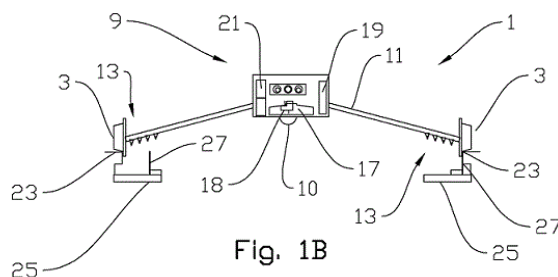


Fig. 1B

21: 2021/08808. 22: 2021/11/09. 43: 2023/02/28
51: A61K; A61Q

71: L'OREAL

72: DONCK, Simon, EASON, Jason, MOLAMODI, Kwezikazi, ATTWELL, Shannon

54: COMPOSITION COMPRISING CYSTEINE, A PARTICULAR FATTY ACID TRIGLYCERIDE AND AN ADDITIONAL REDUCING AGENT

00: -

The present invention relates to a composition useful for styling and/or conditioning keratin fibers, and in particular human keratin fibers such as the hair, the composition comprising cysteine and/or one of its derivatives, a particular fatty acid triglyceride and optionally an additional reducing agent. The invention also relates to a cosmetic process for styling and/or conditioning keratin fibres using such a composition.

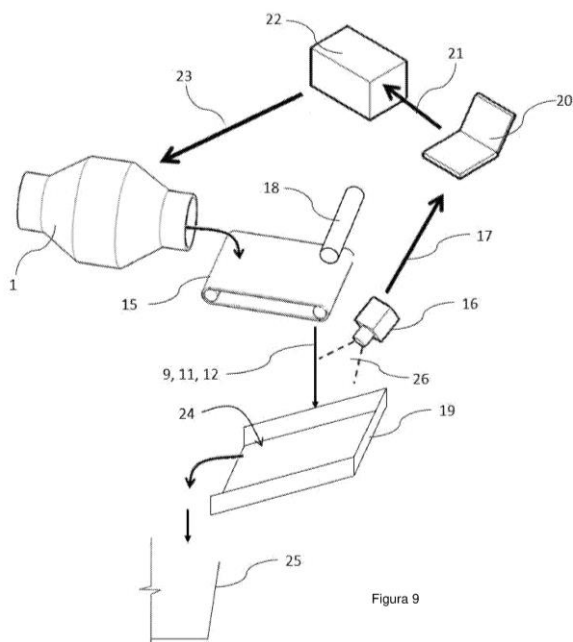
21: 2021/08822. 22: 2021/11/09. 43: 2023/03/02
51: B02C; G01B; G06K; G06T
71: LMAGNE INGENIERÍA LTDA, SOCIEDAD DE INNOVACIÓN Y TRANSFERENCIA TECNOLÓGICA LTDA, ESTUDIO, ASESORÍAS CAPACITACIÓN ALTOYA LTDA

72: TITICHOCA AGUIRRE, Gilda Verónica, PERELLI BACIGALUPO, Ennio Carlo, SEPÚLVEDA VILLALOBOS, Germán Arnaldo, DÍAZ CID, Jaime Roberto, CASTILLO PIZARRO, Patricio Alejandro, ALTAMIRANO CABRERA, Eduardo Lorenzo
33: CL 31: 1231-2019 32: 2019-05-03

54: SYSTEM AND PROCESS FOR DETERMINING IN-LINE THE CHARACTERISTICS OF SPENT BALLS AND PIECES OF SAME

00: -

The present invention relates to a system and process carried out after a process of separating pieces of steel from pieces of ore that come out of a semi-autogenous grinder for grinding ores, and which consists of a system formed by one or more instruments for capturing images, each one being sensitive to light of different wavelengths, which point to the surface of an element for receiving the steel pieces or a channel that receives the steel balls and the pieces thereof from the separation process, through which the steel balls and pieces thereof move when they are discharged from this process, with the possibility of directing each image sensor such that it is not parallel to the others. By digitally processing the images obtained with the one or more sensors, the dimensions and morphology of the balls and ball pieces discharged from the separation process can be determined.



21: 2021/08834. 22: 2021/11/09. 43: 2023/02/27

51: A61K; A61P; C07D

71: Pfizer Inc.

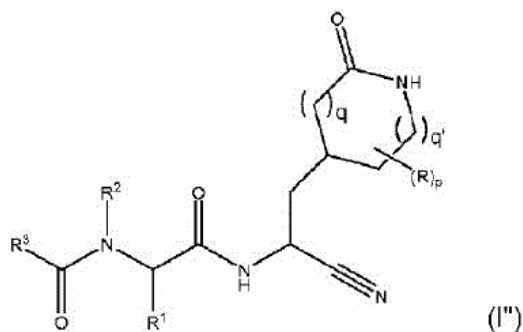
72: OWEN, Dafydd Rhys, PETTERSSON, Martin Youngjin, REESE, Matthew Richard, SAMMONS, Matthew Forrest, TUTTLE, Jamison Bryce, VERHOEST, Patrick Robert, WEI, Liuqing, YANG, Xiaojing, YANG, Qingyi

33: US 31: 63/073,982 32: 2020-09-03

54: NITRILE-CONTAINING ANTIVIRAL COMPOUNDS

00: -

Disclosed is a puncture rod (300), comprising a puncture mechanism (1) and a handle (2). The handle (2) comprises a handle base (21) and a handle cover (22). The handle base (21) comprises a positioning column (21-1) and a connection groove (21-2); and the handle cover (22) comprises a positioning hole (22-1) and a connection convex step (22-2). The positioning column (21-1) is embedded in the positioning hole (22-1) to achieve positioning between the handle base (21) and the handle cover (22). The connection convex step (22-2) is embedded in the connection groove (21-2) to form a concave-convex clamping-fit connection such that the handle base (21) and the handle cover (22) are connected together. There is no strict requirement for interference between the positioning column (21-1) and the positioning hole (22-1), and a trocar (400) is not prone to accidental loosening of the handle (2) during clinical use so as to achieve safer clinical use.



21: 2021/08836. 22: 2021/11/09. 43: 2023/02/27

51: A61K; A61P; C07K; C12N; C12P

71: Eisai R&D Management Co., Ltd.

72: INOUE, Eiji, YAMADA, Akio, KAWAKATSU, Tomomi, IMAI, Toshio, DEGUCHI, Maki, NAKATANI, Aki

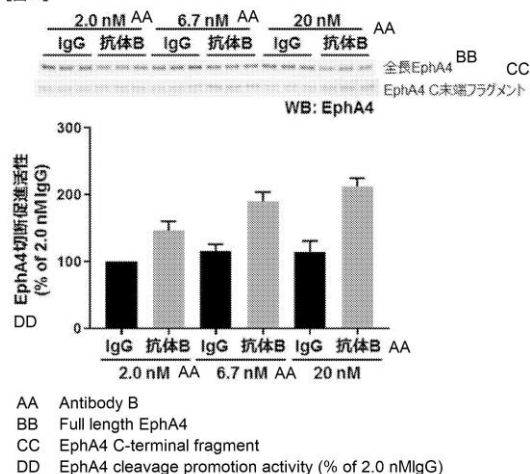
33: JP 31: 2019-122982 32: 2019-07-01

54: ANTI-EphA4 ANTIBODY

00: -

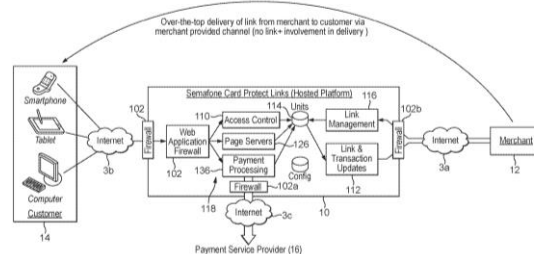
[Problem] To provide: an anti-EphA4 antibody that can bind to EphA4 and promote the cleavage of EphA4; and a pharmaceutical composition comprising said antibody as an active ingredient.
 [Solution] A mouse anti-EphA4 antibody having binding affinity for EphA4 and capable of promoting the cleavage of EphA4 was acquired, and the sequence of the complementarity-determining region (CDR) of the mouse anti-EphA4 antibody was identified. Next, the targeted anti-EphA4 antibody was acquired by preparing a humanized antibody of the mouse anti-EphA4 antibody.

[図13]



21: 2021/09012. 22: 2021/11/12. 43: 2023/03/13
 51: G06Q
 71: SYCURIO LIMITED
 72: BALDWIN, Thomas, RAFFERTY, Ben, PREEDY, Graham
 33: GB 31: 1906083.9 32: 2019-04-30
54: ONLINE PAYMENT SYSTEM
 00: -

A system and method for facilitating an online transaction between a customer and a merchant, wherein receipt of an input from a merchant server defining a specified payment transaction causes a link generation module to generate a URL link uniquely associated with an online data capture resource for the specified transaction, such that activation of said link by a customer device facilitates a data capture process causing payment data to be provided to a payment module for completion of said specified financial transaction via a payment service provider.

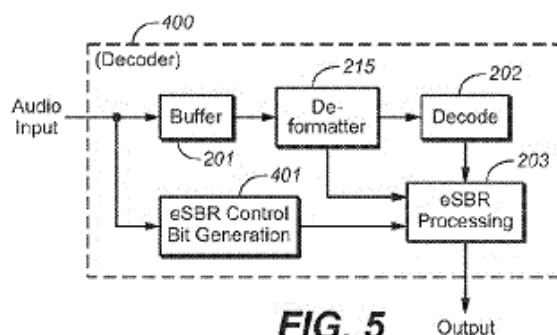


21: 2021/09045. 22: 2021/11/15. 43: 2023/02/27
 51: G06F; G10L
 71: DOLBY INTERNATIONAL AB
 72: VILLEMOES, LARS, PURNHAGEN, HEIKO, EKSTRAND, PER
 33: US 31: 62/475,619 32: 2017-03-23

54: BACKWARD-COMPATIBLE INTEGRATION OF HARMONIC TRANSPOSER FOR HIGH FREQUENCY RECONSTRUCTION OF AUDIO SIGNALS

00: -

A method for decoding an encoded audio bitstream is disclosed. The method includes receiving the encoded audio bitstream and decoding the audio data to generate a decoded lowband audio signal. The method further includes extracting high frequency reconstruction metadata and filtering the decoded lowband audio signal with an analysis filterbank to generate a filtered lowband audio signal. The method also includes extracting a flag indicating whether either spectral translation or harmonic transposition is to be performed on the audio data and regenerating a highband portion of the audio signal using the filtered lowband audio signal and the high frequency reconstruction metadata in accordance with the flag.

**FIG. 5**

21: 2021/09046. 22: 2021/11/15. 43: 2023/02/27
 51: G06F; G10L
 71: DOLBY INTERNATIONAL AB

72: VILLEMOS, LARS, PURNHAGEN, HEIKO, EKSTRAND, PER

33: US 31: 62/475,619 32: 2017-03-23

54: BACKWARD-COMPATIBLE INTEGRATION OF HARMONIC TRANSPOSER FOR HIGH FREQUENCY RECONSTRUCTION OF AUDIO SIGNALS

00: -

A method for decoding an encoded audio bitstream is disclosed. The method includes receiving the encoded audio bitstream and decoding the audio data to generate a decoded lowband audio signal. The method further includes extracting high frequency reconstruction metadata and filtering the decoded lowband audio signal with an analysis filterbank to generate a filtered lowband audio signal. The method also includes extracting a flag indicating whether either spectral translation or harmonic transposition is to be performed on the audio data and regenerating a highband portion of the audio signal using the filtered lowband audio signal and the high frequency reconstruction metadata in accordance with the flag.

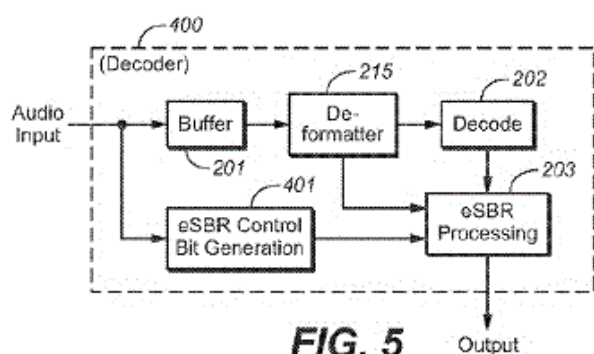


FIG. 5

21: 2021/09173. 22: 2021/11/17. 43: 2023/02/27

51: A61K C07K

71: IMMUNOBRAIN CHECKPOINT, INC., YEDA RESEARCH AND DEVELOPMENT CO. LTD.

72: YOLES, Ester, KROGH, Berit, Olsen, JENSEN, Allan, EGEJERG, Jan, DAVID, Carol, BARUCH, Kuti, EISENBACH-SCHWARTZ, Michal

33: US 31: 62/836,247 32: 2019-04-19

33: EP 31: 19170438.6 32: 2019-04-19

54: MODIFIED ANTI-PD-L1 ANTIBODIES AND METHODS AND USES FOR TREATING A NEURODEGENERATIVE DISEASE

00: -

The present specification discloses modified anti-PD-L1 antibodies that abolishes Fc-related effector function and enhances clearance rate while

maintaining therapeutic efficacy for neurodegenerative disease modification. The present specification also discloses nucleic acid sequences and expression constructs encoding such modified anti-PD-L1 antibodies as well as methods of making such modified anti-PD-L1 antibodies. In addition, the present specification discloses methods of treatment and uses that employ an administration regime of the disclosed anti-PD-L1 antibodies that ensures the antibodies are present for only a specific period of time and then are sufficiently cleared from the body to ensure treatment efficacy is maintained.

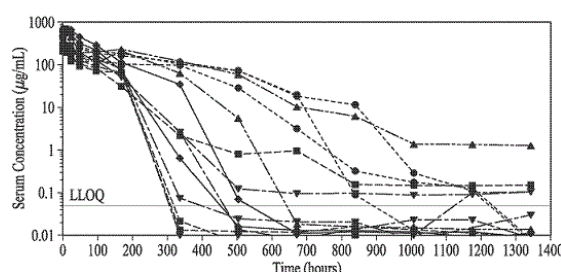


FIG. 32

21: 2021/09180. 22: 2021/11/17. 43: 2023/04/03

51: B25B; E21D

71: MSP MINE SUPPORT PRODUCTS (PTY) LTD

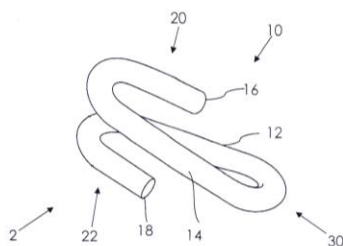
72: NISSEN, Christian, ENGELBRECHT, Conrad

33: ZA 31: 2019/03136 32: 2019-05-20

54: MODULAR NET SYSTEM

00: -

A clip with a body formed from an elongate rigid member, the body having first and second ends, a first hook-shaped formation, in a first plane, formed at the first end and a second hook-shaped formation, in a second plane, formed at the second end, a U-shaped formation which lies in a third plane between the first and second hook-shaped formations, the first plane being displaced from and parallel to the second plane and the first plane and the third plane subtending an angle between them.



21: 2021/09184. 22: 2021/11/17. 43: 2023/02/28

51: A61K; C07K; G01N

71: Momena Pharmaceuticals, Inc.

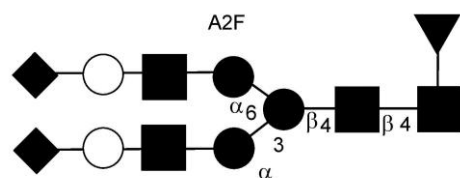
72: PATIL, Siddhesh D.

33: US 31: 62/836,016 32: 2019-04-18

54: SIALYLATED GLYCOPROTEINS

00: -

Pharmaceutical preparations containing hypersialylated immunoglobulins are described. The preparations are stable to shear stress. The pharmaceutical compositions described herein provide pharmaceutically acceptable hslgG compositions that are stable against shear stress (e.g., a significant a number of subvisible particles do not form when the formulation is subjected to shear stress, such as agitation, for example, during shipping and thus can be shipped and handled in liquid form.



21: 2021/09307. 22: 2021/11/19. 43: 2023/02/27

51: C12Q

71: PBD Biotech Limited, The University of Nottingham

72: SWIFT, Benjamin, REES, Catherine

33: GB 31: 1907157.0 32: 2019-05-21

54: METHODS RELATING TO TUBERCULOSIS

00: -

The invention relates to a method of diagnosis of tuberculosis (TB) disease in a subject. The method comprises admixing a Mycobacteria-specific bacteriophage with a sample of peripheral blood mononuclear cells (PBMCs) from the subject, followed by determination of the presence or absence of a Mycobacterial DNA sequence in DNA isolated from the admixture. The invention provides a sensitive and specific test for the presence of

incipient TB, i.e. an asymptomatic infection with a high risk of developing active TB, or for the presence of latent tuberculosis infection (LTBI), i.e. an asymptomatic infection that is not likely to develop into active TB, in a subject.

21: 2021/09423. 22: 2021/11/23. 43: 2023/03/16

51: G06F

71: HUMAIN SOLUTIONS UG

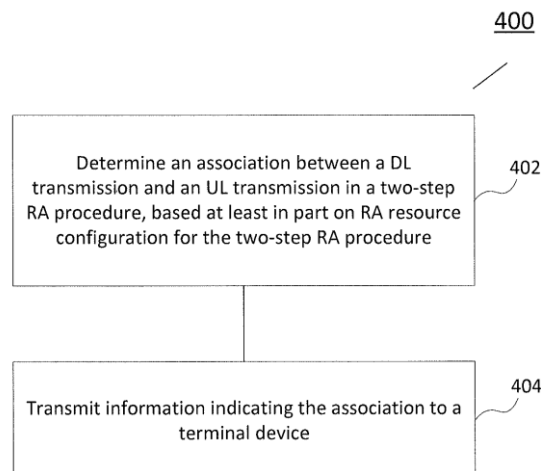
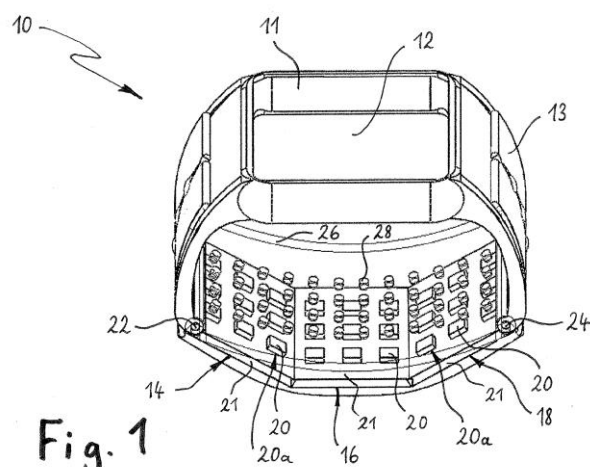
(HAFTUNGSBESCHRÄNKT)

72: GEIER, Andreas, SATHE, Prathamesh Prasad, TUCKER, Rawleigh Cosmo Young

54: WEARABLE HUMAN-MACHINE INTERFACE AND METHOD WHICH CAN BE CARRIED OUT USING SAME

00: -

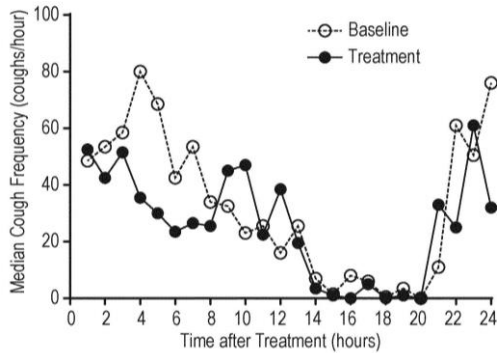
The invention relates to a wearable human-machine interface (10), comprising: an element to be worn (12) which is configured to be attached to an area of skin of a human or animal body, a flexible layer (26) with magnetic properties which is attached to the element to be worn (12) on a side that faces the area of skin of the human or animal body in order to come into contact with the surface of the area of skin, wherein the flexibility of the layer (26) with magnetic properties is such that the layer (26) is able at least substantially to follow deformations of the surface of the area of skin, and wherein the magnetic properties of the layer (26) are configured in such a manner that a deformation of the surface of the area of skin leads to a measurable change of the magnetic properties, a detection unit which measures changes of the magnetic properties of the flexible layer (26), and an integrated or separate processing unit which is adapted to perform an algorithm which allocates the measured change of the magnetic properties to a configuration and/or movement and/or movement intensity. The invention relates also to a method which can be carried out with the human-machine interface.



21: 2021/09495. 22: 2021/11/24. 43: 2023/02/27
 51: H04W
 71: TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)
 72: LIN, Zhipeng, LI, Jingya, HARRISON, Robert, Mark
 33: CN 31: PCT/CN2019/084614 32: 2019-04-26
54: METHOD AND APPARATUS FOR RANDOM ACCESS

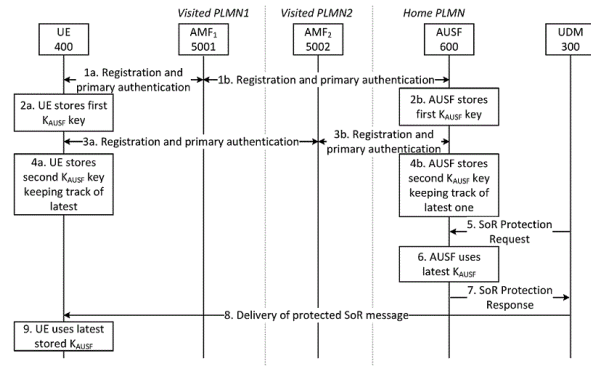
00: -
 Various embodiments of the present disclosure provide a method for random access. The method which may be performed by a network node comprises determining an association between a downlink transmission and an uplink transmission (e.g. an association between a synchronization signal and physical broadcast channel block and a random access occasion) in a two-step random access procedure, based at least in part on random access resource configuration for the two-step random access procedure (e.g. based at least in part on whether random access resource is shared by the two-step random access procedure and a four-step random access procedure). The method further comprises transmitting information indicating the association to a terminal device. According to the embodiments of the present disclosure, an association between a synchronization signal and physical broadcast channel block and a random access occasion in a two-step random access procedure can be configured flexibly and efficiently.

21: 2021/09580. 22: 2021/11/25. 43: 2023/02/28
 51: A61K; A61P
 71: Axalbion SA
 72: POIROT, Olivier, WOODCOCK, Ashley
 33: GB 31: 1908219.7 32: 2019-06-10
54: [((1R,2S,5R)-2-ISOPROPYL-5-METHYL-CYCLOHEXANECARBONYL)-AMINO]-ACETIC ACID ISOPROPYL ESTER FOR TREATMENT OF CHRONIC COUGH
 00: -
 The present invention pertains generally to the field of therapy. More specifically the present invention pertains to a certain compound, [((1R,2S,5R)-2-isopropyl-5-methyl- cyclohexanecarbonyl)-amino]-acetic acid isopropyl ester (also referred to herein as "AX-8" or "Gly-O-iPr"), as described herein, for use in a method of treatment of the human or animal body by therapy, more specifically, for use in a method of treatment of chronic cough (CC), including, for example, refractory chronic cough (RCC) and idiopathic chronic cough (ICC), as described herein.



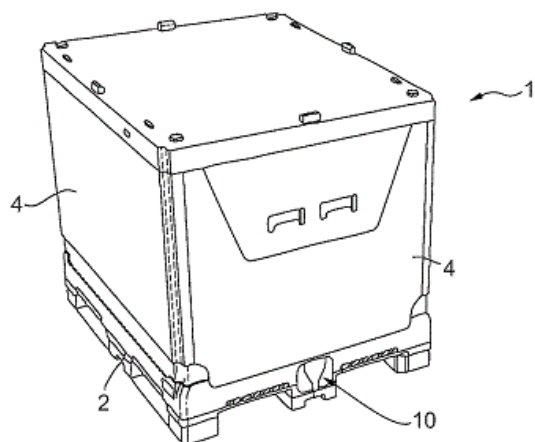
21: 2021/09637. 22: 2021/11/26. 43: 2023/02/27
 51: H04W
 71: TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)
 72: BEN HENDA, Noamen, CASTELLANOS ZAMORA, David, WIFVESSON, Monica, LEHTOVIRTA, Vesa
 33: US 31: 62/840,021 32: 2019-04-29
54: HANDLING OF MULTIPLE AUTHENTICATION PROCEDURES IN 5G
 00: -

A method by an AUSF of a home PLMN configured to communicate through an interface with electronic devices is provided. A first authentication request is received from a first PLMN that is authenticating an electronic device. A first security key used for integrity protection of messages delivered from the home PLMN to the electronic device is obtained. A second authentication request is received from a second PLMN that is authenticating the electronic device. A second security key used for integrity protection of the messages delivered from the home PLMN to the electronic device is obtained. A message protection request is received. Which of the first security key and the second security key is a latest security key is determined. The latest security key is used to protect a message associated with the message protection request.



21: 2021/09713. 22: 2021/11/29. 43: 2023/02/27
 51: B65D E05D
 71: SCHOELLER ALLIBERT GMBH
 72: STRINGER, John, Andrew, COPE, Andrew, Christopher
 33: EP 31: 19172036.6 32: 2019-04-30
54: CONTAINER HAVING A SELF-SUPPORTING COVER FOR AN OUTLET
 00: -

The present invention relates to a container (1) for transporting and storing liquid, viscous or pourable substances, in particular a container of the Intermediate Bulk Container type, comprising a base (2), a side wall (4) and at least one outlet recess (6) in the base (2) and/or the side wall (4), in which an outlet valve (8) is or can be arranged and which is closable on the outside of the container by a cover (10). The cover (10) has a base section (12), by which the cover (10) is fastened or fastenable to the container (1), and a closure section (16) which is hinged on the base section (12) via a hinge assembly (14) such that it can pivot about a rotational axis (A). The hinge assembly is designed to hold or lock the closure section (16) in a self-supporting manner in a position releasing the outlet recess (6).



21: 2021/09754. 22: 2021/11/30. 43: 2023/03/02
51: A61M; G09B

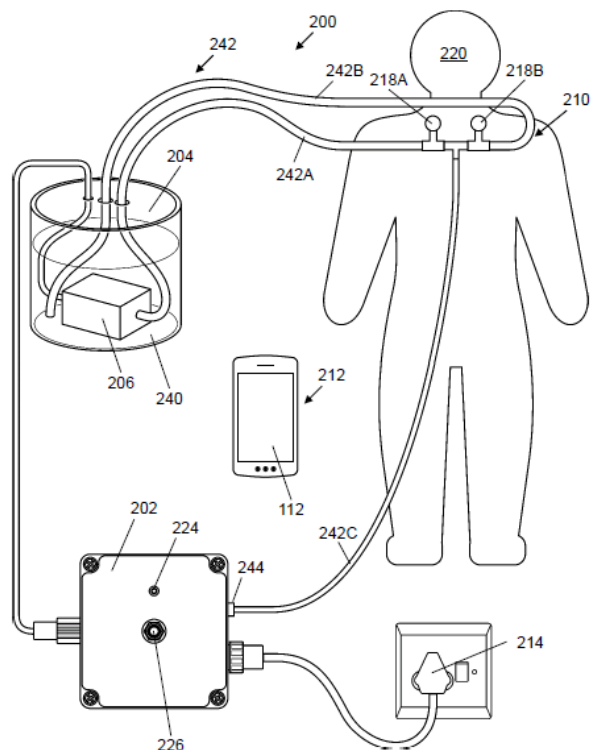
71: BMEC TECHNOLOGIES (PTY) LTD

72: SMITH, Raphael V

54: SYSTEM AND METHOD FOR CADAVER PERFUSION

00: -

A system and method are provided for perfusing a cadaver with a perfusion fluid such as synthetic blood. The system and method may be used for the purpose of surgical skills training. The system comprises a source of perfusion fluid; a conduit arrangement configured to connect to cadaver's circulatory system; and a pump in fluid communication with the source of the perfusion fluid. The pump is configured to circulate the perfusion fluid through the conduit arrangement and the circulatory system of the cadaver. A computing device is arranged to control operation of the pump to provide alternating periods of pump operation and pump rest.



21: 2021/09796. 22: 2021/11/30. 43: 2023/04/05
51: C01B; C07C; C12P; C25B

71: PENTAGON MAPLE LEAF INFORMATION TECHNOLOGIES OF KUNSHAN CO., LTD

72: Zhou Lianhui, Gong Mao

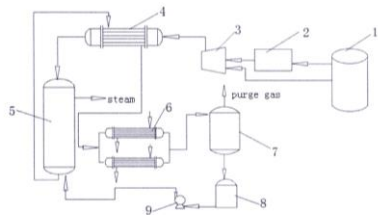
33: WO 31: PCT/CN2020/096980 32: 2020-06-19

54: SYSTEM AND METHOD FOR PREPARING METHANOL THEREWITH

00: -

The invention discloses a system and method for preparing methanol therewith. The oxygen output end of the water electrolyzing reactor is connected to the fermentation pool, the hydrogen output end of the water electrolyzing reactor is connected to the methanol synthesizing gas compressor, and the output end of the fermentation pool is connected to the methanol synthesizing gas compressor, the output end of which is connected to the first input end of the tower gas preheater, the first output end of which is connected to the first input end of the methanol synthesizing tower, and the output end of which is connected to the tower gas preheater, the second input end of which is connected to the methanol condenser, whose output end is connected to the methanol separator, whose output end is connected to the methanol expansion tank, whose

output end is connected to the booster pump, the output end of which is connected to the second input end of the methanol synthesizing tower.



21: 2021/10055. 22: 2021/12/06. 43: 2023/03/16
51: A61K; A61P

71: JIANGSU HENGRUI MEDICINE CO., LTD.
72: ZHOU, Xianqiang, DU, Zhenxing, WANG, Jie
33: CN 31: 201910468254.9 32: 2019-05-31

54: SOLID DISPERSION AND PREPARATION METHOD THEREFOR

00: -

Solid dispersion and a preparation method therefor. In a specific embodiment, the solid dispersion contains an active ingredient (R)-4-amino-1-(1-(but-2-ynyl)pyrrolidin-3-yl)-3-(4-(2,6-difluorophenoxy)phenyl)-1,6-dihydro-7H-pyrrolo[2,3-d]pyridazin-7-one or a salt thereof, and a carrier material, and the pH value is adjusted; employing a method that adds an appropriate amount of acid effectively inhibits an emulsification phenomenon in a reverse solvent process, thereby obtaining solid dispersion having a moderate particle size and uniform content.

21: 2021/10585. 22: 2021/12/17. 43: 2023/02/28
51: C07D; A61P

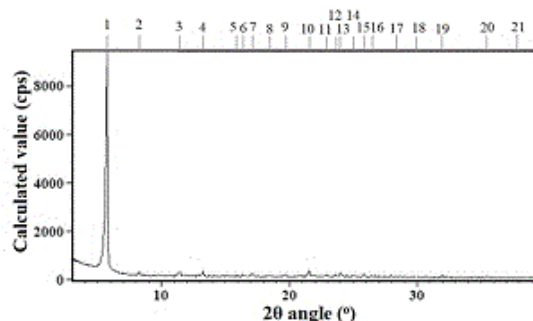
71: SHENZHEN HANHUI PHARMACEUTICAL TECHNOLOGY CO., LTD.
72: ZHAO, ALLAN ZIJIAN, MU, YUNPING, LI, FANGHONG, ZHAO, ZHENGANG, ZHU, HUIDAN
33: CN 31: 201910505948.5 32: 2019-06-12

54: POTASSIUM SALT CRYSTAL FORM B OF PHOSPHODIESTERASE TYPE 5 INHIBITOR, AND PREPARATION METHOD AND USE THEREFOR

00: -

Disclosed in the present invention are a potassium salt crystal form B of a phosphodiesterase type 5 inhibitor, and a preparation method and a use therefor. The structural formula of the phosphodiesterase type 5 inhibitor is as shown in formula (I), and the X-ray powder diffraction (XRPD) pattern of the potassium salt crystal form B has

characteristic peaks at the following 2θ angles: $5.71^{\circ} \pm 0.2^{\circ}$, $8.23^{\circ} \pm 0.2^{\circ}$, $11.37^{\circ} \pm 0.2^{\circ}$, $13.22^{\circ} \pm 0.2^{\circ}$, $17.09^{\circ} \pm 0.2^{\circ}$, $21.56^{\circ} \pm 0.2^{\circ}$, $23.99^{\circ} \pm 0.2^{\circ}$, and $25.85^{\circ} \pm 0.2^{\circ}$. Further disclosed in the present invention is a use for the present crystal form potassium salt in preparing drugs for treating pulmonary hypertension, idiopathic pulmonary fibrosis, renal fibrosis, myocardial hypertrophy, or erectile dysfunction.



21: 2021/10737. 22: 2021/12/21. 43: 2023/02/27
51: B65B B67C

71: HYGENTILE AG

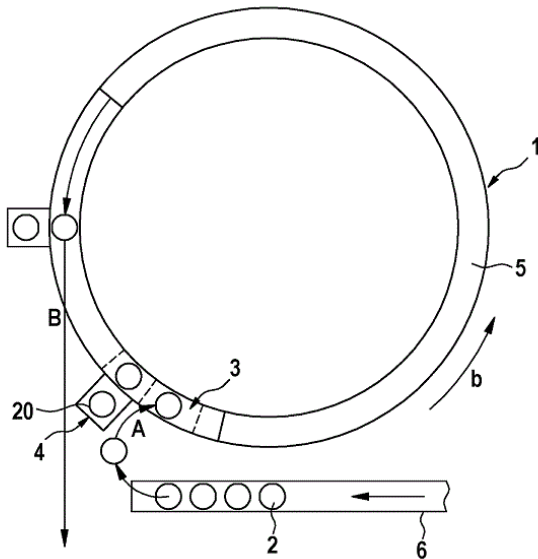
72: KUNZMANN, Andreas

33: EP 31: 19182337.6 32: 2019-06-25

54: PLANT FOR FILLING AND CLOSING CANS UNDER HYGIENIC CONDITIONS

00: -

The invention relates to a plant (1) for filling and closing cans (2) under hygienic conditions, comprising a hygienic compartment (3), a lid applying device (7) and an inlet (30) for a filling material. The lid applying device (7) is arranged in the hygienic compartment (3) and the inlet (30) is formed on the hygienic compartment (3). When used as intended, one or more cans (2) can be assigned to the hygienic compartment (3) and the hygienic compartment (3) can be moved together with the can(s) (2) in the system (1).



21: 2021/10738. 22: 2021/12/21. 43: 2023/02/28
51: H04W H04M

71: SAFENOW GMBH

72: RUMLAND, Tilman

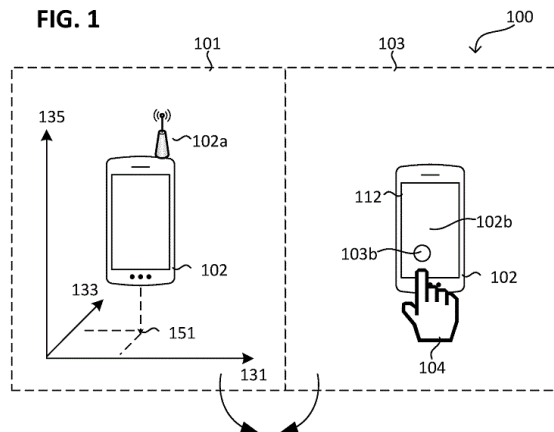
33: DE 31: 10 2019 114 453.1 32: 2019-05-29

33: DE 31: 10 2020 106 434.9 32: 2020-03-10

54: METHOD FOR OPERATING A MOBILE RADIO

00: -

According to various embodiments, a method (100, 200) for operating a mobile radio (102) according to a first mode (107) and a second mode (109) can involve: ascertaining (101) an indication of a location of the mobile radio (102) by means of a first sensor of the mobile radio (102); ascertaining a touch on the mobile radio (102) by means of a second sensor of the mobile radio (102), changing over to the second mode (109) if it has been ascertained in the first mode (107) that the touch satisfies a first predefined criterion, generating a message (106) according to a wireless communication protocol if it has been ascertained in the second mode (109) that the touch was interrupted, wherein the message (106) contains the indication and also indicates that the touch was interrupted; changing over (105) to the first mode (107) without generating the message (106) if it has been ascertained in the second mode (109) that the touch satisfies a second predefined criterion.



21: 2021/10882. 22: 2021/12/23. 43: 2022/12/15
51: E02D; G01N

71: Solmax International Inc.

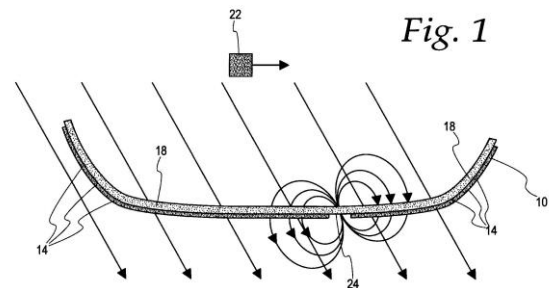
72: ROY-GUAY, David, FLANSBERRY, Zackary,
GUILLETTE, Vincent Philippe

33: US 31: 62/868,362 32: 2019-06-28

54: MEMBRANE INSPECTION METHOD BASED ON MAGNETIC FIELD SENSING

00: -

A method of detecting faults and ensuring integrity of membranes having magnetically functionalized particles, including moving a magnetometer over the membrane to measure at least one magnetic property, mapping the location of the measured properties, identifying anomalies among measured properties including the location of such anomalies, and repairing the membrane at the location where anomalies are identified.



21: 2021/10883. 22: 2021/12/23. 43: 2022/12/15
51: B29C; B32B; G01N

71: Solmax International Inc.

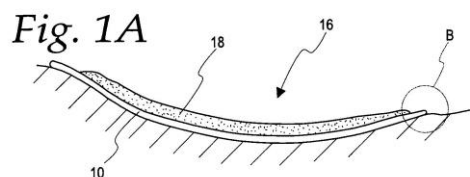
72: ROY-GUAY, David, GUILLETTE, Vincent
Philippe

33: US 31: 62/868,411 32: 2019-06-28

54: MEMBRANE WITH MAGNETIC PROPERTIES FOR VERIFICATION OF MEMBRANE STRUCTURAL INTEGRITY

00: -

A membrane with magnetic properties for verification of the membrane structural integrity, the membrane comprising at least one polymeric layer or sheet with magnetic particles added to at least one layer to render the membrane magnetic, with anomalies in the magnetic field of the membrane at locations of defects in the membrane.



21: 2021/10895. 22: 2021/12/23. 43: 2023/02/03
51: A01C

71: TALLERES METALURGICOS CRUCIANELLI S.A.

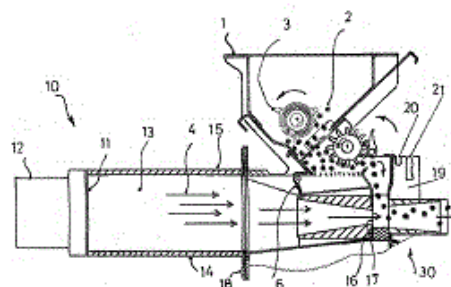
72: CRUCIANELLI, GUSTAVO RAUL

54: AGRICULTURAL TOOL UNIT FOR RAPID CONVERSION OF A COMBINATION SEED DRILL HAVING A TRAILED OR FINE-GRAIN SEED DISPENSER TO AN ON-DEMAND SUPPLY SYSTEM AND VICE VERSA

00: -

The invention relates to an agricultural tool unit for the rapid conversion of a seed drill having a trailed or fine-grain seed dispenser with volumetric supply to an on-demand supply system and vice versa, which includes at least one hopper containing a granular feed material, such as grains, seeds or agrochemical granules, and a delivery device arranged under the hopper. This device has a structure that consists of two physically defined areas. One of the areas, hereinafter referred to as the "seed box", has a direct connection to the hopper, receiving the granular material from same, generally gravity-fed, and another area, hereinafter referred to as the "air box", which has a connection to an air source such as a fan or similar. The seed box is formed by side walls that define its width, a lower bottom wall, a rear wall with the air inlet from the fan, and a front wall that comprises at least the passage for the seed leading to the area where the trailing rotor is located for fine-grain work, or to the

area where the retaining slope is located for on-demand supply.



21: 2022/00283. 22: 2022/01/05. 43: 2023/03/31
51: A23K; C07C

71: ALZCHEM TROSTBERG GMBH

72: Thomas GÜTHNER, Franz THALHAMMER, Jürgen SANS

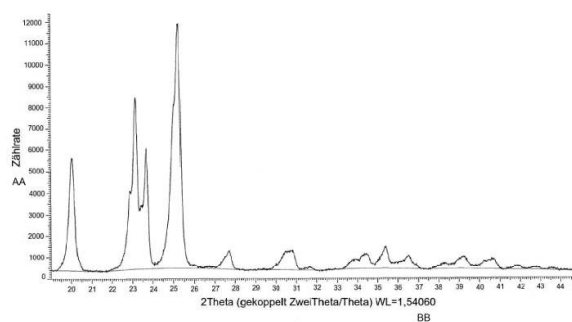
33: DE 31: 10 2019 118 893.8 32: 2019-07-12

33: DE 31: 10 2019 118 894.6 32: 2019-07-12

54: METHOD FOR PRODUCING A METASTABLE CRYSTAL MODIFICATION OF N-(AMINOIMINOMETHYL)-2-AMINOETHANOIC ACID (IV)

00: -

The invention relates to a method for producing N-(aminoiminomethyl)-2-aminoethanoic acid containing N-(aminoiminomethyl)-2-aminoethanoic acid in a thermodynamically metastable crystal modification.



Figur 2
AA Counting rate
BB 2Theta (coupled TwoTheta/Theta) WL = 1.54060

21: 2022/00451. 22: 2022/01/10. 43: 2023/02/03
51: C07K A61P G01N A61K

71: PRESTIGE BIOPHARMA PTE. LTD.

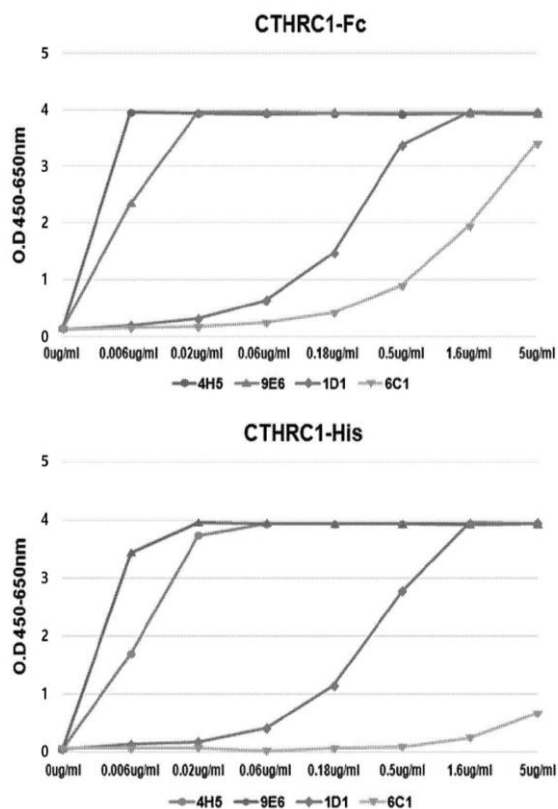
72: KOH, Sang Seok, KANG, Min Kyung, PARK, So Yeon

33: KR 31: 10-2019-0070048 32: 2019-06-13

54: NOVEL ANTIBODIES SPECIFIC FOR CTHRC1 AND USE THEREOF

00: -

The present invention relates to antibodies binding to CTHRC1 and uses thereof.



21: 2022/00652. 22: 2022/01/13. 43: 2023/02/16

51: A01N A61L C02F

71: COLLIDION, INC.

72: ALIM, Hojabr, PRASAD, Sridhar, Govinda, SINHA, Santosh, C.

33: US 31: 62/861,987 32: 2019-06-14

33: US 31: 62/977,090 32: 2020-02-14

54: COMPOSITIONS, KITS, METHODS AND USES FOR PREVENTING MICROBIAL GROWTH

00: -

The present specification discloses a composition comprising, consisting essentially of, or consisting of hypochlorous acid or free available chlorine alone or in combination with one or more quaternary compounds or silicon quaternary compounds, one or more guanide-containing compounds, one or more alcohols, one or more metallic particles, one or more metal salts, or any combination thereof. The present specification further discloses a kit comprising, consisting essentially of, or consisting of a one or more containers including a composition disclosed herein or components which make up such

compositions as well as methods and uses for such compositions and kits.

21: 2022/00730. 22: 2022/01/14. 43: 2023/03/13

51: B65D

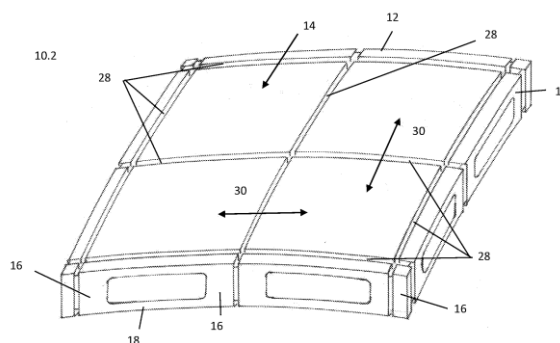
71: CLARKE, Richard Enslin

72: CLARKE, Richard Enslin

54: PALLET

00: -

A pallet (10) comprises a pallet body (12) of a plastic material, with a load deck (14) that is convex along at least one direction of curvature (30) when the pallet body (14) is unloaded, with one or more straps (32) that extend at least partly across the underside of the pallet body (14) along the direction of curvature (30). When the pallet (10) is loaded, the centre of the pallet body (14) is pushed down by the payload, but the strap (32) resists straightening of the pallet body (14), so that the pallet (10) can carry large payloads, even when only supported on opposing edges, in racking systems.



21: 2022/00836. 22: 2022/01/18. 43: 2023/02/24

51: G06F

71: MICROSOFT TECHNOLOGY LICENSING, LLC

72: TANDON, PRATEEK, CORELL, BRIAN JACOB

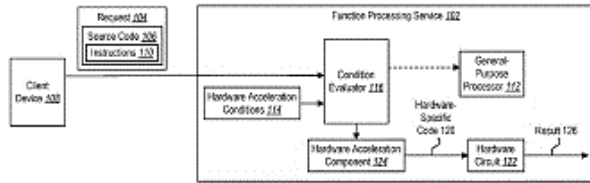
33: US 31: 16/555,927 32: 2019-08-29

54: HARDWARE ACCELERATION FOR FUNCTION PROCESSING

00: -

A function processing service may receive a request to execute source code. The source code may include instructions to perform a function. The function processing service may determine whether at least one hardware acceleration condition has been satisfied for the function. If at least one hardware acceleration condition has been satisfied, the instructions in the source code may be translated into hardware-specific code corresponding to a

hardware circuit. The hardware circuit may be configured based on the hardware-specific code, and the hardware circuit may perform the function. The function processing service may then provide the result obtained from the hardware circuit to the requesting entity.



21: 2022/00837. 22: 2022/01/18. 43: 2023/02/24

51: G06F

71: MICROSOFT TECHNOLOGY LICENSING, LLC

72: BULUSU, MALLIK, NGUYEN, TOM L, LADKANI, NEERAJ, MYSORE SHANTAMURTHY, RAVI

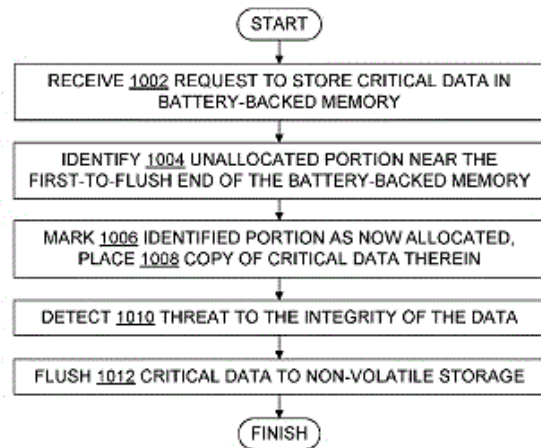
33: US 31: 16/546,337 32: 2019-08-21

54: DATA PRESERVATION USING MEMORY APERTURE FLUSH ORDER

00: -

Combined operational steps and device characteristics help preserve data against integrity threats. Data is divided into critical data and non-critical data, based on criteria such as customer requirements, workload criticality, or virtual machine criticality. Data may be generated in a compute node for storage in a storage node, for example. Critical data is stored in a battery-backed memory aperture at physical addresses where it will be flushed ahead of the non-critical data due to a flush order imposed by or on the battery-backed memory, e.g., a bottom-up NVDIMM flush order. Redundant copies of the data (especially non-critical data) may also be kept in case it does not get flushed in time. Battery-backed memory apertures are sized and located according to their battery's characteristics, and may be relocated or resized as conditions change. Flush defragging is performed to optimize use of the aperture, especially within the portion that holds critical data.

EXAMPLE DATA PRESERVATION METHOD 1000



21: 2022/00839. 22: 2022/01/18. 43: 2023/03/13

51: F25B; F28B; F28D; F28F

71: ALGESACOOING PTY LTD

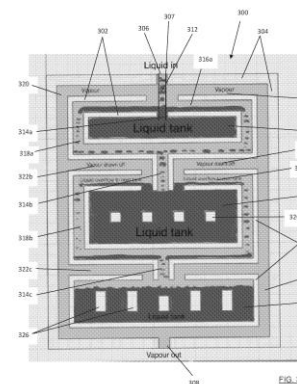
72: RICHARDS, Alan

33: AU 31: 2019902148 32: 2019-06-20

54: THERMAL TRANSFER DEVICE AND STORAGE SYSTEMS INCLUDING SAME

00: -

A thermal transfer device and system for providing an unimpeded vapour channel (320) to all chambers (310a, 310b, 310c). The device and system can be used as part of an evaporator or condenser where potentially undesirable interactions between liquid and vapour could benefit from mitigation.



21: 2022/01174. 22: 2022/01/25. 43: 2023/03/13

51: A61K; A61P

71: SHENZHEN EVERGREEN THERAPEUTICS CO., LTD.

72: DU, Tao Tom, DU, Xin

33: CN 31: 202010350632.6 32: 2020-04-28

54: APPLICATION OF PROGESTIN IN PREPARATION OF DRUG INHIBITING CYTOKINE STORM

00: -

The present application provides a use of hydroxyprogesterone caproate for treating multiple diseases that cause a cytokine storm, such as novel coronavirus pneumonia, various virulent virus infections, side effects after monoclonal antibody treatment, side effects after CAR-T treatment, inflammatory bowel disease, and acute pancreatitis. Moreover, the present application also provides a method for treating the diseases by using a corresponding pharmaceutical composition. Experimental results show that progestin hydroxyprogesterone caproate can effectively inhibit the cytokine storm and is expected to be an effective drug for treating diseases such as novel coronavirus pneumonia.

21: 2022/01430. 22: 2022/01/31. 43: 2023/02/27

51: C04B

71: Circle Seven Trading 997 CC

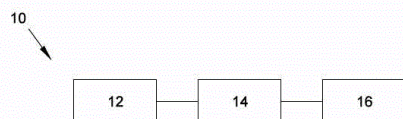
72: RASOOL, Zahed

33: ZA 31: 2019/04345 32: 2019-07-02

54: CLINKER

00: -

The present invention relates to clinker, in particular cement clinker. The invention provides a method of preparing clinker and extends to clinker prepared in accordance with the method of the invention. The method of producing the clinker includes heat treating a mixture of synthetic gypsum, shale and a carbon reductant.



21: 2022/01905. 22: 2022/02/14. 43: 2023/03/24

51: G01V

71: MUON SOLUTIONS OY

72: HOLMA, Marko, KUUSINIEMI, Pasi

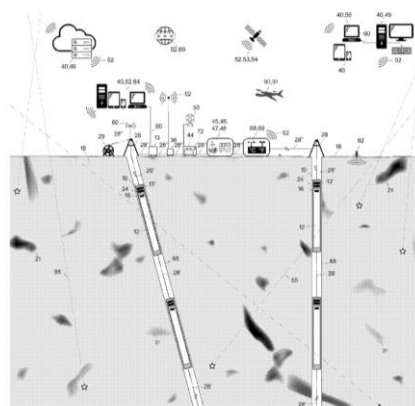
33: FI 31: 20195697 32: 2019-08-23

54: SYSTEM AND METHOD FOR MATERIAL DENSITY DISTRIBUTION SURVEY BASED ON COSMIC MUON DETECTION

00: -

Provided herein is a system and method designed for measuring and recording, in three-dimensional space, an attenuation of cosmic-ray induced muon particle flux through a material. The attenuation of

the said muons determines density variations in the said material in terms of their density, depth, shape and size. The muon data may be combined with various other data types. The passing muons are detected and recorded by one or a plurality of muon detection apparatus designed to be robust and shock resistant. If needed, each individual muon detection apparatus may be controlled remotely or automatically. The muon detection system may be powered by an energy storage device that may be recharged using renewable energy, aggregate or electric grid. The invention comprises methods steps allowing density characterisation of the material in various dimensions, including those over time.



21: 2022/01936. 22: 2022/02/15. 43: 2023/02/27

51: B65F

71: IP TRUST

72: MEINTJIES, van der Merwe, Willem, Schalk

33: ZA 31: 2019/04904 32: 2019-07-26

33: ZA 31: 2019/07729 32: 2019-11-22

33: ZA 31: 2020/01234 32: 2020-02-2

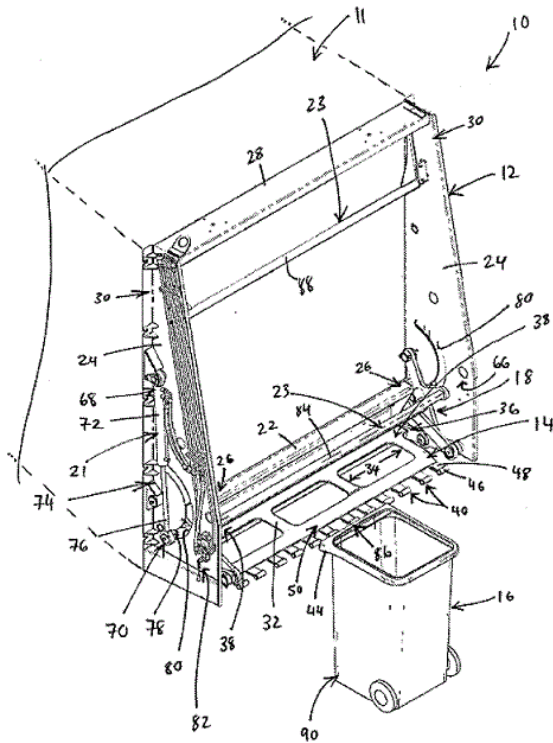
33: ZA 31: 2020/03653 32: 2020-06-18

54: A LIFTING APPARATUS

00: -

The lifting apparatus (10) includes a frame (12) mountable on a material collecting vehicle, a container receiving member (14) for receiving and engaging a container (16) to be lifted and tipped, a linkage arrangement (18) for interconnecting the container receiving member (14) and the frame (12) and for allowing continuous lifting and tipping displacement of the container receiving member (14) relative the frame (12) between a container receiving condition wherein the container receiving member (14) is proximal a ground surface (20) for facilitating receipt of the container (16) and a container tipping

condition wherein the container (16) is lifted and tipped such that its contents are emptied into a collection zone (not shown) of the material collecting vehicle (not shown), a displacement means in the form of a piston-and-cylinder assembly (21) for displacing the linkage arrangement (18) and the container (16), between the container receiving and container tipping conditions.



21: 2022/01948. 22: 2022/02/15. 43: 2023/02/24

51: G06F

71: MICROSOFT TECHNOLOGY LICENSING, LLC

72: KOTHINTI NARESH, VIGNYAN REDDY,
PERAIS, ARTHUR, AL SHEIKH, RAMI
MOHAMMAD, PRIYADARSHI, SHIVAM

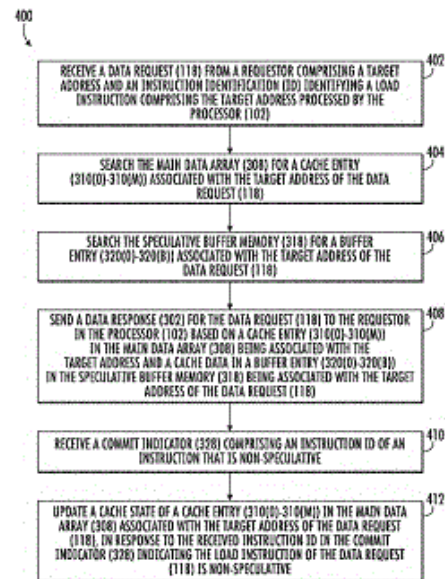
33: US 31: 16/558,843 32: 2019-09-03

**54: DEFERRING CACHE STATE UPDATES IN A
NON-SPECULATIVE CACHE MEMORY IN A
PROCESSOR-BASED SYSTEM IN RESPONSE TO
A SPECULATIVE DATA REQUEST UNTIL THE
SPECULATIVE DATA REQUEST BECOMES NON-
SPECULATIVE**

00: -

Deferring cache state updates in a non-speculative cache memory in a processor-based system in response to a speculative data request until the speculative data request becomes non-speculative

is disclosed. The updating of at least one cache state in the cache memory resulting from a data request is deferred until the data request becomes non-speculative. Thus, a cache state in the cache memory is not updated for requests resulting from mispredictions. Deferring the updating of a cache state in the cache memory can include deferring the storing of received speculative requested data in the main data array of the cache memory as a result of a cache miss until the data request becomes non-speculative. The received speculative requested data can first be stored in a speculative buffer memory associated with a cache memory, and then stored in the main data array if the data request becomes non-speculative.



21: 2022/01949. 22: 2022/02/15. 43: 2023/02/24

51: G06F

71: MICROSOFT TECHNOLOGY LICENSING, LLC

72: MOLA, JORDI

33: US 31: 16/573,734 32: 2019-09-17

**54: INDEXING AND REPLAYING TIME-TRAVEL
TRACES USING DIFFGRAMS**

00: -

Utilizing diffgrams for trace indexing and replay. A subset of instructions of a trace, beginning with a first instruction and ending with a second instruction, are replayed to obtain state of one or more named resources. Based on replaying the subset of instructions, a diffgram is generated, which is structured such that addition of the diffgram at the first instruction brings the one or more named

resources to the second state, and subtraction of the diffgram at the second instruction brings the one or more named resource to the first state. A pat of reaching a target instruction, the diffgram is later added at the first instruction to restore the second state at the second instruction, or subtracted at the second instruction to restore the first state of the first instruction.

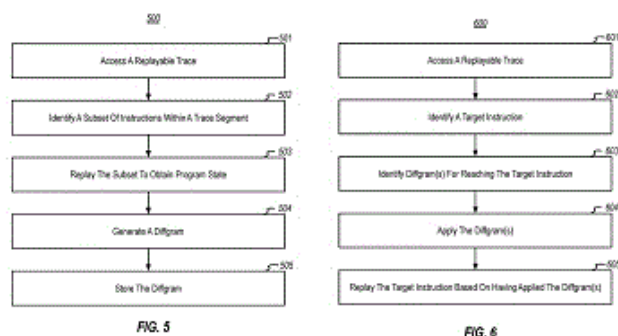


FIG. 5

FIG. 6

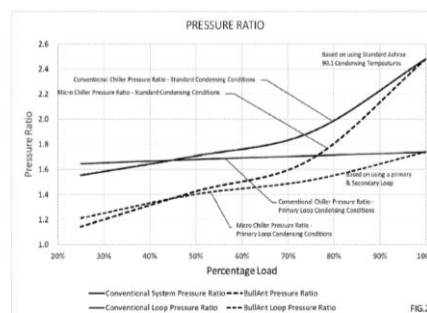


FIG. 25

21: 2022/02208. 22: 2022/02/22. 43: 2023/03/23

51: A61L

71: MARTIN, ANTONIETTA

72: MARTIN, ANTONIETTA

33: ZA 31: 2021/01103 32: 2021-02-18

33: ZA 31: 2021/05703 32: 2021-08-12

54: METHOD OF INACTIVATING A VIRUS USING A GLUTARALDEHYDE COMPOSITION WITH POLYMER

00: -

The invention provides a method of inactivating a virus by at least a 4-log10 reduction, comprising the step of applying, to an environment containing the virus, a stable aqueous glutaraldehyde containing solution which includes glutaraldehyde, an alcohol ethoxylate non-ionic surfactant, a pH modifier, a buffer comprising potassium acetate and a polymer.

21: 2022/02618. 22: 2022/03/03. 43: 2023/03/17

51: B42D; G06Q

71: GIESECKE+DEVRIENT ADVANCE52 GMBH

72: FABIAN, Cristina, SAUER, Thorsten, TARANTINO, Thomas

33: DE 31: 10 2019 006 799.1 32: 2019-09-30

54: CARD AND METHOD FOR PRODUCING THE CARD

00: -

The invention relates to a card, in particular a chip card, comprising a computing unit for managing electronic coin data sets, which are output by a central entity, and comprising a card body with visible data and at least one visible feature. At the same time, the central entity is the issuer or administrator of a banknote series, and the at least one visible feature identifies the card as part of the banknote series to an observer. The invention additionally relates to a method for producing such a card.

21: 2022/02165. 22: 2022/02/21. 43: 2023/02/17

51: F24F; G05D

71: Pinoak Management Pty Ltd

72: CONRY, Ronald David

33: US 31: 62/891,581 32: 2019-08-26

33: US 31: 17/001,818 32: 2020-08-25

54: MICRO CHILLER-BASED HEATING, VENTILATION AND AIR CONDITIONING SYSTEM

00: -

A heating, ventilation, and air conditioning system in which a primary water loop is used as a heat transfer reservoir for both heating and cooling. A plurality of micro chillers are provided, with each micro chiller being connected to the primary water loop. Each micro chiller includes its own heat engine. Each micro chiller includes one or more fan control units that exchange heat between the micro chiller and the air in a building. In a first mode a micro chiller transfers heat from the air in the building to the water circulating within the primary water loop. In a second mode the micro chiller transfers heat from the water circulating in the primary water loop to the air in the building. A primary water loop regulation system is provided to control the temperature of the water circulating in the primary water loop.

21: 2022/02718. 22: 2022/03/07. 43: 2023/03/13

51: B66C

71: SHANGHAI ZHENHUA HEAVY INDUSTRIES CO. LTD

72: SUN, Xianhai, ZHU, Min, SU, Hongya, FENG, Zhiwen, JIA, Cong

33: CN 31: 201910788151.0 32: 2019-08-26

54: BOOM EXTENSION DEVICE FOR DOCKSIDE CONTAINER CRANE, AND EXTENSION METHOD FOR SAME

00: -

A boom extension device for a dockside container crane. A boom comprises a rear boom section (11) and a front boom section (12). The extension device comprises: an extension trolley tool (2) which is disposed below the rear boom section (11) and the front boom section (12) during an extension operation, and which comprises a wheel set (21), a trolley frame (22), a construction platform (23), and a movement track (24) disposed on the construction platform; a first support frame trolley (31) disposed on the movement track (24) and used to carry a boom extension section (41) and guide the boom extension section (41) to move in a first direction; and a second support frame trolley (32) disposed on the movement track (24) and used to carry the front boom section (12) and guide the front boom section (12) to move in a second direction perpendicular to the first direction in a first plane. Further included is an extension method for a boom of a dockside container crane. The invention reduces usage of heavy-duty equipment.

21: 2022/02912. 22: 2022/03/10. 43: 2023/03/17

51: A61K; C07D; A61P

71: NOVARTIS AG

72: YANG, Fan, CHEN, Xin, JENDZA, Keith, SHULTZ, Michael David, HALL, Edward, Charles, CALHOUN, Amy, GARDINIER, Kevin, Matthew, LABBE-GIGUERE, Nancy, NEEF, James, PALACIOS, Daniel, Steven, QIAN, Ming, THOMSON, Christopher G., WANG, Kate, Yaping

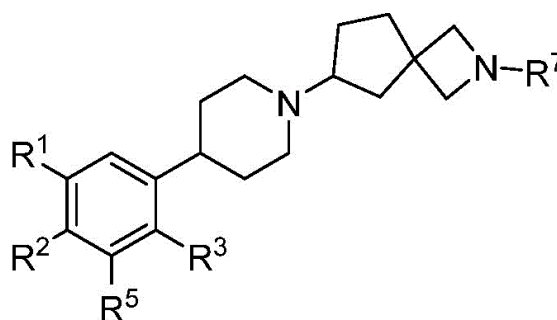
33: US 31: 62/912,980 32: 2019-10-09

54: 2-AZASPIRO[3.4]OCTANE DERIVATIVES AS M4 AGONISTS

00: -

Provided herein are compounds according to Formula (I) or a pharmaceutically acceptable salt thereof, wherein R₁, R₂, R₃, R₅, and R₇ are defined herein. Also provided herein are pharmaceutical compositions comprising a compound of Formula (I)

as well as the use of such compounds as M₄ receptor agonists.



(I)

21: 2022/03142. 22: 2022/03/16. 43: 2023/02/16

51: A01N C02F

71: BIO-LAB, INC.

72: SAYRE, Curtis, GAULDING, Jeffrey, TRENCK, Brian, YEOMAN, Al

33: US 31: 62/890,650 32: 2019-08-23

54: RECIRCULATING WATER SYSTEM COMPOSITION

00: -

Disclosed herein is a composition for the treatment of a recirculating water system, comprising: trichloro-s-triazentrione (TCCA) in an amount of from about 75% to about 98% by mass of the composition; an inorganic salt present in an amount of from about 2% to about 25% by mass of the composition; and an auxiliary agent in a total amount of from about 0% to about 10% by mass of the composition. Also disclosed herein is a formed object comprising the composition, a process for preparing the formed object, and a method of using the formed object.

21: 2022/03763. 22: 2022/04/01. 43: 2023/02/16

51: E21B G01V

71: RIG TECHNOLOGIES INTERNATIONAL PTY LTD

72: HOPPER, Timothy Andrew John

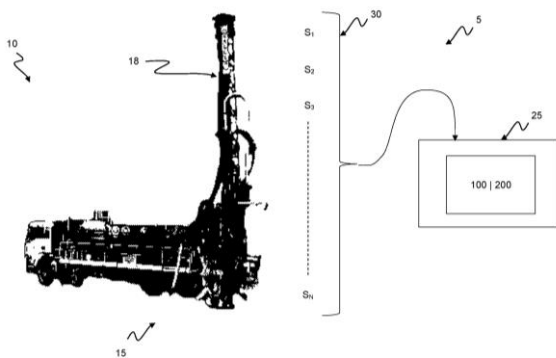
33: AU 31: 2019903706 32: 2019-10-02

54: IMPROVEMENTS IN OR RELATING TO ASSESSMENT OF MINING DEPOSITS

00: -

In one aspect, a system (5) for use in providing an approximation or estimation of a characteristic (for example, a bulk density value) of a deposit subject to a drilling operation is disclosed. In one form, the

system (5) comprises a processor module (25) arranged in operable association with a network of sensors (30) operable for measuring one or more parameters relating to the operation of the drilling assembly (10). The processor module (25) is configured operable for receiving data/information derived from the network of sensors (30), and processing the data/information so as to provide a representation of the incursion (eg. depth of penetration into the relevant deposit) achieved by way of the drilling assembly (10). The processor module (25) is further configured for processing the representation of the incursion with a predetermined relationship that is characteristic of, or unique to, the drilling assembly (10) for providing or allowing an approximation/estimation of the characteristic of the deposit as a function of one or more parameters of the incursion to be made.



21: 2022/04429. 22: 2022/04/20. 43: 2023/02/16
51: F41G G01S

71: SHELTERED WINGS, INC. d/b/a VORTEX OPTICS

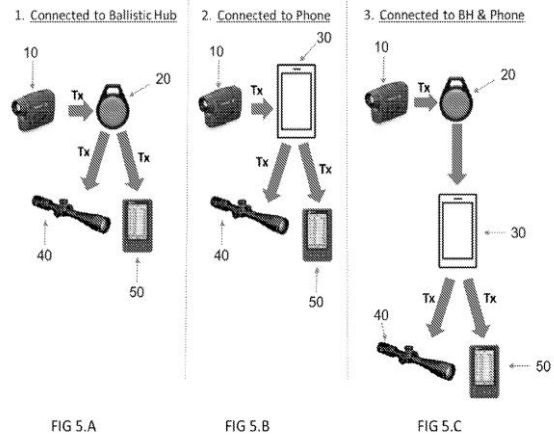
72: CLERMONT, Todd, FARRELL, Ben

33: US 31: 62/906,235 32: 2019-09-26

54: BALLISTIC CALCULATOR HUB

00: -

The disclosure relates to a device for providing a ballistic solution. In one embodiment, the disclosure relates to a device for storing one or more ballistic calculators for providing a ballistic solution. In one embodiment, the device communicates with one or more laser rangefinders.



21: 2022/04475. 22: 2022/04/21. 43: 2023/03/23

51: B29C

71: ALEPH

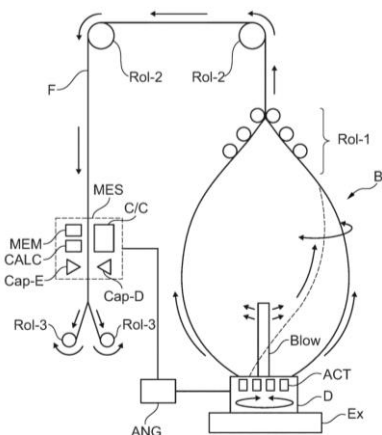
72: AVILA, Jean-Noël

33: FR 31: FR1913386 32: 2019-11-28

54: A METHOD OF MANUFACTURING A BLOWN FILM WITH A PROFILE OF A CHARACTERISTIC PROPERTY OF THE FILM BEING DETERMINED

00: -

A method of manufacturing a blown film (F) comprising extruding it through a die (D), flattening the film with a folding angle that varies, measuring a transverse profile of a characteristic property of the blown film, which property is summed over two juxtaposed portions of a wall of the flattened film, and estimating a polar profile on the basis of said transverse profile, the method further comprising determining polar positions of the periphery of the flattened blown film that correspond to a transverse position of the film, determining discretized angle values flanking each of the polar positions, and, on the basis of said discretized angle values, computing interpolation coefficients that associate the polar profile of the film with a discretized polar profile of the film, and, based on said interpolation coefficients, updating the estimation of the discretized polar profile of the film by applying a Kalman filter.



21: 2022/04517. 22: 2022/04/22. 43: 2023/02/16
51: C01B

71: SAUDI ARABIAN MINING COMPANY
(MA'ADEN)

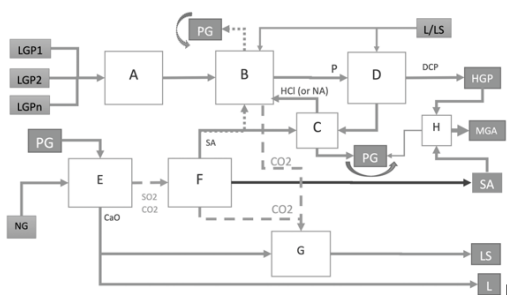
72: AQEL, Malik Mohammad Odeh

33: CA 31: 3,153,419 32: 2022-03-25

54: INTEGRATED PROCESS TO UPGRADE LOW GRADE CALCAREOUS PHOSPHATE ORE WITH LOW CO₂ EMISSIONS AND LOW PHOSPHOGYPSUM WASTE

00: -

A new integrated method based on upgrading low-grade calcareous phosphate ore with low CO₂ emissions and low phosphogypsum waste production. The invention provides an alternative integrated method that increases P₂O₅ recovery, reduces costs, minimizes the environmental impact of product phosphogypsum and CO₂, and overcomes limitations due to different impurities that have negatively affected the yield of traditional processes to a wide range of natural phosphate sources.



21: 2022/04520. 22: 2022/04/22. 43: 2023/02/16
51: C22B

71: HERAEUS DEUTSCHLAND GMBH & CO. KG

72: STEMMLER, Marco

33: EP 31: 19209661.8 32: 2019-11-18

54: PROCESS FOR RECOVERING PRECIOUS METAL

00: -

A process for recovering precious metal from an acidic aqueous solution containing dissolved precious metal and free chlorine, comprising the sequential steps: (1) a salt of a non-precious metal at a low oxidation stage and in the form of a solid or an aqueous solution and the acidic aqueous solution are added together, resulting in the consumption of the free chlorine and the formation of an acidic aqueous mixture, and (2) a non-precious metal is added to the acidic aqueous mixture formed in step (1), leading to the precipitation of elementary precious metal.

21: 2022/04808. 22: 2022/04/29. 43: 2023/02/16

51: G06Q; G06K

71: VISA INTERNATIONAL SERVICE
ASSOCIATION

72: CHIU, Kasey; MEE SUMMERS, Kuen;

WILSON GONZALEZ, Whitney

54: SYSTEM AND METHOD FOR PAYMENT TERMINAL OPTIMIZATION

00: -

A system includes a processor and a non-transitory computer readable medium coupled to the processor. The non-transitory computer readable medium includes code, that when executed by the processor, causes the processor to receive input from a user of a user device to generate an optimal payment location on an application display, generate a first boundary of the optimal payment location on the application display of the user device based upon a first motion of a payment enabled card in a first direction and generate a second boundary of the optimal payment location on the application display of the user device based upon a second motion of the payment enabled card in a second direction. The first boundary and the second boundary combine to form defining edges of the optimal payment location.

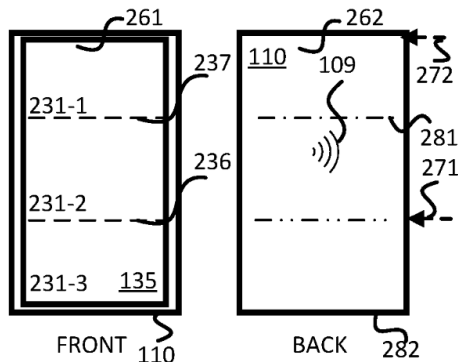
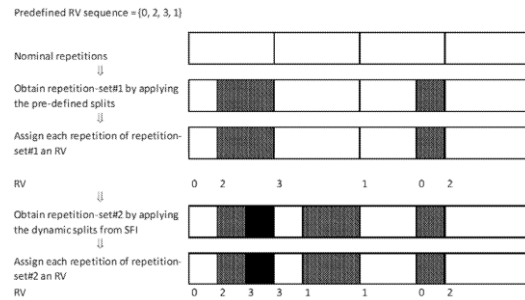


FIG. 2A



21: 2022/04885. 22: 2022/05/04. 43: 2023/02/28
51: H04L

71: TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)

72: BLANKENSHIP, Yufei, ANDERSSON, Mattias

33: US 31: 62/911,922 32: 2019-10-07

54: RV SEQUENCE FOR ENHANCED MULTI-SEGMENT PUSCH

00: -

According to some embodiments, a method performed by a wireless transmitter for transmitting a multiple-segmented physical channel comprising a plurality of nominal repetitions comprises assigning each nominal repetition of the plurality of nominal repetitions a redundancy version (RV). The RVs are taken consecutively and circularly from a pre-defined RV sequence. The method further comprises segmenting one or more of the nominal repetitions into one or more segments and assigning each segment of the one or more segments a RV. The RVs are taken consecutively and circularly from the pre-defined RV sequence starting with the RV assigned to the corresponding nominal repetition. The method further comprises transmitting the physical channel based on the assigned RVs.

21: 2022/05208. 22: 2022/05/11. 43: 2023/02/16

51: C12N; C12Q

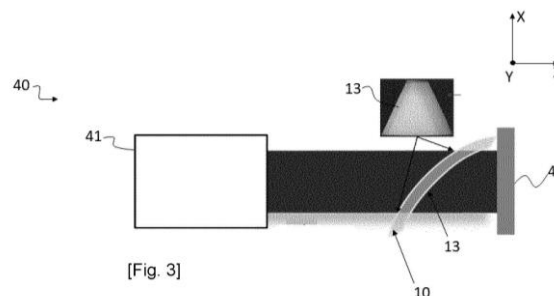
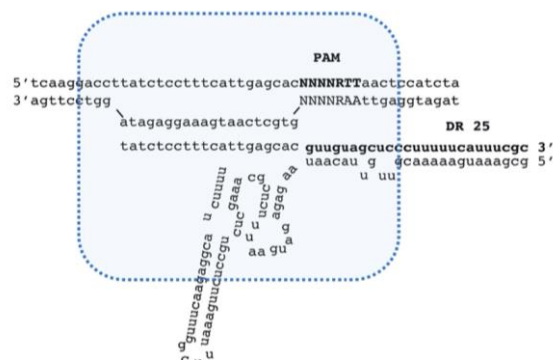
71: JOINT STOCK COMPANY "BIOCAD"

72: SEVERINOV, Konstantin Viktorovich, SHMAKOV, Sergey Anatolievich, ARTAMONOVA, Daria Nikolaevna, GORYANIN, Ignaty Igorevich, MUSHAROVA, Olga Sergeevna, ANDREEVA, Julia Valerevna, ZYUBKO, Tatiana Igorevna, FEDOROVA, Iana Vitalevna, KHODORKOVSKII, Mikhail Alekseevich, POBEGALOV, George Evgenevich, ARSENIEV, Anatoliy Nikolaevich, SELKOVA, Polina Anatolevna, VASILIEVA, Aleksandra Andreevna, ARTAMONOVA, Tatiana Olegovna, ABRAMOVA, Marina Viktorovna
33: RU 31: 2019136164 32: 2019-11-11

54: USE OF CAS9 PROTEIN FROM THE BACTERIUM PASTEURELLA PNEUMOTROPICA

00: -

The present invention describes a novel bacterial nuclease of the CRISPR-Cas9 system from the bacterium *P. pneumotropica*, as well as the use thereof to form strictly specific double-strand breaks in a DNA molecule. This nuclease has unusual properties and may be used as a tool for modifying the genomic DNA sequence in the cell of a unicellular organism or a multicellular organism. Thus, the versatility of the available CRISPR-Cas9 systems is increased, which fact will enable the use of various variants of Cas9 nucleases for cutting genomic or plasmid DNA in various organisms, in a larger number of specific sites and/or under various conditions.



[Fig. 3]

21: 2022/05297. 22: 2022/05/12. 43: 2023/02/21

51: G01N

71: Saint-Gobain Glass France

72: DIOP, Daouda Keita, CARLU, Adrien, RYBARCZYK, Théo

33: FR 31: 1913869 32: 2019-12-06

54: METHOD FOR MEASURING THE OPTICAL QUALITY OF A GIVEN REGION OF A GLAZING UNIT, ASSOCIATED MEASURING DEVICE

00: -

One aspect of the invention relates to a method for measuring the optical quality of a given region (13) of a glazing unit (10) of a road or rail vehicle, which region is intended to be positioned in the optical path of an image acquisition device, the measuring method being implemented by a measuring device (40) comprising an emitter (41) and a wavefront analyzer, the measuring method comprising: - a step of emitting, with the emitter (41), a beam of light rays in the direction of said given region (13), - a step of analyzing, with the wavefront analyzer, the wavefront of the light rays transmitted by said given region (13), comprising: - a sub-step of generating a wavefront error map, - a sub-step of determining, on the basis of the wavefront error map, at least one optical defect map, of any optical defects present in said region (13) of the glazing (10).

21: 2022/05403. 22: 2022/05/17. 43: 2022/11/30

51: B60B; F25B; F24S

71: TSHWANE UNIVERSITY OF TECHNOLOGY

72: HUAN, Zhongjie

33: ZA 31: 2021/03297 32: 2021-05-17

54: COOLING UNIT SUITABLE FOR SOLAR PANELS USED IN TRANSPORT REFRIGERATION

00: -

This invention relates to a cooling unit 10 for facilitating cooling of solar panels which provide power to the refrigeration unit for mobile refrigerated vehicles and trailers. The unit 10 includes a conduit 12 defined between a solar panel 14 and a refrigeration device 16, which is configured to be powered by the solar panel 14. The conduit is configured to allow air 18 to flow therethrough to cool the solar panel 14. The conduit 12 is generally rectangular. The conduit 12 is defined by a bottom portion of the solar panel 14, a portion, typically being a top portion, of the refrigeration device 16 opposing the bottom portion of the solar panel 14, and a pair of generally planar members 20a, 20b arranged on opposing sides therebetween. The planar members 20a, 20b are L-shaped in cross-section. The unit 10 allows the solar panel to achieve a higher conversion efficiency.

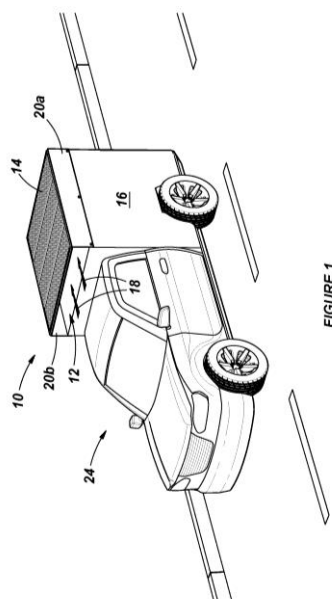


FIGURE 1

21: 2022/05411. 22: 2022/05/17. 43: 2023/03/23
51: A47B

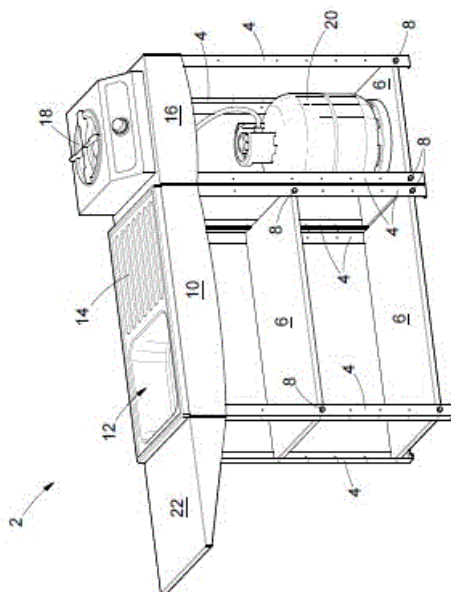
71: GMALETSOS, Alex

72: GMALETSOS, Alex, GMALETSOS, Katerina

54: MODULAR KITCHEN SYSTEM

00: -

The present invention relates to a modular system suitable for use in a kitchen, the modular system including a collapsible body defining one or more receiving zones for receiving one or more objects therein.



21: 2022/05515. 22: 2022/05/19. 43: 2023/03/23

51: A61K; C07K; A61P

71: REGENERON PHARMACEUTICALS, INC.

72: DEVALARAJA-NARASHIMHA, Kishor

33: US 31: 62/598,023 32: 2017-12-13

54: ANTI-C5 ANTIBODY COMBINATIONS AND USES THEREOF

00: -

The present invention relates to combinations of anti-C5 antibodies and antigen-binding fragments which have been determined to exhibit superior activity relative to that of a single anti-C5 antibody or fragment. The combinations include anti-C5 antibodies and antigen-binding fragments which do not compete with one another from C5 binding. Bispecific antibodies comprising antigen-binding domains which do not compete and/or bind the same epitope on C5 are also provided.

Compositions and therapeutic methods relating to such anti-C5 combinations and bispecific antibodies are provided herein.

21: 2022/05516. 22: 2022/05/19. 43: 2023/03/23

51: A21B; A21C; A21D; B29C; B33Y

71: UNIVERSITY OF JOHANNESBURG

72: KEWUYEMI, Yusuf Olamide, KESA, Hema, ADEBO, Oluwafemi Ayodeji

33: ZA 31: 2021/03447 32: 2021-05-21

54: FOOD INK

00: -

The present invention relates to a food ink for use in a 3D printing process for the manufacture of food items, the food ink including a malted grain flour and a fermented legume flour. The invention further relates to the 3D printing process itself, as well as a 3D printer configured for use in the 3D printing process.

21: 2022/05519. 22: 2022/05/19. 43: 2023/02/27

51: G07F; G06Q

71: DATABRAIN (PTY) LTD

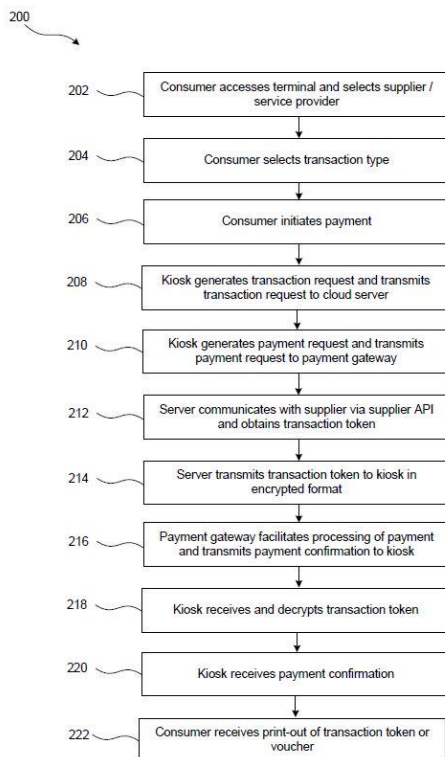
72: TOWEEL, Matthew Joseph

54: A VENDING KIOSK AND A VENDING SYSTEM

00: -

A vending kiosk is disclosed. The kiosk receives, via a user interface of a transaction terminal, transaction details for a transaction from a consumer. The kiosk also receives payment credentials of the consumer or payment for the transaction. A transaction request is generated and transmitted to a remotely

accessible server. The server is configured to transmit a transaction processing request to and receive a transaction token or transaction receipt for the transaction from a supplier associated with the transaction. The supplier is linked to the server by way of a supplier Application Programming Interface (API). The kiosk receives receiving the transaction token or transaction receipt from the server and provides, via the transaction terminal, the transaction token or the transaction receipt to the consumer. A vending system, as well as methods of transacting via a vending kiosk, are also disclosed.



21: 2022/05539. 22: 2022/05/19. 43: 2023/03/23
 51: A61B; C12M
 71: CUTISS AG
 72: RONFARD, Vincent, HOLENSTEIN, Claude, DITTRICH, Anna-Lena, BARNES, Laurent, FREI, Reto, OFFINGER, Ulrich, STOLZ, Boris
 33: US 31: 62/938,985 32: 2019-11-22
54: METHODS AND SYSTEMS FOR PRODUCING SKIN GRAFTS

00: -

The present invention relates to a method for producing skin grafts for rehabilitation of skin

defects, where the method is carried out in a closed system operated and controlled in an automated manner.

21: 2022/05562. 22: 2022/05/20. 43: 2022/08/26

51: E21D

71: RSC MINING (PTY) LTD

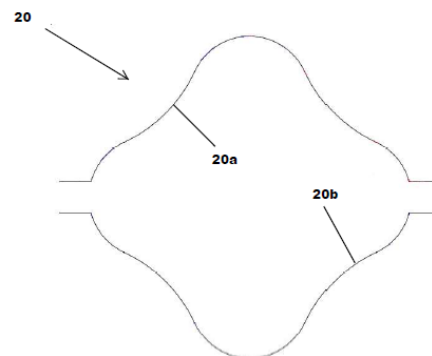
72: STEYN, Johann, FRANCESCO, Toschi

33: ZA 31: 2021/02373 32: 2022-05-14

54: A METHOD FOR MANUFACTURING A ROCK BOLT

00: -

A method for manufacturing a rock bolt 10, 110, 210, 310 as hereinbefore described, which method includes feeding a heated elongate body (not shown) through a pair of opposing rollers 20, which are configured to engage an outer surface of the heated elongate body (not shown) to form a heated elongate body with a quatrefoil shaped cross-section as shown in Figure 1.



21: 2022/05563. 22: 2022/05/20. 43: 2022/08/26

51: E21D

71: RSC MINING (PTY) LTD

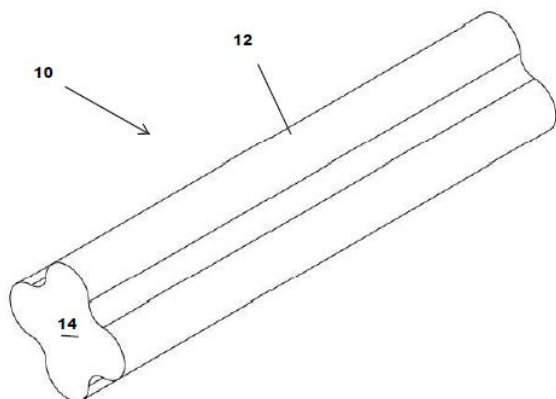
72: STEYN, Johann

33: ZA 31: 2021/02373 32: 2021-05-14

54: ROCK BOLT

00: -

A rock bolt including an elongate body 12 wherein the cross-section 14 of the elongate body 12 is substantially quatrefoil in shape.



21: 2022/05740. 22: 2022/05/24. 43: 2023/03/24

51: B23K; C23C

71: ARCELORMITTAL

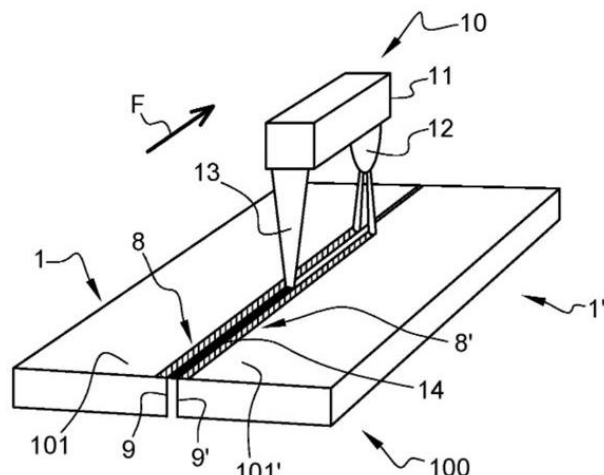
72: Yunhong (Norman) ZHOU, Dulal Chandra SAHA, Elliot BIRO, Andrew MACWAN, Adrian Piotr GERLICH, Shehryar KHAN

33: IB 31: PCT/IB2019/061333 32: 2019-12-24

54: PRE-COATED STEEL SHEET COMPRISING AN ADDITIONAL COATING FOR INCREASING THE MECHANICAL STRENGTH OF THE WELD METAL ZONE OF A WELDED STEEL PART PREPARED FROM SAID PRECOATED SHEET

00: -

The invention mainly relates to a pre-coated steel sheet wherein at least a region at the periphery (7) of at least one (6a;6b) of the opposite faces (6a,6b) of said pre-coated sheet (1,1') is coated with an additional coating (8) selected for increasing the vapor pressure between the pre-coating (2) and said additional coating (8) during a laser welding method up to a critical pressure at which the pre-coating (2) is ejected away from the weld (14). Preferably, the vaporization temperature of the additional coating (8) is greater than the vaporization temperature of the pre-coating (2) and the additional coating comprises gammagene elements like carbon and/or nickel. The invention also relates to a steel part obtained by laser welding, preferably butt laser welding, of at least a first and second pre-coated steel sheet (1,1') as above indicated.



21: 2022/05923. 22: 2022/05/27. 43: 2023/02/21

51: A61K; A61P

71: SKIBA, Mohamed

72: SKIBA, Mohamed, LAHIANI-SKIBA, Malika, BOUNOURE, Frédéric, THOMAS, Michael, LEFEBVRE, Hervé

33: FR 31: FR1912084 32: 2019-10-28

54: PHARMACEUTICAL COMPOSITION COMPRISING MITOTANE ADMINISTERED ORALLY FOR TREATMENT OF ADRENOCORTICAL CARCINOMA AND CUSHING'S SYNDROME

00: -

The present invention relates to the preparation and use of a novel dry emulsion (ES) containing mitotane, oil and cyclodextrin and the use thereof for oral administration in the form of soft capsules, hard capsules, tablets, pellets or powder sachets for the treatment of adrenocortical carcinoma, congenital adrenal hyperplasia and Cushing's syndrome.

21: 2022/05931. 22: 2022/05/27. 43: 2023/02/21

51: B01D; B01J

71: Sasol Germany GmbH

72: HARMENING, Thomas, SCHÖNEBORN, Marcos, JÄGER, Ann-Kathrin

33: EP(DE) 31: 19212712.4 32: 2019-11-29

54: ALUMINA BISMUTH CATALYST SUPPORT AND METHOD FOR ITS PRODUCTION

00: -

The invention provides for a method to prepare an alumina catalyst support comprising bismuth for emission control applications, to an alumina catalyst support prepared according to the method of the invention and to an alumina catalyst support

comprising bismuth and having a specific crystallinity value that leads to improved technical effects.

21: 2022/05946. 22: 2022/05/27. 43: 2023/03/22
51: G02B

71: HELIOGEN HOLDINGS, INC.

72: GROSS, William, PEDRETTI, Andrea

33: US 31: 62/946,333 32: 2019-12-10

54: HELIOSTAT WITH TRIPOD STAND AND TOP-MOUNTED OPTICAL MEMBER

00: -

A heliostat includes an optical member (e.g., a mirror), a mounting frame under the optical member, a support stand and a hinge assembly. The hinge assembly allows the optical member to pivot about two orthogonal directions relative to the support stand. A drive mechanism adjusts one or both of an elevation angle and a roll angle of the optical member.

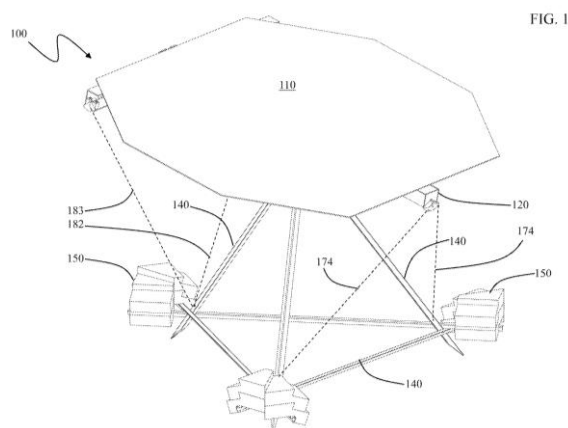


FIG. 1

21: 2022/06045. 22: 2022/05/31. 43: 2023/02/23
51: B01J; B05D; C02F

71: PARISIEN, Brian Rudy, FUNG, David Tat Fai, VERED, Ron, WIGHT, James Stuart

72: PARISIEN, Brian Rudy, FUNG, David Tat Fai, VERED, Ron, WIGHT, James Stuart

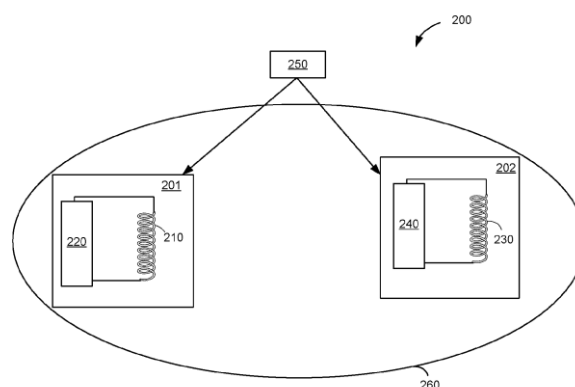
33: US 31: 16/669,793 32: 2019-10-31

54: METHOD OF CHANGING A PROPERTY OF A POLAR LIQUID

00: -

For changing a property of a polar liquid, a transducer including a solenoidal coil is disposed at least partially within the liquid, which is prevented from penetrating the interior of the coil. An alternating electrical current applied to the coil produces a magnetic field about the coil. The current has a frequency and an amplitude such that the

magnetic field has an effect on the liquid changing a property of the liquid at a distance of at least 5 meters from the transducer, wherein the property is gas exchange rate, surface tension, viscosity, freezing point, or partial vapor pressure. A system may include two transducers, wherein the electrical currents are offset in phase or frequency for controlling the effect.



21: 2022/06069. 22: 2022/05/31. 43: 2023/02/17
51: F01K

71: DIPLOMAT GESELLSCHAFT ZUR WIRTSCH. RESTRUKTURIERUNG UND WIRTSCHAFTSFÖRDERUNG MBH

72: HARAZIM, Wolfgang

33: DE 31: 10 2019 007 886.1 32: 2019-11-02

54: METHOD FOR THE CONVERSION OF THERMAL ENERGY INTO ELECTRICAL ENERGY BASED ON AN ANTICLOCKWISE THERMALLY REGENERATED CYCLE COMBINED WITH THERMAL ACCELERATION, AND THE APPLICATION OF SAME

00: -

The invention relates to a method for the conversion of thermal energy into electrical energy based on an anticlockwise thermally regenerated cycle combined with thermal acceleration, and to the application of same, which can be used primarily in the energy industry. Demand for energy is growing world-wide and is increasing the anthropogenic stresses on climate and the environment, because it is principally fossil energy sources that are burnt for mobility and power generation according to the prior art. This generation is exclusively based on clockwise thermal power cycles. The secondary effects are waste heat and exhaust gases. The problem addressed by the invention is that of reducing the anthropogenic stresses on climate and the environment with a new

basic method. Although anticlockwise refrigeration cycles require compression work for the propulsion unit, they can regenerate thermally, since the cooling required for condensation takes place at a higher temperature and pressure level than evaporation. If the volume increase in the phase change is also used to increase the fluid speed over the flow cross section (thermal acceleration), more removable flow energy is available in the process for the generation of power than is required for internal circulation. An anticlockwise thermal power process.

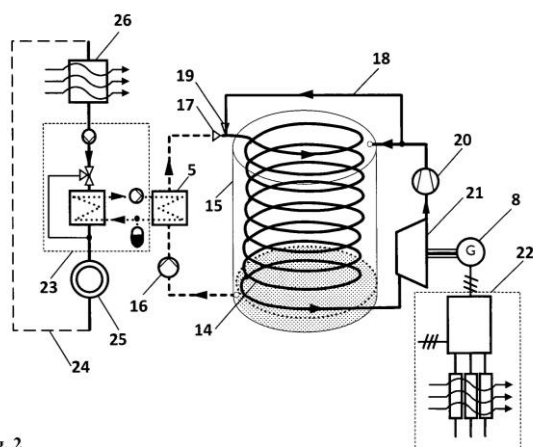


Fig. 2

21: 2022/06107. 22: 2022/06/01. 43: 2023/02/17
51: H04L

71: TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)

72: SHUBHI, Ilmiawan, NIMBALKER, Ajit, NORRY, Ravikiran, MALEKI, Sina

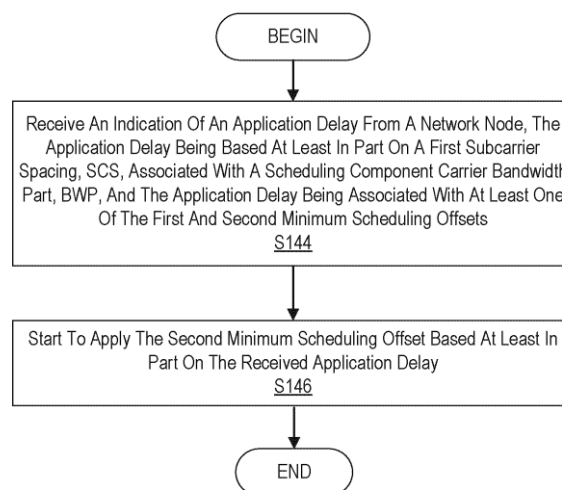
33: US 31: 62/933,116 32: 2019-11-08

54: METHODS FOR DETERMINING MINIMUM SCHEDULING OFFSET APPLICATION DELAY

00: -

A method, system and apparatus for methods for determining minimum scheduling offset application delay are disclosed. According to one aspect, a method in a network node (16) includes determining (S142) an application delay based at least in part on a first subcarrier spacing, SCS, associated with a scheduling component carrier bandwidth part, BWP, the application delay being associated with at least one of the first and second minimum scheduling offsets. According to another aspect, a method in a wireless device (22) includes receiving (S144) an indication of an application delay from a network node (16), the application delay being based at least in part on a first subcarrier spacing, SCS, associated

with a scheduling component carrier bandwidth part, BWP, and the application delay being associated with at least one of the first and second minimum scheduling offsets.



21: 2022/06108. 22: 2022/06/01. 43: 2023/02/17

51: C12N C12P

71: CJ CHEILJEDANG CORPORATION

72: AHN, Chan Hong, KIM, Ju Eun, BAE, Hyun-jung, LEE, Imsang, LEE, Ji Hye, LEE, Hayun

33: KR 31: 10-2020-0010823 32: 2020-01-30

54: NOVEL MODIFIED POLYPEPTIDE WITH ATTENUATED ACTIVITY OF CITRATE SYNTHASE AND METHOD FOR PRODUCING L-AMINO ACID USING THE SAME

00: -

The present application pertains to a novel mutant polypeptide with attenuated activity of citrate synthase, a leucine-producing microorganism comprising the mutant polypeptide, and an L-amino acid production method using the microorganism.

21: 2022/06109. 22: 2022/06/01. 43: 2023/02/17

51: C12N C12P

71: CJ CHEILJEDANG CORPORATION

72: BAE, Hyun-jung, KIM, Ju Eun, BAEK, Min Ji, LEE, Ji Hye

33: KR 31: 10-2019-0161716 32: 2019-12-06

54: NOVEL BRANCHED-CHAIN AMINO ACID AMINOTRANSFERASE VARIANT AND METHOD FOR PRODUCING LEUCINE USING THE SAME

00: -

The present application relates to a novel branched-chain amino acid aminotransferase mutant and a leucine production method using same.

21: 2022/06166. 22: 2022/06/02. 43: 2023/03/23

51: B32B; C21D; C22C; C23C

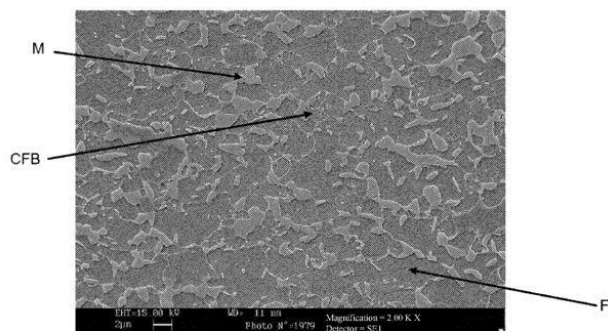
71: ARCELORMITTAL

72: Josée DRILLET

54: COLD-ROLLED AND ANNEALED STEEL SHEET AND MANUFACTURING METHOD

00: -

Cold-rolled and annealed steel sheet and manufacturing method The steel sheet has a composition comprising $0.060\% \leq C \leq 0.085\%$, $1.8\% \leq Mn \leq 2.0\%$, $0.4\% \leq Cr \leq 0.6\%$, $0.1\% \leq Si \leq 0.5\%$, $0.010\% \leq Nb \leq 0.025\%$, $3.42N \leq Ti \leq 0.035\%$, $0 \leq Mo \leq 0.030\%$, $0.020\% \leq Al \leq 0.060\%$, $0.0012\% \leq B \leq 0.0030\%$, $S \leq 0.005\%$, $P \leq 0.050\%$, $0.002\% \leq N \leq 0.007\%$ and optionally $0.0005\% \leq Ca \leq 0.005\%$, the remainder of the composition being iron and unavoidable impurities. The microstructure consists of 34% to 80% bainite, 10% to 16% martensite, and 10% to 50% of ferrite. The surface fraction of unrecrystallized ferrite, with respect to the whole structure, is of less than 30%. The martensite consists of self-tempered martensite and fresh martensite, the surface fraction of self-tempered martensite being comprised between 4% and 10%.



21: 2022/06167. 22: 2022/06/02. 43: 2023/03/23

51: A61N

71: PAULUS, Kenneth

72: PAULUS, Kenneth

33: US 31: 62/943,660 32: 2019-12-04

33: US 31: 17/111,833 32: 2020-12-04

54: MAGNETIC NERVE STIMULATOR

00: -

An apparatus for muscle stimulation comprising a platform with an upper surface and a lower surface, a pair of cross rails mounted under the lower surface of the platform, a sled slidably mounted to the cross rails, a pair of sled rails mounted to the sled, a bracket slidably mounted to the sled rails, a handle secured to the bracket, wherein the handle allows an operator to adjust the location of the bracket to any

location desired under the platform, a magnetic nerve/muscle stimulator mounted to the bracket which includes one or more magnets and one or more electrical coils and a control panel operationally associated with the magnetic nerve/muscle stimulator, the control panel controlling the power supplied to the magnetic nerve/muscle stimulator, wherein the magnetic nerve/muscle stimulator generates and directs a magnetic field into the anatomy of a patient positioned on the upper surface of the platform.

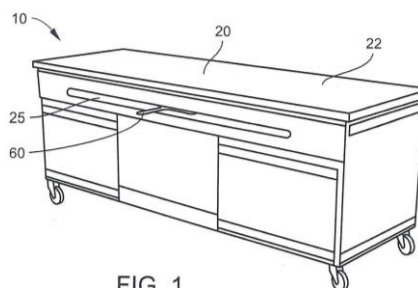


FIG. 1

21: 2022/06374. 22: 2022/06/08. 43: 2023/01/17

51: A23L

71: KAMCHAROV, Alexander Evgenievich, STEELE, Martin, YOVCHEV, Tihomir Georgiev, DRAGANOV, Yavor Nikolaev, PIECK, Jurgen

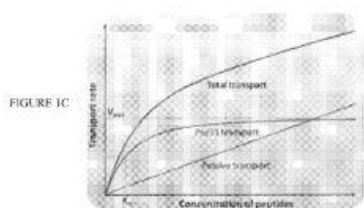
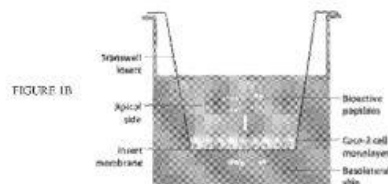
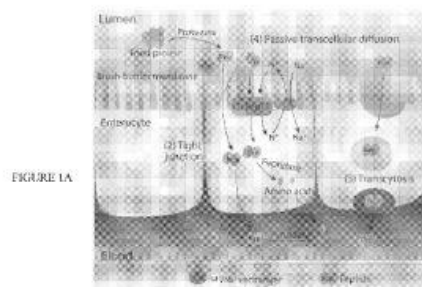
72: KAMCHAROV, Alexander Evgenievich, STEELE, Martin, YOVCHEV, Tihomir Georgiev, DRAGANOV, Yavor Nikolaev, PIECK, Jurgen

33: US 31: 16/680,294 32: 2019-11-11

54: BEVERAGE WITH COLLAGEN AND ADDITIONAL ADDITIVES

00: -

The present invention concerns a beverage having water and a concentration range of about 0.001 grams per liter to 8.44 grams per liter of collagen, wherein the collagen is hydrolyzed. The collagen concentration range may be between 1 milligram per liter to about 8440 milligram per liter or 1 part per million to about 8440 parts per million. The hydrolyzed collagen has collagen peptides. The collagen peptides are produced through hydrolysis of a plurality of collagen sources. The plurality of collagen sources is derived from at least one of animal raw materials, animals raised in non-organic or organic farms, animals from various animal species and various parts of the animal carcass. The water may be comprised of at least one of tap water, spring or mineral water, and iceberg or glacier water.



21: 2022/06492. 22: 2022/06/10. 43: 2023/02/13
51: B63B; E02D

71: Beridi Maritime S.L.

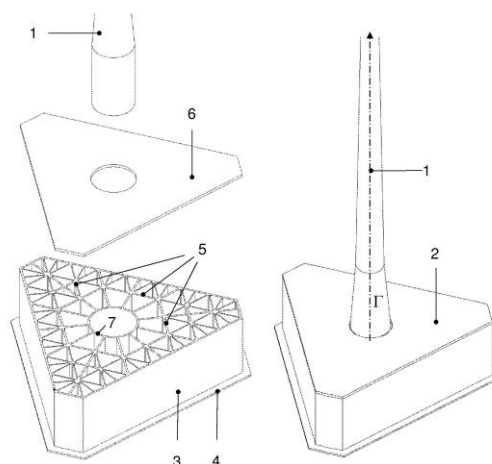
72: COBIÁN BABÉ, Ignacio, ACOSTA GUTIÉRREZ, Clara, BERENGUER PÉREZ, José María

54: STRUCTURE FOR SUPPORTING MARINE INSTALLATIONS AND PROCEDURE FOR THE EXECUTION THEREOF

00: -

A structure (2) for supporting a wind turbine tower (1) having a housing (7) for the fitting therein of the foot of the tower (1), a principal axis (1') being defined on the platform (2) and coinciding with the principal axis of the tower (1), and comprising a constant-section body with a number of internal walls (8) and intermediate walls (10) joined by internal radial ribbing (11) perpendicular to the internal wall (8) whose plane passes through the principal axis (1'), in such a way that at the intermediate wall (10) a number of first interconnection nodes (12) are defined between the intermediate wall (10) and the radial ribbing (11), the intermediate wall (10) and an external wall (9) being linked by reticular ribbing (14 and 15). This structure provides an optimal transmission of forces. The invention likewise relates

to procedures for the manufacture, assembly and installation of the structure.



21: 2022/06543. 22: 2022/06/13. 43: 2023/02/16

51: G08B; G06Q

71: ENVISION DIGITAL INTERNATIONAL PTE. LTD. , SHANGHAI ENVISION DIGITAL CO., LTD.

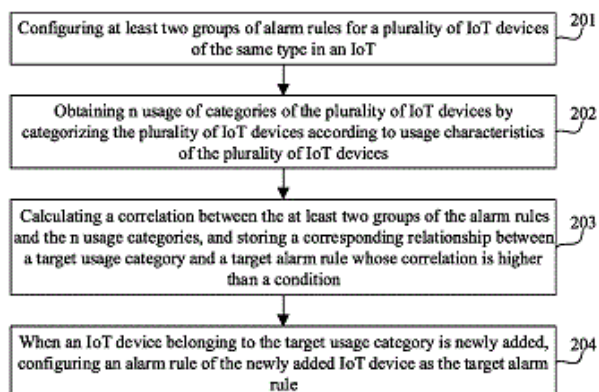
72: SHEN, JIEYUAN, MING, LANG

33: CN 31: 201911113595.0 32: 2019-11-14

54: METHOD AND APPARATUS FOR CONFIGURING ALARM RULE OF IOT DEVICE, DEVICE, AND STORAGE MEDIUM

00: -

The present disclosure discloses a method and an apparatus for configuring an alarm rule for an IoT device, and a device and a storage medium thereof, which are applied to the field of IoT. The method includes: configuring at least two groups of alarm rules for a plurality of IoT devices of the same type in an IoT; obtaining n usage categories of the plurality of IoT devices by categorizing the plurality of IoT devices according to usage characteristics of the plurality of IoT devices; calculating a correlation between the at least two groups of the alarm rules and the n usage categories, and storing a corresponding relationship between a target usage category and a target alarm rule whose correlation is higher than a condition; and when an IoT device belonging to the target usage category is newly added, configuring an alarm rule of the newly added IoT device as the target alarm rule.



21: 2022/06811. 22: 2022/06/20. 43: 2023/02/02

51: G01N, C12Q

71: FOLLEA INTERNATIONAL

72: GOREN, OFER A, MCCOY, JOHN

33: US 31: 63/364,837 32: 2022-05-17

33: US 31: 17/806,208 32: 2022-06-09

54: METHOD FOR STABILIZING COLORIMETRIC ASSAY FOR USE WITH PLUCKED HUMAN HAIR
00: -

Apparatuses are disclosed for performing colorimetric assays with plucked human hair using a device adapted for that purpose. Also disclosed are methods for stabilizing a colorimetric chemical assay so that it can be transported and used as an at-home device for conducting a colorimetric chemical assay are described.

21: 2022/06880. 22: 2022/06/21. 43: 2023/01/30

51: B05B; B65D

71: ORIENTUS INDUSTRY SDN BHD

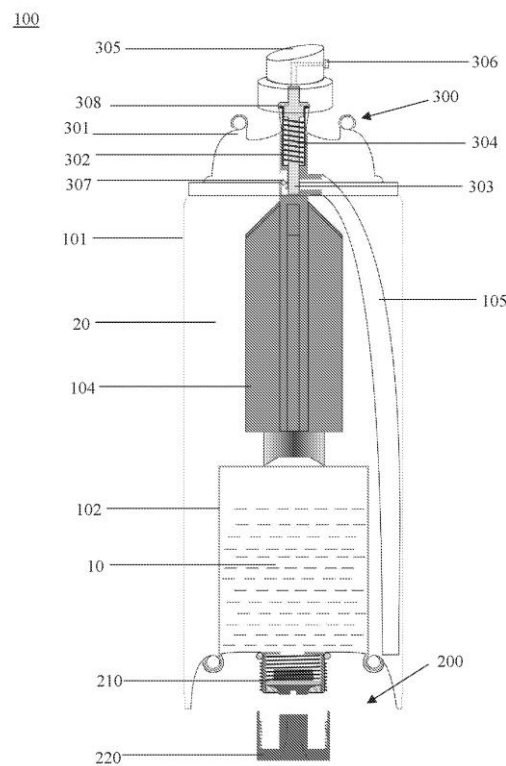
72: ONG, Yoke En

33: MY 31: PI 2019006940 32: 2019-11-26

54: A FILLABLE AEROSOL CONTAINER
00: -

The present invention discloses an aerosol container (100) comprising a body (101) divided into a first chamber (10) and a second chamber (20) by a divider (102), in which the first chamber (10) is under atmospheric pressure and configured to receive a customisable content through an inlet (200) at the body (101) either or both during and after production of the aerosol container (100), and the second chamber (20) is under a pressurised environment and prefilled with a pressurised content; wherein the body (101) includes a mechanism (104) which, when activated, acts on the divider (102) so as to allow mixing of the customisable content and pressurised

content to form a mixture to be dispensed from the body (101) through an outlet (300).



21: 2022/06885. 22: 2022/06/21. 43: 2023/01/30

51: A61K; A61P; C07K; C12N

71: Akeso Biopharma, Inc.

72: ZHANG, Peng, LI, Baiyong, XIA, Yu, WANG, Zhongmin

33: CN 31: 201911164156.2 32: 2019-11-25

54: ANTI-PD-1-ANTI-VEGFA BISPECIFIC ANTIBODY, PHARMACEUTICAL COMPOSITION AND USE THEREOF
00: -

Provided are an anti-VEGFA-anti-PD-1 bispecific antibody and a use thereof. Specifically, the anti-VEGFA-anti-PD-1 bispecific antibody comprises: a PD-1-targeted first protein functional region and a VEGFA-targeted second protein functional region. According to an EU numbering system, mutation occurs at two positions of positions 234 and 235 of a heavy chain constant region of the immunoglobulin contained in the bispecific antibody, and after the mutation, an affinity constant of the bispecific antibody with FcγRI, FcγRIIa, FcγRIIIa, and/or C1q is decreased compared to that before the mutation. The bispecific antibody can specifically bind to VEGFA and PD-1, specifically relieve immunosuppression of VEGFA and PD-1 on an

organism, and inhibit tumor-induced angiogenesis, and thus has good application prospects.

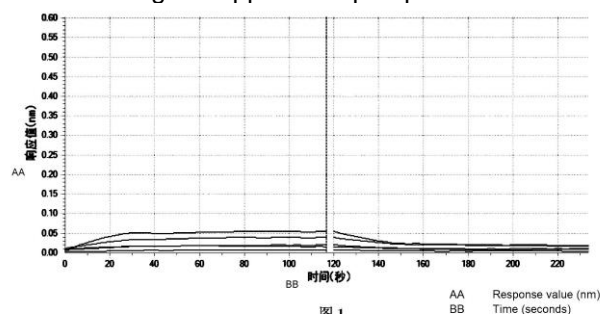


图 1

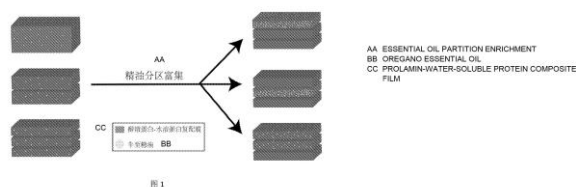


图 1

21: 2022/06887. 22: 2022/06/21. 43: 2023/01/31
51: B32B; B65D; C08J
71: South China Agricultural University
72: XIAO, Jie, CAI, Jiyang, CHEN, Xia
33: CN 31: 201911327654.4 32: 2019-12-20
54: EDIBLE FILM FOR IMPROVING ESSENTIAL OIL RELEASE EFFICIENCY, AND PREPARATION METHOD THEREFOR

00: -

Disclosed are an edible film for improving the essential oil release efficiency, and a preparation method therefor. The edible film consists of at least one blank layer and at least one essential oil enrichment layer. During tape casting, the blank layer is used as a bottom layer, and the essential oil enrichment layer is located in an intermediate layer or an outer layer. The blank layer consists of a prolamin-water-soluble protein composite film. The essential oil enrichment layer consists of a prolamin-water-soluble protein composite film loaded with essential oil. According to the essential oil partition enrichment structure and method proposed by the present invention, the essential oil having the same mass is concentrated in a certain layer of the film. Compared with the existing edible film loaded with essential oil, the essential oil is loaded in the whole film matrix. The essential oil release efficiency can be improved by adjusting the number of layers of the film and the position of the essential oil enrichment layer without significantly changing the mechanical property and transmittance of the film, thereby effectively improving the antibacterial efficiency of an active film and reducing industrial production costs.

21: 2022/06934. 22: 2022/06/22. 43: 2023/02/01
51: G02B G06T H04N G06F

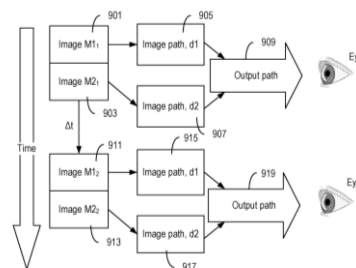
71: TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)

72: KRISTENSSON, Andreas, HUNT, Alexander

54: SUPPLY OF MULTI-LAYER EXTENDED REALITY IMAGES TO A USER

00: -

An apparatus that supplies multi-plane images for viewing by a user includes an image generator, an image director, and a first output port. The image generator generates a first image to be seen by the user as being a first distance from a user point of view, and a second image to be seen by the user as being a second distance from the user point of view. The first image is comprised of a number of optical wavelength components, and the second image is comprised of the number of optical wavelength components. The image director is configured to direct the first image to traverse a first optical path to the first output port of the apparatus, and to direct the second image to traverse a second optical path to the first output port of the apparatus. The first optical path corresponds to the first distance and the second optical path corresponds to the second distance. The first optical path and the second optical path have different lengths. The first output port is configured to connect to a first optical waveguide that is configured to guide the number of optical wavelength components to a user display device.



21: 2022/06953. 22: 2022/06/22. 43: 2023/02/01
51: B61L; G01

71: Commissariat a l'Energie Atomique et aux
Energies Alternatives, ALSTOM Holdings
72: ALBERTINI, Julien, CHAPUIS, Bastien
33: FR 31: 1915428 32: 2019-12-23

54: SYSTEM AND METHOD FOR DETECTING A DEFECT IN A RAILWAY TRACK RAIL

00: -

The document describes methods and devices for detecting a defect in a railway track rail, comprising: at least two sensors chosen from magnetoacoustic and/or piezoelectric and/or magnetostrictive transducers, each sensor being associated with a time-stamping circuit of a GNSS satellite positioning system; a measuring circuit for measuring, using the sensors, the acoustoelastic waves propagating in the rail, the wave measurements or signals being time-stamped. Developments describe in particular: active and passive modes; the use of train crossings; the emission of waves; the determination of the existence, then the position and finally the nature of the defect where applicable; preferred locations for positioning the sensors; the use of inter-correlation methods, passive inverse filter methods or coda correlation methods; the use of mobile robots and/or drones; and the use of artificial sources of noise.

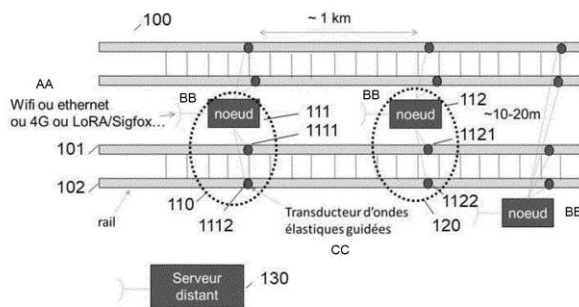


Figure 1

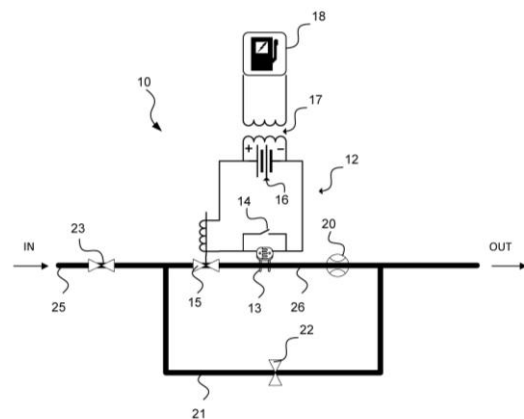
AA: Wifi or ethernet or 4G or LoRA/Sigfox
BB: node
CC: Guided elastic wave transducer
130: Remote server

21: 2022/06967. 22: 2022/06/23. 43: 2023/02/01
51: E03B; E03C; F16K; H01H
71: COETZEE, Ruan, MINNIE, WILLEM JACOBUS
72: MINNIE, WILLEM JACOBUS
54: A water supply control device

00: -

The invention relates to a water supply control device 10 which aims to control the supply of water to an establishment to prevent water damage to the establishment following a water interruption. The

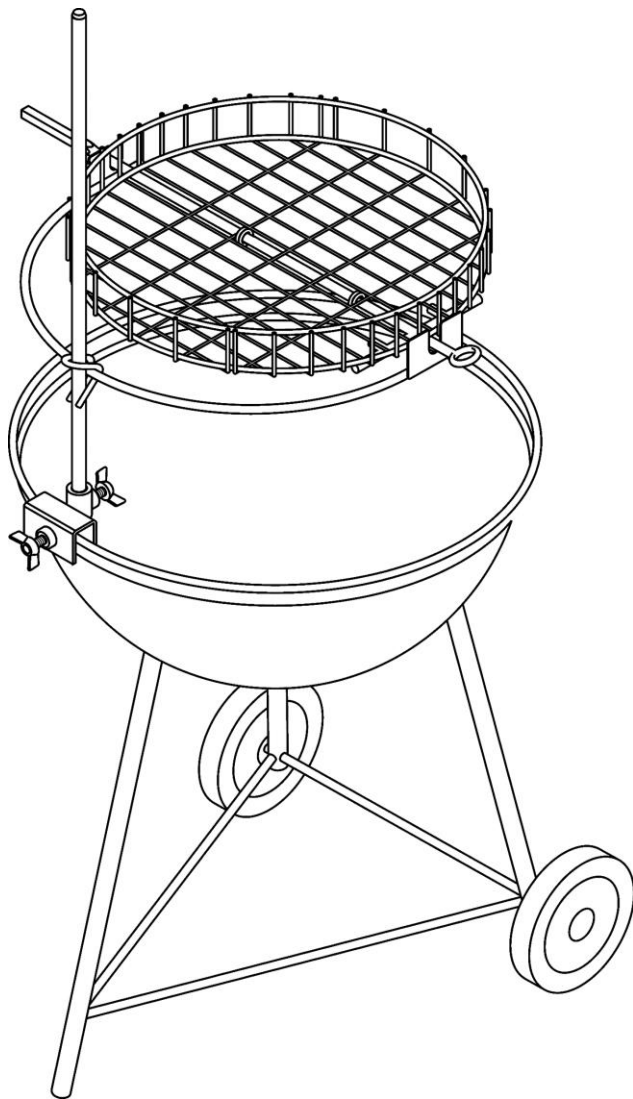
device 10 is configured to be connected in inline fashion to a water supply line 25 and includes a water detection circuit 12 which includes a water sensor 13. In the absence of water, the water sensor 13 opens the circuit 12. The device 10 further includes a valve 15 which is operatively disposed upstream of the water sensor 13. The water detection circuit is configured, using the water sensor, to detect the absence of water, and, in response thereto, automatically to close the valve thereby preventing water from flowing through the water supply control device once water supply has been restored. A manual reset switch is provided to open the valve once water supply has been restored.



21: 2022/07020. 22: 2022/06/24. 43: 2023/01/31
51: A47J
71: BLUE GEAR IMPORTS (PTY) LTD
72: HITCHCOCK, Gideon Johannes
54: BARBEQUE SYSTEM
00: -

A barbeque system is disclosed. The system comprises a clamp that is arranged to be removably secured to an upper rim of a mobile barbeque. The clamp has an elongate member extending therefrom, which is configured to extend substantially vertically upward from the clamp in use. The system further includes a substantially U-shaped support comprising two arms and securing means positioned substantially mid-way on the U-shaped support between the two arms. The securing means is configured to releasably secure the support at an arbitrary position along the elongate member with the arms extending transversely to the elongate member. The free end of each of the

support arms are provided with a cradle arranged to operatively receive a part of a food-carrying barbeque implement therein, thereby to operatively suspend the food-carrying barbeque implement above the mobile barbeque at an arbitrary height.



21: 2022/07059. 22: 2022/06/24. 43: 2023/01/31
51: H02J

71: ZTE Corporation

72: LI, Lin, WANG, Fangchun, ZHANG, Zhe, WU, Yaju, YANG, Rui, FENG, Fujian

33: CN 31: 201911177146.2 32: 2019-11-26

54: MULTIPLE-BATTERY SWITCHING CONTROL CIRCUIT, APPARATUS AND SYSTEM, AND CONTROL METHOD

00: -

Disclosed are a multiple-battery switching control circuit, apparatus and system, and a control method.

A switching control circuit is designed, and the switching control circuit comprises: a first-stage circuit, a second-stage circuit, and a third-stage circuit, which are sequentially connected in parallel, wherein the first-stage circuit comprises a first switch element and a second switch element; the second-stage circuit comprises an inductor and a fourth switch element; and the third-stage circuit comprises a third switch element and a battery unit.

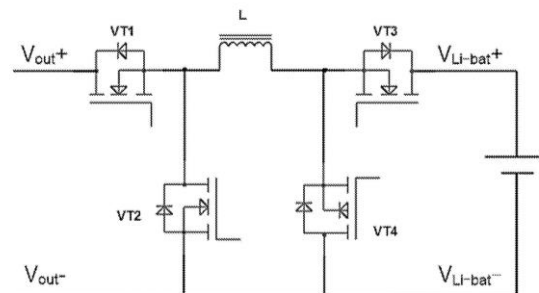


图 3

21: 2022/07112. 22: 2022/06/27. 43: 2023/01/31
51: C08L

71: Basell Polyolefine GmbH

72: PERDOMI, Gianni, GALVAN, Monica

33: EP(DE) 31: 19213059.9 32: 2019-12-03

54: POLYETHYLENE COMPOSITION FOR FILAMENTS OR FIBERS

00: -

A polyethylene composition for preparing filaments and fibers, comprising: A) from 75% to 97% by weight of a copolymer of ethylene having the following features: 1) a density of 0.925 g/cm³ or higher; 2) a MI₂ value of 0.5 g/10 min. or greater; B) from 3% to 25% by weight of a polyolefin composition comprising: B^I) from 5% to 35% by weight of a propylene homopolymer or a propylene copolymer; B^{II}) from 20% to 50% by weight of a copolymer of ethylene containing from 1.0% to 20.0% by weight of alpha-olefin units and 25.0% by weight or less of a fraction soluble in xylene at 25°C; and B^{III}) from 30% to 60% by weight of a copolymer of ethylene and propylene containing from 25.0% to 75.0 % by weight of ethylene derived units and from 40.0% to 95.0% by weight of a fraction soluble in xylene at 25°C.

21: 2022/07115. 22: 2022/06/27. 43: 2023/01/31
51: A61K

71: Bharat Biotech International Limited

72: RAYCHAUDHURI, Mithu

33: IN 31: 202041000777 32: 2020-01-08

54: VIRAL VACCINE COMPOSITIONS AND METHODS OF PREPARATIONS THEREOF

00: -

The present invention relates to vaccine composition comprising inactivated rotavirus antigen, methods of inactivation and preparation of vaccine composition

thereof. The present invention also discloses a combination vaccine comprising inactivated rotavirus antigen and norovirus antigen, and vaccine preparations thereof.

21: 2022/07186. 22: 2022/06/29. 43: 2023/03/23

51: E02D; G01J; G01N; G06T

71: Climate LLC

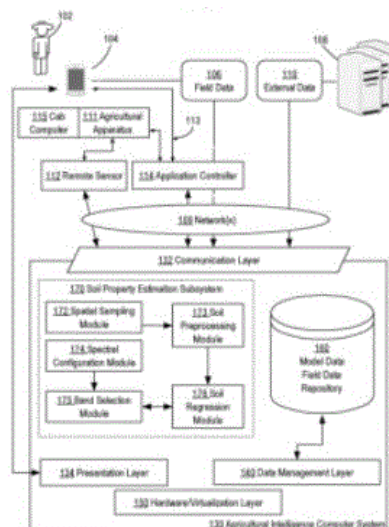
72: XIANG, Haitao, YANG, Xianyuan, KOSHNICK, Nick, CISEK, Nick

33: US 31: 14/866,160 32: 2015-09-25

54: ESTIMATING INTRA-FIELD PROPERTIES WITHIN A FIELD USING HYPERSPECTRAL REMOTE SENSING

00: -

A method for estimating soil properties within a field using hyperspectral remotely sensed data. A soil preprocessing module receives soil spectrum data records that represent a mean soil spectrum of a specific geo-location of a specified area of land. The soil preprocessing module removes interference signals and creates a set of one or more spectral bands. A soil regression module inputs the one or more soil spectral bands and predicts soil property datasets. The soil property datasets include specific soil properties relevant to determining fertility of the soil or soil property levels that may influence soil management at a specific geo-location. The soil regression module selects multiple specific soil property datasets that best represent the existing soil properties including soil properties predicted and the spectral band data used to determine the soil properties. The soil regression module sends this predicted data to a soil model database.



21: 2022/07207. 22: 2022/06/29. 43: 2023/04/17

51: E21D

71: Timrite (Pty) Ltd

72: PIENAAR, Frans Roelof Petrus, HOWELL, Mark

33: ZA 31: 2021/02086 32: 2021-03-29

33: ZA 31: 2021/02951 32: 2021-05-03

54: MINE SUPPORT BLOCK

00: -

This invention relates to a load support block for use as a building block in a stacked block load support pack. The invention is an improvement, modification and adaptation of the invention claimed in SA Patent no. 2019/00399. The block 10 comprises a bag 12.1 made from sheet material, preferably woven, and filled with a settable filling material 24, preferably a cementitious material that has set in the bag. The block 10 is pre-formed in a mould during filling and setting of the filling material. The bag 12.1 is reinforced by the incorporation of reinforcing, preferably stronger warp yarns, in the fabric of the sheet material in one or more reinforced parts of the bag.

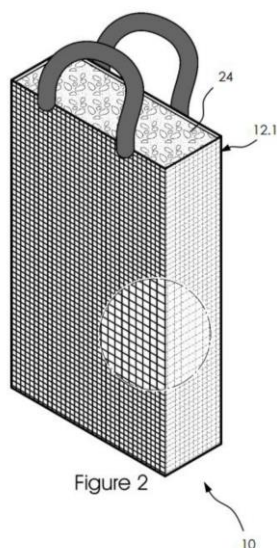


Figure 2

21: 2022/07276. 22: 2022/06/30. 43: 2023/01/31

51: H02K

71: XINJIANG GOLDWIND SCIENCE & TECHNOLOGY CO., LTD.

72: HOU, Nan, LUO, Jiuyang

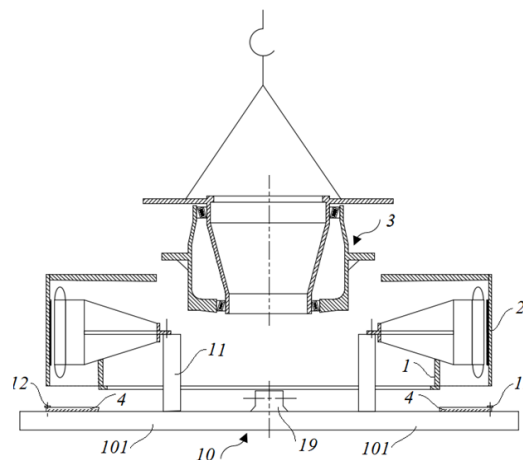
33: CN 31: 201911408904.7 32: 2019-12-31

54: MOTOR SPLITTING OR ASSEMBLING APPARATUS, MOTOR SPLITTING METHOD, AND MOTOR ASSEMBLING METHOD

00: -

The present application relates to a motor splitting or assembling device, a motor splitting method, and a motor assembling method. The motor splitting or assembling device includes a sleeving device which is configured for separating or coaxially sleeving a first rotary body and a second rotary body of the motor; the first disassembly device is configured for fixing the first rotary body and includes at least two first separable portions which are detachably connected with each other, and the first rotary body is split into petals in a circumferential direction by disassembling the first separable portions by the first disassembly device, or respective petal segments of the first rotary body are assembled in the circumferential direction by combining the first separable portions; and the second disassembly device is configured to be fixed to the second rotary body and includes at least two second separable portions which are detachably connected with each other, and the second rotary body is split into petals in the circumferential direction by disassembling the second separable portions by the second disassembly device, or respective petal segments of

the second rotary body are assembled in the circumferential direction by combining the second separable portions. The present application solves the problem that the motor exceeds the road transportation limit and the transportation cost is high.



21: 2022/07279. 22: 2022/06/30. 43: 2023/01/31

51: A01N; A61K

71: Botanitec SpA

72: LEYTON, Allison, VAISMAN, Daniela

54: COMPOSITION RICH IN POLYPHENOLS AND FLAVONOIDS FOR USE AS A BIOSTIMULANT AND ANTIMICROBIAL FOR USE IN AGRICULTURE

00: -

The present invention relates to compositions of natural origin for use in agricultural crops (vegetables and fruit), in particular for use in formulations that are biostimulants and/or have antimicrobial action, which allow the crops to be protected from stress, thereby improving the quality and yield of the plants and/or their fruit. The invention provides a biostimulant and/or antimicrobial composition comprising extracts made from plants, which include berry leaves rich in polyphenols, flavonoids and micronutrients. *In a preferred embodiment of the invention, the composition comprises extracts made from blueberry leaf. The invention also relates to a method for producing the composition.*

21: 2022/07383. 22: 2022/07/04. 43: 2023/02/01

51: A61K; A61P; C07D

71: F. Hoffmann-La Roche AG

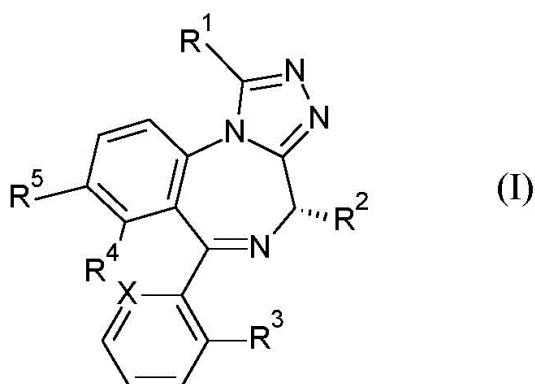
72: CECERE, Giuseppe, GOBBI, Luca, HERNANDEZ, Maria-Clemencia, KNOFLACH, Frédéric, KOBLET, Andreas, O'CONNOR, Eoin Cornelius, OLIVARES MORALES, Andres Miguel, REUTLINGER, Michael, RUNTZ-SCHMITT, Valerie, WAMSTEEKER CUSULIN, Jaclyn Ivy, ZORN, Nicolas

33: EP(CH) 31: 20167239.1 32: 2020-03-31

54: BENZODIAZEPINE DERIVATIVES AS GABA A GAMMA1 PAMS

00: -

The invention provides novel compounds having the general formula (I) wherein R¹, R², R³, R⁴, R⁵ and X are as described herein, compositions including the compounds and methods of using the compounds.



21: 2022/07434. 22: 2022/07/05. 43: 2023/03/31

51: B65D; C08H; C08K; C08L

71: SOCIEDAD ANÓNIMA MINERA CATALANO ARAGONESA

72: Maria José ALFONSO ALEGRE, Patricia ZAGALAZ LASIERRA, Miguel Ángel CABALLERO LÓPEZ

54: RECYCLABLE, SEALABLE CONTAINER

00: -

A recyclable, sealable container comprising one or more polyamides, in a proportion of 90% or higher by weight with respect to the total weight, and in which the sealing layer consists of one or more polyamides that can form a seal at less than 200°C. The invention described provides the main advantages of allowing the recycling thereof after use and a sufficiently low melting temperature such that the container can seal with itself and with other polyamides.

21: 2022/07442. 22: 2022/07/05. 43: 2023/02/02

51: G01N

71: Alifax S.r.l.

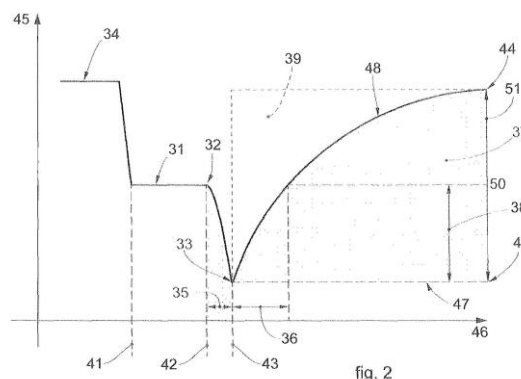
72: GALIANO, Paolo

33: IT 31: 102019000025444 32: 2019-12-23

54: PERFECTED METHOD FOR THE ANALYSIS OF A LIQUID WITH SUSPENDED BODIES

00: -

The invention concerns a method for the analysis of a liquid with suspended bodies, such as blood. The purposed of the present invention is specifically to analyze the behavior of a liquid containing suspended bodies subjected to stress, in order to obtain cognitive factors connected to the liquid itself and to the suspended bodies. In particular, the purpose of present invention is to carry out analysis of the balances reached, in said liquid, by the suspended bodies. The present invention finds application in a wide form of fluids.



21: 2022/07450. 22: 2022/07/05. 43: 2023/02/02

51: C07D; A61K; A61P

71: JACOBIO PHARMACEUTICALS CO., LTD.

72: LI, AMIN, LI, SUJING, WANG, PENG, DANG, CHAOJIE, LIU, DAN

33: CN 31: PCT/CN2020/070885 32: 2020-01-08

33: CN 31: PCT/CN2020/078565 32: 2020-03-10

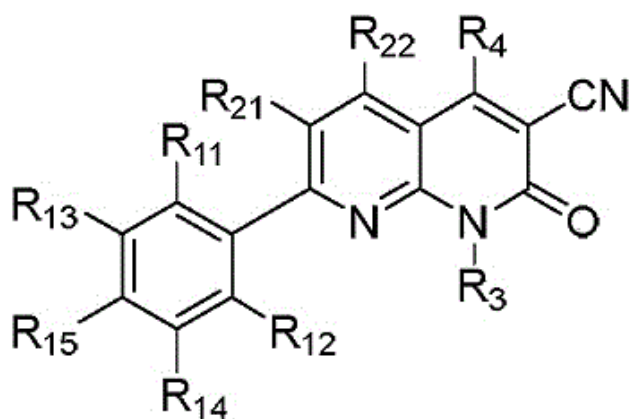
33: CN 31: PCT/CN2020/073723 32: 2020-01-22

33: CN 31: PCT/CN2019/126687 32: 2019-12-19

54: KRAS MUTANT PROTEIN INHIBITORS

00: -

The invention relates to a KRAS mutant protein inhibitor shown as formula (I), a composition containing the inhibitor and the use thereof.



(I)

21: 2022/07461. 22: 2022/07/06. 43: 2023/02/02

51: G01M; G01N; G02B

71: SMART LOCKING LOGIC (PTY) LTD

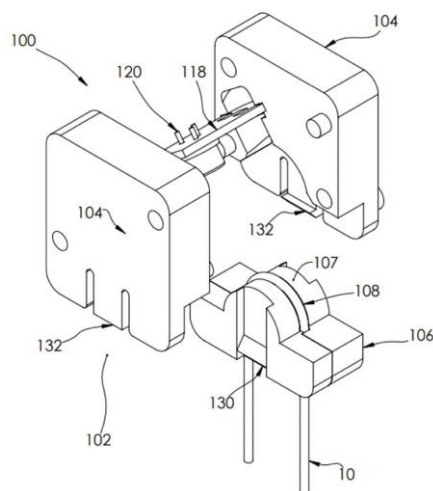
72: SCOTT, Andrew Ernest

33: ZA 31: 2021/05536 32: 2021-08-06

54: An Optical Fibre Monitoring Device

00: -

An optical fibre monitoring device is for monitoring an optical fibre. The device includes a mechanical clip assembly having a seat defining an arcuate channel configured to locate the optical fibre, with an arc section of 90°–360° and a curvature of 5–12 mm and at least one bearing member configured to urge and hold the optical fibre in the arcuate channel, thus bending the optical fibre around the arcuate channel. A sensing circuit has at least one optical sensor configured in a pre-defined relationship relative to the seat and the bent optical fibre. The mechanical clip assembly is configured to bend the optical fibre to reduce total internal refraction so that transmitted light within the optical fibre escapes in a region of the bend while having an insertion loss of no more than 0.5 dB; the optical sensor receives at least a portion of the escaped transmitted light.



21: 2022/07479. 22: 2022/07/06. 43: 2023/02/02

51: F24S G02B

71: ZHEJIANG COSIN SOLAR TECHNOLOGY CO., LTD.

72: JIN, Jianxiang, XU, Neng, MI, Xiaoling, ZHANG,

Xuzhong, HUANG, Yuanming, LIN, Da, TAN, Xiao,

ZHU, Zhengping, CHEN, Kangli, XIAO, Tingting

33: CN 31: 202010031804.3 32: 2020-01-13

33: CN 31: 202010032374.7 32: 2020-01-13

54: HELIOSTAT FRAME AND HELIOSTAT THEREOF, AND HELIOSTAT FIELD

00: -

A heliostat frame, comprising: a main beam (21) and a plurality of auxiliary beams (23) arranged at intervals on the main beam (21). Each auxiliary beam (23) is fixed on the main beam (21) along an extension direction of a central axis of the main beam (21), and a plurality of supporting block assemblies are arranged on the auxiliary beam (23); each supporting block assembly comprises a supporting block (26) and a bonding sheet (27), and the supporting block (26) is connected to a reflective surface (1) of a heliostat by means of the bonding sheet (27); the height of each supporting block (26) is set according to a position thereof on the corresponding auxiliary beam (23), so that a connection line of centers of top surfaces of the supporting blocks (26) on the auxiliary beam (23) is arc-shaped.

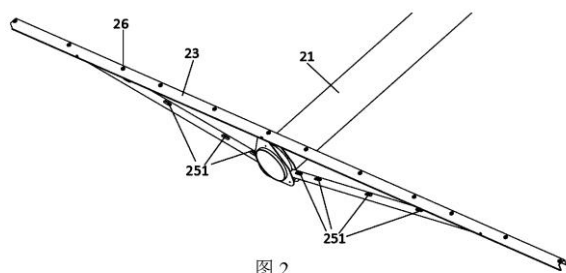


图 2

21: 2022/07497. 22: 2022/07/06. 43: 2023/02/03

51: E05B

71: CISA S.p.A.

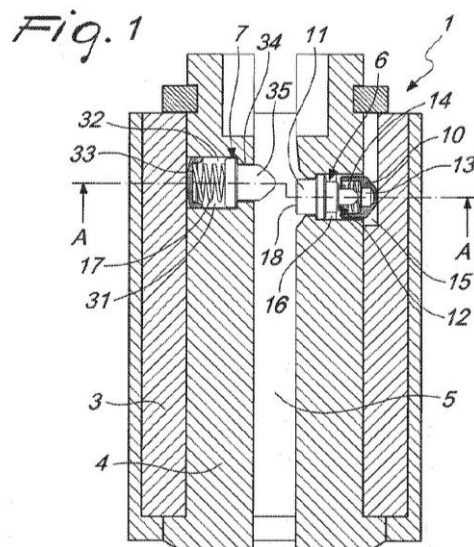
72: FABBRI, Matteo, TALAMONTI, Enzo, FERRI, Giovanni

54: CYLINDER LOCK AND KEY THEREOF

00: -

A cylinder lock (1) and a key (2) thereof, the lock (1) comprising a stator (3) within which a rotor (4) can rotate which is provided with a longitudinal channel (5) inside which respective pins (6, 7) are arranged substantially mutually opposite. The channel (5) is adapted for the insertion of a key (2) provided with a seat (8) for the accommodation of a respective lever (9) which can be oriented freely and is adapted to actuate the pins (6, 7). At least one of the pins (6) is constituted by a concave ogive (10) and a contoured grub (11) which has an end (12) whose shape and dimensions are complementary to those of the internal cavity (13) of the ogive (10). Axially acting elastic means (14) are interposed between the ogive (10) and the grub (11) for their respective mutual spacing in conditions of absence of external forces applied to the grub (11) toward the ogive (10). The stator (3) comprises a recess (15) whose shape and dimensions are complementary to those of the terminal front of the ogive (10) for the temporary accommodation of the front; the recess (15) is aligned with the hole (16) of the rotor (4) within which the ogive (10) and the grub (11) are arranged. At least one elastic element (17) is interposed between the stator (3) and the at least one additional pin (7) for the forcing thereof within the longitudinal channel (5). Following the insertion of the key (2) in the longitudinal channel (5), the end of the pin (7) and a head (18) of the grub (11) abut against the lever (9), with consequent partial inclination thereof with respect to the key (2) in the configuration for free translation of the pin (6) within the hole (16) of

the rotor (4), without protrusion of the front of the ogive (10) with respect to the contour of the rotor (4) during the rotation thereof.



21: 2022/07498. 22: 2022/07/06. 43: 2023/02/08

51: A61K; A61P; C07D

71: Jacobio Pharmaceuticals Co., Ltd.

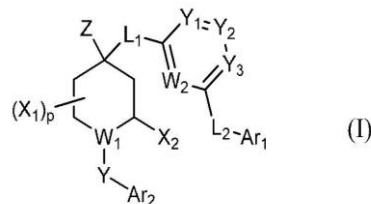
72: CHENG, Dai, CHEN, Mingming, LI, Amin, LI, Haijun, YANG, Guqun

33: PCT/CN 31: 2020/073786 32: 2020-01-22

54: NOVEL HETEROCYCLIC COMPOUNDS USEFUL AS AURORA A SELECTIVE INHIBITORS

00: -

Provided are compounds of formula (I), or pharmaceutically acceptable salts thereof, which can be used for inhibiting the activity of Aurora A and treating cancer mediated by Aurora A.



21: 2022/07505. 22: 2022/07/06. 43: 2023/02/08

51: C08K; C09D; C09F

71: Akzo Nobel Coatings International B.V.

72: FLAPPER, Jitte, KLAASEN, Robert Paul

33: EP(NL) 31: 20152434.5 32: 2020-01-17

54: WATER-IN-OIL COATING COMPOSITION

00: -

The invention relates to a water-in-oil coating composition comprising a water phase emulsified in a non-aqueous liquid phase, wherein the non-aqueous phase comprises an autoxidizable binder and wherein an inorganic first salt and an organic second salt are dissolved in the water phase, wherein the inorganic first salt has a solubility in water of at least 100 grams per liter as determined at 20 °C, and a solubility in the non-aqueous phase of less than 1.0 grams per liter as determined at 20 °C, and wherein the second salt is an organic salt of an alkali or alkaline earth metal, and wherein the coating composition comprises a primary drier. The invention further relates to a substrate coated with a coating deposited from such water-in-oil coating composition.

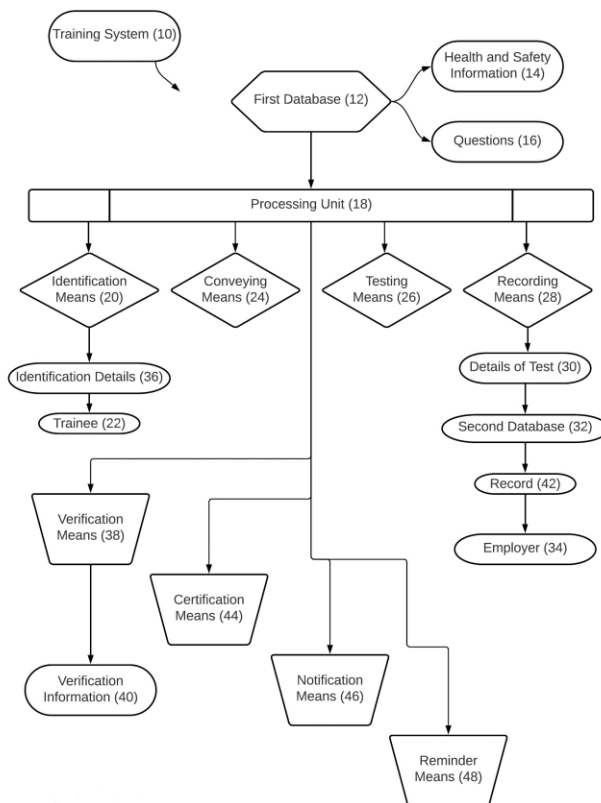
21: 2022/07575. 22: 2022/07/08. 43: 2023/02/08
51: G06Q

71: UVEX SAFETY SOUTH AFRICA (PTY) LTD.
72: SWANEPOEL, Jarryd, Luke, NEL, Christo
33: ZA 31: 2021/04837 32: 2021-07-12

54: A TRAINING SYSTEM

00: -

A training system (10) which includes a first database (12) containing health and safety information (14) relating to a particular industry and a set of questions (16) relating to the health and safety information (14), and a processing unit (18) arranged in communication with the first database (12), which processing unit (18) includes identification means (20) for identifying a trainee (22) to be tested, conveying means (24) for conveying the health and safety information (14) to the trainee (22), testing means (26) for providing a test to the trainee (22) in relation to the health and safety information (14), and recording means (28) for recording details (30) of the test, upon successful completion thereof, on a second database (32), wherein the testing means (26) and recording means (28) serve to facilitate achievement, by an employer (34) of the trainee (22), of compliance with national health and safety laws and regulations relating to the particular industry.



21: 2022/07578. 22: 2022/07/08. 43: 2023/02/07
51: B60J

71: MANITOU ITALIA S.R.L.

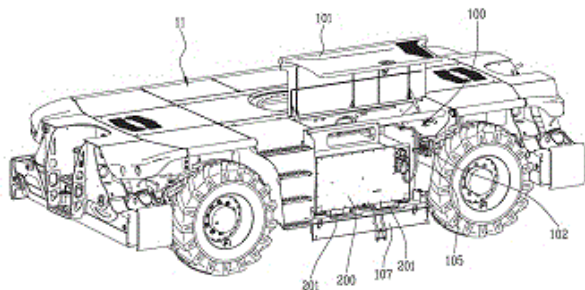
72: IOTTI, MARCO

33: IT 31: 102021000019406 32: 2021-07-21

54: TELEHANDLER WITH CONVERTIBLE PROPULSION

00: -

Described is a telehandler equipped with at an electric propulsion motor and with several containment compartments (100) for housing means (200) for powering the motor. A compartment (100) is provided with an access opening to allow a user to insert or extract a source of electricity (200) included in the power supply means. A plurality of electric batteries (200) is made available, each designed to be inserted in one of the compartments (100). An electricity generator apparatus is provided for insertion in one of the compartments (100). The telehandler is equipped with the following alternative power supply configurations: a fully electrical configuration wherein the power supply means comprise only one or more electric batteries (200); and a hybrid configuration wherein the power supply means include the electricity generator apparatus.



21: 2022/07589. 22: 2022/07/08. 43: 2023/02/01
51: A61K; A61P; C07C; C07D

71: Pfizer Inc.

72: ASPNES, Gary E., BAGLEY, Scott W., CLARK, Wesley Dewitt, CURTO, John M., EDMONDS, David James, FLANAGAN, Mark E., FUTATSUGI, Kentaro, GRIFFITH, David Andrew, HUARD, Kim, LIAN, Yajing, LIMBERAKIS, Chris, LONDREGAN, Allyn T., MATHIOWETZ, Alan M., PIOTROWSKI, David Walter, RUGGERI, Roger B.

33: US 31: 62/946,084 32: 2019-12-10

54: SOLID FORMS OF 2-((4-((S)-2-(5-CHLOROPYRIDIN-2-YL)-2-METHYLBENZO[D][1,3]DIOXOL-4-YL)PIPERIDIN-1-YL)METHYL)-1-(((S)-OXETAN-2-YL)METHYL)-1H-BENZO[D]IMIDAZOLE-6-CARBOXYLIC ACID, 1,3-DIHYDROXY-2-(HYDROXYMETHYL)PROPAN-2-AMINE SALT

00: -

The invention provides solid forms of 2-((4-((S)-2-(5-chloropyridin-2-yl)-2-methylbenzo[d][1,3]dioxol-4-yl)piperidin-1-yl)methyl)-1-(((S)-oxetan-2-yl)methyl)-1H-benzo[d]imidazole-6-carboxylic acid, 1,3-dihydroxy-2-(hydroxymethyl)propan-2-amine salt for example, a hydrate (e.g. a monohydrate) crystalline form (e.g. Form 2 or Form 3) or an amorphous form; as well as pharmaceutical compositions, and the uses thereof in treating diseases, conditions or disorders modulated by GLP-1R in a mammal, such as a human.

21: 2022/07607. 22: 2022/07/08. 43: 2023/02/03
51: C02F

71: DAPHNE WATER SOLUTIONS LIMITED

72: DEARN, Karl David, ORSINI, Luisa

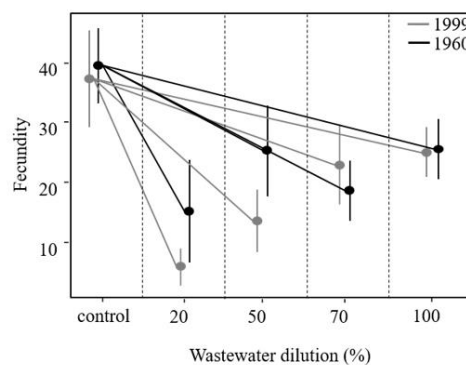
33: GB 31: 1918129.6 32: 2019-12-10

54: USING DAPHNIA FOR BIOREMEDIATION

00: -

There is disclosed a method of improving water quality, the method comprising adding a pool of isolated Daphnia to a body of water such that the

pool of isolated Daphnia is exposed to one or more contaminants which may be in the water. The pool of isolated Daphnia comprise Daphnia which have been resurrected from dormant Daphnia. The pool of isolated Daphnia are allowed to filter from the body of water at least a portion of said one or more contaminants to reduce the level of the one or more contaminants in the body of water. After a period of time, at least a portion of the Daphnia containing said one or more contaminants are removed from the body of water, thereby improving the water quality of the body of water.



21: 2022/07669. 22: 2022/07/11. 43: 2023/04/12
51: A61K; C12N

71: PANTHERNA THERAPEUTICS GMBH

72: Volker FEHRING, Jörg KAUFMANN, Oliver KEIL, Daniel TONDERA

33: EP 31: 20000065.1 32: 2020-02-11

54: LIPID COMPOSITION AND USE THEREOF FOR DELIVERY OF A THERAPEUTICALLY ACTIVE AGENT TO ENDOTHELIUM

00: -

The present invention is related to a composition comprising a lipid composition, a tricarboxylic acid and a nucleic acid molecule, wherein the lipid composition comprises a cationic lipid, a neutral lipid and a shielding lipid, wherein a positive charge excess arising from a larger number of positive charges provided by the cationic lipid molecules in the composition compared to the smaller number of negative charges provided by the nucleic acid molecules in the composition is compensated by the charges provided by the tricarboxylic acid; and methods of use of such composition.

21: 2022/07671. 22: 2022/07/11. 43: 2023/03/31
51: C21D; C22C

71: ARCELORMITTAL

72: Gregory INACIO DA ROSA, Lijia ZHAO,
Dongwei FAN, Josée DRILLET

33: IB 31: PCT/IB2020/051750 32: 2020-03-02

54: HIGH STRENGTH COLD ROLLED AND GALVANNEALED STEEL SHEET AND MANUFACTURING PROCESS THEREOF

00: -

The invention deals with a cold rolled and galvanized steel sheet having a composition comprising, by weight percent: C 0.15-0.25%, Mn 2.4-3.5%, Si 0.30-0.90%, Cr 0.30-0.70%, Mo 0.05-0.35%, Al 0.001-0.09%, Ti 0.01-0.06, B 0.0010-0.0040%, Nb 0.01 -0.05%, P#0.020%, S#0.010% and N#0.008%, the remainder of the composition being iron and unavoidable impurities resulting from the smelting, and having a microstructure consisting of, in surface fraction, between 80% and 90% of martensite, the balance being ferrite and bainite.

21: 2022/07672. 22: 2022/07/11. 43: 2023/02/03
51: A61L

71: SADRA ATIYEH MAHOUR

72: MOAZEN, Seyed Ali

54: A HYDRAULIC PLASMA STONE BLASTER PROBE

00: -

[0001] The present disclosure relates to an improvement and optimization tool for a plasma stone blaster instrument. In an embodiment, the instrument comprises a co-centric high voltage earth electrode, an insulator as the electric separator, and an earth electrode so that the parts of the earth electrode and high-voltage electrode have the ability to adjust the distance between them for different applications. The instrument is supported by a high voltage energy storage and a related generator, which create an electric arc in an even environment by creating a high voltage between two electrodes and passing the high current. The electric arc created by the high voltage electrode and earth electrode are in a fluid environment with controlled dimensions, which can create strong shockwaves and destroy the surrounding solid environment. The arrangements of these two electrodes and the distance adjusted between them, as well as, created mechanical resistance and the system is designed for decreasing impacts lead to the increased lifetime

of the probe against impacts. Also, the instrument limits the fluid volume and increases the pressure transferred to the environment. One of the advantages of the present disclosure is the use of fluid material with favorable density and elastic coefficient, which improves the efficiency of the process as an optimum energy transporter. << To be published with Figure 2 >>

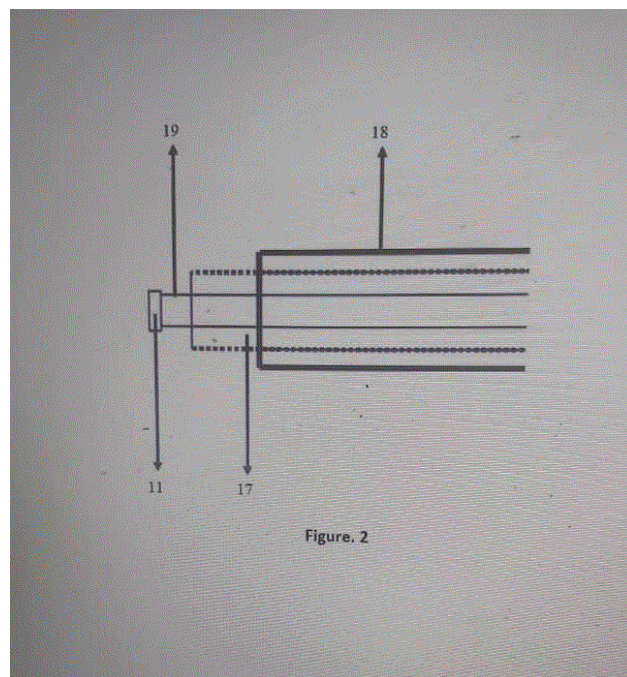


Figure. 2

21: 2022/07728. 22: 2022/07/12. 43: 2023/02/02
51: A61K; A61P

71: Professional Dietetics S.p.A.

72: GIORGETTI, Paolo Luca Maria

33: IT 31: 102020000000442 32: 2020-01-13

54: COMPOSITIONS COMPRISING AMINO ACIDS FOR USE IN THE PREVENTION AND TREATMENT OF CHEMOTHERAPY SIDE EFFECTS

00: -

Composition for use in the prevention and/or in the treatment of cardiotoxicity induced by at least one chemotherapeutic agent in a subject undergoing chemotherapy, the composition comprising an active agent, said active agent containing the amino acids leucine, isoleucine, valine, threonine, lysine and citric acid, succinic acid, malic acid. Said chemotherapeutic agent may be selected in the group consisting of anthracyclines, HER2/ErbB2 inhibitors, tyrosine-kinase inhibitors, vascular

endothelial growth factor inhibitors, immune checkpoint inhibitors.

21: 2022/07791. 22: 2022/07/13. 43: 2023/02/03
51: A23L A61P A21D A61K C12R
71: EVONIK OPERATIONS GMBH
72: SPECKMANN, Bodo, SCHWARM, Michael, PELZER, Stefan, BERNGRUBER, Thomas, GOBBETTI, Marco, DI CAGNO, Raffaella
33: EP 31: 19219287.0 32: 2019-12-23
54: BACTERIAL CONSORTIUM COMPRISING AT LEAST ONE BACILLUS AND LACTOBACILLUS STRAIN FOR GLUTEN DEGRADATION
00: -

The current invention concerns preparations comprising probiotic strains belonging to the genera *Bacillus* sp., *Lactobacillus* sp., and optionally also *Pediococcus* sp. as viable cells or cytoplasmic extract thereof, and proteases and their use for safe gluten degradation in humans and during food production.

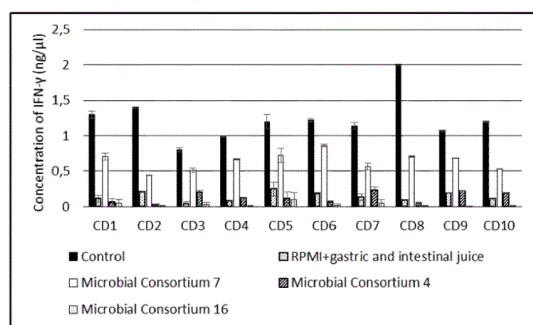


Figure 5 C: Concentration (ng/μl) of interferon gamma (IFN-γ) in duodenal biopsy specimens from patients with CD.

21: 2022/07792. 22: 2022/07/13. 43: 2023/02/03
51: C12P C12N
71: EVONIK OPERATIONS GMBH
72: SCHNEIDER, Frank, JANKOWITSCH, Frank
33: EP 31: 19218204.6 32: 2019-12-19
54: METHOD FOR THE FERMENTATIVE PRODUCTION OF GUANIDINOACETIC ACID
00: -

The present invention relates to a microorganism transformed to be capable of producing guanidinoacetic acid (GAA) by increased expression of L-arginine:glycine amidotransferase, carbamoyl phosphate synthase and argF, argG and argH of arginine operon and to a method for the fermentative production of GAA using such microorganism. The present invention also relates to a method for the fermentative production of creatine.

21: 2022/07793. 22: 2022/07/13. 43: 2023/02/02
51: C07D A61K
71: LG CHEM, LTD.

72: YOON, Seung Hyun, JOO, Hyun Woo, SEO, Bo Kyung, LEE, Eun Jin, JUNG, Jin Young, YOON, Su Young, CHO, Woo Young

33: KR 31: 10-2019-0173487 32: 2019-12-23

54: NOVEL AMINO ARYL DERIVATIVE USEFUL AS DIACYLGLYCEROL ACYLTRANSFERASE 2 INHIBITOR AND USE THEREOF

00: -

The present invention relates to an amino aryl derivative compound, represented by chemical formula (1) and exhibiting the activity of a diacylglycerol acyltransferase 2 (DGAT2) inhibitor, a pharmaceutical composition comprising same as an active ingredient, and a use thereof.

21: 2022/07823. 22: 2022/07/14. 43: 2023/02/06
51: C22C

71: DIEHL BRASS SOLUTIONS STIFTUNG & CO. KG

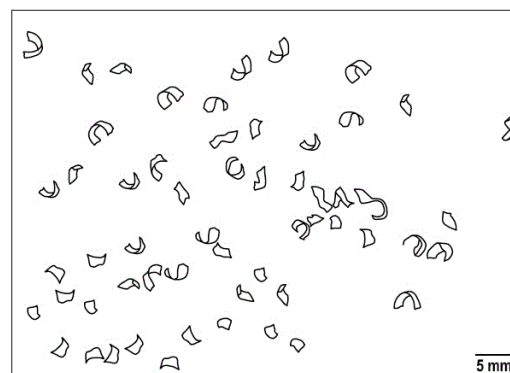
72: SEUß, Florian, FELDNER, Patrick, RICKEN, Hartmut, DEHNELT, Alexander

33: DE 31: 10 2021 119 474.1 32: 2021-07-27

54: LEAD- AND ANTIMONY-FREE BRASS ALLOY

00: -

The invention relates to a lead- and antimony-free brass alloy containing 56 to 66% Cu, 0.1 to 1.5% Mg, less than 0.1% Pb, balance Zn and also unavoidable impurities.



21: 2022/07824. 22: 2022/07/14. 43: 2023/02/06
51: C22C

71: DIEHL BRASS SOLUTIONS STIFTUNG & CO. KG

72: SEUß, Florian, DEHNELT, Alexander, BRÄUTIGAM, Volker

33: DE 31: 10 2021 118 907.1 32: 2021-07-21

54: LEAD-FREE BRASS ALLOY AND USE THEREOF

00: -

The invention relates to a lead-free brass alloy including 57.0 to 60.0% Cu, 1.0 to 2.0% Al, 1.5 to 2.5% Mn, 0.1 to 1.0% Fe, at most 0.5% Ni, at most 0.5% Sn, 0.5 to 2.0% Si, less than 0.1% Pb, balance Zn and also unavoidable impurities, wherein the copper equivalent (CuEq) is in the range from 52.0 to 58.0%.

21: 2022/07907. 22: 2022/07/15. 43: 2023/02/06

51: H04B

71: KRATOS INTEGRAL HOLDINGS, LLC

72: KING, Brandon, Gregory, JARRIEL, Jeffrey, David, STOLTENBERG, Matthew, James, SUTTON, Daniel, Joseph

33: US 31: 62/948,599 32: 2019-12-16

54: SYSTEM AND METHOD FOR COMBINING A PLURALITY OF DOWNLINK SIGNALS REPRESENTATIVE OF A COMMUNICATION SIGNAL

00: -

Embodiments of systems and methods for combining downlink signals representative of a communication signal are provided herein. An example method comprises receiving the downlink signals from antenna feeds. In a first processing block(s) in a processor(s), performing a first blind detection operation on first packets of a first signal, and performing a first doppler compensation operation on the first packets. In a second processing block(s) in the processor(s) in parallel with the first processing block(s), performing a second blind detection operation on second packets of a second signal, and performing a second doppler compensation operation on the second packets. The method also comprises combining the first signal and the second signal based on (i) aligning the first data packets with the second data packets and (ii) performing a weighted combiner operation that applies scaling to the first and second packets based on corresponding signal quality.

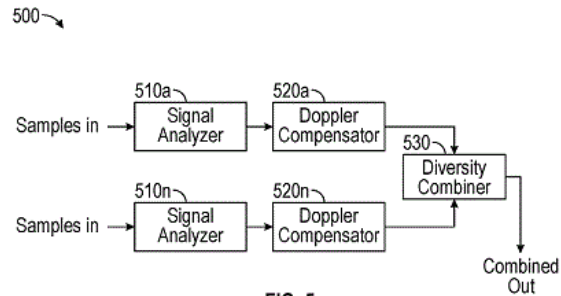


FIG. 5

21: 2022/07908. 22: 2022/07/15. 43: 2023/02/06

51: H04B

71: KRATOS INTEGRAL HOLDINGS, LLC

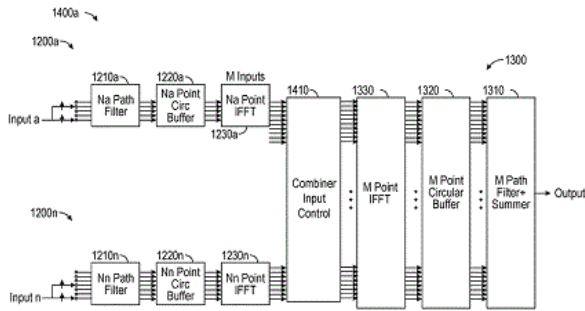
72: KING, Brandon, Gregory, JARRIEL, Jeffrey, David, STOLTENBERG, Matthew, James, SUTTON, Daniel, Joseph

33: US 31: 62/948,599 32: 2019-12-16

54: SYSTEM AND METHOD FOR MANAGING CHANNEL BANDWIDTH OF A COMMUNICATION SIGNAL

00: -

Embodiments of systems and methods for managing channel bandwidth of signals are provided herein. Example method include receiving signals from one or more antenna feeds, each signal having a first bandwidth. Some example methods include, in a plurality of processing blocks operating in parallel in one or more processors, performing one or more channelizer operations on portions of the signals, each channelizer operation creates a plurality of channels having a bandwidth smaller than the first bandwidth. Some methods may include, in a plurality of processing blocks in the one or more processors, performing one or more combiner operations on the channels, each operation combines the bandwidth of a subset of the channels into a combined channel, the plurality of processing blocks operating in parallel. The method then outputs the combined channel to a network.



21: 2022/07967. 22: 2022/07/18. 43: 2023/02/03

51: B26F; B65D; B67B

71: LESAFFRE ET COMPAGNIE

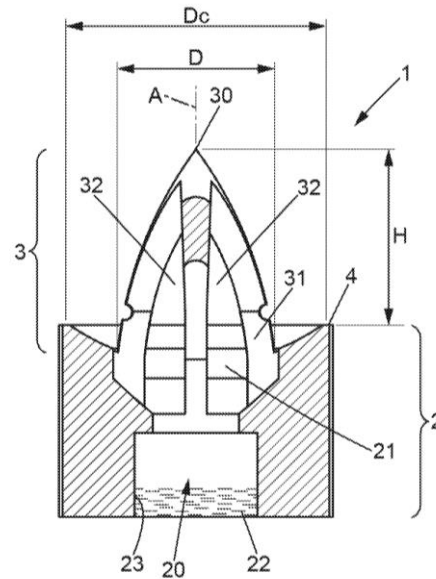
72: GATTI, Adrien, GUYOT, Matthieu, DUPIRE, Christian, SZYMANEK, Hervé, GOSSELIN, Yves

33: FR 31: FR1915023 32: 2019-12-19

54: POURING DEVICE

00: -

The invention relates to a pouring device (1) which is suitable for piercing and emptying granular material contained in vacuum packaging (P) and which comprises: - a tubular body (2) having a pipe (20) for conducting the material, the pipe (20) extending from an inlet mouth (21) located at a first end of the tubular body to an outlet mouth (22) for the granular material, located at a second end of the tubular body (2); - a hollow piercing tool (3) having a distal end terminating in a tip (30) and a widened base (31) at its proximal end, rigidly connected to the body. The device also comprises a shoulder (4) serving as a stop, configured to come into contact with the wall of the packaging so as to stop the pouring device when the wall is pierced by the piercing tool (3), and optionally a bowl (5) configured to return the granular material that escaped the hollow part of the piercing tool by gravity to the inside of the hollow part.



21: 2022/07968. 22: 2022/07/18. 43: 2023/02/24

51: B26F; B65D; B67B

71: LESAFFRE ET COMPAGNIE

72: GATTI, Adrien, GOSSELIN, Yves

33: FR 31: FR1915027 32: 2019-12-19

54: DISPENSING DEVICE

00: -

The invention relates to a dispensing device (1), which is hand-held or integral, suitable for perforating and emptying a granular material contained in a vacuum package (P) comprising: - a tubular body (2) having a pipe (20) for the flow of the material, extending from an inlet opening (21), positioned at a first end of the tubular body, up to an outlet opening (22) for the granular material, positioned at a second end of the tubular body (2); - a hollow perforating tool (3) having a distal end terminated at a tip (30) and a broad base (31) at its proximal end secured to the body. The device also comprises a shoulder (4) acting as a stop configured to come into contact with the wall of the package to ensure that the dispensing device stops when said wall is perforated by the perforating tool (3).

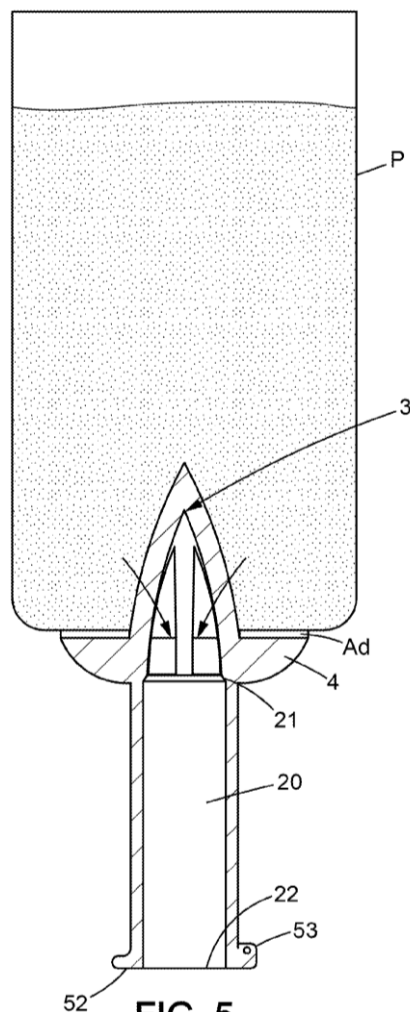


FIG. 5

21: 2022/07991. 22: 2022/07/18. 43: 2023/02/24
 51: A61K
 71: LYRUS LIFE SCIENCES PVT. LTD., NOKHA TRADING LLP
 72: BOTHRA, Chandanmal Pukhraj, BOTHRA, Hemanth Kumar, NATARAJAN, Elayaraja, MUNNANGI, Siva Ram, THALKARI, Manmath Nana, THANGAPRAGASAM, Manivel
 33: IN 31: 202041031047 32: 2020-07-21
54: NOVEL PROCESSES FOR THE PREPARATION OF RAPID MELT GRANULES
 00: -

The present invention relates to Rapid melt granules prepared by encapsulation and complexation processes. The present invention specifically relates to Rapid melt granules prepared by novel process of particulate coating comprising the steps of encapsulation of active ingredient with encapsulation polymer and / or pore former, drying, blending,

optionally polymer coating, drying before blending and filling into sachets or compressing into tablets. The present invention more specifically relates to Rapid melt granules prepared by novel process of complexation comprising the steps of complexation of active ingredient with sulfonated polymers of ion exchange resin, drying, blending, optionally polymer coating, drying before blending and filling into sachets or compressing into tablets.

21: 2022/07992. 22: 2022/07/18. 43: 2023/02/24
 51: A61K
 71: LYRUS LIFE SCIENCES PVT LTD, NOKHA TRADING LLP
 72: BOTHRA, Chandanmal Pukhraj, BOTHRA, Hemanth Kumar, NATARAJAN, Elayaraja, AJITHAN VARMA, Chitra, GOVINDAPPA, Venkateshappa
 33: IN 31: 202041021756 32: 2020-05-23
 33: IN 31: 202041022739 32: 2020-05-30
 33: IN 31: 202041023560 32: 2020-06-04
54: PHARMACEUTICAL COMPOSITION OF EXTENDED-RELEASE ORAL SUSPENSION AND PROCESS FOR PREPARATION THEREOF
 00: -

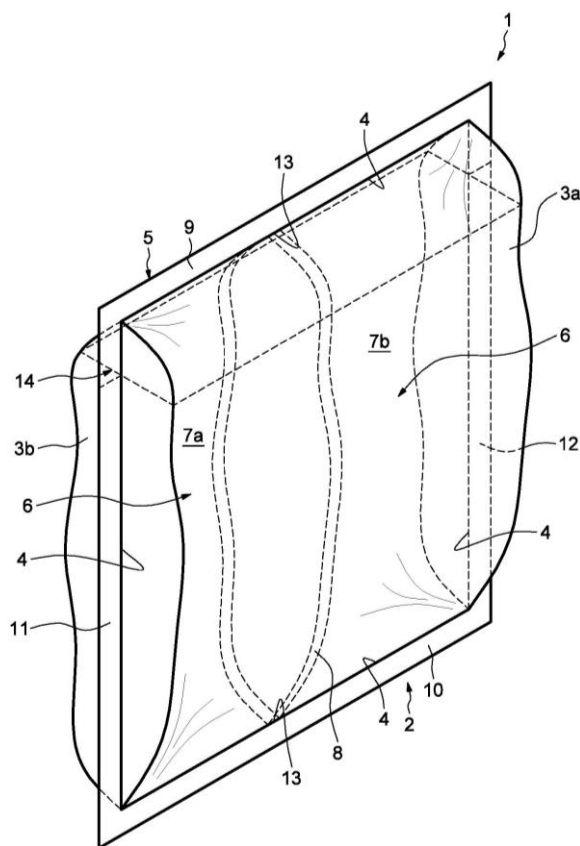
The present invention relates to extended-release suspension composition. The present invention specifically relates to extended-release suspension composition comprising active ingredient and pharmaceutically acceptable excipients, wherein said composition is in the form of powder for suspension or a ready to use suspension. The present invention specifically relates to extended-release suspension composition comprising active ingredient and pharmaceutically acceptable excipients, wherein said composition is devoid of uncoated active ingredient-ion exchange resin complex portion and polyvinyl acetate. The present invention also relates to extended-release suspension composition comprising one or more functional barrier coatings on active ingredient-ion exchange resin complex, wherein said functional barrier coatings comprises hypromellose and/or talc.

21: 2022/08042. 22: 2022/07/19. 43: 2023/02/08
 51: A61K; A61Q
 71: L'Oréal
 72: HALDER JOSHI, Shilpa, ALKAHWAJI, Amer, MAHADESHWAR, Anand, PAUL, Soumyadip, BHAN, Chandra
 33: IN 31: 201921053251 32: 2019-12-20

54: MULTIPLE-COMPARTMENT DEVICE COMPRISING AT LEAST ONE INTERNAL FRANGIBLE SEAL CONTAINING A KERATIN FIBERS DYEING COMPOSITION

00: -

The present invention relates to a multiple-compartment device (1) composed of a closed envelop (2) divided in at least two distinct compartments (7a) and (7b) separated from one another by at least one internal frangible seal (8), wherein one of the compartments (7a) containing a composition (A), comprising one oxidation dye precursor, one anionic surfactant, one amphoteric surfactant chosen from betaine; and another one of the compartments (7b) containing an oxidizing composition (B) comprising at least one oxidizing agent.



21: 2022/08207. 22: 2022/07/22. 43: 2023/03/31

51: A01N; A61L; C01B

71: AFRIFUME (PTY) LTD

72: Teunis NIEUWOUDT

33: ZA 31: 2021/05211 32: 2021-07-23

54: FUMIGANT COMPOSITION

00: -

The invention discloses a fumigant composition for controlling pests and/or weeds and/or bacteria and/or fungi and/or nematodes, which includes at least one allyl-isothiocyanates in combination with at least one synergistic compound adapted to increase the biological activity of the allyl-isothiocyanate by synergistic effect of its use. The composition may be a soil fumigant, a substrate fumigant and/or disinfectant for the control of various soil borne pathogens. The soil borne pathogens are fungi or bacteria, weeds and soil or substrate borne plant parasitic nematodes and pests.

21: 2022/08239. 22: 2022/07/22. 43: 2023/02/08

51: E05F

71: FOSHAN TIANSI HARDWARE CO., LTD

72: LIANG, Peiling

33: CN 31: 202010216699.0 32: 2020-03-25

33: CN 31: 202010263822.4 32: 2020-04-07

33: CN 31: 202010466917.6 32: 2020-05-28

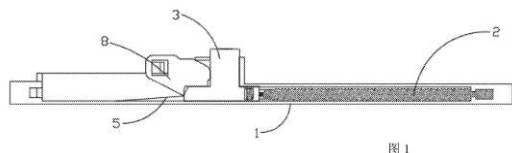
33: CN 31: 202010672141.3 32: 2020-07-14

54: HIDDEN RAIL DAMPER

00: -

The present invention provides a damper with hidden rail, comprising a shell and a damper, wherein the damper comprises a tension piece, a sliding block, a telescopic cylinder and a limiting piece, the sliding block is slidably mounted in the shell, and the tension piece is connected to the shell and the sliding block; the sliding block has a first position and a second position in the shell, and the tension piece is capable of pulling the sliding block to move from the first position to the second position; the limiting piece is connected to the sliding block, and the telescopic cylinder is mounted on the shell; or the telescopic cylinder is mounted on the sliding block, and the limiting piece is mounted on the shell; the limiting piece is provided with a compression surface, one end of the telescopic cylinder abuts against the compression surface directly or indirectly, and the telescopic cylinder and the limiting piece have a first relative position and a second relative position; in the process that the tension piece pulls the sliding block to move from the first position to the second position, the telescopic cylinder moves from the first relative position to the second relative position; and in the process that the telescopic cylinder moves from the first relative position to the second relative position, the

telescopic cylinder is gradually compressed. The damper provided by the present invention adopts a small-size telescopic cylinder, so the production cost of the damper is reduced.



21: 2022/08250. 22: 2022/07/25. 43: 2023/03/31

51: B01J; C25B

71: University of the Western Cape

72: Cecil FELIX, Wafeeq DAVIDS, Sivakumar PASUPATHI

33: GB 31: GB2110028.4 32: 2021-07-12

54: A STABLE REUSABLE GRAPHITE CRUCIBLE FOR UPSCALING OF UNSUPPORTED METAL OXIDES ELECTROCATALYSTS VIA A MODIFIED ADAMS FUSION METHOD

00: -

A stable reusable graphite crucible for use during the modified Adams fusion method (MAFM) for the upscaling of unsupported metal oxide electrocatalysts suitable for the oxygen evolution reaction (OER) in polymer electrolyte membrane water electrolyzers (PEMWE) is described. The graphite material displays no deterioration or involvement in the reaction after repeated use, whereas other crucibles crumbles/deteriorated. The graphite crucible is suitable for synthesis of batches as small as milligram scale up to the kilogram scale. The MAFM described here also eliminated the need for high quantities of the NaNO_3 reagent and the need for an annealing step and directly yields nano-sized electrocatalysts with crystallite sizes less than 50 nm and BET surface between 100 and 350 m^2g^{-1} . Three electrode electrochemical studies showed that electrocatalysts prepared using the graphite crucible and the MAFM showed enhanced activity and stability during the oxygen evolution reaction (OER).

21: 2022/08266. 22: 2022/07/25. 43: 2023/02/16

51: F24F

71: AAR MANUFACTURING, INC.

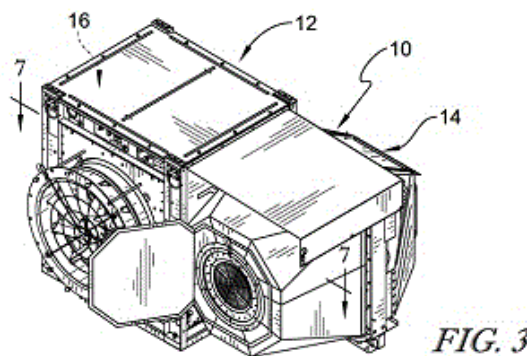
72: ESSO, DEREK P

33: US 31: 17/385,306 32: 2021-07-26

54: EXPANDABLE ENVIRONMENTAL CONTROL UNIT

00: -

An environmental control unit for providing heated or cooled air to an enclosed environment, such as a building structure or temporary shelter. Air passes through the environmental control unit and the air is heated or cooled by a temperature control system of the environmental control unit. The heated or cooled air is provided to the enclosed environment.



21: 2022/08279. 22: 2022/07/25. 43: 2023/02/08

51: H02J

71: AULTON NEW ENERGY AUTOMOTIVE TECHNOLOGY GROUP, SHANGHAI DIANBA NEW ENERGY TECHNOLOGY CO., LTD.

72: ZHANG, JIANPING, LIU, BING, CHEN, ZHIMIN

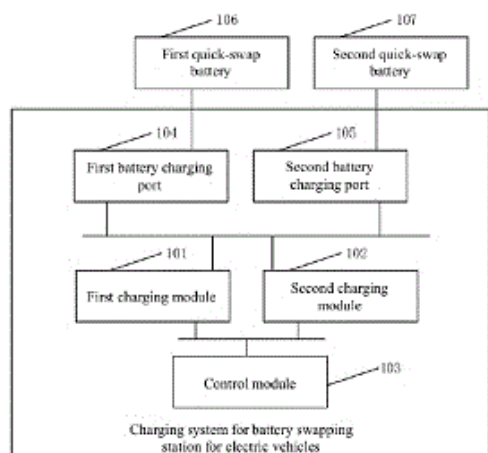
33: CN 31: 201911370518.3 32: 2019-12-26

54: CHARGING SYSTEM FOR SWAPPING STATION OR ENERGY STORAGE STATION

00: -

Provided is a charging system for a swapping station or an energy storage station. The charging system comprises at least two charging modules (101, 102, 201, 202, b1, d1, d2, d3, d4), battery charging ports (104, 105), and a control module (103, 203), wherein the at least two charging modules (101, 102, 201, 202, b1, d1, d2, d3, d4) are connected in parallel; and the control module (103, 203) is used for calling different numbers of charging modules (101, 102, 201, 202, b1, d1, d2, d3, d4) and/or controlling the output power of each of the charging modules (101, 102, 201, 202, b1, d1, d2, d3, d4), and for charging quick-swap batteries (106, 107, 207, 208, 209, BAT1, BAT2, BAT3, BAT4) by means of the battery charging ports (104, 105). Different numbers of charging modules (101, 102, 201, 202, b1, d1, d2,

d3, d4) are called according to the different charging requirements of batteries, and the output power of the charging modules (101, 102, 201, 202, b1, d1, d2, d3, d4) can also be controlled according to the different charging requirements of the batteries, such that the batteries with high charging requirements can be efficiently and quickly charged, electric energy can be rationally distributed, and the charging efficiency can be improved.



21: 2022/08333. 22: 2022/07/26. 43: 2023/02/07
51: A01N

71: Novamont S.p.A.

72: SAGLIANO, Angela, CIANCOLINI, Anna, CAPUZZI, Luigi

33: IT 31: 102020000003635 32: 2020-02-21

54: PELARGONIC ACID-BASED HERBICIDE COMPOSITIONS

00: -

The present invention relates to a concentrated emulsifiable composition comprising pelargonic acid and at least one emulsifying agent belonging to the class of anionic surfactants, preferably in acid form, at least one emulsifying agent belonging to the class of non-ionic surfactants and at least an organic solvent, a process for preparing said composition and use of said composition in herbicidal applications and as desiccant harvest aid. Said composition advantageously also finds use as a plant growth regulator.

21: 2022/08396. 22: 2022/07/27. 43: 2023/02/07
51: H04W

71: TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)

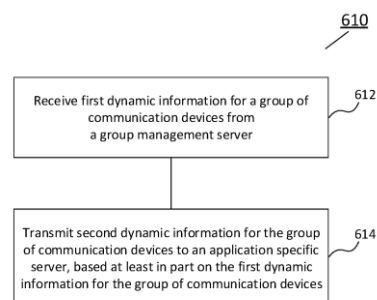
72: XU, Wenliang, EL ESSAILI, Ali

33: CN 31: PCT/CN2020/070460 32: 2020-01-06

54: METHOD AND APPARATUS FOR DYNAMIC GROUP MANAGEMENT

00: -

Various embodiments of the present disclosure provide a method for dynamic group management. The method which may be performed by a vertical application layer server comprises receiving first dynamic information for a group of communication devices from a group management server. The method further comprises transmitting second dynamic information for the group of communication devices to an application specific server, based at least in part on the first dynamic information for the group of communication devices. In accordance with some embodiments of the present disclosure, the application specific server may get the dynamic information about group membership effectively during dynamic group management.



21: 2022/08397. 22: 2022/07/27. 43: 2023/02/22
51: A61K

71: CANNAXAN GMBH

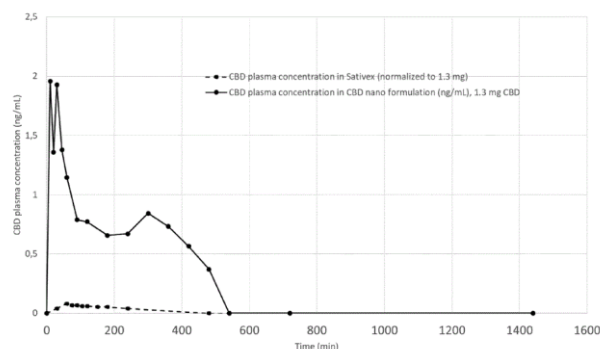
72: BRAND, Werner

33: EP 31: 20150397.6 32: 2020-01-06

54: PREPARATION AND USE OF CANNABIS NANO-FORMULATION

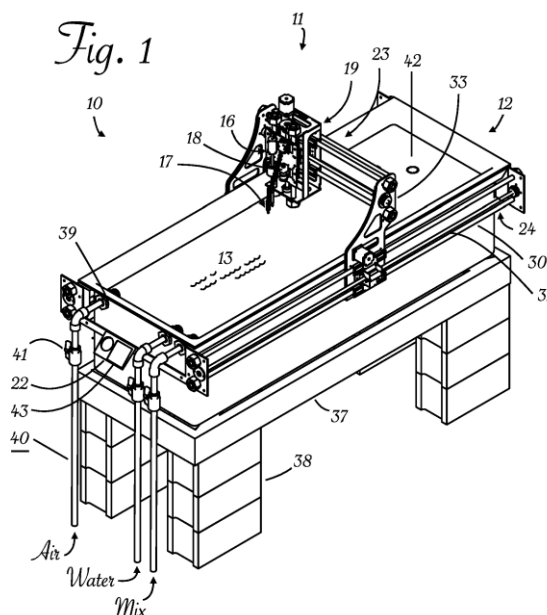
00: -

The present application relates to a formulation comprising at least one natural cannabis material, at least one solvent, and at least one stabilizer, wherein the formulation is a liquid suspension having a particle size (D_{50}) of below 500 nm, and the use thereof in the treatment of a disease.



21: 2022/08398. 22: 2022/07/27. 43: 2023/02/07
 51: A01K; B25J
 71: CHARM IP PTY LTD
 72: RODAN, Stephen Francis
 33: US 31: 16/774,177 32: 2020-01-28
54: AN APPARATUS AND METHOD FOR CORAL HUSBANDRY

00: -
 An apparatus and method for coral husbandry including a frame configured to attach to an aquaculture raceway, a carriage having a plurality of tools mounted thereon, the carriage being attached to the frame and configured to move relative to the frame, the plurality of tools comprising a rotary tool having a tool member attached thereto, a nozzle configured for at least one-way fluid communication, and an inspection instrument for monitoring and cataloguing coral reef specimens.



21: 2022/08401. 22: 2022/07/27. 43: 2023/02/22
 51: H02G
 71: CCG INTERNATIONAL HOLDINGS LIMITED
 72: LACKINGER, Nicholas Franz Edward, MOOD, Geoffrey Ingles
 33: GB 31: 1919460.4 32: 2019-12-31
54: RESIN POT COMPONENT FOR AN INSPECTABLE BARRIER CABLE GLAND
 00: -

A resin pot assembly for use with a barrier cable gland is provided. The resin pot assembly is shaped and dimensioned to locate within an internal cavity of a cooperating barrier cable gland and has a closable end configured to seal onto a cable sheath of a cable in an installed condition. The resin pot assembly has two, coaxial components configured in the installed condition to surround a plurality of individually electrically insulated conductors extending out of the cable sheath. A first hollow component in the form of a clear cylinder provides the closable end of the resin pot assembly and a second hollow component, which is rigid, provides an open end of the resin pot assembly and is axially spaced apart from the closable end of the resin pot assembly. The resin pot assembly operatively receives a resin mix therein.

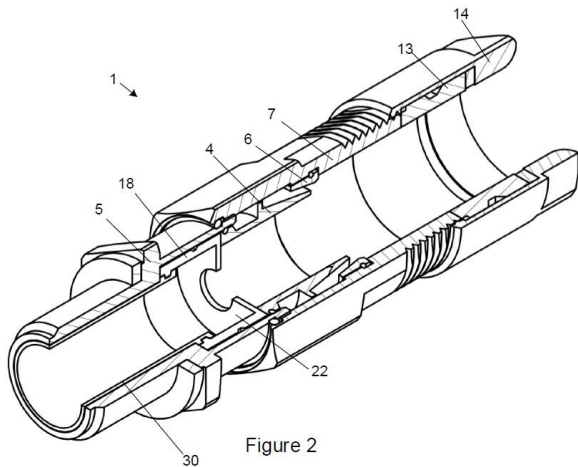


Figure 2

21: 2022/08419. 22: 2022/07/27. 43: 2023/02/21

51: H01H

71: General Equipment and Manufacturing Company, Inc. d/b/a Topworx, Inc.

72: LAFOUNTAIN, Robert L., SIMMONS, Michael J.

33: US 31: 16/738,856 32: 2020-01-09

54: MAGNETIC REED SWITCH ASSEMBLY AND METHOD

00: -

A magnetic reed switch assembly. The magnetic reed switch assembly includes a reed switch having a body and a pair of electrical contacts disposed in the body. A ring magnet has a bore, and a portion of the body of the reed switch is disposed within the bore, with the ring magnet positioned close to the pair of electrical contacts. The ring magnet is movable along the axis of the body between a first position and a second position. A plunger includes a proximal end coupled to the ring magnet and a distal end having a sensing magnet. When a ferrous target is disposed near the sensing magnet, the plunger moves toward the ferrous target causing the ring magnet to move from the first position to the second position, and the reed switch to move from an open state to a closed state.

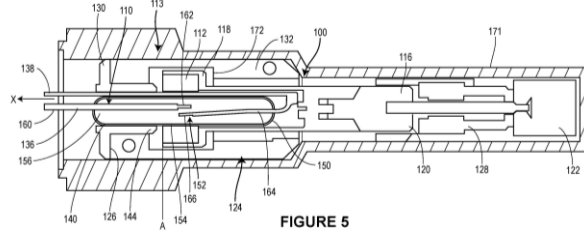


FIGURE 5

21: 2022/08437. 22: 2022/07/28. 43: 2023/02/08

51: B01D; C02F; E03B

71: EDC TANKS

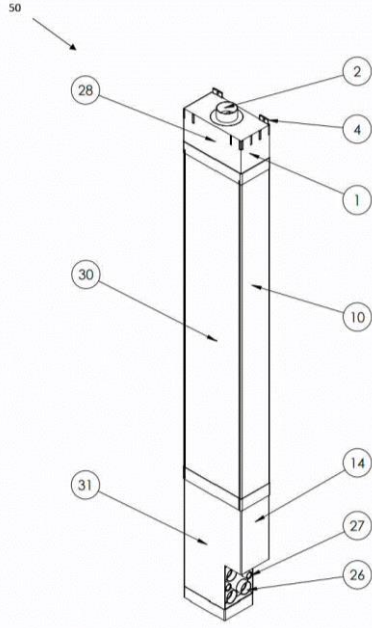
72: SINGH, Ajit

33: ZA 31: 2021/05331 32: 2021-07-28

54: HARVESTER TANK ASSEMBLY AND FILTRATION ARRANGEMENTS THEREFOR

00: -

This invention relates to a harvester tank assembly and a filtration arrangements therefor. The harvester tank assembly comprises an inlet for receiving rainwater and a discharge outlet; an elongate body in communication with the inlet, the elongate body defining a holding chamber for holding water; and a filtration arrangement attached or attachable to the elongate body. The filtration arrangement comprises a first filtration system attached or attachable between the holding chamber and the inlet for filtering water received into the elongate body via the inlet prior to the water being fed into the holding chamber. In addition the filtration arrangement comprises a second filtration system attached or attachable between the holding chamber and the discharge outlet to further filter the water prior to the water being released via the discharge outlet. Filter arrangement for harvester tanks are also disclosed herein.



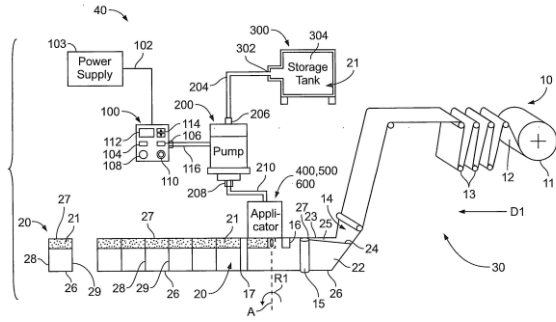
21: 2022/08465. 22: 2022/07/28. 43: 2023/02/08
51: A61L

71: Reynolds Consumer Products LLC
72: MORAS, Wayne, PATEL, Asmin
33: US 31: 16/777,429 32: 2020-01-30

54: A SYSTEM AND METHOD FOR APPLYING A FRAGRANCE OR MALODOR CONTROL AGENT TO A PLASTIC WEB

00: -

A system and method for applying a fragrance or malodor control agent to a plastic web is provided. The system includes a form and seal machine that is used to form and seal a plastic web and a fragrance or malodor control agent applicator that applies a fragrance or malodor control agent to the plastic web. The fragrance or malodor control agent applicator designed to apply fragrance or malodor control agent directly to a first interior surface and a second interior surface formed by folding the plastic web with the form and seal machine.



21: 2022/08468. 22: 2022/07/28. 43: 2023/02/21
51: A61K; A61P

71: Astromedical Biotechnology, Ltd.

72: WANG, James Chyan-Ji

33: US 31: 62/960,255 32: 2020-01-13

54: USE OF KETAMINE IN THE TREATMENT OF CACHEXIA

00: -

Disclosed herein is an use of ketamine in the treatment of cachexia, wherein the ketamine is administered to a subject who is treated with 5-FU and the dose amount of ketamine is about 60% to 5-FU. Specifically, the ketamine in the present invention is used to elevate the survival rate and improve the reduction of weight caused by cachexia.

21: 2022/08510. 22: 2022/07/29. 43: 2023/02/08
51: F16H; F16J

71: Transportation IP Holdings, LLC

72: LEUTE, Scott, KARMARKAR, Uday,
ARMBRUSTER, Robert

33: US 31: 17/450,053 32: 2021-10-05

54: GEARCASE SYSTEM FOR MOTOR AND WHEEL SET ASSEMBLY

00: -

Systems and methods are provided for a gearcase of a motor and wheel set assembly configured to enclose a gear set, including a first case element, a second case element configured to mate with the first case element to contain lubricating oil for at least the gear set and a pinion, and a rubberized seal. In one example, a system may include permanent rubberized seals sealing an opening configured to receive the pinion, an interface between the first case element and the second case element and a bearing cap.

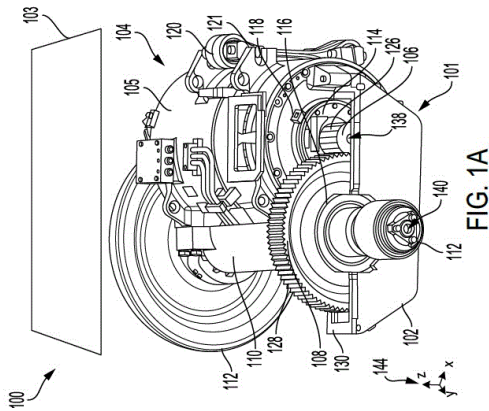


FIG. 1A

21: 2022/08544. 22: 2022/08/01. 43: 2023/02/28

51: G06Q

71: Safe Take Cash (Pty) Ltd.

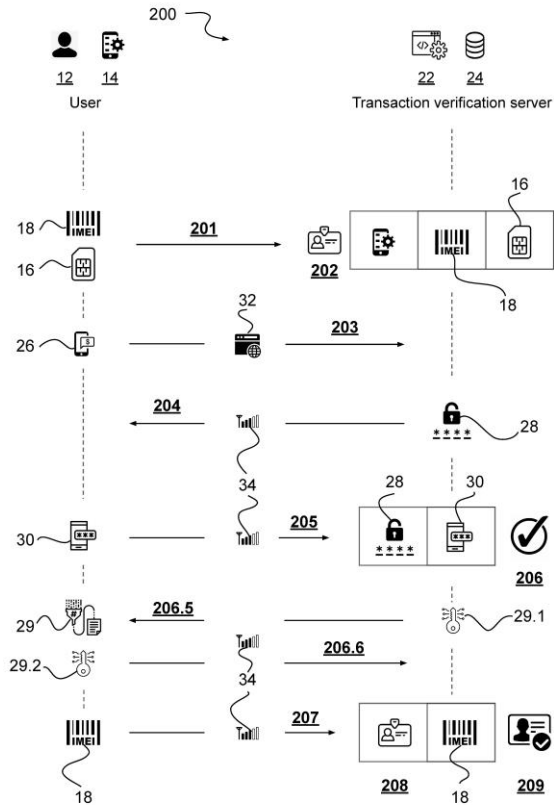
72: VAN DER MERWE, Alwyn

33: ZA 31: 2021/05449 32: 2021-08-02

54: A MULTI-FACTOR AUTHENTICATION METHOD AND SYSTEM

00: -

A multi-factor authentication method and system for approving a payment transaction, the method including the steps of: uploading a unique device identifier of a user; uploading a unique Subscriber Identification Module (SIM) identifier of the user; creating a user identity; receiving, from the user, a transaction verification request; transmitting a server-generated time-sensitive secret code; receiving a device-originating secret code; authenticating the user; verifying the device-originating secret code against the server-generated time-sensitive secret code; and approving the transaction upon successful authentication of the user and successful verification of the device-originating secret code, and declining of the transaction upon any one or more of: failure of authenticating of the user and failure of verifying of the device-originating secret code.



21: 2022/08545. 22: 2022/08/01. 43: 2023/02/28

51: G06Q

71: Safe Take Cash (Pty) Ltd.

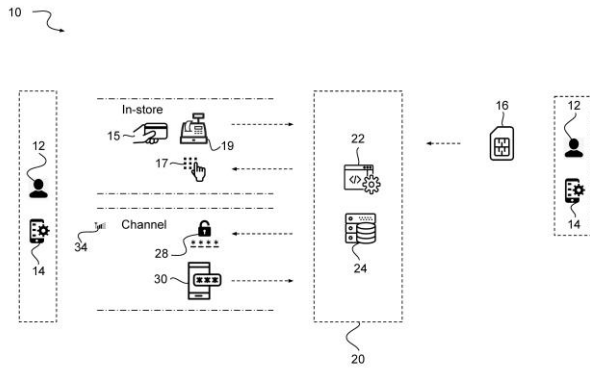
72: VAN DER MERWE, Alwyn

33: ZA 31: 2021/05450 32: 2021-08-02

54: A METHOD AND SYSTEM OF AUTHORIZING A PAYMENT TRANSACTION

00: -

A method and system of authorizing a payment transaction which includes the steps of: issuing a user with a payment device and linking a Personal Identification Number (PIN) to the payment device; registering a unique Subscriber Identification Module (SIM) identifier of a user mobile device; requesting the user's entering of their PIN upon the user's presenting of the payment device at a Point of Sale (POS) terminal when conducting a payment transaction; transmitting a server-generated time-sensitive secret code to the SIM card of the user, and in reply thereto, receiving a user-transmitted secret code; and verifying the PIN entered by the user against the PIN of the payment device and verifying the server-generated time-sensitive secret code against the user-transmitted secret code.



21: 2022/08546. 22: 2022/08/01. 43: 2023/02/28

51: B60B

71: VESCONITE BEARINGS

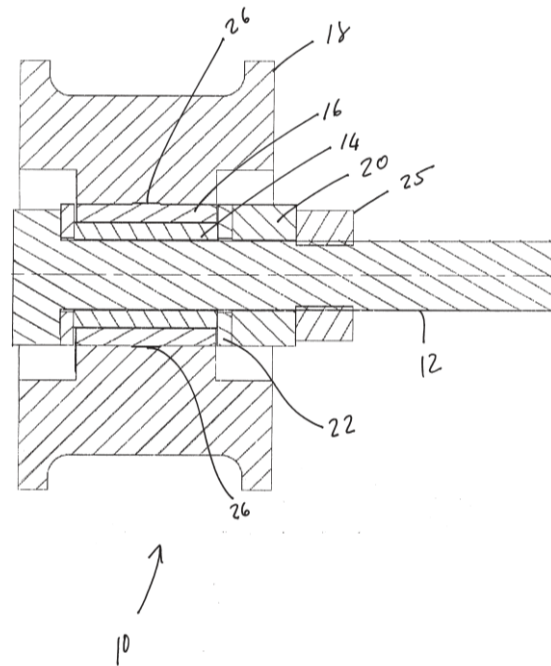
72: FOURIE, Petrus, Johannes, VAN WYK, Juan, LEGER, Jean-Patrick

33: ZA 31: 2021/05768 32: 2021-08-13

54: A CANTILEVER ROLLER

00: -

A cantilever roller which includes an axle, a roller arrangement receiving formation mounted about a portion of the axle for rotatably receiving a roller arrangement, the roller arrangement comprising a centrally defined bearing formation, and, an outer roller member mounted about the centrally defined bearing member; and axle mountable securing formations for keeping the roller arrangement receiving formation in place while allowing relatively free rotation of the roller arrangement relative the axle.



21: 2022/08547. 22: 2022/08/01. 43: 2023/02/28

51: G06F

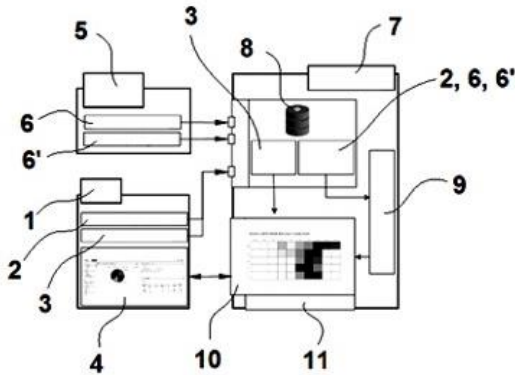
71: UNIVERSIDAD INTERNACIONAL DE LA RIOJA (UNIR)

72: BURGOS SOLANS, Daniel

54: PROCESS FOR DETECTING FRAUDULENT BEHAVIOURS IN ACTIVITIES CONDUCTED BY USERS OF CONTENT MANAGEMENT SYSTEMS

00: -

The invention relates to a process and system for monitoring activities performed by user groups in online digital environments based on one or more web services comprising at least: one CMS (1) configured with different activities that can be performed by the users, and with one or more recording means for recording activity records (2) and/or results (3) associated with the performance of activities performed by said users, and a user evaluation web platform (7). Said platform (7) advantageously comprises a calculation module (9) configured for calculating the similarity of the activity records (2, 6, 6') of the CMS (1) and of the secondary data sources (5), evaluated between two or more users of the system, and associating said similarity with the result (3) obtained in the performance of said activities, and a display module (10) configured for reading and representing the calculated similarity information.



21: 2022/08612. 22: 2022/07/29. 43: 2023/03/23

51: F21L; F21S; F21V

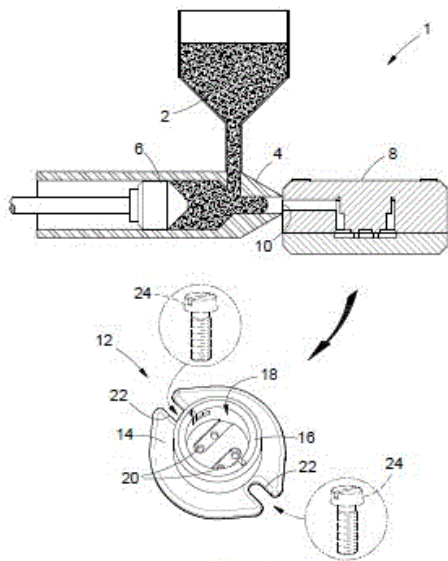
71: DYNAMIC DISTRIBUTORS (PTY) LTD

72: TONER, Shaun

54: A SHATTERPROOF AND HEAT RESISTANT HOLDER

00: -

The invention related to a device suitable for receiving an object therein, the device including a body defining a region; a support member for supporting an object; and securing means for securing the support member to the region defined by the body.



21: 2022/08615. 22: 2022/08/02. 43: 2023/03/23

51: B65B; B67C

71: FILKRAFT PTY LTD

72: Jacobus Cornelius LOCK, Elias Lourens KAMFER

33: ZA 31: 2021/02980 32: 2021-05-04

54: ROTARY PISTON FILLER ARRANGEMENT

00: -

The invention discloses a rotary piston filler arrangement, which includes at least one electronically actuated piston adapted to fill products into containers. The pistons are individually actuated and are tailored to a specific product. The arrangement is adapted to allow air to be purged from the pistons and without discharging any product, drastically reducing product and container waste. Since the pistons are not cam bound, charging the pistons with product is done at higher than filling speed, increasing the output speed of the machine.

21: 2022/08616. 22: 2022/08/02. 43: 2023/04/05

51: F42D

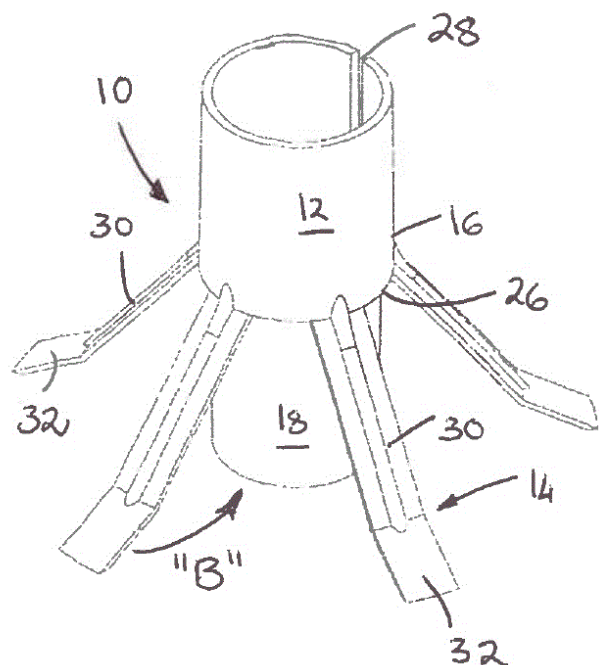
71: LUBBE, Gert, Petrus

72: LUBBE, Gert, Petrus

54: A DEVICE FOR POSITIONING AND SECURING BLAST EQUIPMENT IN A BLAST HOLE

00: -

A device 10 for positioning and securing blast equipment in a blast hole (not shown) includes a primary receiving formation 12 configured and dimensioned to receive blast equipment (not shown) therein. The device is provided with outwardly biased gripping formations 14 extending from an outer wall 16 of the device 10 for in use engaging a wall of a blast hole, thereby securing the device 10 substantially centrally at a desired location in the blast hole. The device 10 further includes a secondary receiving formation 18 extending from the primary receiving formation 16.



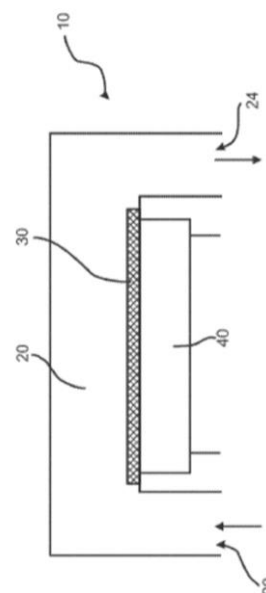
21: 2022/08647. 22: 2022/08/02. 43: 2023/02/28
 51: C08G; C08K; C08L
 71: LANXESS Solutions Australia Pty. Ltd.
 72: TRAN, Loc, BUDD, Brett
 33: US 31: 62/971,275 32: 2020-02-07
54: POLYURETHANE MULTI-PART KIT SYSTEM
 00: -

This invention relates to a multi-part kit system to repair damaged products used in industrial applications, comprising a part A which comprises A1) MDI prepolymer, A2) fumed silica and A3) plasticizer; a part B which comprises B1) hydroquinone di-(2-hydroxyethyl)ether and B2) plasticizer; and a part C which comprises C1) polyol, C2) optionally catalyst and C3) optionally plasticizer.

21: 2022/08649. 22: 2022/08/02. 43: 2023/02/28
 51: H01M
 71: AVL LIST GMBH
 72: NEUBAUER, Raphael, STRASSER-KRAUSS, Thomas
 33: AT 31: A50092/2020 32: 2020-02-06
54: PROTECTIVE REFORMER DEVICE FOR THE PROTECTION OF AN ANODE SECTION OF A FUEL CELL STACK
 00: -

The present invention relates to a protective reformer device (10) for the protection of an anode section (112) of a fuel cell stack (110) against oxidizing damage during a heating-up process,

having a gas duct (20) with a gas inlet (22) and a gas outlet (24) for conducting fuel gas from an anode feed section (120) of the fuel cell stack (110), wherein a catalytic converter section (30) is arranged in the gas duct (20) for a catalytic oxidation of at least part of the fuel gas into a protective gas for feeding to the anode section (112), wherein, furthermore, the gas duct (20) has a temperature control device (40) in thermally transmitting contact with the catalytic converter section (30) for an active temperature control of the catalytic converter section (30).



21: 2022/08650. 22: 2022/08/02. 43: 2023/03/17
 51: A61K; A61P
 71: ORANO MED
 72: A. STALLONS, Tania, TORQUE, Julien, E. KIEFER, Garry, ROJAS-QUIJANO, Federico
 33: EP 31: 20305138.8 32: 2020-02-13
54: PROCESS FOR SITE-SPECIFIC MODIFICATION OF AN ANTIBODY
 00: -

The present application concerns a process for preparing a site-specific bioconjugated antibody with a metal Chelator, the bioconjugated antibody and its use in nuclear medicine.

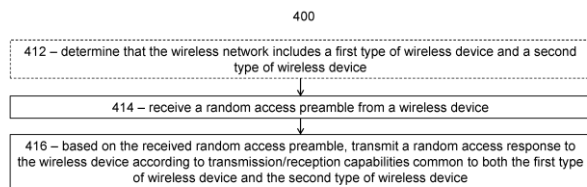
21: 2022/08681. 22: 2022/08/03. 43: 2023/02/28
 51: H04W
 71: TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)

72: BEHRAVAN, Ali, KADAN VEEDU, Sandeep, Narayanan, SUI, Yutao, MOZAFFARI, Mohammad, HÖGLUND, Andreas, HOSSAIN, Istiak
 33: US 31: 62/958,990 32: 2020-01-09

54: RANDOM ACCESS FOR LOW-COMPLEXITY USER EQUIPMENT

00: -

According to some embodiments, a method is performed by a network node for random access in a wireless network. The network node is suitable for serving a first type of wireless device and a second type of wireless device and transmission/reception capabilities of the first type of wireless device are reduced with respect to transmission/reception capabilities of the second type of wireless device. The method comprises receiving a random access preamble from a wireless device and, based on the received random access preamble, transmitting a random access response to the wireless device according to transmission/reception capabilities common to both the first type of wireless device and the second type of wireless device.



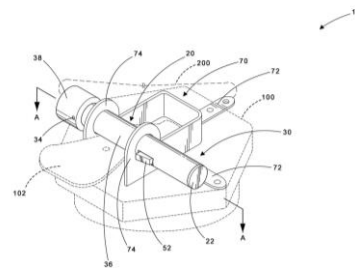
21: 2022/08735. 22: 2022/08/04. 43: 2023/03/02
 51: E05B; F01P; F28C
 71: LDD MARKETING (PTY) LTD
 72: PILLAY, Strinivasan Kisten, PILLAY, Sabashnie, PILLAY, Thirosan Strinivasan
 33: ZA 31: 2021/03199 32: 2021-05-12

54: LOCKS

00: -

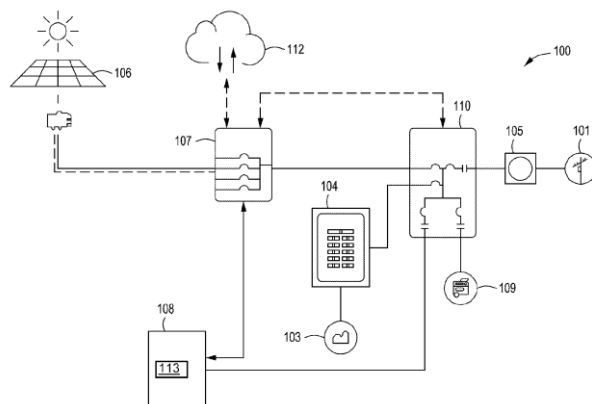
The invention relates to a locking device for a lever operated radiator cap, which includes a lock associated with a lever operated radiator cap, the lock being displaceable between a locked condition and an unlocked condition, in a locked condition the lock is operable to interfere with the lever so as to prevent operation of the lever. The locking device includes a bracket attachable to either the radiator cap or radiator neck, wherein a lock retaining formation is operable to interact with the lock when the lock is in a locked position. In an unlocked

position, the retaining formation is displaced away from the lock, to allow removal of the radiator cap.



21: 2022/08742. 22: 2022/08/04. 43: 2022/09/21
 51: H02J; H02S
 71: ENPHASE ENERGY, INC.
 72: BOZCHALUI, Mohammad Chehrehghani
 33: US 31: 62/959,419 32: 2020-01-10
54: STORAGE SYSTEM CONFIGURED FOR USE WITH AN ENERGY MANAGEMENT SYSTEM
 00: -

A storage system configured for use with an energy management system is provided and includes a single-phase AC coupled battery or a three-phase AC coupled battery, a plurality of microinverters that are configured to connect to one or more battery cell core pack that form a local grid, and a controller configured to detect when to charge or discharge the single-phase AC coupled battery or the three-phase AC coupled battery so that energy can be stored therein when energy is abundant and used when energy is scarce.



21: 2022/08768. 22: 2022/08/05. 43: 2023/02/28
 51: F16K
 71: I-CAT INTERNATIONAL CONSULTING AND TRADING (PTY) LTD

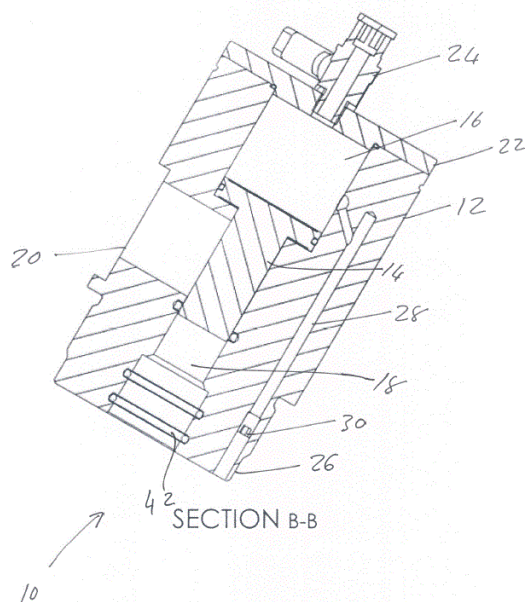
72: ROTHMANN, David, Schalk, VAN DER MERWE, Antonie, Duminy

33: ZA 31: 2021/05819 32: 2021-08-16

54: DIFFERENTIAL PRESSURE CONTROL VALVE

00: -

A differential pressure control valve having pressure equalising properties and configured to be activated when experiencing a pressure differential over a pair of valve chambers separated by a valve piston, which includes an equalising mechanism for, within limits, equalising pressure between the pair of valve chambers to inhibit displacement of the valve piston.



21: 2022/08804. 22: 2022/08/05. 43: 2023/03/16
51: C12Q

71: DIAGONAL BIO AB

72: PUNYANI, Kushagr, NYBERG, Per Andreas, SØPSTAD, Sindre, PEACOCK, Martin, XIONG, Linhongjia, SHIN, Jae Yen

33: EP 31: 20168019.6 32: 2020-04-03

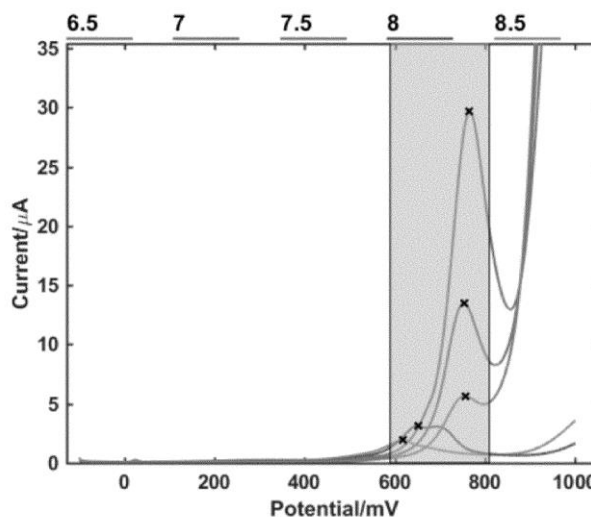
33: EP 31: 20197572.9 32: 2020-09-22

54: A METHOD OF MEASURING THE PH OF A SAMPLE

00: -

The present invention provides a more sensitive and accurate method of monitoring the pH of a solution, wherein the pH of the solution is quantified as a function of the electrochemical response of the solution in a two or three-electrode electrochemical cell, wherein the solution comprises a compound

capable of undergoing a change in its oxidation state and/or structural conformation as a function of the pH of the solution. The present invention also provides highly accelerated methods and processes enabling analysis of specific polynucleotide sequences in a sample, e.g. a biological sample. The methods of the inventions are, for example, useful for rapid screening of a large amount of samples in a point-of-care setting.



21: 2022/08807. 22: 2022/08/05. 43: 2023/04/11

51: A61K; C07K; C12N; A61P

71: SHANGHAI HENLIUS BIOTECH, INC.

72: YANG, Ming, XU, Wenfeng, JIANG, Wei-Dong, XUE, Jie

33: CN 31: 202010024565.9 32: 2020-01-10

54: ANTI-TIGIT ANTIBODIES AND USAGE METHOD

00: -

Provided are anti-TIGIT antibodies that bind to "a T cell immunoreceptor with Ig and ITIM domains (TIGIT)". Such antibodies comprise multi-specific anti-TIGIT antibodies having binding specificity for TIGIT and one or more additional antigens; and a usage method therefor. Such anti-TIGIT antibodies comprise a single domain antibody that binds to TIGIT.

21: 2022/08850. 22: 2022/08/08. 43: 2023/03/17

51: D06N

71: CONDOR TRADE S.R.L.

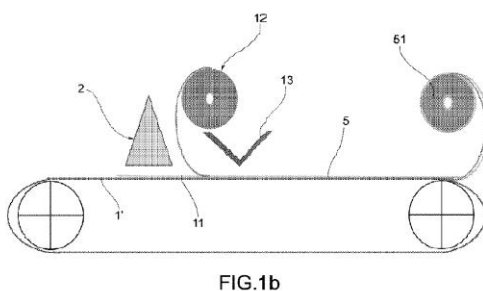
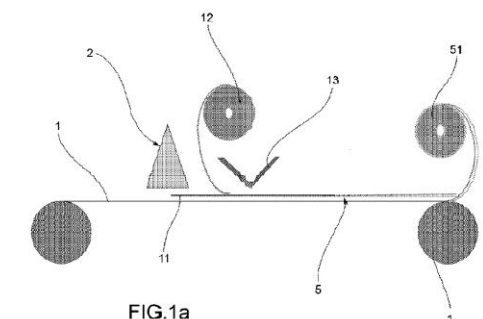
72: FIDANZA, Virginio Abbondio, VENTURA, Emanuele

33: IT 31: 102020000003401 32: 2020-02-19

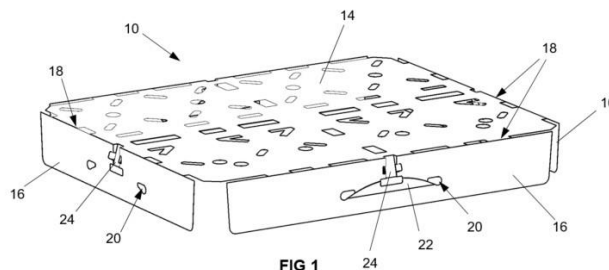
54: METHOD OF PRODUCING A SUPPORT FOR POLYURETHANE-BASED IMITATION LEATHER FREE OF DIMETHYLFORMAMIDE (DMFA) OR OTHER SOLVENTS OR WATER, AND RELATED METHOD OF PRODUCING AN IMITATION LEATHER

00: -

A method of producing a support (5) for polyurethane based imitation leather free of dimethylformamide (DMFA) or other solvents or water, comprises the steps of: - preparing a base (1,1'); spray distributing a polyurethane layer (11) on the base (1, 1'); this step involves: preparing a component (A) and a component (B) of the polyurethane (11); combining the two components (A, B) to obtain a mixture; - spray distributing the mixture uniformly on the base (1,1') forming the polyurethane layer (11); - applying a backing (12) on the polyurethane layer (11) forming a support (5); - drying the support (5).



which the flap (16) extends perpendicularly to the top wall (14). A tab (24) is folded from the blank (12) and is attached either to the top wall (14) or to the flap (16), to extend between the top wall (14) and the flap (16) in a lock position, to hold the flap (16) in its erected position when the tab (24) is in its lock position.



21: 2022/08941. 22: 2022/08/10. 43: 2023/02/03
51: A61K; A61Q
71: L'ORÉAL

72: PARIKH, Dhara, COMERON-DECARLO, Vanessa, SULEIMAN, Aziza Khader
33: US 31: 16/805,032 32: 2020-02-28

33: FR 31: 2003162 32: 2020-03-31

54: COSMETIC COMPOSITIONS CONTAINING A SUGAR ALCOHOL, A SACCHARIDE COMPOUND AND PECTIN AND METHODS OF USE

00: -

The present disclosure relates to hair cosmetic compositions comprising: (a) at least one sugar alcohol; (b) at least one saccharide compound, and mixtures thereof; (c) pectin; (d) at least one water-soluble solvent; and (e) water. The hair cosmetic compositions provide excellent hair styling benefits without requiring synthetic film-forming polymers and/or silicones. In particular, the hair cosmetic compositions are useful for imparting to hair, durable styling or shaping benefits, curl definition, curl regularity, shape/styling control, shine, and frizz control.

21: 2022/08928. 22: 2022/08/10. 43: 2023/03/14
51: B65D

71: APL CARTONS (PTY) LTD

72: GROBBELAAR, Dewald, BARENDILLA, Clyde, KLEINHANS, Frederick Dewald

54: PALLET TOP CAP

00: -

A top cap (10) is folded from a blank (12) to form a top wall (14) and flaps (16) that are folded from edges of the top wall (14) to an erected position in

21: 2022/09052. 22: 2022/08/12. 43: 2023/03/24
51: C05F

71: MICO-SYSTEMS GMBH

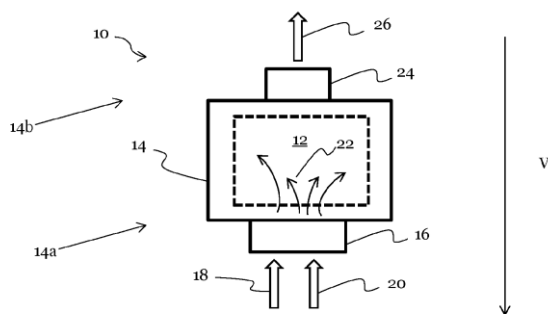
72: LUNG, Gerhard, VON KÖNEMANN, Olaf, BÖHM, Georg

33: EP 31: 20160130.9 32: 2020-02-28

54: EXTRACTION APPARATUS AND EXTRACTION METHOD FOR A FERMENTATION MEDIUM

00: -

An extraction apparatus for a fermentation medium comprises an extraction chamber configured to receive a fermentation medium and comprising a lower portion and an upper portion above the lower portion, as well as a feed device configured to feed at least one gas and one liquid into the lower portion of the extraction chamber, as well as a discharge opening arranged in the upper portion of the extraction chamber and configured to drain a washout liquid, loaded with microorganisms, from the extraction chamber.



21: 2022/09053. 22: 2022/08/12. 43: 2023/03/17
 51: A61B
 71: ORTHOFIX S.R.L., TEXAS SCOTTISH RITE HOSPITAL FOR CHILDREN
 72: VENTURINI, Daniele, OTTOBONI, Andrea, MILANO, Gianluca, ROSS, John David Jr., STANDEFER, Karen Divita, SAMCHUKOV, Mikhail, CHERKASHIN, Alexander
 33: US 31: 16/827,269 32: 2020-03-23
 33: EP 31: 20164789.8 32: 2020-03-23
 33: EP 31: 20217764.8 32: 2020-12-30

54: IMPROVED EXTERNAL FIXATION STRUT

00: -

The present disclosure relates to improved external fixation strut comprising: - an elongated body comprising a first and a second hollow tubular shaft; - opposite connectors respectively coupled to an end portion of the first or the second shaft and each including a ball and socket joint; - one shaft having an internal diameter that is slightly larger than the external diameter than the other shaft to host internally the other shaft in a slidably and telescopic manner; - said first and second shafts of the strut being realized by a synthetic radiolucent plastic material; - a clamp element provided in proximity of overlapping ends of the first and second shaft for

providing a fast gripping action stopping the telescopic sliding of one shaft inside the other shaft; - a manually operated fixation element acting on the clamp element for exerting said fast gripping action - a sleeve provided around the central portion of the strut where the first and second shaft overlap; - a clamp band around said sleeve and including opposite and facing gripping portions, said gripping portions being connected by a threaded connector. A fixation system is also disclosed including at least a first and a second fixation ring and/or at least a fixation arch interconnected by at least one of the above fixation struts.

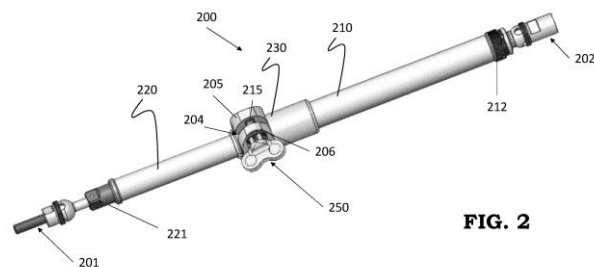
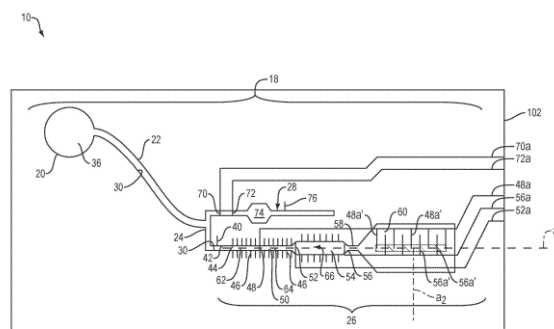
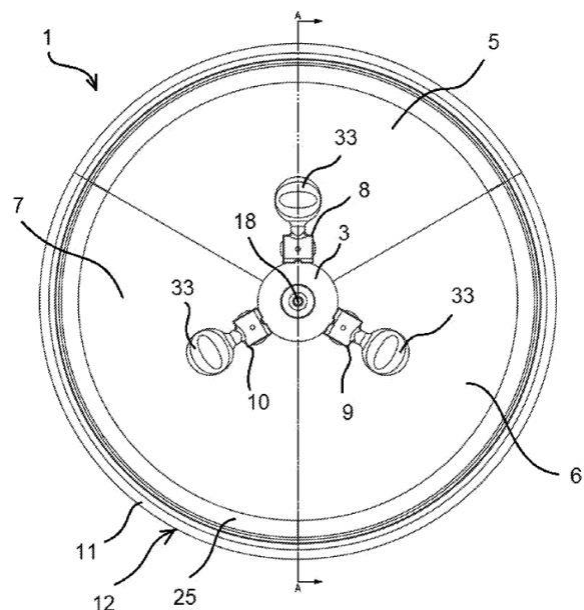


FIG. 2

21: 2022/09054. 22: 2022/08/12. 43: 2023/03/24
 51: A61G; B60B
 71: P + L INNOVATIONS GMBH
 72: Michael EICH, Wolf-Dietrich PFLAUMBAUM
 33: DE 31: 10 2020 103 171.8 32: 2020-02-07
54: WHEELCHAIR WHEEL

00: -

The invention relates to a wheelchair wheel (1) which is rotatable about an axis of rotation (2) and comprises: a hub (3), which can be connected to a wheel axle (18) of a wheelchair frame; a wheel body which is arranged on the hub (3), forms a running surface (12) of the wheelchair wheel (1) and constitutes the connection between the running surface (12) and the hub (3), said wheel body being composed of three wheel body segments (5, 6, 7), each wheel body segment (5, 6, 7) being equipped with a rim profile (19) and a tyre portion (20) arranged in the rim profile (19); three fastening devices (8, 9, 10) which are independent of one another, each wheel body segment (5, 6, 7) being releasably fastened to the hub (3) by one of the fastening devices (8, 9, 10).



21: 2022/09062. 22: 2022/08/12. 43: 2023/02/28

51: B01F; B01L; G01N

71: LumiraDx UK Ltd.

72: QUINLAN, Thomas J., KHAN, Aman Murtaza, KHAN, Badr Aman, MCGUIGAN, Brian, TAYLOR, David William, LANG, David Kinniburgh, DEANE, John Iain William, FERNANDEZ DE SANNAMED, Lois Bello, FLETT, Michael, LOWE, Phill, KEATCH, Steven Alexander, KHAN, Usman Ali, SCOTT, Dave, LINDNER, Nigel Malcolm, TWOMEY, Marcus, MCINNES, Graeme John

33: US 31: 62/960,421 32: 2020-01-13

54: FLUID CONTROL IN MICROFLUIDIC DEVICES

00: -

A diagnostic system for determining the presence of a target in a sample liquid that includes a diagnostic reader and a microfluidic strip having a microfluidic channel network therein. An actuator within the reader modifies the pressure of a gas in gaseous communication with a liquid-gas interface of a sample liquid within the microfluidic channel network to move and/or mix the sample liquid. The pressure modifications may be continuous and/or oscillatory.

21: 2022/09115. 22: 2022/08/15. 43: 2023/03/23

51: A23K

71: TONGWEI CO.,LTD., FRESHWATER

FISHERIES RESEARCH CENTER,CAFS

72: TENG Tao, ZHANG Lu, MI Haifeng, REN

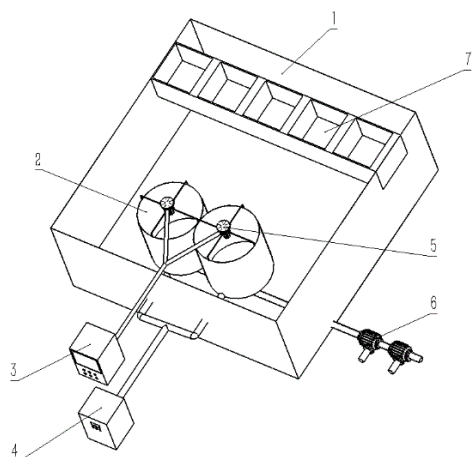
Mingchun, LIAO Shengchen, XUE Chunyu

33: CN 31: 202210172530.9 32: 2022-02-24

54: CYPRINID FEED WITH IMMUNE-ENHANCING EFFECT AND METHOD OF RECYCLING POND CULTURE

00: -

The present application discloses a cyprinid feed with immune-enhancing effect and method of recycling pond culture, belonging to the technical field of aquaculture. The fish of the present application comprises the following raw materials in parts by weight: 5 - 8 parts of fish meal, 4 - 7 parts of chicken meal, 24 - 28 parts of soybean meal, 20 - 25 parts of rapeseed meal, 4 - 7 parts of DDGS, 12 - 15 parts of wheat, 4 - 5 parts of soybean oil, 12 - 14 parts of rice bran and 2 - 2.5 parts of calcium dihydrogen phosphate, 0.3 part of 98.5% lysine, 0.1 part of methionine, 0.2 part of omnivorous premix, 0.1 - 0.2 part of immunopotentiator, 0.1 - 0.2 part of herbal additive and 0.1 - 0.2 part of compound enzyme preparation. The cyprinid feed with immune-enhancing effect in conjunction with corresponding pond culture system and mode is adopted to promote the growth and development of cyprinid with improved immunity, in addition to reduce nitrogen and phosphorus emissions while ensuring high security.



21: 2022/09195. 22: 2022/08/16. 43: 2023/04/17

51: A61L; C08L; C12M

71: CUTISS AG

72: HOLENSTEIN, Claude Nicolas, DONNAN, Jerry, RONFARD, Vincent

33: US 31: 62/983,791 32: 2020-03-02

54: DISPOSABLE SYSTEM AND METHOD FOR PREPARING A COMPRESSED HYDROGEL

00: -

The invention relates to a fully disposable system for casting, polymerizing and compressing a hydrogel. The invention further relates to a method for producing a scaffold for the generation of artificial tissue products using said disposable system.

21: 2022/09227. 22: 2022/08/17. 43: 2023/03/24

51: C02F

71: ZOGHBY, Nicholas John

72: ZOGHBY, Nicholas John

54: A SOLAR-POWERED POOL SANITIZER

00: -

The invention provides a solar-powered sanitizer kit which includes a solar panel which is tilt-angle adjustable, a tubular floatation device which is adapted to float in a swimming pool in vertical orientation and which has at least one cathode rod projecting from a submersible end of the floatation device, and a copper anode which is engageable to the submersible end of the floatation device, and an electrical conduit which electrically connects the solar panel to both the at least one cathode rod and the copper anode.

71: Vibra Maschinenfabrik Schultheis GmbH & Co.

72: Winfried Schultheis

33: EP 31: 21193891.5 32: 2021-08-30

54: VIBRATORY CONVEYOR FOR BULK MATERIAL

00: -

A vibratory conveyor for bulk material comprises a conveying trough (20) or a conveying tube for accommodating bulk material, at least one vibration generator (30) functionally connected to the conveying trough (20) or the conveying tube and configured for generating a directed vibratory excitation (S) in order to transport the bulk material in longitudinal direction through the conveying trough (20) or the conveying tube, wherein the directed vibratory excitation (S) has directional components in the longitudinal direction of the conveying trough (20) or the conveying tube and in vertical direction opposite to a direction of gravity, and at least one retaining weir (50) arranged in the conveying trough (20) or the conveying tube and configured for decelerating transport movement of the bulk material in longitudinal direction through the conveying trough (20) or the conveying tube. The retaining weir (50) has a rear wall (51) pointing in transport direction (F) of the bulk material and a front wall (52) pointing opposite to the transport direction (F). The rear wall (51) of the retaining weir (50) is at least sectionally inclined in an obliquely descending manner from an apex (53) of the retaining weir (50) toward the bottom (24) of the conveying trough (20) or the conveying tube in the longitudinal direction of the conveying trough (20) or the conveying tube. The length (IV) of the front wall (52) measured in the longitudinal direction of the conveying trough (20) or the conveying tube from the runout at bottom side to the apex (53) of the retaining weir (50) is smaller than the length (IR) of the rear wall (51) measured in the longitudinal direction of the conveying trough (20) or the conveying tube from the apex (53) of the retaining weir (50) to the runout at bottom side.

21: 2022/09228. 22: 2022/08/17. 43: 2023/03/09

51: B65G

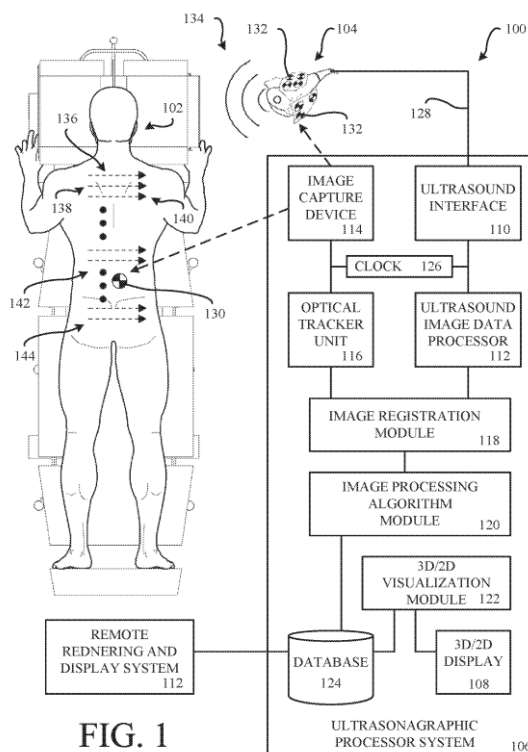
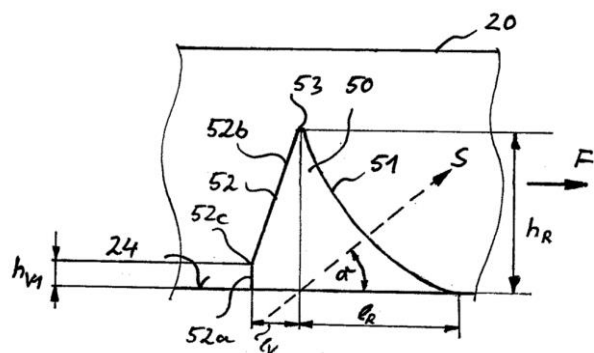


FIG. 1

21: 2022/09284. 22: 2022/08/18. 43: 2023/03/09

51: A61B

71: VERDURE IMAGING, INC.

72: SCHLENGER, Christopher, UNGI, Tamas

33: US 31: 16/813,469 32: 2020-03-09

54: APPARATUS AND METHOD FOR AUTOMATIC ULTRASOUND SEGMENTATION FOR VISUALIZATION AND MEASUREMENT

00: -

A system and method for performing ultrasound scans is provided. One embodiment of the ultrasonographic system acquires sonogram information from a series of ultrasonic scans of a human subject. The series of ultrasound scans are taken over a portion of interest on the human subject which has their underlying bone structure or other ultrasound discernable organ that is under examination. The data from the series of scans are synthesized into a single data file that corresponds to a three-dimensional (3D) image and/or 3D model of the underlying bone structure or organ of the examined human subject.

21: 2022/09285. 22: 2022/08/18. 43: 2023/03/16

51: A61L; C08G

71: BONE SUBSTITUTES

72: PUGALANTHI PANDIAN, Sankaralingam

33: IN 31: 202041008048 32: 2020-02-26

54: A SYNTHETIC COMPOSITE AS BONE GRAFT AND THE METHOD THEREOF

00: -

The invention is for a synthetic composite for a bone graft comprising of: bio inert polymers comprising poly lactic acid, poly D, L-Lactic acid; bio active polymer consisting of polypropylene fumarate or diester of fumaric acid and propylene diol (1,2-Diol); and a bioactive inorganic component consisting of a metal fluorophosphates glass powder wherein the amount of the bioactive components is upto 30% (w/w) of the composite. The bioactive inorganic metal fluorophosphates glass powder of the composite is one of zinc fluorophosphate, magnesium fluorophosphate or silver fluorophosphate. The invention pertains to the method of making the scaffold, and also the 3D printed scaffold.

21: 2022/09398. 22: 2022/08/22. 43: 2023/02/28

51: A61K; A61Q

71: Givaudan SA

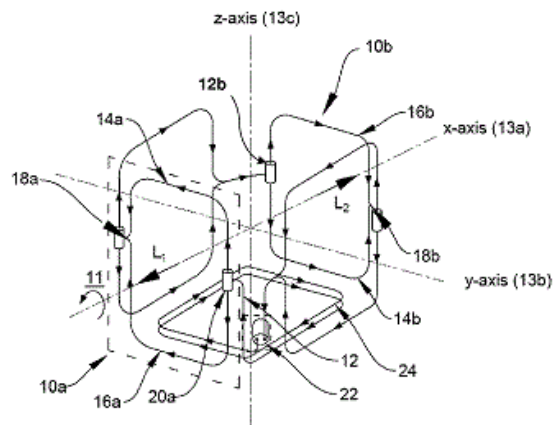
72: SENNELIER PORTET, Bénédicte, MARTINEZ, Jessy, CROVILLE, Claire, LAVAUD, Alexis, TARDIEU, Anne-Sophie

33: GB 31: 2004239.6 32: 2020-03-24

54: PIGMENT COMPRISING RAPHANUS SATIVUS EXTRACT AND MONTMORILLONITE

00: -

A pigment for cosmetic applications is provided, which exhibits excellent color and stability characteristics, while being fully plant-based, edible and of natural origin.



21: 2022/09432. 22: 2022/08/23. 43: 2023/02/28

51: B64G; F16F; G05D; H02K

71: NEWSPACE SYSTEMS (PTY) LTD

72: BARRINGTON-BROWN, Antony, James, GLATTHAAR, Rudolf, Wilhelm, MAHARAJ, Riddhi, Anubhav

33: ZA 31: 2020/01453 32: 2020-03-06

54: A UNIT FOR CAUSING ANGULAR MOMENTUM ABOUT AN AXIS

00: -

A unit (10) for causing angular momentum (11) about an axis (13a), which unit includes, in flow sequence, an incoming fluid pathway (12), a first fluid pathway (14a) in fluid communication with the incoming fluid pathway (12), a second fluid pathway (16a) in fluid communication with the incoming fluid pathway (12), an outgoing fluid pathway (18) in fluid communication with the first and second fluid pathway (14a, 16a), a flow regulating means (20a) for regulating the proportional flow in the first and second fluid pathways (14a, 16a), and wherein the first and second fluid pathways (14a, 16a) are respectively arranged about the axis (13a) generally in a plane transverse to the axis (13a).

21: 2022/09475. 22: 2022/08/24. 43: 2023/03/10

51: B65B

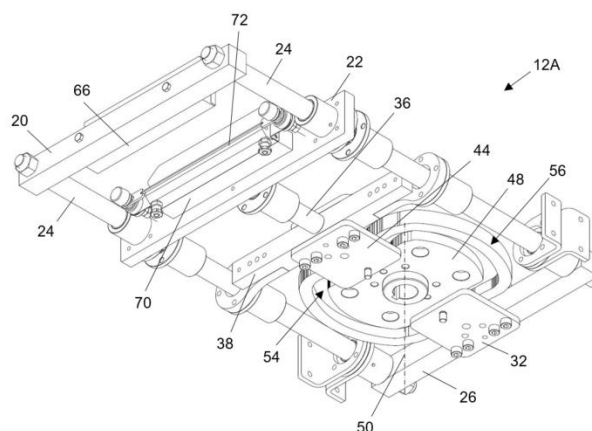
71: THE CHAR ASSET TRUST

72: LE ROUX, Etienne

54: SEALING ARRANGEMENT FOR A FORM FILL SEAL MACHINE

00: -

A sealing assembly (12) in a form fill seal machine (10) has a rotating cam (48) and two cam followers (40,42) that follow the cam's profile (74) to move jaws (20,22) to open and close. The assembly (12) has a load cell (86) measuring pressure between the jaws and is configured to stop rotation of the cam (48) if the pressure gets too high. The cam profile (74) includes a closing portion (76) for closing the jaws (20,22), a relief portion (78) for retarding the jaws (20,22) momentarily and a clamp portion (80) for urging the jaws (20,22) together.



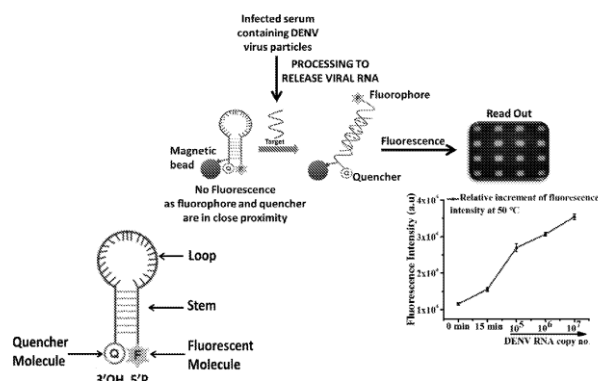
21: 2022/09493. 22: 2022/08/24. 43: 2023/03/24

51: C12Q

71: COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH

72: BISWAS, Subhajit, GHOSH, Surajit, SUKLA, Soumi, MONDAL, Prasenjit
 33: IN 31: 202011019066 32: 2020-05-05
54: RAPID DENGUE VIRUS DETECTION SYSTEM
 00: -

The present invention relates to a fluorescence-based detection system and method for detecting DENV RNA in patient's serum directly. This is a rapid method and does not require any nucleic acid amplification step and can precisely detect dengue RNA within two hours confirming ongoing DENV replication in the patient. The method uses complementary sequence in the molecular probe which would specifically bind to conserved target sequence of DENV RNA in the infected serum samples. The molecular probes are approximately 37-40 bases long hairpin structures (stem and a loop) with a fluorophore-quencher system attached at the terminal end of the stem. These probes are biotinylated in the stem region so that they can be immobilized to the streptavidin-tagged magnetic beads.



21: 2022/09614. 22: 2022/08/29. 43: 2023/02/27
 51: H01S
 71: ADIGE S.P.A.
 72: PICCIONE, Sara, BIASI, Stefano, PAVESI, Lorenzo, RAFFALDI, Cristiano
 33: IT 31: 102020000001897 32: 2020-01-31
54: INTERFEROMETRIC GAIN LASER DEVICE
 00: -

A laser device adapted to emit a coherent optical radiation is described that includes an optical beam amplifier system (12) comprising a single interferometric optical amplification arrangement (20) or a plurality of interferometric optical amplification arrangements (20, 20') in series, each said interferometric optical amplification arrangement (20)

comprising a Mach-Zehnder type interferometer with an amplification arm (20a) including an active gain region (G) and a passive propagation arm (20b) not including a gain region. The laser device (10) further comprises an optical return path (14) to conduct the beam (B0) emerging from the optical beam amplifier system (12) to an input of the optical beam amplifier system so as to form an optical ring resonant structure, and a radiation output element arranged to extract a portion of the beam emerging from the amplifier system and deliver the portion of the beam extracted as output radiation (BL) of the laser device.

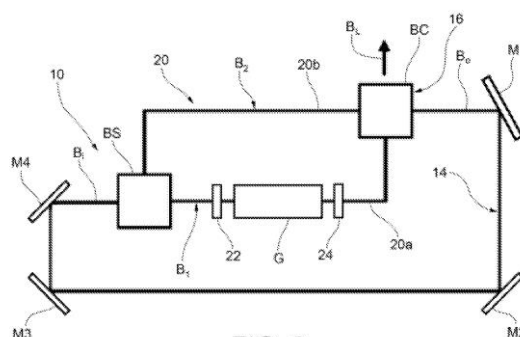
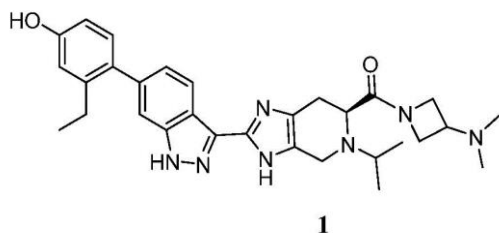


FIG. 2

21: 2022/09617. 22: 2022/08/29. 43: 2023/02/27
 51: A61K; A61P; C07D
 71: Theravance Biopharma R&D IP, LLC
 72: FASS, Gene Timothy
 33: US 31: 62/983,931 32: 2020-03-02
54: CRYSTALLINE HYDRATE OF A JAK INHIBITOR COMPOUND
 00: -

Provided herein is a crystalline hydrate of the compound of formula 1:. Also provides herein are pharmaceutical compositions comprising such crystalline hydrate, methods of using such crystalline hydrate to treat respiratory diseases, and processes useful for preparing such crystalline hydrate.



21: 2022/09650. 22: 2022/08/30. 43: 2023/02/27

51: E02D

71: SMART LOCKING LOGIC (PTY) LTD

72: OLIVIER, Johan

33: ZA 31: 2021/06584 32: 2021-09-08

54: A HYBRID MANHOLE COVER

00: -

The invention is for a hybrid manhole cover which includes a manhole body made of composite material and a metal layer provided on top of the manhole body. The metal layer may be steel. The hybrid manhole cover may include a manhole lid and/or a coping of a manhole chamber. The manhole body may include a body of the cover and/or a body of the coping and the metal layer may be provided on top of the body of the cover and/or the body of the coping.

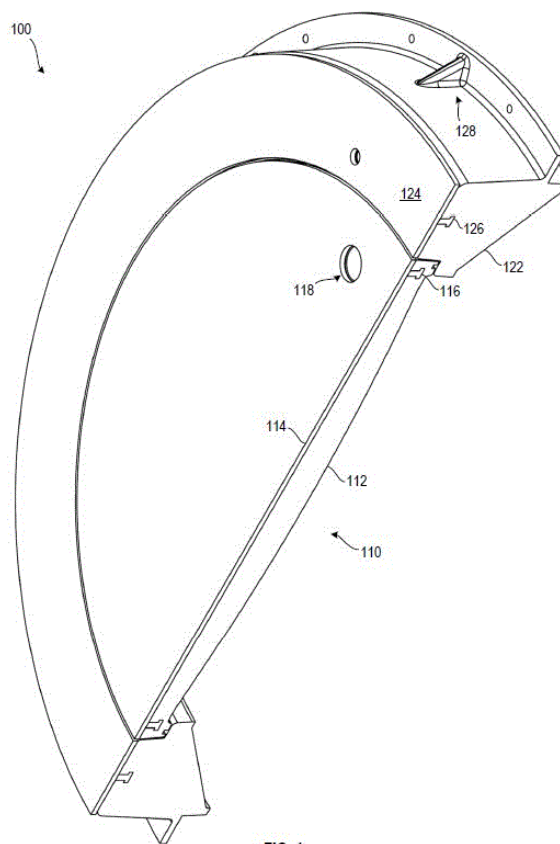


FIG. 1

21: 2022/09668. 22: 2022/08/30. 43: 2023/02/27

51: A47J

71: JOMA KUNSTSTOFFTECHNIK GMBH

72: FRIES, Rudolf

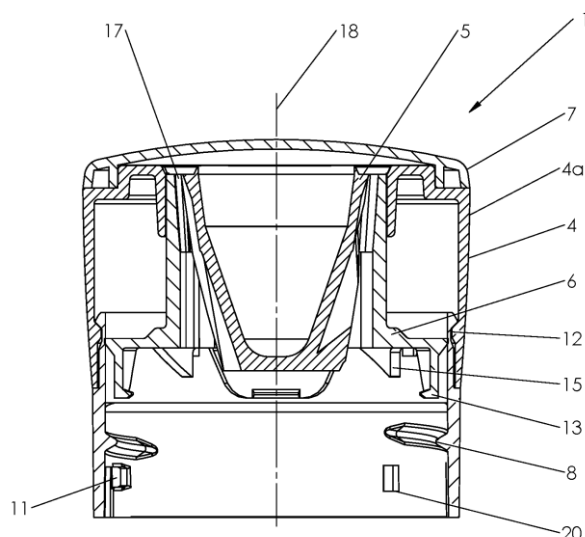
33: AT 31: A 50308/2020 32: 2020-04-09

54: ADJUSTABLE SPICE MILL

00: -

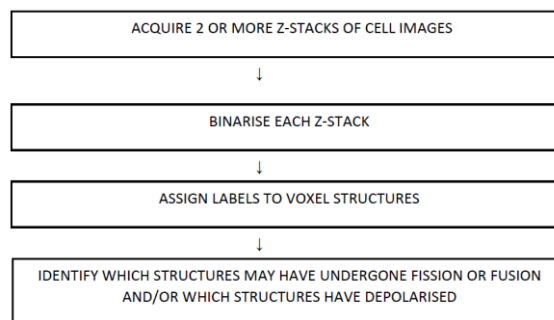
The invention relates to a spice mill (2) having a container (9) and having a grinder (1) which comprises the following: a stator (6), wherein the stator (6) can be connected to the container (9) and the position of the stator (6), when connected, is substantially defined in the direction of a longitudinal axis of the grinder (1) relative to the container (9); an actuating unit (4), which has a rotor (5), wherein the rotor (5) is arranged at least in portions within the stator (6) and is mounted rotatably relative to the stator (6), wherein the rotor (5) is connected for conjoint rotation to an actuating element (4a) and the actuating element (4a) is rotatably connected to an adjusting element (3) and is secured in the direction of the longitudinal axis (18), wherein the adjusting element (3) has a thread by means of which it can

be connected to the container (9) such that the position of the rotor (5) is adjustable in the direction of the longitudinal axis (18) by means of a rotation of the adjusting element (3) relative to the container (9).



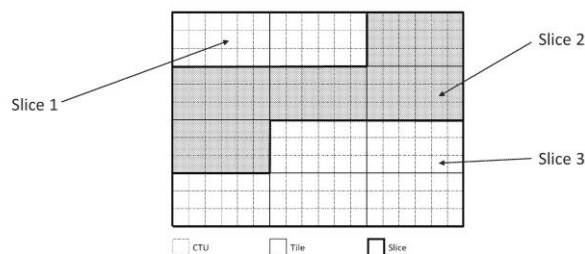
21: 2022/09670. 22: 2022/08/30. 43: 2023/02/28
51: G06K
71: STELLENBOSCH UNIVERSITY
72: LOOS, Benjamin, NIESLER, Thomas Richard, THEART, Rensu Petrus
33: ZA 31: 2020/00654 32: 2020-01-31
54: METHOD FOR DETERMINING MITOCHONDRIAL EVENTS

00: -
A method of determining the location and quantity of mitochondrial fission, fusion and depolarisation events that occur in a cell is provided. Using a three-dimensional time lapse image sequence of a cell, the method identifies which of the mitochondria in a cell had depolarised or undergone fission or fusion in the interval between the acquisition of the earlier and later images, indicates the locations of the fission, fusion and depolarisation events, and generates a count of the number of mitochondrial fission, fusion and depolarisation events. The method can be used to diagnose a disease or condition associated with mitochondrial dysfunction. The method can further be used to screen a compound or composition for use in preventing or treating a disease or condition associated with mitochondrial dysfunction.



21: 2022/09683. 22: 2022/08/30. 43: 2023/02/27
51: H04N
71: Huawei Technologies Co., Ltd.
72: ESENLIK, Semih, WANG, Biao, KOTRA, Anand Meher, ALSHINA, Elena Alexandrovna
33: PCT/EP(DE) 31: 2020/055341 32: 2020-02-28
54: AN ENCODER, A DECODER AND CORRESPONDING METHODS SIMPLIFYING SIGNALLING SLICE HEADER SYNTAX ELEMENTS

00: -
A method of decoding of a picture from a video bitstream implemented by a decoding device, the bitstream including a slice header of a current slice and data representing the current slice, the method comprising: obtaining a parameter used to derive the number of tiles in the current slice from the slice header, in case that a condition is satisfied, wherein the condition comprises: the slice address of the current slice is not the address of the last tile in the picture where the current slice located;
reconstructing the current slice using the number of tiles in the current slice and the data representing the current slice.

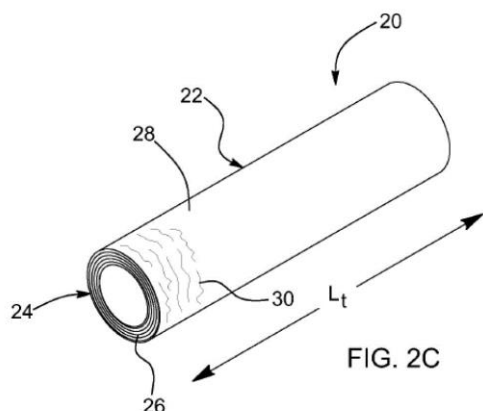


21: 2022/09717. 22: 2022/08/31. 43: 2023/02/28
51: B32B; B65H; D21H
71: ABZAC CANADA INC.
72: D'ANGLADE, Pierre-Michel
33: US 31: 17/503,068 32: 2021-10-15

54: CONVOLUTE CARDBOARD TUBE, APPARATUS AND METHOD FOR MANUFACTURING THE SAME

00: -

A plastic film roll includes: a convolute cardboard tube comprising a tubular body having a tubular body wall formed by a plurality of layers of a straight rolled cardboard sheet having a weight equal to or less than 300 gsm; a plastic film wound about the convolute cardboard tube to form a plurality of plastic film windings around the convolute cardboard tube, the plastic film windings creating a radial compression force equal to or greater than 10 bar on the tubular body wall, wherein the cardboard sheet includes a plurality of fibres, at least a majority of the fibres being substantially aligned in a tangential direction relative to the tubular body to allow the convolute cardboard tube to resist the radial compression force.



21: 2022/09720. 22: 2022/08/31. 43: 2023/02/27
51: F24D

71: NINGDE SHANGBAISHI WATER CONSERVANCY PROJECT CO., LTD

72: YAN, Chenkai, XUE, Feng, XIE, Yunding, WU, Hao

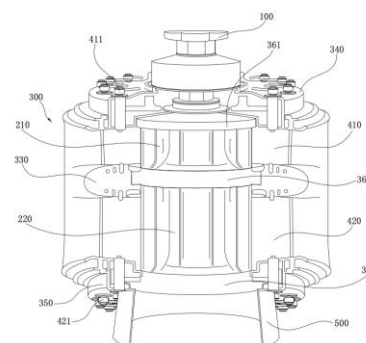
33: CN 31: 202210573649.7 32: 2022-05-24

54: FRANCIS TURBINE

00: -

A Francis turbine includes a casing (300), a main shaft (100) inserted into the casing (300), a first runner (210) and a second runner (220) respectively disposed inside the casing (300) coaxially with the main shaft (100), and fixedly disposed on the main shaft (100) at an interval. The casing (300) includes a first volute (310) disposed on the first runner (210) in a sleeving manner and a second volute (320)

disposed on the second runner (220) in a sleeving manner in sequence in the axial direction of the main shaft (100). A first inlet (3101) from a water inlet end to a nose end of the first volute (310) is formed in a side wall, facing the first runner (210). A second inlet (3201) from a water inlet end to a nose end of the second volute (320) is formed in a side wall, facing the second runner (220).



21: 2022/09741. 22: 2022/08/31. 43: 2023/02/28

51: A61K; A61P; C07D

71: Genfleet Therapeutics (Shanghai) Inc., Zhejiang Genfleet Therapeutics Co., Ltd.

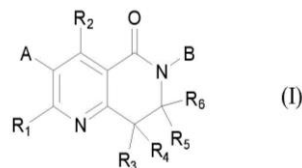
72: ZHOU, Fusheng, XU, Xiaoming, ZHANG, Leitao, Li, Xin, TANG, Lili, LAN, Jiong

33: CN 31: 202010090252.3 32: 2020-02-13

54: DIHYDRONAPHTHYRIDINONE COMPOUND, AND PREPARATION METHOD THEREFOR AND MEDICAL USE THEREOF

00: -

Provided are a dihydronaphthyridinone compound as shown in formula (I), which compound has a selective inhibitory effect on RIPK1, and a pharmaceutically acceptable salt, a stereoisomer, a solvate or a prodrug thereof. In addition, provided are a pharmaceutical composition containing the compound, and the use thereof in the preparation of a drug for treating RIPK1-related diseases or conditions.



21: 2022/09764. 22: 2022/09/01. 43: 2023/03/05

51: G06F

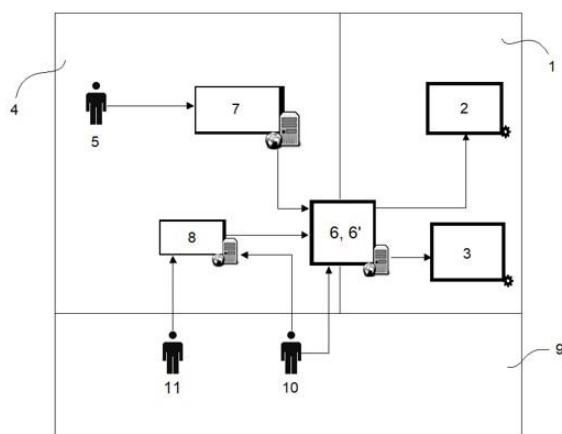
71: UNIVERSIDAD INTERNACIONAL DE LA RIOJA (UNIR)

72: PANIAGUA DÍEZ, Fidel, NOMBELA PÉREZ, Juan José, GONZÁLEZ CRESPO, Rubén, BURGOS SOLANS, Daniel

54: SYSTEM FOR ISSUING, VALIDATING AND STORING CERTIFICATES IN PUBLIC-PERMISSIONED BLOCKCHAIN NETWORKS

00: -

The invention relates to a blockchain-based system for issuing and validating certificates, comprising: a public-permissioned blockchain network (1); a certifying institution network (4), wherein the certifying institution network (4) further comprises a public permission blockchain node (6) managed by a certifying institution (5), distributed peer-to-peer storage/content distribution platform (6'), one or more computing means configured with a certificate management service (7) adapted for issuing and revoking certificates by the certifying institution (5); one or more computing means configured with a plurality of offchain (8) services used by the certifying institution (5) to manage the access to the certificates by users not connected to the public permissioned blockchain network (1); and an external network (9) comprising a plurality of computing devices used by users (10) or other third-party service providers (11) not connected to the blockchain environment (1), configured to interact with the certificates stored at the storage/content distribution platform (6') through the offchain services (8).



21: 2022/09765. 22: 2022/09/01. 43: 2023/04/05

51: E04B; E04H

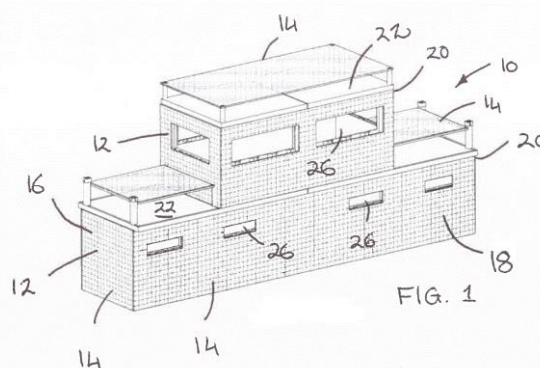
71: WBHO CONSTRUCTION (PTY) LTD

72: FERREIRA, Gert

54: A PROTECTIVE HOUSING

00: -

A protective housing 10 includes a shipping container 12 having a lining (not shown) made from a re-enforced settable material and a mesh 14 that is spaced apart from outer walls 16 and 18 of the container 12. The settable material is concrete that is re-enforced by a steel grid. The steel grid includes anchor formations extending therefrom for in use attaching the grid to walls of the container 12. The lining is cast over the grid after the container 12 has been located in a desired position, thereby making it easier to transport before arriving at a desired location. The lining lines side 18 and end walls 16 on the inside of the container 12.



21: 2022/09816. 22: 2022/09/02. 43: 2023/03/16

51: F16L; G01N; G05B; H04B

71: SOCIETE DES TRANSPORTS PETROLIERS PAR PIPELINE TRAPIL

72: RADISSON, Marc, BENICHO, Stéphane

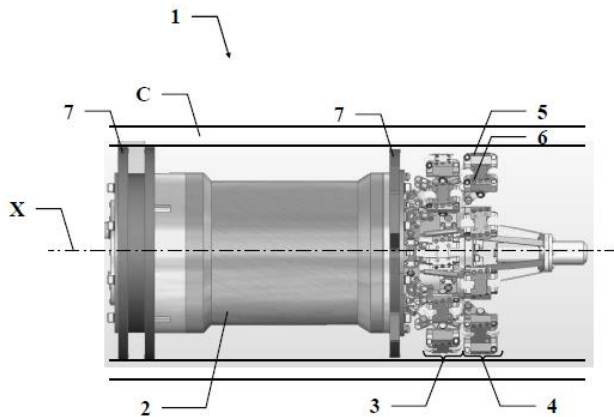
33: FR 31: 2109200 32: 2021-09-03

54: DEVICE FOR INSPECTING A PIPE, IN PARTICULAR WITH REGARD TO CLANDESTINE TAPPING

00: -

A device (1) for inspecting a pipe (C), comprises a scraper carriage (2), substantially cylindrical about an axis (X) coinciding with an axis of the pipe (C) and which is inserted into the pipe (C) and propelled by a liquid transported by the pipe (C), and measuring means carried by the carriage (2). The measuring means comprise a first crown (3), carrying a first set of ultrasound transducers (5, 6), arranged on a first circle centered on the axis (X) and of diameter substantially equal to an inside diameter of the pipe (C), alternating a transmitting ultrasound transducer (5) and a receiving ultrasound

transducer (6), arranged so that a wave transmitted by a transmitting ultrasound transducer (5) is reflected, by a wall of the pipe (C) facing it, towards a counterpart receiving ultrasound transducer (6).



21: 2022/09893. 22: 2022/09/05. 43: 2023/03/24
51: H04S

71: FRAUNHOFER-GESELLSCHAFT ZUR
FÖRDERUNG DER ANGEWANDTEN
FORSCHUNG E.V.

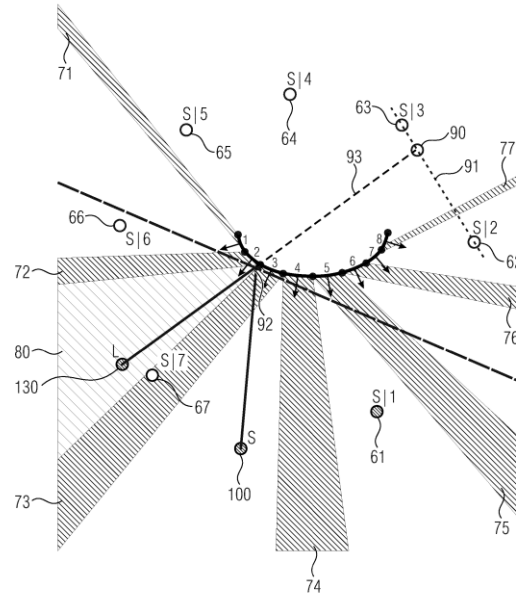
72: BORSS, Christian, WEFERS, Frank
33: EP 31: 20163151.2 32: 2020-03-13

**54: APPARATUS AND METHOD FOR
RENDERING A SOUND SCENE COMPRISING
DISCRETIZED CURVED SURFACES**

00: -

An apparatus for rendering a sound scene having reflection objects and a sound source at a sound source position, comprises: a geometry data provider (10) for providing an analysis of the reflection objects of the sound scene to determine a reflection object represented by a first polygon (2) and a second adjacent polygon (3) having associated a first image source position (62) for the first polygon and a second image source position (63) for the second polygon, wherein the first and second image source positions result in a sequence comprising a first visible zone (72) related to the first image source position (62), an invisible zone (80) and a second visible zone (73) related to the second image source position (63); an image source position generator (20) for generating an additional image source position (90) such that the additional image source position (90) is placed between the first image source position and the second image source position; and a sound renderer (30) for rendering the sound source at the sound source position and, additionally for rendering the sound

source at the first image source position, when a listener position (130) is located within the first visible zone, for rendering the sound source at the additional image source position (90), when the listener position is located within the invisible zone (80), or for rendering the sound source at the second image source position, when the listener position is located within the second visible zone.



21: 2022/09914. 22: 2022/09/06. 43: 2023/03/23
51: G06K; G06Q

71: K61 BLAZER INVESTMENTS (PTY) LTD

72: PHILLIPS, Victor Albert

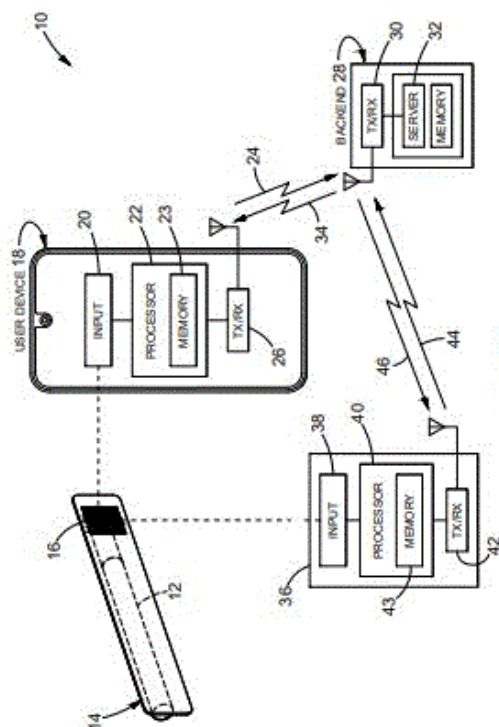
33: ZA 31: 2022/07286 32: 2022-07-01

**54: SYSTEM AND METHOD FOR FACILITATING
CIGARETTE SALES AND CIGARETTE TRACKING**

00: -

The present invention relates to system for facilitating either one of cigarette sales and cigarette tracking. The system comprises a package for not more than four cigarettes, a token presented by the package, a user device and a backend. The token comprises a first data set. The user device comprises an input device, a processor and a first transceiver. The first data set is entered with the input device. The processor is in electronic communication with the input device. The processor receives and processes the first data set for use in a first message. The first transceiver transmits the first message to a remote backend. The remote backend comprises a second transceiver and a server. The

second transceiver receives the first message. The server is in electronic communication with the second transceiver and configured to communicate a second message to the user device in response to the first message.



21: 2022/09928. 22: 2022/09/06. 43: 2023/04/04
51: E04F

71: CHAMPION LINK INTERNATIONAL CORPORATION

72: BAERT, Thomas Luc Martine, VAN POYER, Tom, BOON, Sven

33: NL 31: 2025119 32: 2020-03-13

33: NL 31: 2026795 32: 2020-10-30

54: PANEL AND METHOD FOR PRODUCING A PANEL

00: -

The invention relates to a panel for constructing a floor or wall covering. The panel comprises a substantially planar top surface, at least one core layer composed of a composite material which core layer is provided with the cavities, and a bottom surface. The panel further comprises at least one pair of opposite edges, said pair of opposite edges preferably comprising complementary coupling parts configured for mutual coupling of adjacent panels.

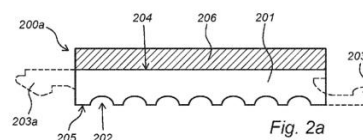


Fig. 2a

21: 2022/10030. 22: 2022/09/08. 43: 2023/03/30

51: A61K; C07K; C12N; C12P

71: SHANGHAI HENLIUS BIOTECH, INC.

72: XUE, Jie, JIANG, Wei-Dong, XU, Wenfeng, FENG, Weijun

33: WO 31: PCT/CN2020/077146 32: 2020-02-28

54: ANTI-CD137 CONSTRUCTS, MULTISPECIFIC ANTIBODY AND USES THEREOF

00: -

Provided are anti-CD137 constructs that bind to CD137, including multispecific anti-CD137 antibodies with binding specificity for CD137 and one or more additional antigens, and methods of using the same. In certain embodiments, the one or more additional antigens comprise human epidermal growth factor receptor 2 (HER2).

21: 2022/10031. 22: 2022/09/08. 43: 2023/03/30

51: A61N; C12M; C12N

71: ST ANDREWS PHARMACEUTICAL TECHNOLOGY LIMITED

72: HENRY, William J, MONTALI, Anna, BOURDON, Jean-Christophe

33: GB 31: 2004411.1 32: 2020-03-26

33: GB 31: 2004412.9 32: 2020-03-26

33: GB 31: 2009296.1 32: 2020-06-18

33: GB 31: 2009297.9 32: 2020-06-18

54: APPARATUS FOR IMPROVED TRANSFECTION AND/OR INTRACELLULAR DELIVERY EFFICIENCY OF AN AGENT INTO A EUKARYOTIC CELL AND/OR PROTEIN EXPRESSION AND METHOD OF USE THEREOF

00: -

A method and apparatus for improving transfection efficiency and/or an intra-cellular delivery process in one or more eukaryotic cells is provided. The method includes the steps of providing at least one naked agent suitable for transfection and/or intra-cellular delivery. Introducing the at least one naked agent to one or more eukaryotic cells to form a mixture or transfection mixture and allowing the mixture or transfection mixture to undergo a transfection process or intra-cellular delivery process to form one or more transfected or treated eukaryotic cells. The method also includes the step of directing pulsed electromagnetic signals provided at any or

any combination of a pre-determined frequency, at a pre-determined pulse rate, or at a pre-determined power, at the at least one naked agent at step a) prior to creating the mixture or transfection mixture, at the mixture or transfection mixture in step b), at the mixture or transfection mixture in step c) and/or at the transfected or treated cell mixture after step c).

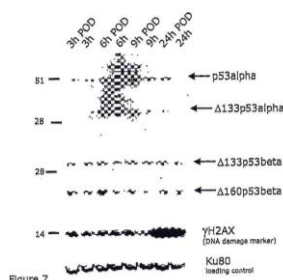


Figure 7

21: 2022/10033. 22: 2022/09/08. 43: 2023/03/30
51: A61N; C12M; C12N

71: ST ANDREWS PHARMACEUTICAL TECHNOLOGY LIMITED

72: HENRY, William J, MONTALI, Anna, BOURDON, Jean-Christophe

33: GB 31: 2004412.9 32: 2020-03-26

33: GB 31: 2004411.1 32: 2020-03-26

33: GB 31: 2009297.9 32: 2020-06-18

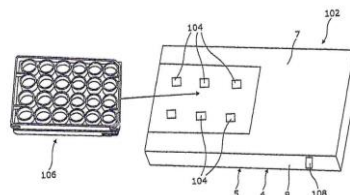
33: GB 31: 2009296.1 32: 2020-06-18

54: APPARATUS FOR IMPROVED TRANSFECTION EFFICIENCY AND/OR PROTEIN EXPRESSION AND METHOD OF USE THEREOF

00: -

A method and apparatus for improving transfection efficiency in eukaryotic cells is provided. The method includes the steps of providing a transfection mixture including an agent associated with at least one amphiphilic construct suitable for transfection. Adding the transfection mixture to one or more eukaryotic cells to form a transfection complex and allowing the transfection complex to undergo a transfection process to form one or more transfected cells. The method also includes the step of directing pulsed electromagnetic signals provided at any or any combination of a pre-determined frequency, at a pre-determined pulse rate, or at a pre-determined power, at the transfection mixture at step a) prior to creating the transfection complex, at the transfection complex in step b), at the transfection complex in

step c) and/or at the transfected cell complex after step c).



21: 2022/10101. 22: 2022/09/12. 43: 2023/03/30

51: A47C; B60P

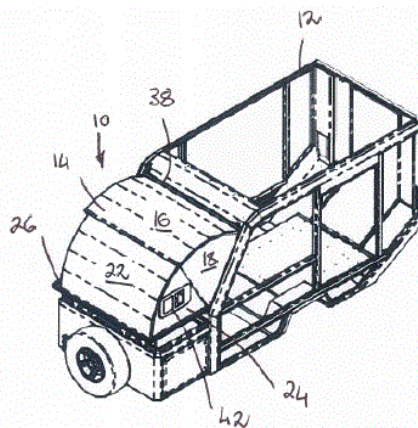
71: LUDIK, Riaan

72: LUDIK, Riaan

54: A RETRACTABLE COMPARTMENT

00: -

A retractable compartment 10 includes a first compartment portion 14 having an arcuate roof 16 and substantially triangular side walls 18 extending from free side regions of the roof. The compartment 10 further includes a second compartment portion 20 having an arcuate roof 22, substantially triangular side walls 24 extending from free side regions of the roof, and a base portion 26 spanning between the side walls 24 and a free edge region of the roof 22. The first and second compartment portions 14 and 20 are hingedly connected at free ends of their respective side walls 18 and 24.



21: 2022/10224. 22: 2022/09/14. 43: 2023/04/03

51: A61K; C07D

71: TRIUMF INC., PROVINCIAL HEALTH SERVICES AUTHORITY, THE UNIVERSITY OF BRITISH COLUMBIA

72: YANG, Hua, GAO, Feng, SCHAFFER, Paul, YUAN, Zheliang, ZHANG, Chengcheng, BENARD, Francois, WHARTON, Luke

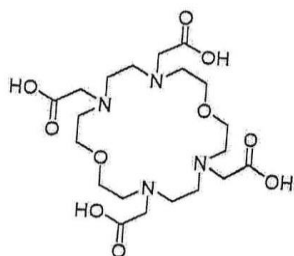
33: US 31: 62/981,113 32: 2020-02-25

33: US 31: 62/993,636 32: 2020-03-23

54: CHELATOR COMPOSITIONS FOR RADIOMETALS AND METHODS OF USING SAME

00: -

A chelator having the general structure (I) for chelating radiometals such as ^{225}Ac under mild conditions is provided. (I) The chelator can be coupled to a biological targeting moiety to facilitate targeted delivery of the chelated radiometal in a mammalian subject.



(1)

21: 2022/10280. 22: 2022/09/16. 43: 2023/04/13

51: A23D

71: SIQALO FOODS (PTY) LTD

72: MZUNGU, Chipita, VLOTMAN, Alicia, XABA, Phakamani, SAKWA, Susan, Matem

33: ZA 31: 2021/07054 32: 2021-09-22

54: BUTTER FAT SPREAD

00: -

The present invention relates to edible food composition. More particularly, but not exclusively, this invention relates to a fat spread composition. According to a first aspect thereof there is provided an edible fat spread composition including: - butter; - one or more emulsifiers; - tocopherol; - milk powder; - an acidifier; and - a preservative.

21: 2022/10281. 22: 2022/09/16. 43: 2023/04/13

51: A23D

71: SIQALO FOODS (PTY) LTD

72: MZUNGU, Chipita, VLOTMAN, Alicia, XABA, Phakamani, SAKWA, Susan, Matem

33: ZA 31: 2021/07055 32: 2021-09-22

54: PROCESS FOR THE PRODUCTION OF BUTTER FAT SPREAD

00: -

The present invention relates to a fat spread. More particularly, but not exclusively, the present invention relates to a process for preparing an edible fat

spread. According to a first aspect thereof there is provided a method of preparing an edible fat spread, the method including the steps of: i. blending a liquid oil mixture comprising a hard fat, and a liquid aqueous mixture, so as to form a liquid dispersion; ii. temperature treatment of the liquid dispersion from between 70 to 100°C so as to form a temperature-treated liquid dispersion; iii. flash cooling the temperature-treated liquid dispersion, wherein the flash cooling temperature ranges from 30°C to 40°C, so as to form a cooled liquid dispersion; and iv. crystallising the cooled liquid dispersion.

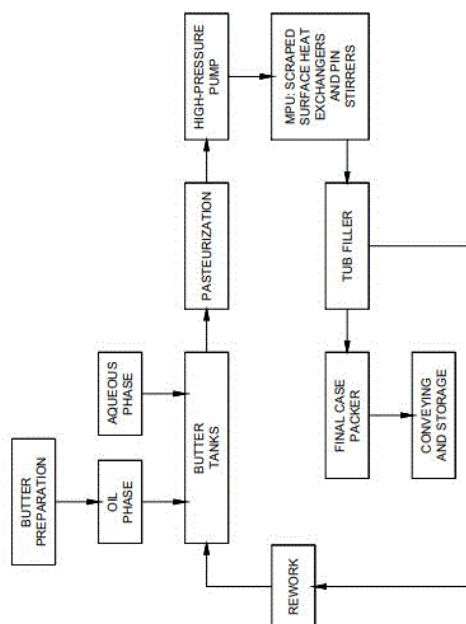


FIGURE 1

21: 2022/10321. 22: 2022/09/16. 43: 2023/04/13

51: A01N

71: ALPHA BIOPESTICIDES LIMITED

72: VECCHI, Alfeo

33: IT 31: 102020000004816 32: 2020-03-06

54: PESTICIDE COMPOSITION FOR CROP CARE AND PROTECTION

00: -

A pesticide composition comprising a C12-C14 fatty acid in an emulsion, as well as a process for preparing the same and uses for protecting crop against pests, such as insects, nematodes, fungi, oomycetes and bacteria, are disclosed.

21: 2022/10353. 22: 2022/09/19. 43: 2023/04/13

51: H02S

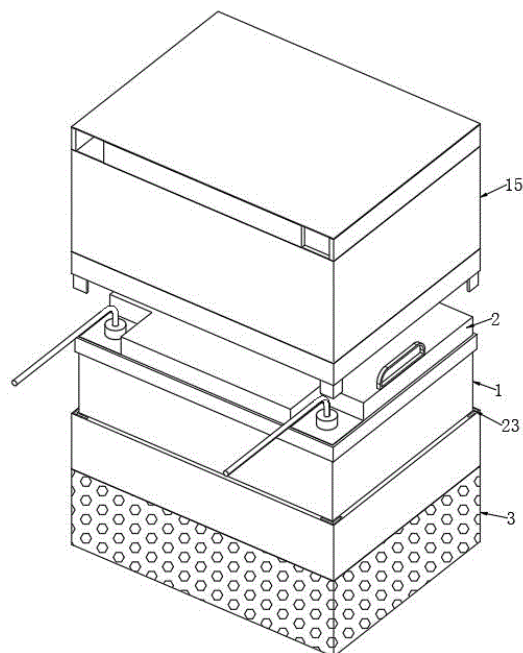
71: Jiangxi Jianbang Construction Group Co., Ltd.

72: Ming Li, Xiaoming Chen, Jianqiang Cao

54: SOLAR POWER GENERATION METHOD AND DEVICE

00: -

The present disclosure relates to a solar power generation and storage device and belongs to the technical field of electric energy storage. The device includes an energy storage colloid storage battery body, a storage battery top cover is covered at an upper part of the energy storage colloid storage battery body, and a lifting device is sleeved outside the energy storage colloid storage battery body. According to the solar power generation and storage device provided by the present disclosure, after the energy storage colloid storage battery body is placed, ventilating holes are formed in surfaces of a radiating box and a ventilation bracket; at the same time, a moisture absorption plate assembly is arranged in the radiating box, so the moistureproof effect may be achieved without affecting the heat radiation of the energy storage colloid storage battery body; in addition, the ventilation bracket can lift the energy storage colloid storage battery body in an internal area of an external blocking frame through a buffer device, so the situation that the bottom of the traditional energy storage colloid storage battery body contacts with water when being placed can be relieved; and during the process that the energy storage colloid storage battery body is placed on the ground, the impact force when the energy storage colloid storage battery body is placed on the ground can be buffered, thereby reducing the damage caused by great impact when the storage battery falls to the ground.



21: 2022/10354. 22: 2022/09/19. 43: 2023/04/13
51: H02S

71: Jiangxi Jianbang Construction Group Co., Ltd.

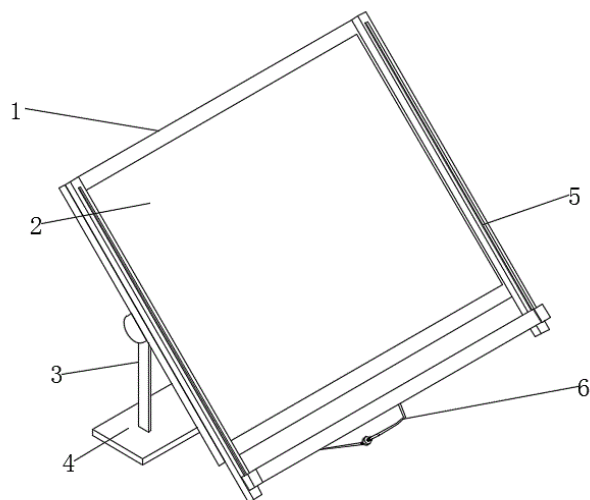
72: Ming Li, Xiaoming Chen, Jianqiang Cao

54: MULTIFUNCTIONAL DEVICE FOR PHOTOVOLTAIC POWER GENERATION

00: -

The present disclosure provides a photovoltaic power generation device, and relates to the field of photovoltaic power generation. The photovoltaic power generation device includes a locating frame, a photovoltaic power generation panel, a support bracket and a locating base, wherein a cleaning mechanism is fixedly installed on the locating frame, the cleaning mechanism includes servo sliding tables, a locating frame body, a tapping pipeline, dust collection nozzles and sliding table sliders; the dust collection nozzles and a gas transmission mechanism are connected to the tapping pipeline, the gas transmission mechanism includes a gas transmission pipeline, a limiting screw, a weight block, limiting card sleeves and a limiting screw hole, and a pumping mechanism is fixedly installed at a position where the upper surface of the locating base is located at one side of the drive mechanism; the pumping mechanism includes a first check valve, a connecting leg, a piston, a pumping cylinder, an air outlet nozzle and a second check valve; and air will be continuously pumped into the dust collection

nozzles after the piston moves back and forth in the pumping cylinder, the air pumped into the dust collection nozzles will be sprayed to the surface of the photovoltaic power generation panel, so that the dust on the surface of the photovoltaic power generation panel is cleaned quickly.



21: 2022/10371. 22: 2022/09/19. 43: 2023/04/13

51: A61D

71: Suzhou Yinque Intelligent Technology Co., Ltd

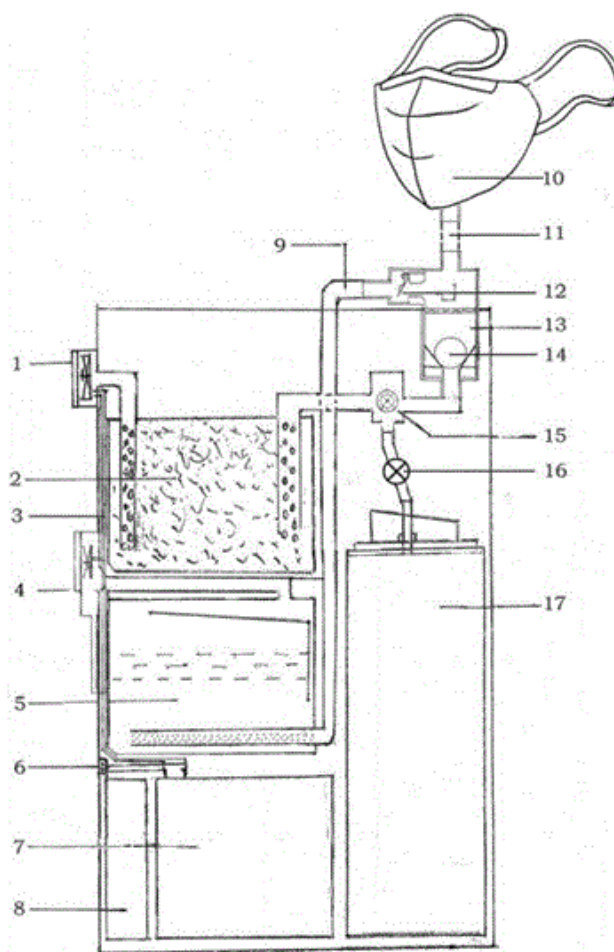
72: Jianmeng Long, Yihan Long

54: BACKPACK VENTILATOR FOR PREVENTING RESPIRATORY INFECTIOUS DISEASES

00: -

Disclosed is a backpack ventilator for preventing respiratory infectious diseases. The backpack ventilator includes a gas inlet disinfection and sterilization assembly and a gas outlet disinfection and sterilization assembly, the gas inlet disinfection and sterilization assembly and the gas outlet disinfection and sterilization assembly are connected through a gas treatment assembly, a mask is connected to the gas treatment assembly through a mouth and nose respirator connector, and both the gas inlet disinfection and sterilization assembly and the gas outlet disinfection and sterilization assembly are arranged in a backpack. The backpack ventilator of the present disclosure is simple in structure and convenient to implement, not only can assist a user in air purification during inhalation and exhalation, but also can assist the user in oxygen supply, can be conveniently used by the user on different occasions, and can reduce the probability that the

user is infected with viruses, thereby improving the use performance of the backpack ventilator; and an emergency treatment device supplying power to the backpack can also be formed, so that the situation that the backpack ventilator cannot be used as a lithium battery cannot output power in an emergency is avoided, and continuous use of the backpack ventilator is ensured.



21: 2022/10402. 22: 2022/09/20. 43: 2023/04/12

51: A47B

71: Jiangxi Sunshine Safety Equipment Group Co., Ltd.

72: Haixin Ding

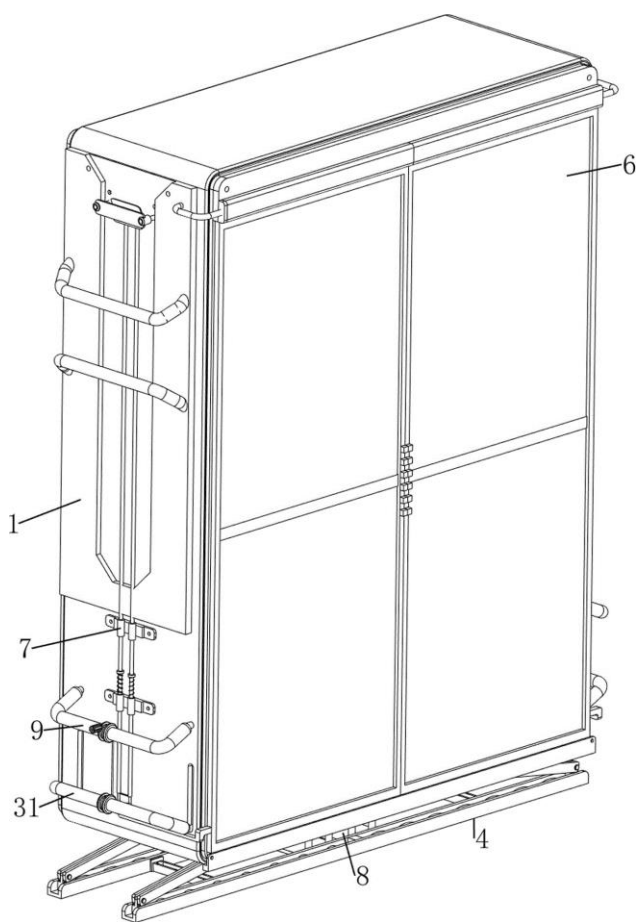
33: CN 31: 202210344288.9 32: 2022-03-31

54: HEIGHT ADJUSTABLE COMPACT SHELF

00: -

The present disclosure relates to a compact shelf, in particular to a height adjustable compact shelf. The technical problem to be solved is to provide a height adjustable compact shelf capable of adjusting the height of the compact shelf and placing higher

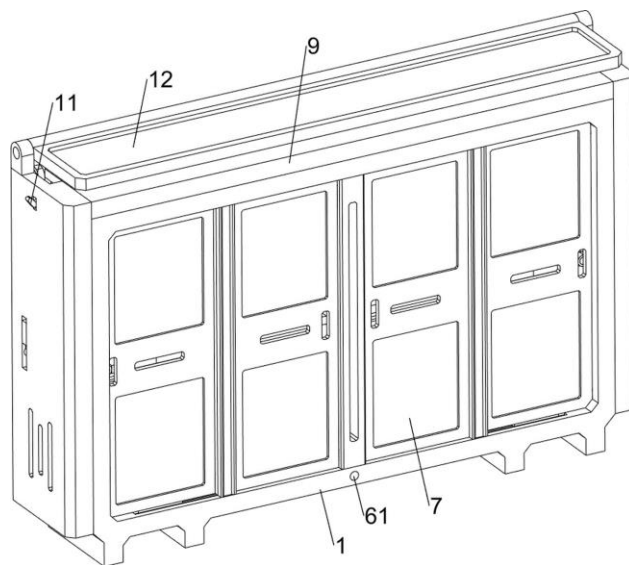
documents. The height adjustable compact shelf includes a compact shelf, document placing shelves, fixed rods, handles and the like, wherein six document placing shelves are uniformly and slidably arranged inside the compact shelf, and the handles are slidably arranged at lower parts of left and right sides of the compact shelf. In the present disclosure, the document placing shelves move upwards by placing documents on the document placing shelves and pulling the handle upwards, and then the compact shelf moves upwards; and movable plates rotate downwards, so that the height of the compact shelf can be adjusted, and the handles are released, so that clamping blocks can clamp fixed rods.



21: 2022/10403. 22: 2022/09/20. 43: 2023/04/12
51: A47B
71: Jiangxi Sunshine Safety Equipment Group Co., Ltd.
72: Feifei Zhang
33: CN 31: 202210368434.1 32: 2022-04-06
54: COMPACT SHELF WITH INDUCTION LIGHTING DEVICE

00: -

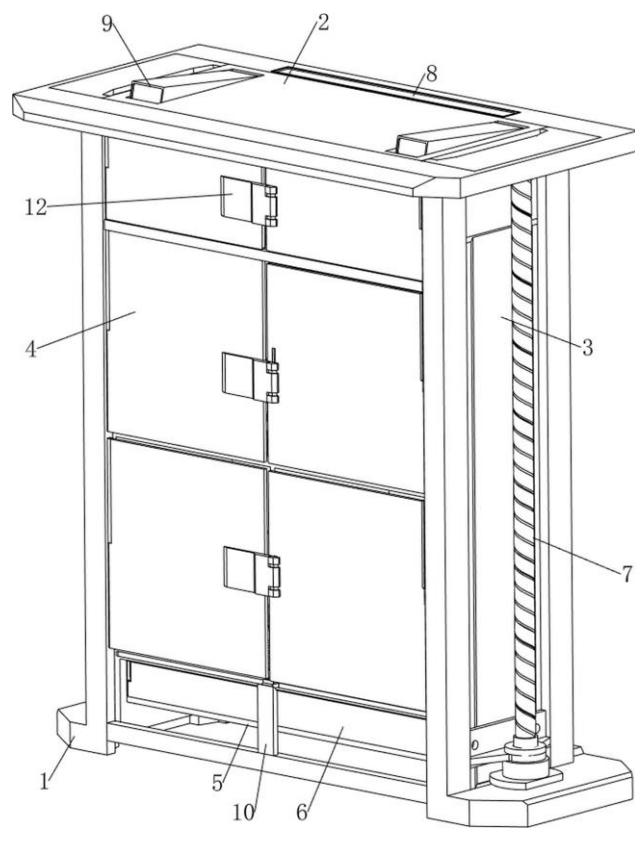
The present disclosure relates to a compact shelf, in particular to a compact shelf with an induction lighting device. The purpose of the present disclosure is to provide a compact shelf with an induction lighting device capable of storing bigger items. The present disclosure provides a compact shelf with an induction lighting device, including an outer frame, support frames, first support blocks, first rotating shafts, first movable plates and the like, wherein the support frames are arranged inside the outer frame, front sides of middles of left and right sides inside the outer frame and front sides of middles of left and right sides of the support frames are all provided with the first support blocks, the first rotating shafts are rotationally arranged on the first support blocks, the first movable plates are arranged on the first rotating shafts and made of iron, and inner sides of every two corresponding first movable plates contact with each other. In the present disclosure, the storage space on the support frames can be enlarged by pulling the first movable plates to rotate, so that the users can place bigger items on the support frames, and then the users are convenient to place the greater items.



21: 2022/10405. 22: 2022/09/20. 43: 2023/04/12
51: A47B
71: Jiangxi Sunshine Safety Equipment Group Co., Ltd.
72: Feifei Zhang
33: CN 31: 202210439609.3 32: 2022-04-25
54: LIFTING COMPACT SHELF

00: -

The present disclosure relates to a compact shelf, in particular to a lifting compact shelf. The technical problem is to provide a lifting compact shelf which is installed underground, has small floor area, airtightness and capability of achieving lifting. The technical solution is as follows: a lifting compact shelf includes a support sliding rail, a cabinet, sliding blocks, first rotating plates, a storage box and the like, wherein left and right sides inside the support sliding rail are all slidingly provided with the sliding blocks, the cabinet is arranged between the sliding blocks, left and right sides of the cabinet are all provided with three cavities in respective, left and right sides at the front of the cabinet are all rotationally provided with three first rotating plates, the storage box is slidingly arranged at a lower part inside the cabinet. In the present disclosure, output shafts of motors are remotely controlled to rotate, so that screw rods drive the sliding blocks and the cabinet to rise, and users are convenient to take items.



21: 2022/10414. 22: 2022/09/20. 43: 2023/04/12

51: G01N

71: NANTONG UNIVERSITY

72: ZHU, Changlai, HE, Xiaoqin, LIU, Xiaoman, LIU, Fang, WANG, Yingjie

33: CN 31: 202111003683.2 32: 2021-08-30

54: SAMPLE TREATMENT METHOD OF IN-SITU IN VITRO CULTURED CELLS FOR TEM OBSERVATION

00: -

Disclosed is a sample treatment method of in-situ in vitro cultured cells for TEM observation, including the following steps: preparing agar gel, placing the agar gel at the well bottom of a cell culture plate, acidifying and rinsing the agar gel, and performing cationic activity treatment on the surface of the agar gel; inoculating to-be-observed cells onto the surface of the obtained agar gel; in the subsequent sample treatment and preparation, fixing with osmic acid and rinsing the sample, cutting an agar gel block containing growing cells by using a scalpel and microforceps, and transferring the agar gel block to another culture plate; performing subsequent dehydration and permeation, and embedding the sample in a capsule type embedding plate; and then performing conventional slicing, dyeing and on-machine observation. The method is of great significance to in-situ TEM observation of the cultured cells and research on the ultrastructure relation between adjacent cells.

21: 2022/10415. 22: 2022/09/20. 43: 2023/04/12

51: A47B

71: Jiangxi Sunshine Safety Equipment Group Co., Ltd.

72: Jianping Zhang

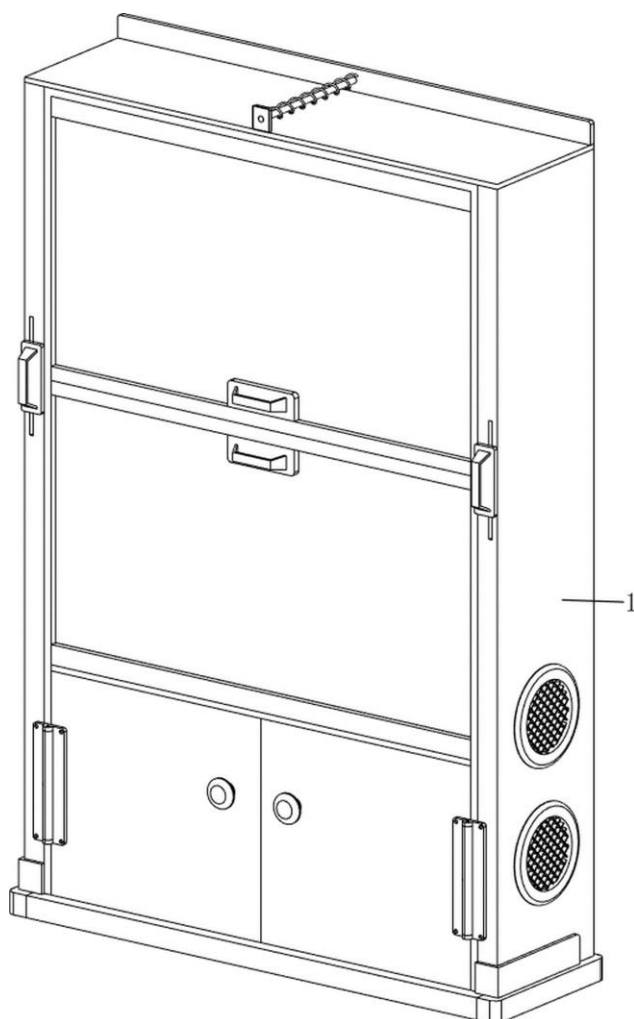
33: CN 31: 202210417209.2 32: 2022-04-20

54: MULTIFUNCTIONAL COMPACT SHELF

00: -

The present disclosure relates to a compact shelf, in particular to a multifunctional compact shelf. The technical problem to be solved is to provide a multifunctional compact shelf capable of realizing free adjustment of item storage spacing. The technical solution is as follows: a multifunctional compact shelf includes a first connecting frame, a plane plate, a spacer plate, a folding placement mechanism and a regulating baffle mechanism, wherein the plane plate is arranged at an upper part inside the first connecting frame, and the spacer

plate is arranged at a left lower part inside the first connecting frame. The multifunctional compact shelf provided by the present disclosure may adjust a placing space according to an item size, clamping rods can move forwards to loosen drive rods, and first rotating plates will be in a vertical state, so the placing space can be enlarged, so as to store the item with great volume conveniently; and conversely, the first rotating plates will be in a parallel state, so as to store small items.

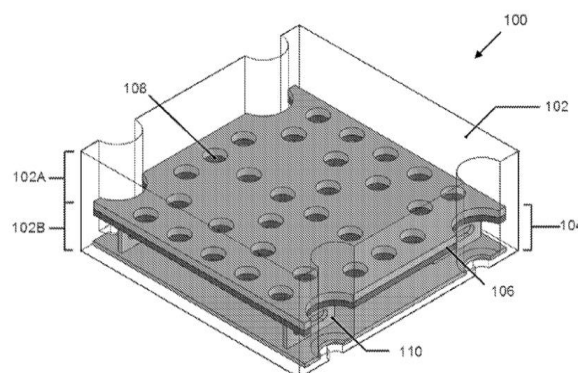


21: 2022/10416. 22: 2022/09/20. 43: 2023/04/12
51: B61D
71: CUTTING EDGES EQUIPMENT PARTS (PTY) LTD
72: ANDREWS, Richard Scott, KIDD, Gary, CAVASINNI, Michael Robert
33: AU 31: 2020900479 32: 2020-02-20

54: IMPACT WEAR PANEL AND METHOD OF CONSTRUCTION THEREOF

00: -

The present invention relates to an impact wear panel comprising an elastomeric panel body, and a plate insert positioned within the panel body, the plate insert comprising at least an impact plate having an upper side and an underside, wherein the impact plate is positioned at a non-zero height within the panel body and is entirely enclosed therein. Also provided is a method of constructing an impact wear panel.



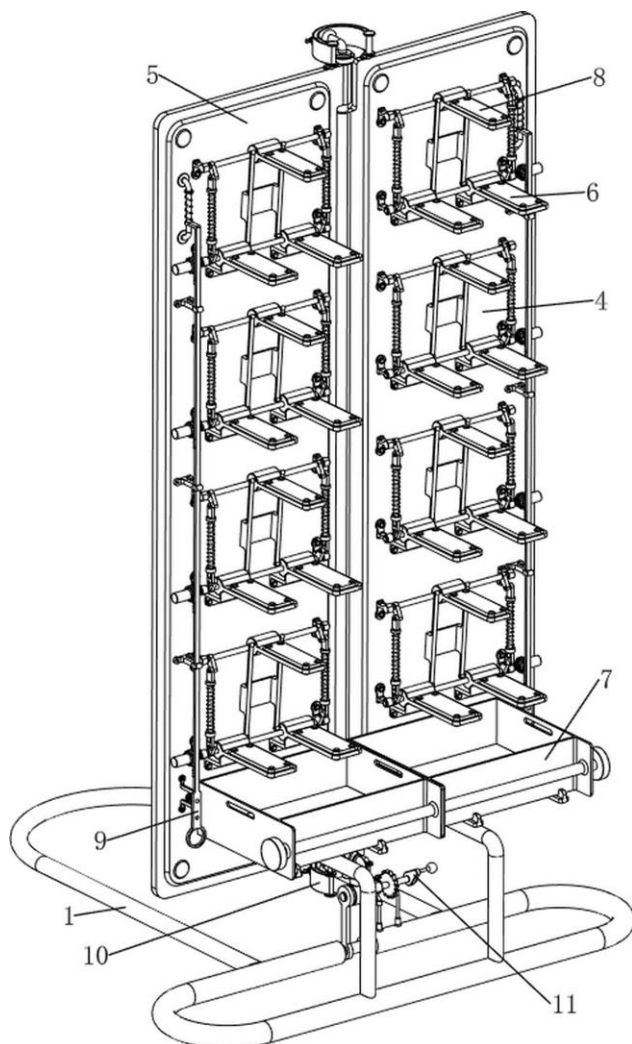
21: 2022/10417. 22: 2022/09/20. 43: 2023/04/12
51: A47B
71: Jiangxi Sunshine Safety Equipment Group Co., Ltd.
72: Shunping Peng
33: CN 31: 202210371264.2 32: 2022-04-11

54: FOLDABLE COMPACT SHELF

00: -

The present disclosure relates to a compact shelf, in particular to a foldable compact shelf. The purpose of the present disclosure is to provide a foldable compact shelf capable of collecting crop seeds. Technical solution: a foldable compact shelf includes a support frame, first fixed columns, a fixed rod, a first main plate, a second main plate and the like, wherein two first fixed columns are arranged on an upper side of the support frame, the fixed rod is rotationally arranged between the two first fixed columns, the second main plate is rotationally arranged on a left side of the fixed rod, and the first main plate is rotationally arranged on a right side of the fixed rod. In the present disclosure, users can rotate first handles by rotating the first main plate and the second main plate forwards, so that support plates rotate and unfold forwards, the users can air a

great number of bundled crops, and then the falling crop seeds can be collected in collection boxes.



21: 2022/10491. 22: 2022/09/21. 43: 2023/03/17

51: B29C; B32B; B65D

71: KUHNE ANLAGENBAU GMBH

72: SCHIFFMANN, Jürgen MICHAEL

33: DE 31: 10 2020 111 879.1 32: 2020-04-30

54: METHOD FOR PRODUCING A MULTILAYER COMPOSITE FILM, MULTILAYER COMPOSITE FILM, AND USE THEREOF

00: -

The invention relates to a method for producing a coextruded and/or laminated and biaxially stretched composite film and to a multilayer film resulting therefrom which has an improved processability and/or an improved recyclability. For this purpose, the invention proposes a novel combination of different layer component densities of the composite film and specific production parameters, such as the

stretch factors, relaxation factors, relaxation temperatures, and residual stretch factors.

21: 2022/10547. 22: 2022/09/22. 43: 2023/03/24

51: E21D; G01L

71: Timrite (Pty) Ltd

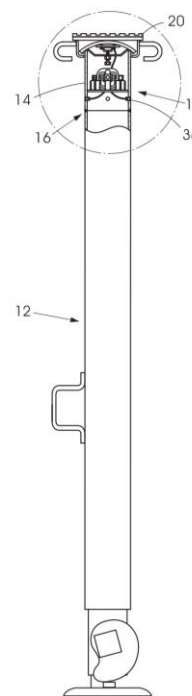
72: PIENAAR, Frans Roelof Petrus, HOWELL, Mark

33: ZA 31: 2021/04264 32: 2021-06-22

54: SUPPORT STATUS INDICATOR AND GROUND MOVEMENT EARLY WARNING DEVICE

00: -

A warning system 10 intended for use in conjunction with mine supports 12 in underground mines. The warning system 10 comprises a housing 14 secured to the upper end of a mine support 12. The free end of the housing 14 is closed by means of a resiliently deformable domed end cap. A load cell is secured to the underside of the domed end cap 18, where it is acted on by a pressure element that bears against the spring element of the load cell and transfers compressive force applied to the domed end cap to the spring element. The warning system 10 includes programmable logic means programmed to monitor the compressive force applied to the spring element and to produce an alert signal in the event that the compressive force exceeds a programmed compressive force value.



21: 2022/10570. 22: 2022/09/23. 43: 2023/04/12

51: B24B

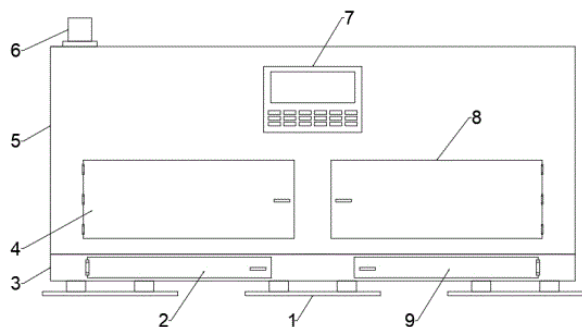
71: Jingtian ZHANG

72: Jingtian ZHANG, Zhe ZHANG, Jing YUAN, Fang LIANG

54: ALL-IN-ONE GRINDING MACHINE FOR ELECTRONICALLY CONTROLLED MACHINING

00: -

The invention discloses an all-in-one grinding machine for electronically controlled machining, comprising supporting feet, a first chamber door, an equipment base, a feeding chamber door, an equipment casing, an indicator light, a main control panel, and so on; the equipment base is provided with an equipment casing, the equipment casing is horizontally provided with a section of sliding rail, and the bottom of the sliding rail is fixed by sliding rail frames; the sliding rail is provided with a slidable workpiece table, and two vertically fixed threaded rod seats are symmetrically arranged on the workpiece table. Compared with the prior art, the invention has the advantages that: the overall structure is simple and exquisite, the selection of parts, the connection method and the overall working principle are reasonable and clear, and the use method is simple. Through the grinding and cleaning of the electronically controlled all-in-one equipment, the production efficiency and workpiece machining accuracy are greatly improved, and the tedious and inconvenient problems of traditional manual grinding are solved. Compared with large-scale equipment, this equipment is more compact, professional, and suitable for promotion.



21: 2022/10625. 22: 2022/09/26. 43: 2023/04/14

51: H01M

71: POWERCELL SWEDEN AB

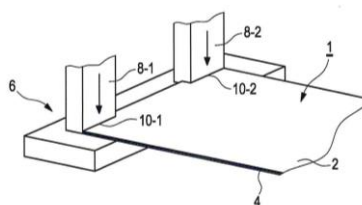
72: ARELL, Lars Gustaf, FLINK, Johan, LYDHIG, Thomas

33: SE 31: 2050394-2 32: 2020-04-07

54: MANUFACTURING ARRANGEMENT AND METHOD FOR A FUEL CELL STACK

00: -

Disclosed is a manufacturing arrangement for a fuel cell stack or at least a unit fuel cell (1) of the fuel cell stack comprising at least a pre-arrangement site for arranging a membrane electrode assembly (2) and a bipolar plate (4) in a predefined orientation to each other, wherein the bipolar plate (4) has at least one opening (12) and/or at least one specific contour, and wherein the membrane electrode assembly (2) and the bipolar plate (4) are oriented to each other in such a way that the membrane electrode assembly (2) covers at least one opening in the bipolar plate (4) and/or extends over the bipolar plate (4) in at least one area; wherein the manufacturing arrangement further comprises at least one cutting site with a cutting device (6) which is adapted to cut the membrane electrode assembly (2) in a pre-determined area so that the membrane electrode assembly (2) has a cut opening (12), which resembles the at least one opening of the bipolar plate (4), and/or at least one cut contour (10), which resembles the at least one contour of the bipolar plate (4), and/or at least one cut alignment structure (10) for aligning the unit fuel cells (1) in a fuel cell stack, as well as a corresponding manufacturing method.



21: 2022/10648. 22: 2022/09/26. 43: 2023/03/17

51: C04B

71: CHRYSO

72: JACHET, Marie, PELLERIN, Bruno

33: FR 31: 2003563 32: 2020-04-09

54: PARTIALLY PROTONATED ALKANOLAMINE COMPOSITION, AND USE IN A MILL

00: -

The invention relates to a composition (C) comprising 10 to 99 wt.% secondary or tertiary alkanolamine (A) in the form of a salt, preferably an inorganic acid salt, and 1 to 90 wt.% of non-salified alkanolamine (A).

21: 2022/10688. 22: 2022/09/27. 43: 2023/04/12

51: A47G; B64D; B64F

71: O'TOOLE, Daniel, S

72: O'TOOLE, Daniel, S

33: US 31: 63012662 32: 2020-04-20

54: EXPANDING FLOOR/ACCORDION DRONE DOCKING STATION

00: -

Disclosed herein is a drone docking station for deposit of items/goods delivered by a drone to a secured receptacle. Items can be delivered to a receptacle at a curb, mailbox, post, porch, in-ground vault and window to a multi-panel receptacle with an expanding floor/accordion station that has specific residential/commercial address with various optional features. Features include communication systems between the station and drone; security; hot and cold temperature control and preservation of the goods before and after delivery; battery charging and exchange station; a collector to identify explosive materials, anthrax etc.; ultraviolet system to eradicate diseases, virus and harmful materials; an ozone applicator to eradicate disease, virus and harmful materials; weather monitoring; tag and track vehicles and packages; facial recognition camera and software for pets and humans; and local two-way speakers; LED lights tat strobe flash, and a flood light.

21: 2022/10744. 22: 2022/09/28. 43: 2023/02/15

51: G06K

71: Identity Inc.

72: ARAGON, Jesus, GUPTA, Hardik

33: EP(ES) 31: 20382290.3 32: 2020-04-09

54: LIVELINESS DETECTION USING A DEVICE COMPRISING AN ILLUMINATION SOURCE

00: -

A computer-implemented method for identifying a user, the method using a computing device comprising an illumination source that, when activated, emits visible light, the method comprising taking two images of a scene potentially comprising a living body part carrying a biometric characteristic, wherein a first image is taken without the illumination source being activated and the second image is taken with the illumination source being activated, transferring the first image and the second image to a neural network and processing, by the neural network the first image and the second image,

wherein the processing comprises comparing the first image and the second image, thereby determining whether the first image and the second image are images of a living body part, the method further comprising, if it is determined that the first image and the second image are images of a living body part, performing an identification algorithm to find a biometric characteristic for identifying the user and, if it is determined that the first image and the second image are not images of a living body part, not performing the identification algorithm.

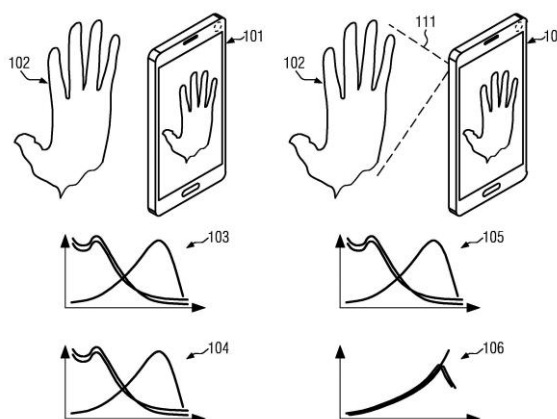


FIG. 1

21: 2022/10782. 22: 2022/09/29. 43: 2023/04/13

51: A61K; C07C; C07D

71: SUZHOU ABOGEN BIOSCIENCES CO., LTD.

72: YING, Bo

33: US 31: 63/011,140 32: 2020-04-16

33: CN 31: 202010275664.4 32: 2020-04-09

33: CN 31: 202110299761.1 32: 2021-03-19

54: LIPID NANOPARTICLE COMPOSITION

00: -

Provided herein are lipids that can be used in combination with other lipid components, such as neutral lipids, cholesterol and polymer conjugated lipids, to form lipid nanoparticles for delivery of therapeutic agents (e.g., nucleic acid molecules) for therapeutic or prophylactic purposes, including vaccination.

21: 2022/10852. 22: 2022/09/30. 43: 2023/03/09

51: H04W

71: TELEFONAKTIEBOLAGET LM ERICSSON

(PUBL)

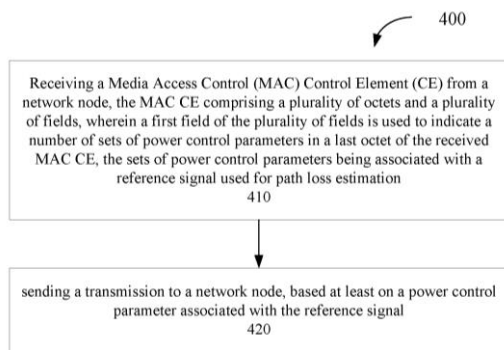
72: MÄÄTTÄNEN, Helka-Liina, FOLKE, Mats

33: US 31: 63/014,470 32: 2020-04-23

54: METHODS AND NODES FOR EFFICIENT MAC CE DESIGN FOR INDICATING MAPPING BETWEEN PATHLOSS REFERENCE AND MULTIPLE SRI

00: -

There is provided a method in a wireless device. The method comprises: receiving a Media Access Control (MAC) Control Element (CE) from a network node, the MAC CE comprising a plurality of octets and a plurality of fields, wherein a first field of the plurality of fields is used to indicate a number of sets of power control parameters in a last octet of the received MAC CE, the sets of power control parameters being associated with a reference signal used for path loss estimation; and sending a transmission to a network node, based at least on a set of power control parameters associated with the reference signal.



21: 2022/10878. 22: 2022/10/03. 43: 2023/02/27
51: G21C

71: Shanghai Nuclear Engineering Research & Design Institute Co., Ltd.

72: LIU, Zhan, LIU, Di, WANG, Haitao, YANG, Bo, CAO, Kemei, QI, Zhanfei

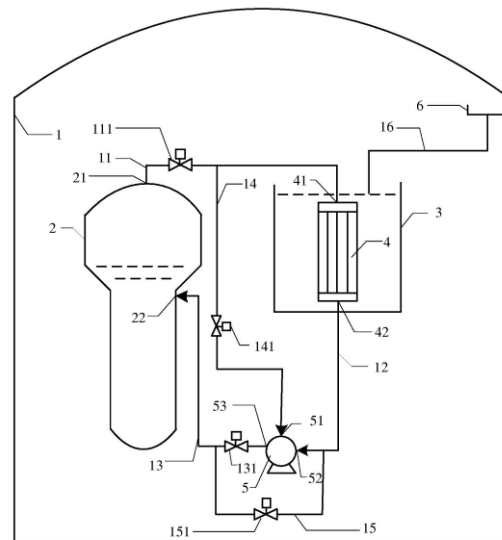
33: CN 31: 202010332404.6 32: 2020-04-24

54: REACTOR SECONDARY SIDE PASSIVE RESIDUAL HEAT REMOVAL SYSTEM

00: -

Provided is a reactor secondary side passive residual heat removal system, comprising: a containment vessel; a steam generator provided with a steam outlet and a water supply inlet; a water tank, the water tank being internally provided with a heat exchanger, the heat exchanger having a heat exchanger inlet and a heat exchanger outlet; and a steam driven pump provided with a steam port, a water inlet and a water outlet, wherein the steam generator, the water tank and the steam driven

pump are arranged in the containment vessel, the heat exchanger inlet is in communication with the steam outlet of the steam generator by means of a first pipeline, the heat exchanger outlet is in communication with the water inlet of the steam driven pump by means of a second pipeline, the water outlet of the steam driven pump is in communication with the water supply inlet of the steam generator by means of a third pipeline, and the steam port of the steam driven pump is in communication with the first pipeline by means of a fourth pipeline. The present invention does not rely on an external driving force, thereby greatly reducing the failure probability of the system and improving the safety of the system.



21: 2022/11165. 22: 2022/10/12. 43: 2023/03/24
51: G05B

71: China Construction Railway Investment and Construction Group Co., Ltd.

72: HUANG, Feng, XING, Zhenhua, TIAN, Hao, ZHAO, Wanping, RAN, Teng, WANG, Jintong, LIU, Chuang, LUO, Zongqiang, LAN, Tingbo

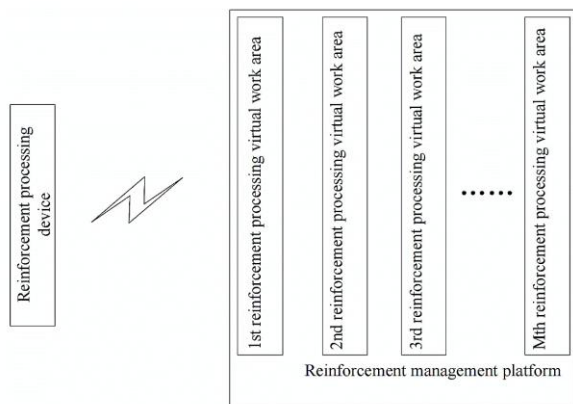
33: CN 31: CN202210192644.X 32: 2022-03-01

54: COST BATCH METHOD AND SYSTEM AS WELL AS COUNTING SYSTEM FOR REINFORCEMENT PROCESSING PLANTS

00: -

The present disclosure provides a cost batch method and system for a reinforcement processing plant, as well as a counting method and method. The batch system includes a reinforcement

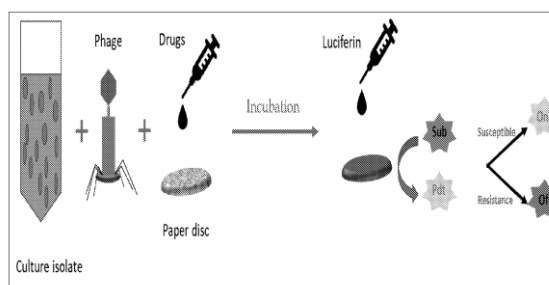
processing device, and also includes a reinforcement management platform, wherein M reinforcement processing virtual work areas are arranged on the reinforcement management platform, a material list on the mth reinforcement processing virtual work area is sent to the reinforcement processing device, and reinforcement surpluses are counted after processing using the reinforcement processing device. The batch method includes the following steps: S-1, a reinforcement surplus counting device sends counted reinforcement surplus information to a reinforcement management platform; and S-2, the reinforcement management platform calculates costs after receiving the reinforcement surplus information counted by the reinforcement surplus counting device. The counting system comprises a collection stand including a left-column collection stand pillar and a right-column collection stand pillar which are arranged side by side at left and right intervals along the length direction of reinforcements. According to the present disclosure, the reinforcement surpluses on each reinforcement processing virtual work area are counted to obtain its cost.



21: 2022/11453. 22: 2022/10/19. 43: 2023/03/17
 51: C12Q; G01N
 71: INDIAN COUNCIL OF MEDICAL RESEARCH, INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR
 72: CHAKRABORTY, Suman, TRIPATHY, Srikanth Prasad, AZGERDUSTHACKEER, V. N., KAR, Shantimoy, MAHIZHAVENI, B., GOVINDARAJAN, S.
 33: IN 31: 202011018419 32: 2020-04-29
54: A PAPER DISC BASED METHOD FOR DETERMINING THE DRUG SUSCEPTIBILITY OF MYCOBACTERIUM TUBERCULOSIS

00: -

The present invention provides a method for determining drug susceptibility of bacteria. More specifically, the present invention provides a paper disc based method for determining the drug susceptibility of *M. tuberculosis* comprising preparing a paper disc and incubating with a sample; treating the disc with an anti-microbial drug; adding a bacteriophage to the drug treated disc and incubating at 37 degrees C for a period of 180 minutes; and screening by addition of a substrate and measuring relative light units. Thus, the present invention provides a cost-effective, rapid and sensitive method for assessing drug resistance for tuberculosis.



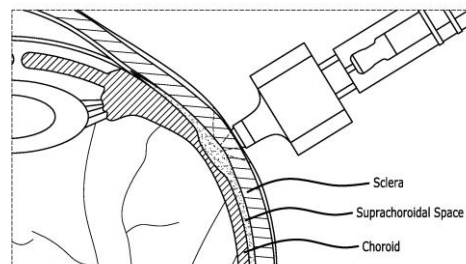
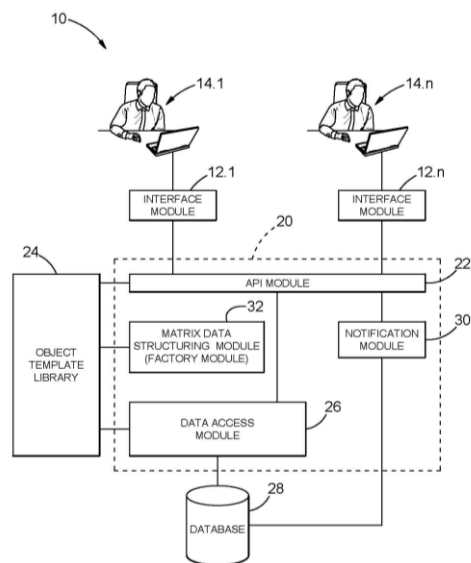
21: 2022/11589. 22: 2022/10/24. 43: 2023/03/16
 51: A61K; A61P
 71: BIOPROJET PHARMA
 72: LECOMTE, Jeanne-Marie, SCHWARTZ, Jean-Charles, BERREBI-BERTRAND, Isabelle, KRIEF, Stéphane, LIGNEAU, Xavier, LECOMTE, Isabelle
 33: EP 31: 20305429.1 32: 2020-05-04
54: USE OF DOPAMINE D3 PARTIAL AGONISTS FOR TREATING CENTRAL NERVOUS SYSTEM DISORDERS

00: -

The present invention provides for the use of D3 partial agonists for treating or inhibiting the restless leg syndrome (RLS), binge eating, essential tremor and neurodegenerative diseases, in particular D3 partial agonists/D2 antagonists.

21: 2022/11736. 22: 2022/10/27. 43: 2023/03/16
 51: G06Q
 71: GABRIENNE TRADING SYSTEMS (PTY) LIMITED
 72: VAN NIEKERK, Tyronne, MAHON, Brett, Lyle
54: SYSTEMS AND PROCESSES FOR PEER-TO-PEER FINANCIAL INSTRUMENT TRANSACTIONS
 00: -
 The invention relates to systems and processes for enabling the execution of a peer-to-peer financial

instrument transaction. More specifically, the invention relates to a system and processes for executing a peer-to-peer financial instrument transaction, a system and process for generating a quote in the system for executing a peer-to-peer financial instrument transaction, and a process for presenting a price level component matrix in an interface module of the system for executing a peer-to-peer financial instrument transaction.



21: 2022/11922. 22: 2022/11/02. 43: 2023/03/22
51: B60W

71: VISHWAKARMA INSTITUTE OF TECHNOLOGY

72: MAHAJAN, Chandrashekhar, JOSHI, Kalpesh V., SONAR, Parikshit M., SONAWANE, Mohan L., SOMAN, Koustubh P., SONAWANE, Pushkar L., SOMANI, Venkatesh R

54: DRIVER SAFETY SYSTEM

00: -

Accordingly following invention provides a driver safety system capable to recognize driver fatigue based on visual information and artificial intelligence. The system comprises of an algorithm to locate, track, and analyse both the drivers face and eyes to measure drowsiness associated with slow eye closure. We use the Lane Departure Warning (LDW) systems to detect the position of the vehicle with respect to the lane boundary. We propose an algorithm to detect lane marking and it works accurately with various lighting conditions as well as on different road types. This system is able to determine the driver state under real day and night conditions using IR camera. Face and eyes detection are implemented based on symmetry. Following invention is described in detail with the help of Figure 1 of sheet 1 showing flow chart of the proposed system.

21: 2022/11833. 22: 2022/10/31. 43: 2023/02/28
51: A61K

71: MED PROGRESS, LLC

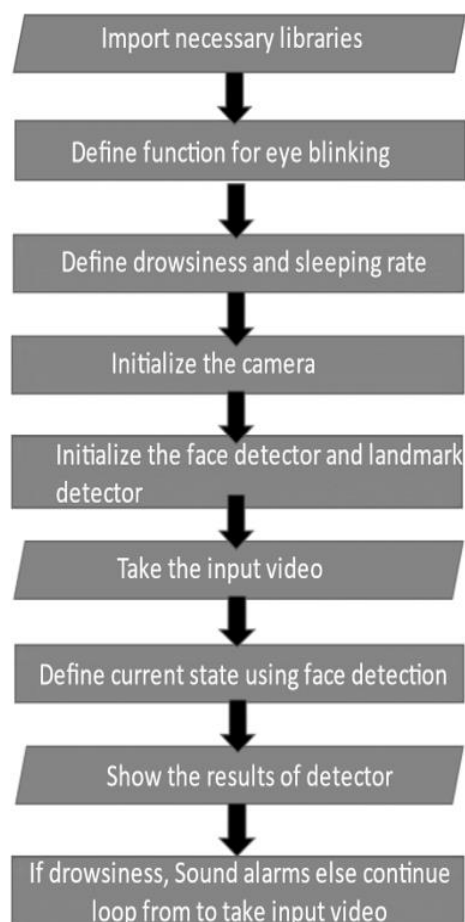
72: YOELIN, Steve

33: US 31: 63/004,444 32: 2020-04-02

54: REDUCING OR INHIBITING OCULAR DAMAGE BY HYALURONIDASE ADMINISTRATION

00: -

The present disclosure discloses compositions comprising a hyaluronidase, devices comprising such compositions, as well as methods and uses employing such compositions and devices to reduce or eliminate a hyaluronic acid-induced blockage of one or more blood vessels supplying an eye of an individual; methods and uses for employing such compositions and devices to reduce or inhibit a vascular occlusion in an eye of an individual; and methods and uses for employing such compositions and devices to reduce or inhibit a hyaluronic acid-induced loss of vision of an individual.



21: 2022/12205. 22: 2022/11/09. 43: 2023/02/10
51: B01J; C07D

71: ANHUI SENRISE TECHNOLOGY CO., LTD.

72: LIU, Yinhui, SUN, Xiling, LI, Xiaoyan

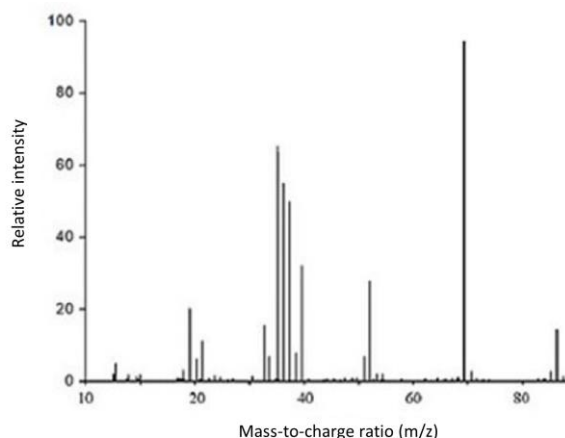
33: CN 31: 202210364329.0 32: 2022-04-08

54: METHOD FOR PREPARING 2-METHYLTETRAHYDROFURAN BY USING WASTE BIOMASS

00: -

The present invention provides a method for preparing 2-methyltetrahydrofuran by using waste biomass, and belongs to the technical field of chemical production. For preparation of the 2-methyltetrahydrofuran in the present invention, a catalyst is used for catalytic hydrogenation of furfural to prepare the 2-methyltetrahydrofuran. In a preparation process, a Cu-Ni bimetallic catalyst is used in combination with phenylhydrazine hydrochloride and sodium vanadate as a catalyst for hydrogenation reaction. The use of the catalyst can make the hydrogenation reaction react under a low pressure, with low requirements for reaction

equipment, which is conducive to large-scale preparation. In addition, the addition of the phenylhydrazine hydrochloride and the sodium vanadate effectively improves the activity of the catalyst, making a conversion rate of the furfural close to 100%.



21: 2022/12343. 22: 2022/11/11. 43: 2023/02/15
51: G06Q

71: BLOCKQUAKE IP HOLDINGS, LLC

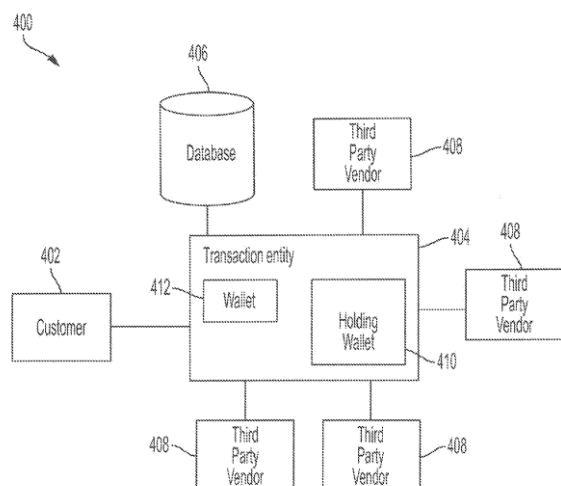
72: BRASSE, Antonio, BRASSE, Samuel, HYUN, Samuel, SHRIKISHUN, Randy

33: US 31: 63/001,646 32: 2020-03-30

54: SYSTEM AND METHOD OF AUTOMATED KNOW-YOUR-TRANSACTION CHECKING IN DIGITAL ASSET TRANSACTIONS

00: -

An automated method of checking for legitimacy during a digital asset transaction, including by a customer, initiating a digital asset transaction, receiving a wallet address corresponding to a wallet, checking the wallet address against one or more databases, wherein said one or more databases comprise wallet transaction history and risk category information, determining if the wallet address should be flagged as a suspicious transaction based on the transaction history and risk category information stored in the one or more databases, if the wallet address is flagged as suspicious, rejecting the transaction and notifying the customer of the rejection, or moving the digital assets to a holding wallet for further checks, and if the wallet address is not flagged as suspicious, releasing the digital assets and proceeding with the transaction.



21: 2022/12487. 22: 2022/11/16. 43: 2023/03/27
51: A01G

71: SUN, Zhihua, XINJIANG TAIYUAN WATER TECHNOLOGY CO., LTD.

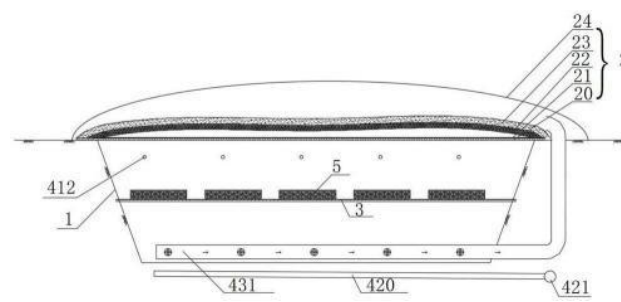
72: He, Jun, SUN, Zhihua, MA, Yanping, MA, Jun, GUO, Yan, ARKEN, Yasen, YAN, Xixin, BAI, Haili, UMAR, Husan

33: CN 31: 202111326797.0 32: 2021-11-10

54: UNDERGROUND MUSHROOM PLANTING GREENHOUSE

00: -

The present invention relates to the technical field of mushroom cultivation, and discloses an underground mushroom planting greenhouse which comprises a cultivation groove dug under the ground, a covering structure, a support frame and an environmental control mechanism. In the present application, the cultivation groove is underground, and can still play a good heat preservation role when the temperature is low; the covering structure on the top of the cultivation groove can isolate the temperature above the ground, prevent carbon dioxide in the upper greenhouse from infiltrating into the cultivation groove, ensure stability of air humidity in the cultivation groove, provide air needed for mushroom growth through a gas control assembly, exhaust the carbon dioxide accumulated during mushroom growth by an exhaust mechanism, and discharge the carbon dioxide into the greenhouse, thereby further improving a heat preservation effect of the greenhouse by using heat preservation characteristics of carbon dioxide.



21: 2022/12530. 22: 2022/11/16. 43: 2023/02/01

51: H01L

71: SEOUL VIOSYS CO.,LTD.

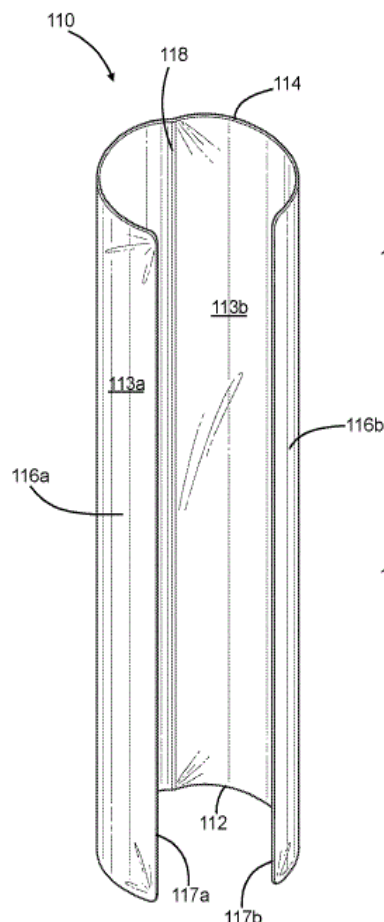
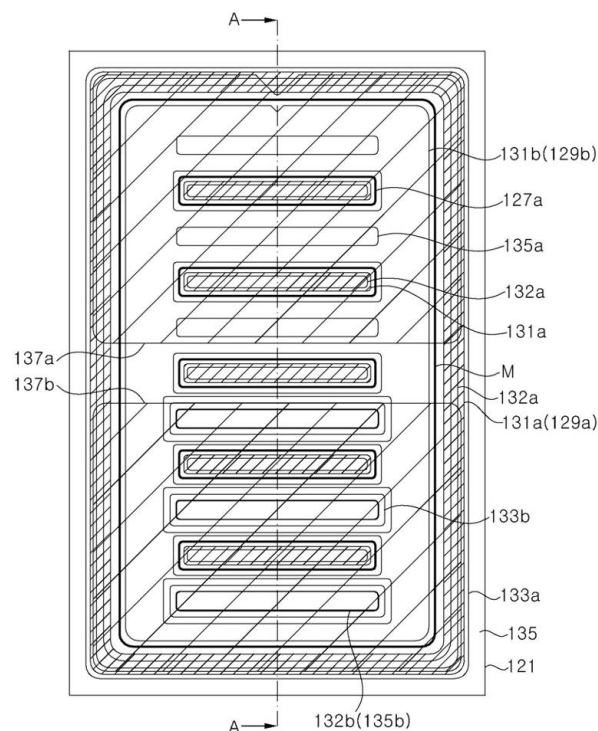
72: KIM, Tae Gun, LEE, Kyu Ho

33: KR 31: 10-2019-0004547 32: 2019-01-14

54: DEEP ULTRAVIOLET LIGHT-EMITTING DIODE

00: -

A deep ultraviolet light-emitting diode is provided. A deep ultraviolet light-emitting diode according to an embodiment comprises: a substrate; an n-type semiconductor layer positioned on the substrate; a mesa disposed on the n-type semiconductor layer and comprising an active layer and a p-type semiconductor layer; n ohmic contact layers coming into contact with the n-type semiconductor layer; a p ohmic contact layer coming into contact with the p-type semiconductor layer; an n bump electrically connected to the n ohmic contact layers; and a p bump electrically connected to the p ohmic contact layer. The mesa comprises a plurality of vias which expose a first conductive semiconductor layer. The mesa has a long rectangular shape along the length direction. The vias are aligned to be parallel to one another in a direction perpendicular to the length direction of the mesa. The n ohmic contact layers are respectively formed on the first conductive semiconductor layer exposed around the mesa and the first conductive semiconductor layer exposed by means of the vias.



21: 2022/12672. 22: 2022/11/21. 43: 2023/02/17

51: A61F

71: MENOVA INTERNATIONAL, INC.

72: James J ELIST

33: US 31: 16/882,167 32: 2020-05-22

54: PENILE IMPLANT DEVICE AND METHOD

00: -

A penile implant enhancement device and method is provided. The penile implant device comprises a sleeve that is configured to at least partially surround a shaft of a penis and an external layer configured to cover one or more edges, surfaces, or layers of the sleeve to form one or more covered edges, surfaces, or layers themselves configured to align with the penis. The method comprises the steps of administering one or more anesthetic agents; cutting a transverse incision above the pubic symphysis; clamping a lower edge of the transverse incision; dissection through the one or more layers of subcutaneous tissue to expose tunica albuginea; everting the penis; creating a pocket between the tunica albuginea and the skin; providing the aforementioned penile implant device; suturing the covered edges, surfaces, or layers to the penis; trimming the external layer, reverting the penis; and closing the transverse incision.

21: 2022/12697. 22: 2022/11/22. 43: 2023/01/11

51: A61K; C07D

71: CELLIX BIO PRIVATE LIMITED

72: KANDULA, Mahesh

33: IN 31: 202041019951 32: 2020-05-12

54: PROCESS FOR THE PREPARATION SALTS OF TRIAZOLE COMPOUNDS

00: -

The present invention discloses a large scale process for preparation of triazole compounds using polar and non-polar solvents. More particularly relates to a method of preparing dilauryl glyceryl fumarate salt of posaconazole, voriconazole and itraconazole respectively. The method comprises of dissolving triazole compound and dilauryl glyceryl fumarate in a suitable polar solvent at a temperature range of 30-55°C for salt formation and final salt is isolated using non-polar solvent at a low temperature range of 0-35°C. It further discloses a method of producing fine particulate size of the dilauryl glyceryl fumarate salt of triazole preferably in the size ranging from 0.001micron to 100micron. It also discloses a method of preparing a desired pharmaceutical preparation.

21: 2022/12702. 22: 2022/11/22. 43: 2023/01/24
51: A61K; C07H

71: CELLIX BIO PRIVATE LIMITED

72: KANDULA, Mahesh

33: IN 31: 202041020998 32: 2020-05-19

54: PHARMACEUTICAL FORMULATIONS AND THEIR PREPARATIONS FOR TREATMENT OF CANCER

00: -

The present invention relates to a pharmaceutical formulation of 5-fluoropyrimidine derivatives or a salt, solvate, or hydrate thereof for oral administration wherein the formulation is a simple composition for ingestion, simple, safest, convenient, non-invasive, versatility and most importantly, the patient compliance for oral administration with improved compliance, safety, and bioavailability. Further disclosed is a process for the preparation, composition, methods of administration, dosages of the formulation and their use for treating cancers and its associated complications.

21: 2022/12770. 22: 2022/11/23. 43: 2023/04/12

51: C09D; C09K

71: BIND-X GMBH

72: Martin SPITZNAGEL, Luitpold FRIED, Saskia PAZUR, Jan-Philip MERKL, Florian HORNUNG

33: EP 31: 20176894.2 32: 2020-05-27

54: BIOCEMENTATION MIXTURE FOR DUST CONTROL AND RELATED APPLICATIONS

00: -

The present invention relates primarily to the use of a mixture for reducing dust formation and/or erosion. The invention relates additionally to a method for reducing dust formation and/or erosion and also to a mixture suitable for this purpose.

21: 2022/12795. 22: 2022/11/24. 43: 2023/04/11

51: B65B

71: Anqing Tianrun Paper Plastic Packaging Co., Ltd

72: LONG, Daoqin, CHENG, Jiusong

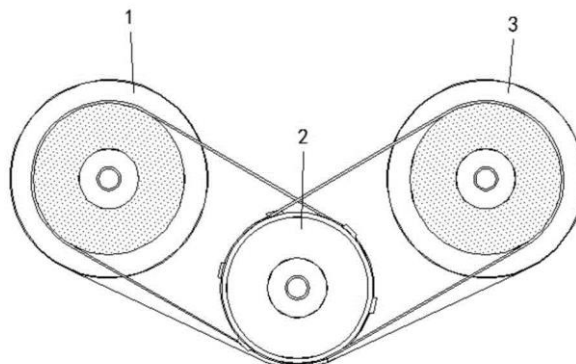
33: CN 31: 202111106766.4 32: 2021-09-22

54: PAPER PASTING MECHANISM OF PAPER PASTING MACHINE OF INFUSION APPARATUS

00: -

The present application provides a paper pasting mechanism of a paper pasting machine for an infusion apparatus, and relates to the field of packaging stickers of infusion apparatuses. The paper pasting mechanism of the paper pasting

machine of the infusion apparatus includes a pasting component. In the present application, a winding drum and an unwinding drum arranged at two sides of the pasting component are in transmission connection under the action of connection of belts so that the cut dialysis paper is firmly adsorbed onto an outer end surface of outer convex sleeves, and stripped from the outer convex sleeve under the action of adhesion of an adhesive at the packaging bag so as to complete the whole paper pasting process. In this process, the dialysis paper after being cut is adsorbed onto the outer convex sleeve, and the outer convex sleeve is adaptive to the adhesion position of the packaging bag, i.e., a process that multiple sets of outer convex sleeves alternately rotate to the packaging bag is a process of precisely pasting the dialysis paper.



21: 2022/12846. 22: 2022/11/25. 43: 2023/03/16

51: A21C

71: FRITO-LAY NORTH AMERICA, INC.

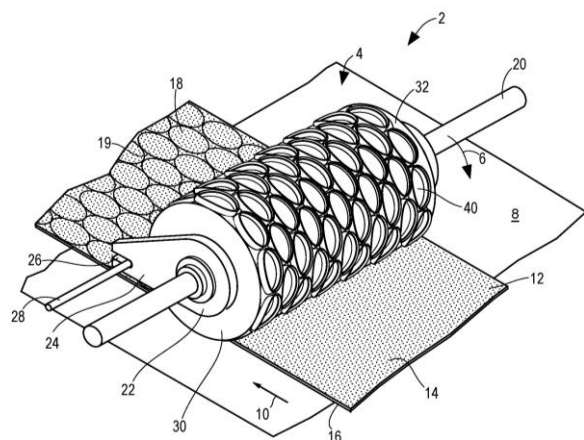
72: PONGPAIROTE, Chumpol

33: US 31: 16/890,260 32: 2020-06-02

54: CUTTING APPARATUS FOR DOUGH PRODUCTS

00: -

An apparatus includes a cutting surface that contains at least one cutting element having a top. The cutting element also has an interior sidewall extending from the cutting surface to the top with an interior sidewall angle, an exterior sidewall extending from the cutting surface to the top with an exterior sidewall angle and a shoulder provided on the interior sidewall between the base and the top. The interior sidewall angle is different than the exterior sidewall angle.



21: 2022/12915. 22: 2022/11/28. 43: 2023/03/16

51: H05B

71: FUJIAN SANAN SINO-SCIENCE
PHOTOBIOTECH CO., LTD.72: HONG, Huilun, LIN, Shaoqing, LI, Haibin, WU,
Chanjuan, ZENG, Liang

33: CN 31: 202010261133.X 32: 2020-04-03

**54: EFFICIENT AND SAFE PLANT LIGHTING
CIRCUIT**

00: -

The present invention relates to the technical field of plant lighting. Provided is an efficient and safe plant lighting circuit, comprising an aluminum substrate and a driving power supply, wherein the driving power supply is disposed on the aluminum substrate; multiple driving circuits are connected in parallel at an output end of the driving power supply, each driving circuit is connected to at least one LED lamp source, each driving circuit is connected to a safe circuit in series at the front end of the LED lamp source, and the safe circuit is disposed on the aluminum substrate; and an LED light-emergent surface of the aluminum substrate is coated with an ultrathin silicone layer. In the present invention, the safety and reliability of a lamp circuit are improved by means of the safe circuit, and the integral junction pressure of an LED is precisely controlled, thereby improving the circuit efficiency, and simplifying a lamp. Accordingly, the use of heat dissipation parts is reduced, the heat dissipation surface area of the lamp is effectively decreased, sufficient lighting can be provided for plants in a limited space, the lighting utilization rate is effectively improved, the planting effect is greatly improved, and the planting safety and economic benefits are improved.

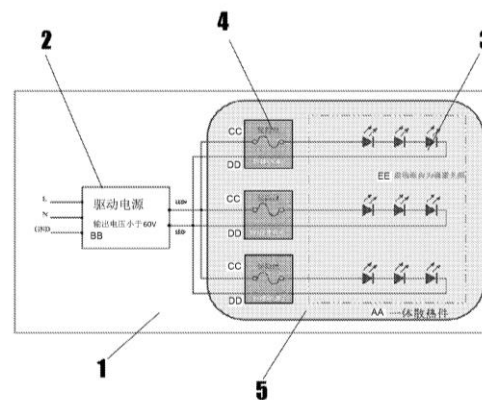


图 1
2 Driving power supply
AA Integrated heat dissipation member
BB The output voltage is less than 60V
CC Fuse
DD EVA waterproof box
EE Exposed light source in dashed box

21: 2022/12937. 22: 2022/11/29. 43: 2023/03/16

51: G06K

71: Ningde Normal University

72: HUANG Zhaoyuan

**54: KEY ACTION DETECTION SYSTEM OF
PHYSICAL EDUCATION VIDEO BASED ON DEEP
LEARNING**

00: -

The invention discloses a key action detection system of physical education video based on deep learning, which comprises the following steps: acquiring physical education video data through an acquisition module, wherein the physical education video data comprises track and field teaching video data; the extraction module extracts the region of interest from the video data of physical education teaching, and obtains the characteristic region according to the extraction result; through the detection module, the deep learning module is used to identify the characteristic regions, and the key frames are extracted according to the identification results to obtain the key actions of the physical education video, and the key actions of the physical education video are displayed and stored by the display module.



21: 2022/13091. 22: 2022/12/02. 43: 2023/03/16

51: C09D

71: Wesdon River Powder Paint Scientific Research
Co., Ltd.

72: Yufu WEI, Zhuoxuan HUANG, Yanming WU, Xinping ZHU

33: CN 31: 202011574451.8 32: 2020-12-25

54: ANTISTATIC POWDER COATING AND PREPARATION METHOD THEREFOR

00: -

The present disclosure relates to the field of a preparation method for a high polymer material, and particularly discloses an antistatic powder coating and a preparation method therefor. The antistatic powder coating is prepared from a component A and a component B at a weight percentage of (200-20): 1, wherein the component A is composed of the following raw materials in weight percentages: 30.0-75.0% of a resin, 3.0-30.0% of a curing agent, 0.8-1.5% of a leveling agent, 1.0-5.0% of a coupling agent, 0.3-1.0% of a defoaming agent, 0.2-1.0% of an electricity increasing agent, 0.5-5.0% of other adjuvants, and 10.0-45.0% of a pigment and filler, and a sum of the weight percentages of the raw materials is 100%; and the component B is composed of the following raw materials in weight percentages: 40.0-85.0% of a composite conductive adjuvant, 10.0-58.0% of an organic acid modified stabilizer, 0.5-8.0% of a coupling agent, and 0.2-5.0% of a dispersing agent, and the sum of the weight percentages of the components is 100%. The present disclosure further discloses a preparation method for preparing the antistatic powder coating. The antistatic powder coating of the present disclosure not only can improve the application efficiency of a conductive material and reduce the cost of the coating, but also can significantly improve the corrosion resistance and the stability of electrical conduction of a coating layer.

21: 2022/13184. 22: 2022/12/06. 43: 2023/03/16
51: H02M

71: Northwestern Polytechnical University

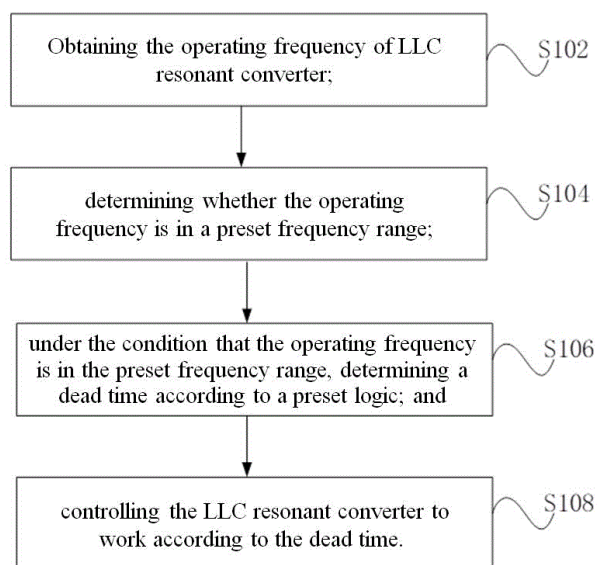
72: GAO Tian, YANG Yan, HOU Jing

54: LLC RESONANT CONVERTER AND CONTROL METHOD THEREOF

00: -

Disclosed are a control method and a device of LLC resonant converter and LLC resonant conversion system. The control method of LLC resonant converter includes: obtaining the operating frequency f of LLC resonant converter; determining whether the operating frequency f is in a preset frequency range; under the condition that the

operating frequency f is in the preset frequency range, determining a dead time $d(f)$ according to a preset logic; controlling the LLC resonant converter to work according to the dead time $d(f)$. The invention solves the problems in the prior art that the LLC resonant converter has increased circuit switching loss, difficult selection and design of magnetic components, difficult stable control of output voltage and the like due to too high operating frequency when outputting at light load or low voltage.



21: 2022/13185. 22: 2022/12/06. 43: 2023/03/16
51: E21D; G01N

71: Hetaoyu Coal Mine of Huaneng Qingyang Coal Power Co., Ltd, Anhui Weipei Mining Technology Co., Ltd, Anhui chen'an Mine Support Technology Co., Ltd., Anhui University of Science and Technology

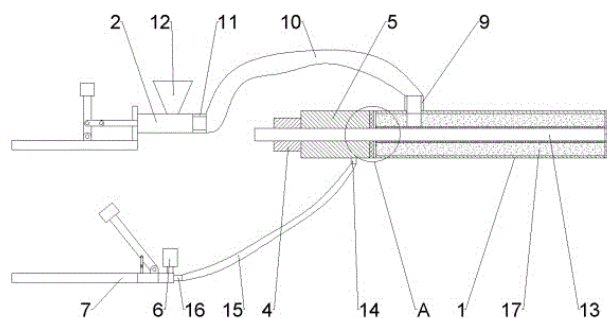
72: WANG Gang, JING Laiwang, LIU Zhiwen, DOU Jiangang, ZHANG Manguo, XUE Weipei, LIANG Gelong, YANG Xiaoquan, JING Wei

54: DEVICE FOR TESTING ANCHORING PERFORMANCE OF GROUTING MATERIAL FOR FULL-LENGTH ANCHORING OF ANCHOR CABLE

00: -

The invention relates to the technical field of roadway support, in particular to a device for testing the anchoring performance of grouting material for full-length anchoring of anchor cables, which comprises two molds, wherein the openings of the two molds are oppositely arranged; the two molds

are fixedly connected; the outer side wall of any mold is fixedly connected with a grouting apparatus; a matrix is poured in the mold; an anchor cable is arranged between the two matrixes; a gap is left between the anchor cable and the two matrixes; the gap is communicated with the grouting port; the gap is filled with slurry; and one end of the anchor cable penetrates through the mold and fixedly connected with a drawing apparatus; and metering assembly is arranged on the drawing apparatus. The device can inject grout into the gap between the matrix and the anchor cable in the mold through the grouting apparatus, and can effectively simulate the stress of the anchor cable and the anchoring section under the deep stratum of the anchor cable through the drawing apparatus. It can also be used as a test device for slurry diffusion, soil destruction and other related issues. The device has simple structure, convenient installation and use, and accurate test results.



21: 2022/13190. 22: 2022/12/06. 43: 2023/03/16

51: G06F

71: XUZHOU COLLEGE OF INDUSTRIAL TECHNOLOGY

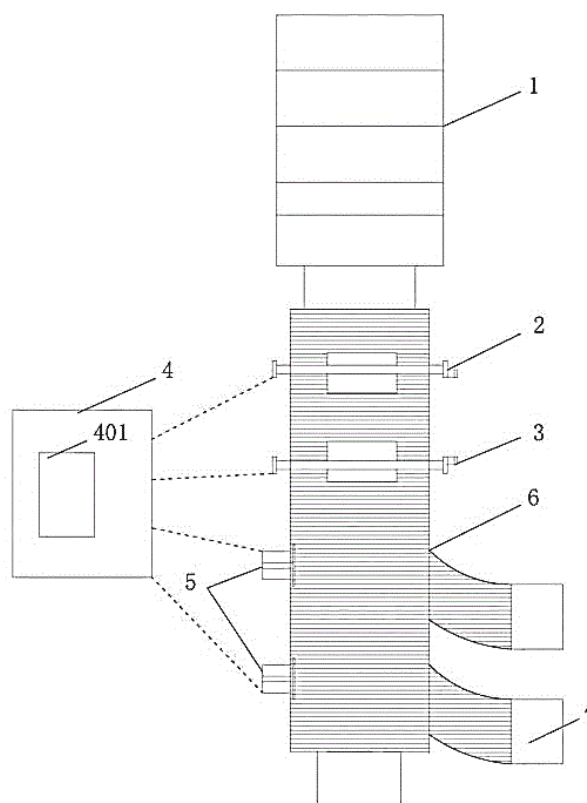
72: LI Ying, NING Junsheng, HE Hongmei, WU Yali, LI Mengying

54: AUTOMATIC FILING DEVICE FOR ARCHIVES

00: -

The invention discloses an automatic filing device for archives, which comprises a separating device for separating individual archives, and an archive conveying roller table. The separating device is connected with the archive conveying roller table, a camera scanning device for reading archive information and a barcode scanning device for reading archive barcode information are arranged above the archive conveying roller table, and an archive pushing device is arranged at the tail end of

the archive conveying roller table; the camera scanning device and the barcode scanning device are connected with an information processor through an input device, and the information processor is connected with and controls the archive pushing device. The camera scanning device of the present invention obtains information by camera scanning, and then inputs it into the computer for information extraction and processing, and checks it with the information obtained by barcode scanning in barcode scanner. After the check is correct, the computer sends out the sorting and filing information of archives, and sends it to the designated location through the archives pushing device. The device has compact structure and high sorting accuracy.



21: 2022/13192. 22: 2022/12/06. 43: 2023/03/16

51: G09B

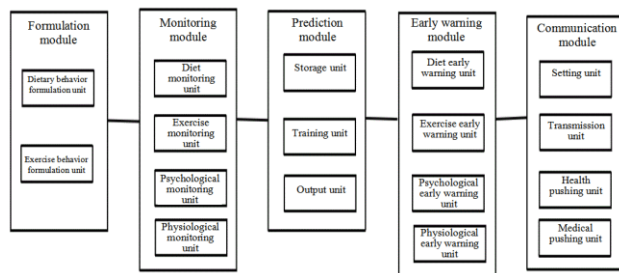
71: Wuxi Maternal and Child Health Hospital, Wuxi School of Medicine, Jiangnan University

72: PEI Jingjing, JIANG Xinye, DING Yang, ZHUANG Jieliang, GUO Bingbing, QI Ying, ZHOU Yu, XU Yin

54: SYSTEM AND METHOD FOR LIFESTYLE INTERVENTION OF OBESE CHILDREN

00: -

The invention provides a system and a method for lifestyle intervention of obese children. The system comprises a monitoring module, a prediction module, an early warning module and a communication module; the monitoring module is used for monitoring the life behavior, psychological behavior and physiological data of obese children; the prediction module is used for predicting the development trend of the physiological data; the early warning module is used for early warning the development trend of the life behavior, psychological behavior, physiological data and physiological data; the communication module is used for sending the life behavior, psychological behavior, physiological data and early warning information to the guardian. By actively intervening that lifestyle of obese children, the invention strengthens the management measure for obese children and reduces the risk of illness.



21: 2022/13199. 22: 2022/12/06. 43: 2023/03/16
51: A01N

71: Xinjiang Institute of Ecology and Geography,
Chinese Academy of Sciences

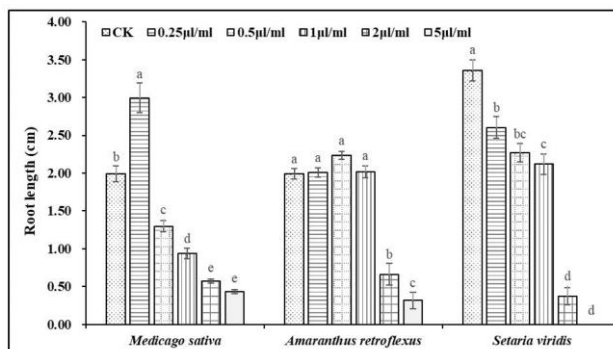
72: SHAO Hua, ZHOU Shixing, SHAO Wei, ZHANG
Chi

54: APPLICATION OF NATURAL MONOTERPENE COMPOUND SABINENE IN PREPARATION OF HERBICIDE

00: -

This invention relates to an application of a natural monoterpene compound sabinene in a preparation of herbicides. The research test shows that the compound kills monocotyledonous and dicotyledonous plants, *Setaria viridis*, and has obvious inhibitory effect on dicotyledonous plants, *Amaranthus retroflexus* and *Medicago sativa* when the compound is applied at a low concentration of 5 microliter per milliliter. This compound is a component of plant volatile oil, with fragrant smell. It not only has herbicidal activity, but also has a certain

insect repelling effect. The compound is naturally degraded and has no pollution to the environment when it is prepared into different concentrations and used alone or in combination with other pesticides before or at seedling stage. It is used as an herbicide, and has great potential commercial value.



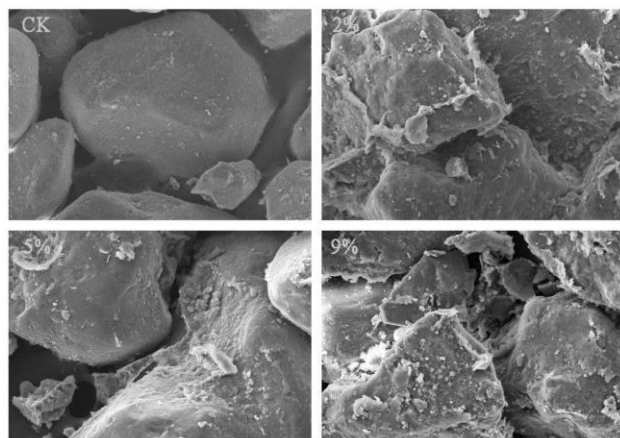
21: 2022/13234. 22: 2022/12/07. 43: 2023/03/16
51: E02D

71: Xinjiang Institute of ecology and geography
Chinese academy of sciences, Qitai Guoping
Bentonite Mine
72: WANG Shijie, LI Congjuan, Madinai·Abulimiti, LU
Xueliang, LIU Guojun, SHEN Qiang, LIU Yongping,
ZHONG Fashu, LIU Wenhua

54: BENTONITE SAND FIXATION METHOD

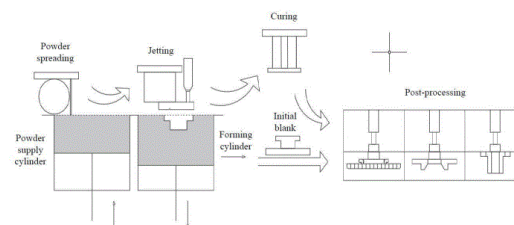
00: -

The invention relates to a bentonite sand fixation method, which uses the characteristics of bentonite, such as high-efficiency adsorption and cohesiveness, to bond sand grains together to form a stable solidified substance, thereby realizing the fixation of sand dunes. According to the invention, bentonite sand fixation is completed through the steps of land selection, sand blocking, mixing, infiltration, consolidation, protection and the like. The method has that advantage that bentonite, as a natural nontoxic soil with abundant reserves, has the characteristic of environmental protection, and overcomes the disadvantages of high cost and desert pollution of polymer chemical sand-fixing agent. It is an economical, practical and environment-friendly sand-fixing method with economic characteristics, and the sand-fixing cost per mu is less than that of 750 yuan, which has a very broad application prospect for sand-fixing.



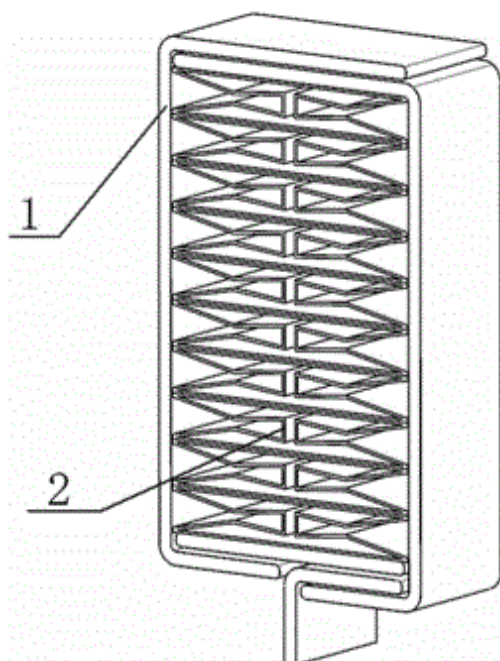
21: 2022/13238. 22: 2022/12/07. 43: 2023/03/30
 51: B29C; B33Y
 71: Research Institute of Wood Industry, Chinese Academy of Forestry
 72: YAN, Chenglin, LIU, Dong, LI, Xiaoxu, LIU, Zixin
 33: CN 31: 202111495994.5 32: 2021-12-08
54: 3D PRINTING AND POST-PROCESSING METHOD OF WOOD-BASED FIBER BIOMASS MATERIAL

00: -
 Provided is a 3D printing and post-processing method of a wood-based fiber biomass material, including: S1, mixing the wood-based fiber biomass material and plastic powder, adding a modifier, and uniformly mixing through high-speed stirring to obtain a printing material; S2, pushing, by a powder supply cylinder, the printing material to rise, and forming a powder layer surface suitable for printing on a forming cylinder; S3, jetting, by a jet, a binder according to a set path, and performing one-layer jetting while one-layer curing until an initial blank is completed; S4, sequentially subjecting the cured initial blank to post-processing operations such as powder removal, isostatic pressing, coating, and wax permeation through a conveying mechanism or a mechanical arm, etc.; S5, taking out a final formed part, and recycling residual powder. According to the method, the forming size is large, and an integrated process of post-processing and printing is achieved.



21: 2022/13243. 22: 2022/12/07. 43: 2023/03/16
 51: F16F
 71: SHENYANG UNIVERSITY OF TECHNOLOGY
 72: WANG Peng, BA Zhongcheng, LI Jihao, XU Wei, WU Jianping, SUN He, LIU Bo
54: NOVEL SHOCK ISOLATOR FOR NAVAL EQUIPMENT

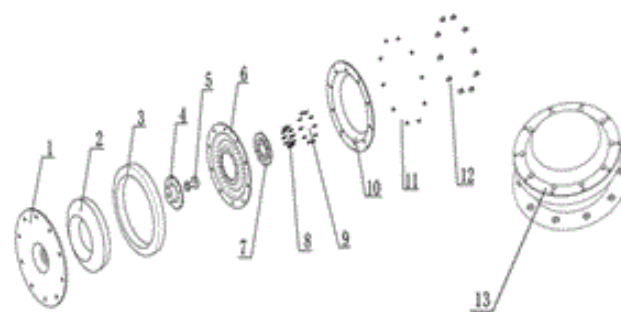
00: -
 The invention discloses a novel shock isolator for naval equipment, which is characterized by consisting of a structural framework (1) and a surface spring assembly (2), wherein the surface spring assembly (2) is installed in the structural framework (1), and the structural framework (1) comprises a cover (1-1), a lower cover (1-3) and a gland (1-2) and a push rod (1-4), the surface spring assembly (2) is composed of a plurality of single-sided springs. The invention adopts the surface spring for impact isolation, which has stable impact isolation effect and small overturning moment; in the process of impact isolation, the surface spring assembly is always in a compressed state and has a long service life; the surface spring assembly is the assembly of multiple groups of single surface springs, which is convenient to disassemble, install and replace, and low in maintenance cost.



21: 2022/13244. 22: 2022/12/07. 43: 2023/03/16
51: F16F
71: SHENYANG UNIVERSITY OF TECHNOLOGY
72: WANG Peng, JIN Xingbo, LIU Bo, XU Wei, HAN He, BA Zhongcheng, TANG Liying
54: NOVEL SOLID-LIQUID ANTI-SHOCK ISOLATOR FOR WARSHIP EQUIPMENT
00: -

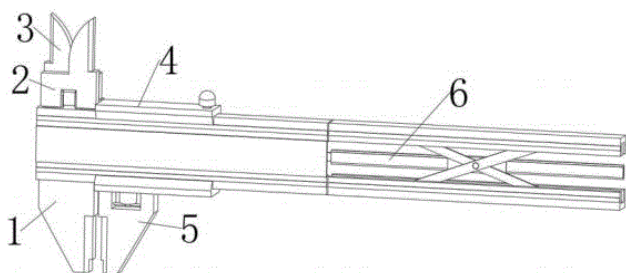
A novel solid-liquid anti-shock isolator for warship equipment, comprises a mounting base, an annular rubber spring, an outer frame, a support frame, a large connecting bolt, a convex disc-shaped metal surface spring, a spring pressing plate, two groups of small bolts, an upper cover and two groups of fastening screws. The mounting base, the annular rubber spring, the outer frame, the support frame, the large connecting bolt and the convex disc-shaped metal surface spring, a spring pressing plate, two groups of small bolts, an upper cover and two groups of fastening screws are sequentially installed from bottom to top. The invention adopts the convex disc-shaped metal surface spring, the damping liquid and the rubber spring for impact isolation, the impact isolation effect is obvious; during the shock isolation process, the damping liquid circulates in the upper cavity; the components adopted by the isolator are all conventional materials, which are convenient to process,

disassemble, install and replace, and low in maintenance cost.



21: 2022/13245. 22: 2022/12/07. 43: 2023/03/16
51: G01B
71: Henan University of Urban Construction
72: ZHANG Renqi, WANG Chaoyong, LI Wei, XU Huafeng, CHEN Yanyan, WANG Xinlian, DUAN Kunjie, HUANG Xiaoya, WANG Wenfang, LIU Zhiqing
54: VERNIER CALIPER CONVENIENT FOR FOLDING AND STORING FOR PHYSICS TEACHING
00: -

Disclosed is a vernier caliper convenient for folding and storing for physics teaching, and relates to an auxiliary device for physics teaching, including a sizing device, wherein an upper end of the sizing device is provided with an inner diameter device I, a rear end of the inner diameter device I is movably connected with an inner diameter device II. In the invention, two magnetic blocks I, two magnetic grooves I, connecting plates, sliding blocks, and sliding grooves are arranged, so that the inner diameter clamp I moves forward and connects with the front side of the sizing frame, and the inner diameter clamp I is positioned by a pair of folded two magnetic blocks I. After that, the spring I, the transverse plate, the stepped groove, the positioning plate, the support shaft and the torx move the inner diameter clamp II to the rear side to contact with the rear side of the sizing frame and position the inner diameter clamp II. The present invention solves the problem that most vernier calipers for physics teaching do not have a folding structure, so that it is inconvenient for corresponding physics teachers to store and carry vernier calipers to classroom teaching, and brings some inconvenience for corresponding physics teachers to carry vernier calipers to different classroom teaching



21: 2022/13250. 22: 2022/12/07. 43: 2023/04/04

51: A61K

71: Institute of Chemical Industry of Forest Products, CAF

72: Ding Haiyang, Li Mei, Li Shouhai, Yang Xiaohua, XU Lina, Zhang Yan, Yao Na

33: CN 31: 202211464543.X 32: 2022-11-22

54: PREPARATION METHOD OF GLUCOSYL/AMINO ACID COMPOSITE CARBON SPHERES AND THE APPLICATION

00: -

The invention discloses the preparation method of glucosyl/amino acid composite carbon spheres and the application, relating to the technical field of lubricating additives. Glucose is used as a carbon source to prepare glucosyl/amino acid composite carbon spheres by hydrothermal carbonization, and the prepared glucosyl/amino acid composite carbon spheres can be used as extreme pressure lubricating additives for soybean oil. And the preparation process of the invention is simple, and glucose is used as the carrier of the composite carbon spheres. On the one hand, no organic solvent can be added in the synthesis process of the carbon spheres, so it is environment-friendly and pollution-free; On the other hand, carbon spheres can increase the contact area between additives and friction interface, provide more extreme pressure element sites, and improve the extreme pressure performance of lubricants. The friction performance test shows that compared with the base oil, the glucosyl/amino acid composite carbon spheres lubricating additives prepared by this method have excellent friction performance.

Dissolve glucose and amino acid in deionized water according to the predetermined mass ratio, and magnetically stir to form a uniform mixed solution.

Place the mixed solution in the polytetrafluoroethylene lining of the reaction kettle for hydrothermal reaction at the set heating temperature and time.

After the hydrothermal reaction, the reaction kettle is naturally cooled to room temperature, and then filter, wash and dry the product to obtain a solid product.

Disperse the solid product in soybean oil to form a lubricating system to improve the extreme pressure and wear resistance of soybean oil.

21: 2022/13251. 22: 2022/12/07. 43: 2023/03/16

51: G06F

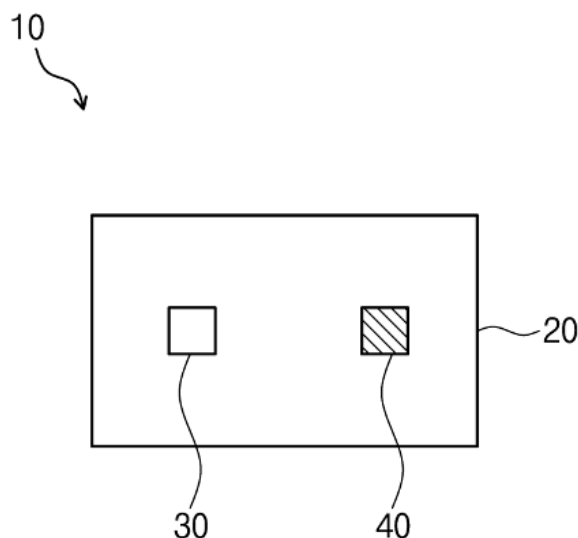
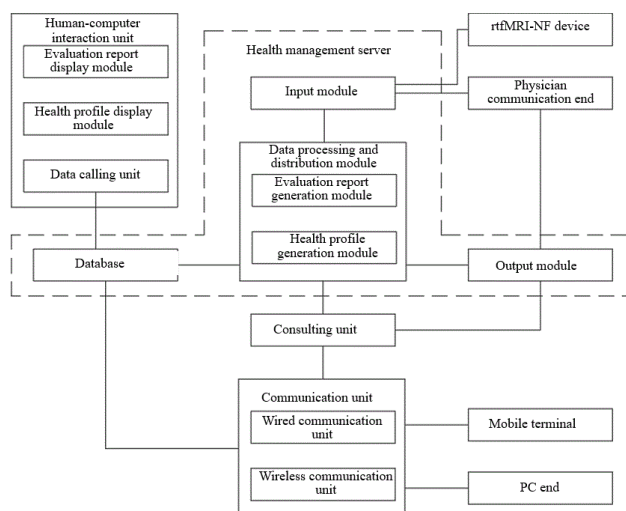
71: Yongli Li

72: Yongli Li, Xiaoling Wu, Zhi Zou, Zhonglin Li, Jing Zhou, Shewei Dou, Fengshan Yan, Gang Li, Huimin Ma, Xiaojuan Zhao

54: HEALTH MANAGEMENT SYSTEM BASED ON RTFMRI-NF TECHNOLOGY

00: -

The disclosure provides a health management system based on rtfMRI-NF technology, comprising a real-time functional magnetic resonance imaging neurofeedback device, a health management server and a human-computer interaction unit; the health management server comprises an input module, a data processing and distribution module and a database; the data processing and distribution module comprises an assessment report generation module and a health profile generation module; and the human-computer interaction unit comprises a data calling unit, an assessment report display module and a health profile display module. Data acquired by the real-time functional magnetic resonance imaging neurofeedback device are stored, and archived in groups by corresponding to trainee names, so that the data of trainees are automatically stored in the profile data of the corresponding trainee name after each training, so that the data can be viewed conveniently later without the need of paper record.



21: 2022/13282. 22: 2022/12/07. 43: 2023/03/24

51: A61N

71: SEOUL VIOSYS CO., LTD.

72: YOON, YEONG MIN, BAE, HEE HO, LEE, A YOUNG, LEE, CHUNG HOON

33: US 31: 62/820,493 32: 2019-03-19

33: US 31: 16/821,024 32: 2020-03-17

54: LIGHT EMISSION DEVICE

00: -

A light emission device comprises a light source unit for emitting light at wounded skin and a control unit for controlling the light source unit. The light source unit includes: a substrate; one or more first light sources which are provided on the substrate and which emit first light having a blue wavelength band; and one or more second light sources which are provided on the substrate and which emit second light having red to near infrared wavelength bands. The first light and the second light have different skin penetration depths according to the wavelength.

21: 2022/13290. 22: 2022/12/08. 43: 2023/03/16

51: G06F

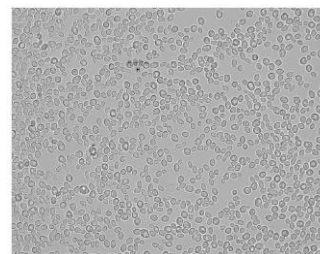
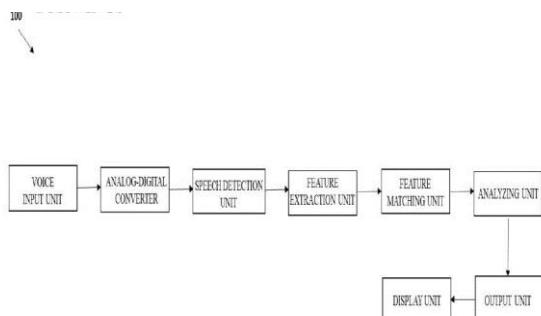
71: Dr. Rashmi Gujrati, Dr. Hayri Uygun, Prof. Sasmita Rani Samanta, Dr. Kishori Jagdish Bhagat, Dr. Prashant Madhukar Shinde, Dr. (CA) Vishwanathan Hariharan Iyer, Dr. Neha Gupta, Dr. Pritesh Somani, Dr. (Mrs.) Archana Kedar Prabhudesai, Dr. Anaya Aditya Markandeya
72: Dr. Rashmi Gujrati, Dr. Hayri Uygun, Prof. Sasmita Rani Samanta, Dr. Kishori Jagdish Bhagat, Dr. Prashant Madhukar Shinde, Dr. (CA) Vishwanathan Hariharan Iyer, Dr. Neha Gupta, Dr. Pritesh Somani, Dr. (Mrs.) Archana Kedar Prabhudesai, Dr. Anaya Aditya Markandeya

54: A SYSTEM BASED ON ARTIFICIAL INTELLIGENCE RECOGNITION FOR LANGUAGE MAINTENANCE

00: -

The present invention relates to a system (100) based on artificial intelligence recognition for language maintenance. The system (100) comprises a voice input unit, an analog-digital converter, a speech detection unit, a feature extraction unit, a feature matching unit, an analyzing unit, an output unit and a display unit. The voice input unit is configured to receive voice. The analog-digital converter is configured to convert analog input voice into digital form. The speech detection unit is configured to detect the received language. The feature extraction unit is configured to extract the feature of the detected speech. The feature matching unit is configured to match digital data received by the feature extraction unit with the preselected language data. The analyzing unit is

configured to analyze data received from the feature matching unit. The output unit is configured to produce output in the desired language in the form of text or sound. {FIGURE 1}



21: 2022/13397. 22: 2022/12/12. 43: 2023/03/16
51: B03B

71: Backfill Engineering Laboratory, Shandong Gold Mining Technology Co., Ltd., Shandong Gold Mining Technology Co., Ltd.

72: Zhaojun Qi, Yunpeng Kou, Jiguang Yang, Zhai Wu, Jiaren Guo, Guangbo Li, Xiaodong Jing, Yuhang Sheng, Gengjie Zhu, Zepu Song, Zengjia Wang, Laifa Sang, Yuliang Wang

33: CN 31: 202210838425.4 32: 2022-07-18

54: SIZE-FRACTIONATED THICKENING DEWATERING DEVICE FOR MINE TAILINGS

00: -

The present disclosure pertains to the technical field of iron tailings treatment, and pertains to a size-fractionated thickening dewatering device for mine tailings, which comprises a box body and a dewatering assembly disposed on an inner bottom wall of the box body; a mounting plate is disposed inside the box body in an inclined manner, a rotating barrel is vertically mounted on the mounting plate, a feed hopper is disposed at a top end of the box body, a discharge outlet of the feed hopper is in communication with a feed inlet of the rotating barrel, an inner barrel is movably sheathed inside the rotating barrel, and a filter cloth in a funnel shape is disposed at a bottom end of the inner barrel, a plurality of knocking assemblies for knocking and shaking the filter cloth are uniformly disposed on an outer side wall of the rotating barrel in a circumferential direction, a push plate is disposed inside the box body and directly below the mounting plate, the push plate and the mounting plate are parallel to each other, a discharge barrel is rotatably disposed on the push plate, the discharge barrel is in communication with a discharge outlet of the filter cloth, and a cleaning mechanism for cleaning impurities in the filter cloth is disposed on an outer surface of the discharge barrel, the rotating barrel and the push plate are disposed in an inclined manner to prevent sewage backflow, and the

21: 2022/13395. 22: 2022/12/12. 43: 2023/03/16
51: C12N

71: Hunan Institute of Microbiology

72: ZENG, Yan, ZHOU, Bingyu, WANG, Chunping, YIN, Hongmei

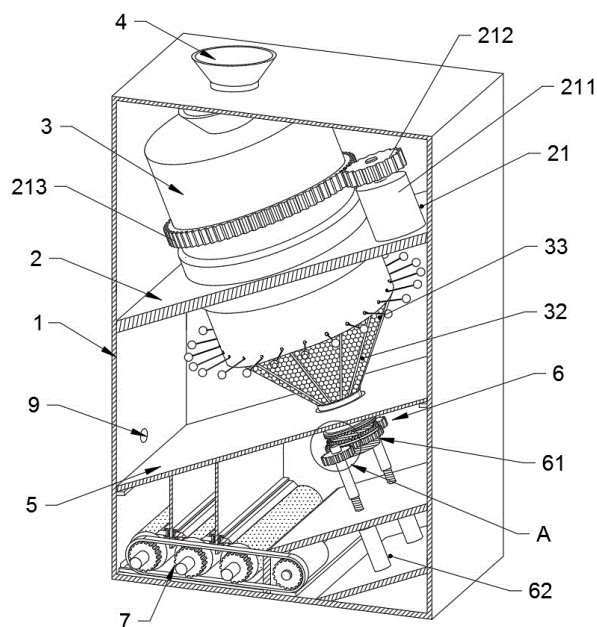
33: CN 31: 202210964804.8 32: 2022-07-12

54: IRON-RICH MICROBIAL COMPLEX AGENT FOR FEED AND PREPARATION AND APPLICATION THEREOF

00: -

The present disclosure discloses a complex iron-rich microbial agent and preparation and application thereof. The complex agent is prepared by co-culturing and fermenting *Saccharomyces cerevisiae* (CGMCC No. 22727) and *Lactobacillus plantarum* (CCTCC No. M 2022915). The complex iron-rich microbial agent integrates the probiotic functions of trace elements, saccharomycetes and lactobacilli, and may be used as a feed additive in piglet breeding. The complex iron-rich microbial agent and a use method thereof of the present disclosure have the effects of promoting growth of piglets, preventing piglet anemia, improving immunity and antioxidant capacity, reducing diarrhea rate, and reducing odor and the concentration of greenhouse gas in a pig house.

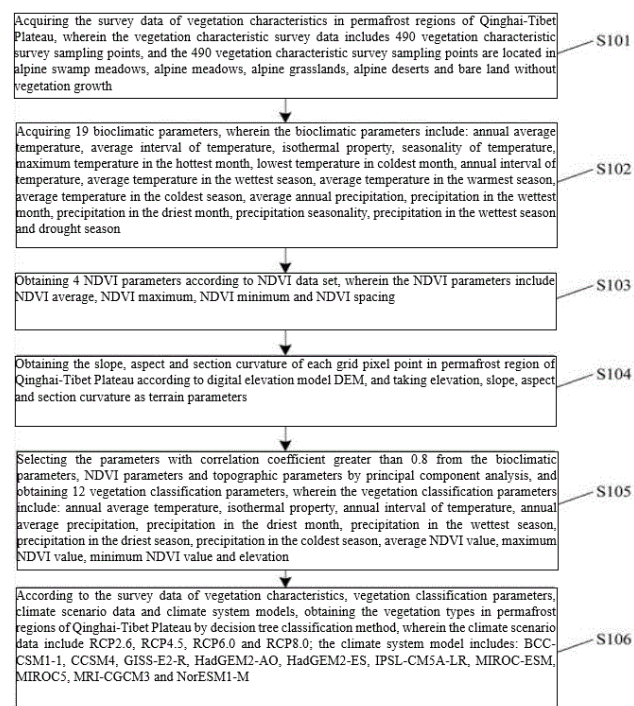
cleaning mechanism cooperates with the knocking assemblies to torsionally clean the filter cloth.



21: 2022/13398. 22: 2022/12/12. 43: 2023/03/16
51: G06F; G06K
71: Guizhou Institute of prataculture
72: WANG Qian, JI Yuyu, WANG Zhiwei, OU Erling, TANG Huajiang, LIU Fengpeng
54: METHOD FOR PREDICTING VEGETATION TYPES IN HIGH-ALTITUDE PERMAFROST REGIONS
00: -

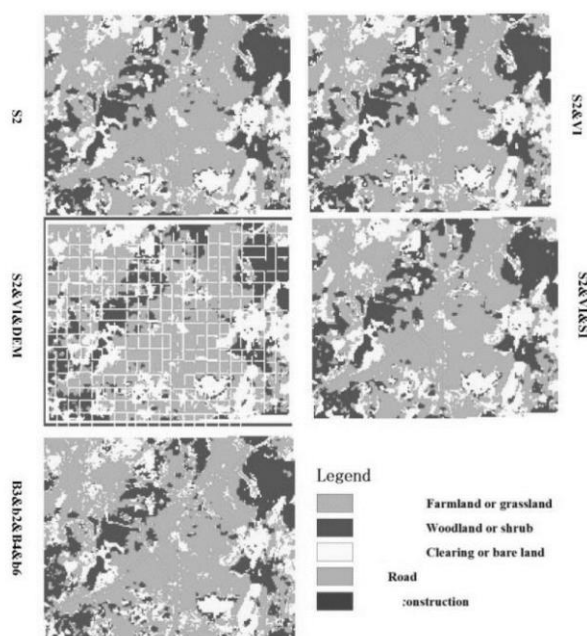
The present invention relates to the field of geography, and particularly to a method for predicting vegetation types in high-altitude permafrost regions. The method includes: acquiring the survey data of vegetation characteristics in permafrost regions of Qinghai-Tibet Plateau; acquiring bioclimatic parameters; obtaining NDVI parameters according to NDVI data set; obtaining NDVI parameters; obtaining the slope, aspect and section curvature of each grid pixel point in permafrost region of Qinghai-Tibet Plateau according to digital elevation model DEM, and taking elevation, slope, aspect and section curvature as terrain parameters; selecting the parameters with correlation coefficient greater than 0.8 from the bioclimatic parameters, NDVI parameters and topographic parameters by principal component

analysis, and obtaining 12 vegetation classification parameters; and according to the survey data of vegetation characteristics, vegetation classification parameters, climate scenario data and climate system models, obtaining the vegetation types in permafrost regions of Qinghai-Tibet Plateau by decision tree classification method. The method can realize the distribution prediction of vegetation types in permafrost regions of Qinghai-Tibet Plateau under four climate scenarios and ten climate system modes in 2050 and 2070.



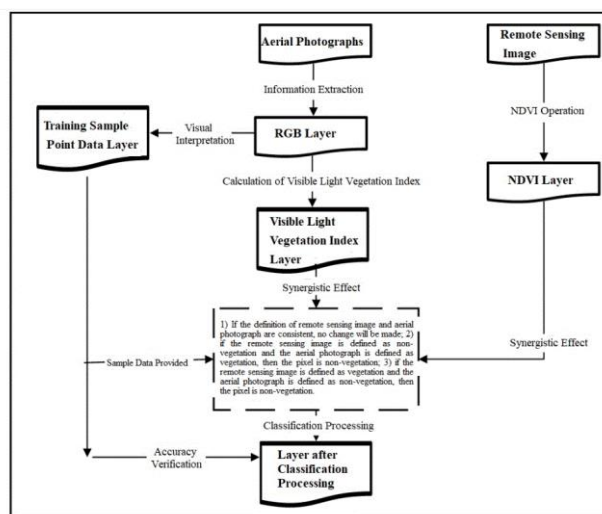
21: 2022/13399. 22: 2022/12/12. 43: 2023/03/16
51: G06K; G06T
71: Guizhou Institute of prataculture
72: JI Yuyu, OU Erling, WANG Qian, WANG Zhiwei, TANG Huajiang, LIU Fengpeng
54: A MULTI-SOURCE REMOTE SENSING DATA CLASSIFICATION METHOD BASED ON THE CLASSIFICATION SAMPLE POINTS EXTRACTED BY THE UAV
00: -
The invention discloses a multi-source remote sensing data classification method based on the classification sample points extracted by the UAV, which comprises: extract the classification sample points uniformly from aerial photographs of the UAV, and prepare sample points for calibration; obtain the classification remote sensing data sets, perform

image processing on the remote sensing data sets, and perform geospatial location on the classification sample points according to the classification remote sensing image data sets; the classification remote sensing data sets include: microwave data Sentinel-1 data set, multispectral Sentinel-2 data set, vegetation index data set based on Sentinel-2 data set and digital elevation model data set; through the classification sample points located by geospatial information, and use the random forest classification model to obtain the classification results. The random forest classification method of multi-source remote sensing data based on the classification sample points extracted by the UAV in the invention can realize the surface type classification mapping process quickly, effectively and cheaply; after eliminating the effects of edge classification sample points, the classification accuracy is significantly improved, especially the accuracy of the Kappa coefficient is better.



21: 2022/13400. 22: 2022/12/12. 43: 2023/03/16
51: G06K
71: Guizhou Institute of prataculture
72: WANG Qian, OU Erling, WANG Zhiwei, JI Yuyu, TANG Huajiang, LIU Fengpeng
54: A METHOD FOR EXTRACTING VEGETATION INFORMATION FROM AERIAL PHOTOGRAPHS OF SYNERGISTIC REMOTE SENSING IMAGES
00: -

The invention discloses a method for extracting vegetation information from aerial photographs of synergistic remote sensing images, which relates to the field of image processing technology. An effective vegetation remote sensing monitoring method is established by using the aerial photographs and remote sensing images containing visible light bands to extract vegetation information, so as to apply it to the vegetation identification research of destination aerial photographs, quickly and relatively accurately extract vegetation information.



21: 2022/13447. 22: 2022/12/13. 43: 2023/03/16
51: B03B
71: Wuhan University of Technology
72: REN Liuyi, QIU Hang
54: MICRO-BUBBLE FLOTATION METHOD FOR FINE OXIDIZED MINERALS
00: -

Disclosed is a micro-bubble flotation method for fine oxidized minerals. In the invention, a self-made micro-bubble flotation device is adopted, and flotation micro-bubbles with uniform flow and appropriate size are obtained by adjusting the solution environment in the flotation system, the polar distance between graphite anode and stainless steel cathode net, and the mesh size of stainless steel cathode net, and fine oxidized minerals are subjected to micro-bubble flotation under the action of DC electric field to obtain concentrate and tailings. The method effectively improves the recovery rate of fine-grained oxidized minerals, reduces the dosage of chemicals, and especially recovers fine-grained

cassiterite and quartz of -10 micrometer, so it is an ideal method for micro-bubble flotation of fine-grained oxidized minerals

21: 2022/13449. 22: 2022/12/13. 43: 2023/03/16
51: H01M

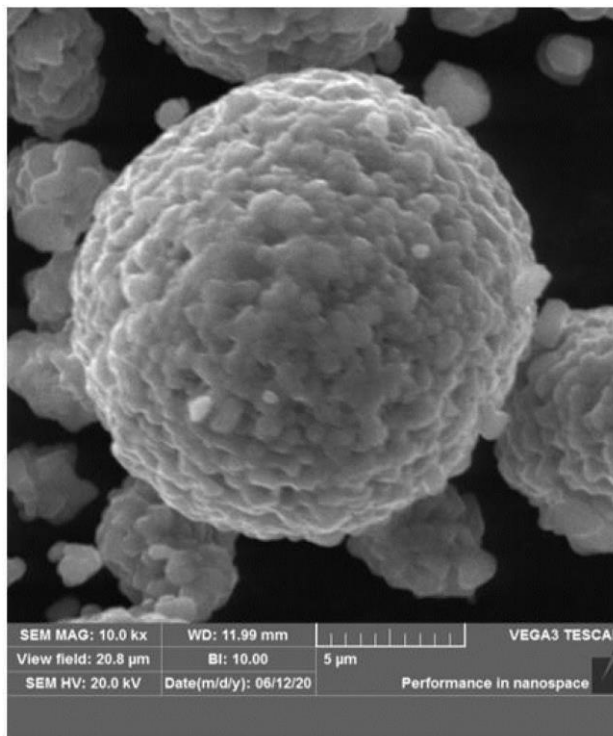
71: KUNMING UNIVERSITY OF SCIENCE AND TECHNOLOGY

72: DONG Peng, FEI Zitong, MENG Qi, ZHANG Yingjie, ZHANG Yannan, ZHANG Yiyong

54: RAPID REGENERATION METHOD OF WASTE TERNARY LITHIUM ION BATTERY CATHODE MATERIAL

00: -

The invention discloses a rapid regeneration method of waste ternary lithium ion battery cathode material, which comprises the following steps: manually disassembling the waste ternary lithium ion battery, cleaning with dimethyl carbonate, soaking in NMP, centrifuging, oxidizing, spray drying, grinding and calcining to obtain waste ternary cathode material powder, and putting forward a combined process of pre-oxidation treatment, spray drying, high-temperature short-time annealing to regenerate the waste ternary cathode material; according to the invention, the rock salt phase on the surface of the cathode material of the waste ternary lithium ion battery is oxidized, alkali is added to generate a layered intermediate phase, lithium is mixed and ground, and a short-time high-temperature annealing treatment is carried out, so that the intermediate phase can form a layered oxide phase to repair the failed surface, and lithium lost in the circulation process can also be supplemented to regenerate the cathode material; The method can realize the rapid repair and regeneration of waste ternary cathode materials, has the characteristics of simple operation, high efficiency, economy and no pollution, and provides a new idea for the recovery and regeneration of waste ternary cathode materials of lithium ion batteries.



21: 2022/13450. 22: 2022/12/13. 43: 2023/03/16
51: F01D; F03D

71: CEN Yuxin

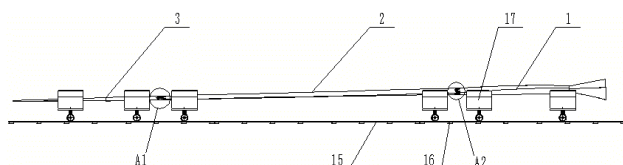
72: CEN Yuxin

54: MORTISE AND TENON CONFIGURATION OF SECTIONAL BLADES OF LARGE WIND TURBINES AND CONNECTION THEREOF

00: -

The present invention provides a mortise and tenon configuration of segmented blades of large wind turbines and connection thereof, comprising: a track, the top of the track is in sliding contact with six supporting mechanisms; every two adjacent supporting mechanisms are respectively used for supporting the blade head, the blade middle and the blade tip; two webs are fixedly connected through the inner cavities of the blade head, the blade middle and the blade tip, one end of two welding plates is fixedly connected between the two webs at one end of the blade head, the other ends of the two welding plates are bonded with the inner wall of the blade middle by glue, two opposite sides of the two webs located on the blade head are respectively fixedly connected with one end of a plurality of clamping plates, the end surface of the other end of the clamping plate is set as an inclined surface, and the clamping block is fixedly connected to the side surface of the clamping plate; two opposite sides of

one end of two webs located on the blade middle are respectively provided with a plurality of clamping grooves which are matched with the clamping block; the blade head, the blade middle and the outer wall of the blade tip are connected by a connecting mechanism. According to the invention, after the end faces of the segmented blades are aligned through the matching of the supporting mechanism and the vehicle rail, various connecting pieces are used to connect the segmented blades into a whole.



21: 2022/13451. 22: 2022/12/13. 43: 2023/03/16

51: A63B

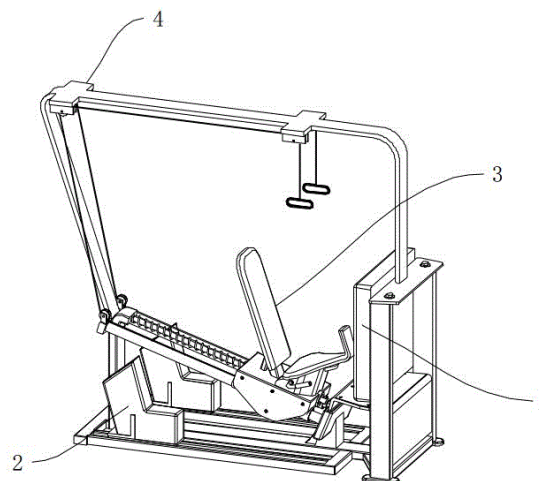
71: Zhenxin Wang

72: Zhenxin Wang

54: BACK-SUPPORTING BENT-LEG TYPE MULTIFUNCTIONAL HOME FITNESS EXERCISE EQUIPMENT

00: -

A back-supporting bent-leg type multifunctional home fitness exercise equipment, comprising a multi-stage two-way shock-absorbing gas medium noise-abatement device, a self-driven leg and foot massage device, a back-supporting bent-leg type lower limb stretching component, and a slow-moving pulling type upper limb stretching component, wherein the slow-moving pulling type upper limb stretching component is arranged on the back-supporting bent-leg type lower limb stretching component, the multi-stage two-way shock-absorbing gas medium noise-abatement device is arranged on the slow-moving pulling type upper limb stretching component, and the self-driven leg and foot massage device is arranged under the back-supporting bent-leg type lower limb stretching component.



21: 2022/13453. 22: 2022/12/13. 43: 2023/03/16

51: A61K

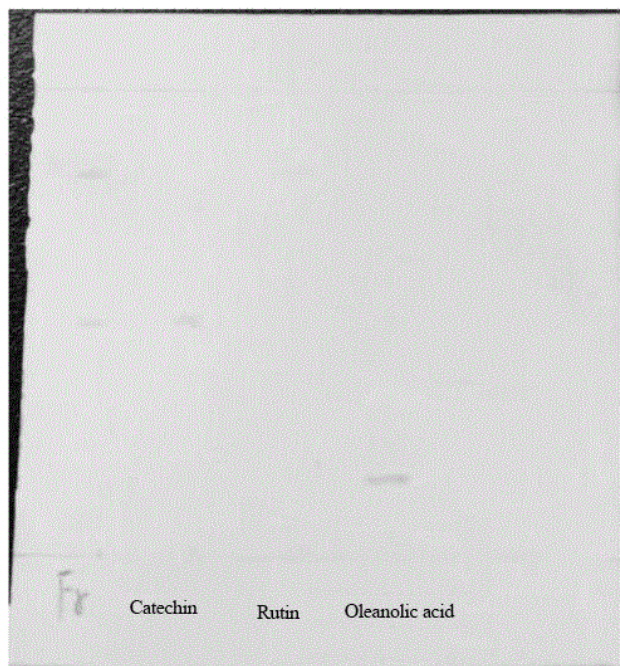
71: SHANGHAI INSTITUTE OF TECHNOLOGY

72: FANG Xiang, ZHANG Yunbin, XU Jing, WEI Mengyue

54: SEMEN BRASSICAE EXTRACT AND A PREPARATION METHOD AND APPLICATION THEREOF

00: -

The invention relates to a semen brassicae extract, a preparation method and application thereof. The preparation method comprises the following steps: extracting semen brassicae with ethanol, removing ethanol to obtain an ethanol extract, dissolving the ethanol extract in water, extracting with ethyl acetate, and removing ethyl acetate solvent to obtain the semen brassicae extract, which is applied to preparing acetylcholinesterase inhibitors, and the inhibitors are capsules, tablets or granules. Compared with the prior art, the semen brassicae extract of the invention is extracted from common spices, can be taken for a long time, and has less side effects than conventional therapeutic drugs. The strong inhibitory effect of semen brassicae extract on acetylcholinesterase provides a new idea for developing new treatments for senile dementia.



21: 2022/13454. 22: 2022/12/13. 43: 2023/03/16
51: G06Q

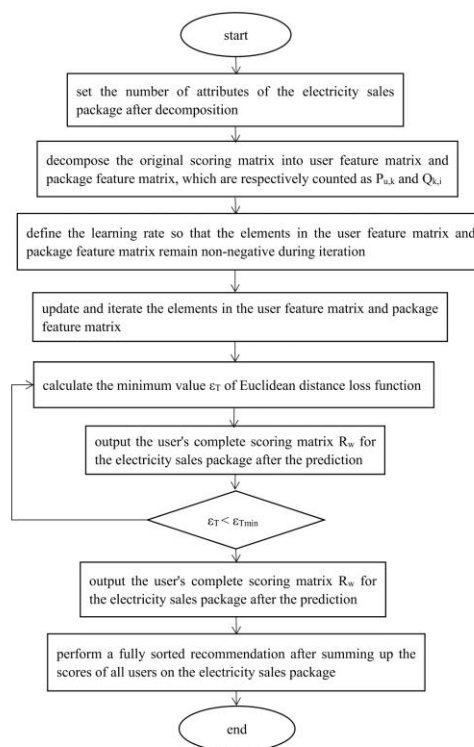
71: Zhejiang Sci-Tech University

72: Jianyu Ruan, Ruinan Zheng, Yuanqian Ma

54: A CF-BASED NMF ELECTRICITY SALES PACKAGE RECOMMENDATION METHOD

00: -

A CF-based NMF electricity sales package recommendation method, first, collecting the scoring data of the electricity sales packages used by the original users to obtain an original scoring matrix; second, using the NMF non-negative matrix factorization method to decompose the original scoring matrix into user feature matrix and package feature matrix; then, under the condition that the product distance between the original matrix and the decomposed two matrices is the smallest, and then iterating the elements of the two matrices; then performing a fully sorted recommendation on the obtained prediction matrix, which realizes the accurate filling of the original scoring matrix and helps the electricity sales company to realize the accurate recommendation of the electricity sales package. The invention has strong practicability and functionality, and can be widely used in the technical field of electricity sales.



21: 2022/13638. 22: 2022/12/19. 43: 2023/03/16
51: G05B

71: SHENYANG UNIVERSITY OF TECHNOLOGY

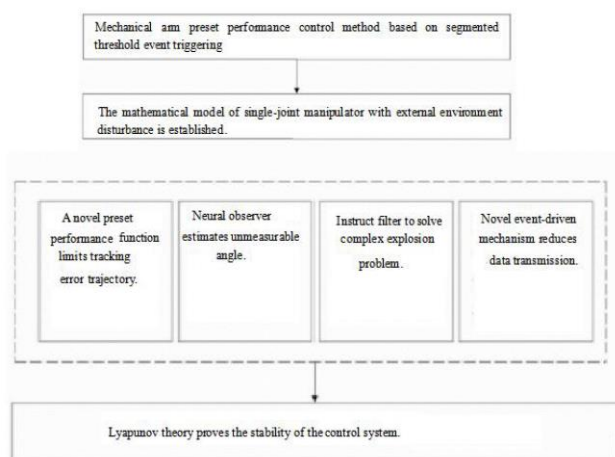
72: YANG Di, LIU Weijun, TONG Weiyan, ZHANG Heng, ZHU Yuhua, XIAO Zhanying

54: MECHANICAL ARM PRESET PERFORMANCE CONTROL METHOD BASED ON SEGMENTED THRESHOLD EVENT TRIGGERING

00: -

The invention relates to mechanical arm control, in particular to a mechanical arm preset performance control method based on segmented threshold event triggering. The event triggering mechanism of the invention can reduce data transmission and improve resource utilization rate, and the control law is simple in structure and easy to realize. Comprise that following steps: Step 1, establishing a mathematical model of a single-joint mechanical arm; Step 2, aiming at the trajectory tracking error generated by the mathematical model of the single-joint manipulator, combining with nonlinear transformation, designing a preset performance function to limit its motion trajectory; Step 3, according to the intermediate variable obtained by nonlinear transformation, constructing a command filter with filtering error compensation to process the time derivative of the virtual control law; Step 4.

According to the output of the instruction filter, the event-driven control law and the adaptive law are designed by combining the neural network observer, the segmented threshold trigger mechanism and the adaptive technology.



21: 2022/13640. 22: 2022/12/19. 43: 2023/03/16
51: G06Q

71: GUIZHOU UNIVERSITY

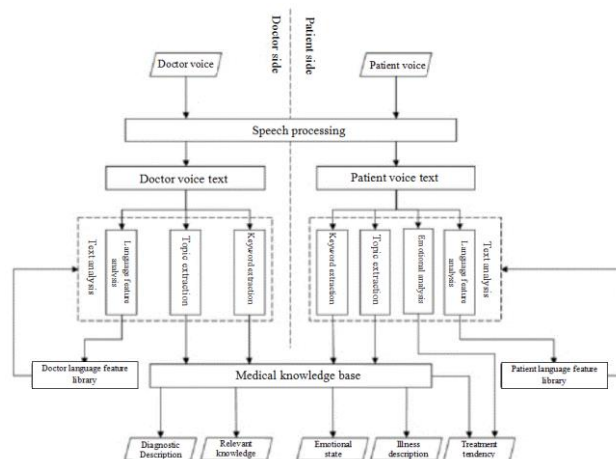
72: YANG Mingqing, LIN Li

54: DOCTOR-PATIENT COMMUNICATION ASSISTANT PLATFORM AND INTERACTIVE METHOD THEREOF

00: -

The invention discloses a doctor-patient communication assistant platform and an interactive method thereof, which comprises a doctor-patient communication assistant device and a doctor-patient communication assistant system, wherein the doctor-patient communication assistant system comprises a voice processing module, a doctor-side text analysis module, a medical knowledge base, a patient-side text analysis module and an output processing module, wherein the voice processing module is used for processing voice information transmitted from the doctor-side voice input device and the patient-side voice input device into doctor voice text and patient voice text; the doctor-side text analysis module is used to extract topics and keywords from the doctor's voice text, and obtain corresponding information from the medical knowledge base, forming diagnosis instructions and related knowledge and displaying them on the patient-side display device. The patient-side text analysis module is used to extract topics and keywords from the patient's voice text, and obtain

corresponding information from the medical knowledge base, so as to form emotional state and illness description and display them on the doctor-side display device.



21: 2022/13646. 22: 2022/12/19. 43: 2023/03/16
51: A01K

71: Shangzhi Agricultural Machinery Equipment Limited Company (NTCO.LTD) of Nanchong, Sichuan, Sericultural Research Institute of Sichuan Academy of Agricultural Sciences, Sichuan Jieneng Drying Equipment Co., Ltd.

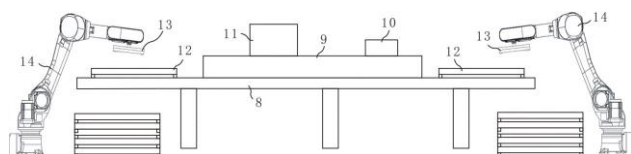
72: SHEN Yan, HU Guangrong, XIE Ying, WU Jianmei, SHI Hongkang, HE Guangzan, YE Jingjing, ZHANG Youhong, HU Junhua, WU Jinxuan, CAO Qingming

54: INTELLIGENT CONTROL FULL-AUTOMATIC MULTIPURPOSE MACHINE FOR CULTURE FEEDING

00: -

The invention discloses an intelligent control full-automatic multipurpose machine for breeding and feeding, which comprises a feeding manipulator, loading trays, a conveyor belt, a mulberry feeder, a powder spreader and a feeding manipulator, wherein the feeding manipulator and the feeding manipulator are installed on both sides of the conveyor belt; the loading trays are placed on the conveyor belt by the loading manipulator, and the mulberry feeding or silkworm body disinfection is completed by a mulberry feeding device or a powder spreader; the automatic manipulators is provided with pallet tools which are convenient for loading and unloading the loading trays. The invention is reasonable in design and ingenious in structure, and through the cooperation of the manipulator and the conveyor belt, the silkworm or insect feeding (feeding),

disinfection and other processes can be completed, or the stacked objects need to be stacked or separated into single pieces for transportation, so that the efficiency of breeding, conveying and feeding can be improved, and the labor intensity of workers can be reduced.



21: 2022/13652. 22: 2022/12/19. 43: 2023/03/16
51: B65B; G06Q

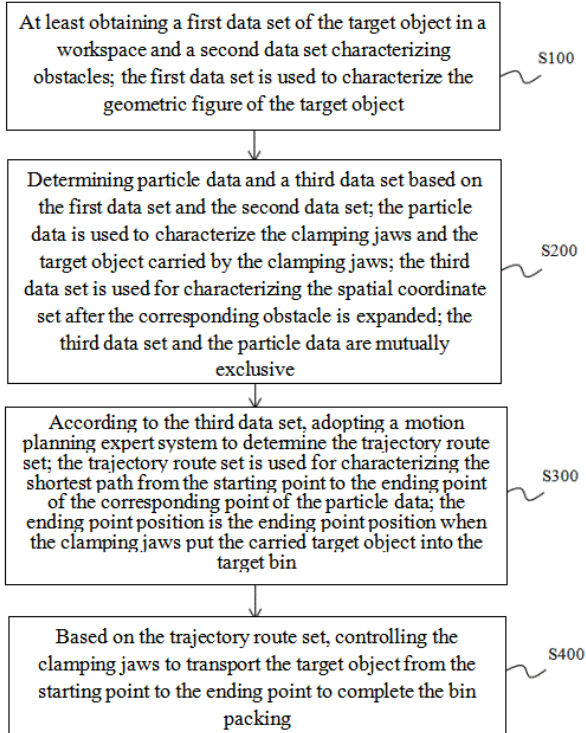
71: Shanghai Polytechnic University

72: CUI Lei, WANG Yue, XU Jie, WANG Zhifeng

54: BIN PACKING METHOD AND BIN PACKING CONTROL SYSTEM

00: -

The invention provides a bin packing method and a bin packing control system, which are used for packing a target object by clamping jaws, and comprise the following steps: at least obtaining a first data set of the target object in a workspace and a second data set characterizing obstacles; determining particle data and a third data set based on the first data set and the second data set; particle data is used to characterize the clamping jaw and the target object carried by the clamping jaw; the third data set is used for characterizing the spatial coordinate set after the corresponding obstacle is expanded; the third data set and particle data are mutually exclusive; according to the third data set, adopting the motion planning expert system to determine the trajectory route set; based on the trajectory route set, the clamping jaw is controlled to transport the target object from the starting point to the ending point to complete the bin packing. The method and the system can find the optimal packing path for different target objects, shorten the packing time of target objects, improve work efficiency and meet the working rhythm of automatic production lines.



21: 2022/13654. 22: 2022/12/19. 43: 2023/03/16
51: A61K

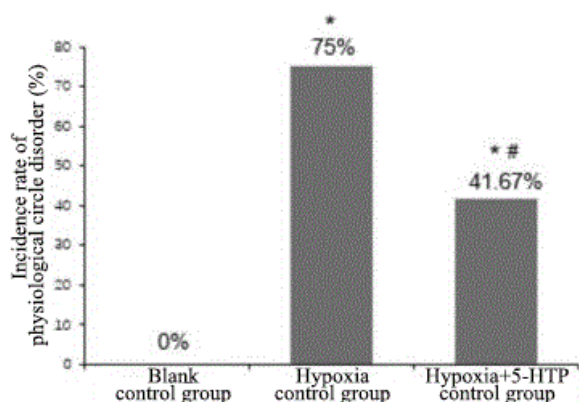
71: Institute of Environmental and Operational Medicine, Academy of Military Medical Science, Academy of Military Science

72: LIU Weili, CHEN Zhaoli, PU Lingling, XU Hongbao, WANG Xinxing, WANG Tianhui, LI Ran, WANG Zirou, AI Chongyi

54: APPLICATION OF 5-HYDROXYTRYPTOPHAN IN PREPARING HEALTH PRODUCTS OR MEDICINES FOR IMPROVING FEMALE PHYSIOLOGICAL CYCLE DISORDER CAUSED BY HIGH ALTITUDE HYPOXIA

00: -

The present disclosure provides an application of 5-hydroxytryptophan in preparing health products or medicines for improving female physiological cycle disorder caused by hypoxia in highlands; it is proved through experiments according to the present disclosure that 5-HTP can significantly prolong the survival duration of females in confined hypoxia conditions and significantly improve female physiological cycle disorder caused by low pressure and hypoxia.



21: 2022/13655. 22: 2022/12/19. 43: 2023/03/16
51: E21D

71: Hetaoyu Coal Mine of Huaneng Qingyang Coal Power Co., Ltd, Anhui Weipei Mining Technology Co., Ltd, Anhui chen'an Mine Support Technology Co., Ltd., Anhui University of Science and Technology

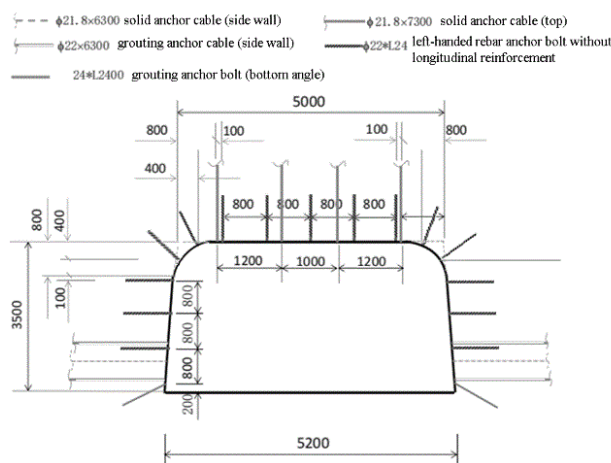
72: LIANG Gelong, JING Laiwang, YANG Xiaoquan, LI Xiujun, ZHANG Haicheng, JIAO Jianjun, JING Wei, XUE Weipei

54: SUPPORT METHOD FOR GOB-SIDE ENTRY IN DEEP COAL SEAM

00: -

The invention discloses a support method for gob-side entry in deep coal seam, which including: using a horseshoe shape for the deep coal seam along the empty roadway section, that is, the left and right angles of the section are replaced by a circular arc transition, and the upper and lower ends of the arc are tangent to the roadway roof and the roadway side wall respectively; changing the support strength of the side wall, specifically in reducing the support strength of the upper side wall and enhancing the support strength of the lower sidewall. The invention changes the cross section of the roadway from the traditional cross section shape to horseshoe shape, which reduces the stress concentration at the top side wall junction and can effectively reduce the roadway deformation. In turn, the anchor bolt axis is parallel to the pallet normal, which reduces the shear stress concentration in the anchor section and enhances the support effect; reducing the support strength of the upper side wall will allow the coal column to have larger lateral displacement, so that it has the ability to let the pressure, and strengthening the support strength of the lower side wall will restrain the lateral displacement of the coal column, so that it has the ability to resist the pressure, so that

the resistance can help each other, making the deformation of the upper and lower parts of the roadway side wall basically consistent and improving the bearing capacity of the surrounding rock.



21: 2022/13658. 22: 2022/12/19. 43: 2023/03/16
51: A61K

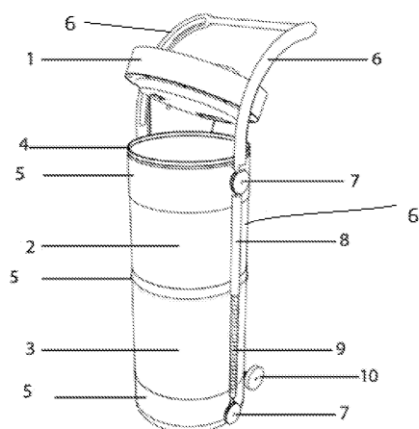
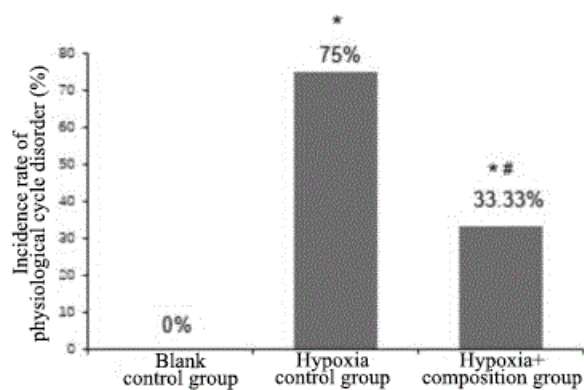
71: Institute of Environmental and Operational Medicine, Academy of Military Medical Science, Academy of Military Science

72: LIU Weili, CHEN Zhaoli, PU Lingling, XU Hongbao, WANG Xinxing, WANG Tianhui, LI Ran, WANG Zirou, AI Chongyi

54: COMPOSITION FOR PREVENTING AND TREATING FEMALE PHYSIOLOGICAL CYCLE DISORDER CAUSED BY HIGH ALTITUDE HYPOXIA AND APPLICATION

00: -

The present disclosure provides a composition for preventing and treating female physiological cycle disorder caused by high altitude hypoxia and its application. The composition includes in parts by mass 24 parts of astragali radix extract, 16 parts of poria extract, 18 parts of polygoni multiflori caulis extract, 21 parts of salviae miltiorrhizae radix et rhizoma extract, 8 parts of angelicae sinensis radix extract, 11 parts of codonopsis radix extract, and 2 parts of 5-hydroxytryptophan (5-HTP). It is proved by experiments according to the present disclosure that the composition of the present disclosure can significantly prolong the survival duration of female mice under normobaric confinement hypoxia, and can significantly ameliorate female physiological cycle disorders caused by hypoxic exposure at plateau.



21: 2022/13677. 22: 2022/12/19. 43: 2023/03/16

51: B65F

71: DUEÑAS SANCHEZ, Silverio

72: DUEÑAS SANCHEZ, Silverio

33: ES 31: P202030475 32: 2020-05-22

54: WASTE-COMPACTING CONTAINER WITH DISINFECTION SYSTEM

00: -

Disclosed is a waste-compacting container with a disinfection system, formed by a vertically movable structure, a cover and a bag, the structure comprising: a frame that supports a leaktight container therein and has a lower lateral structure vertically attached to either side; two lower lateral structures, each formed by cylinders, a steel cable, a spring and a telescopic tube; two upper lateral structures with a handle; and a leaktight container formed by a lower cylindrical body and an upper cylindrical body. The container cover is disposed on the frame and moves along the two upper lateral structures, has a hermetic rubber seal and contains mechanical elements for sterilising and compacting the waste contained inside a bag, which bag is disposed inside the leaktight container.

21: 2022/13679. 22: 2022/12/19. 43: 2023/03/16

51: F21V; H02M; F21Y

71: FUJIAN SANAN SINO-SCIENCE

PHOTOBIOTECH CO., LTD

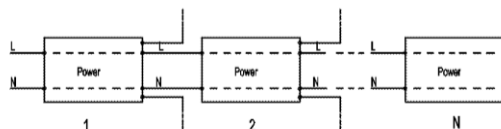
72: ZENG, Liang, LI, Haibin, WANG, Yating

33: CN 31: 202010561764.3 32: 2020-06-18

54: NETWORKED LAMP AND LAMP NETWORKING SYSTEM

00: -

A lamp capable of networking, and a lamp networking system. The lamp (1) comprises a power adapter (2), a load unit and a connection circuit, wherein the connection circuit comprises an AC input end (11) and at least two AC output ends (12); the power adapter (2) comprises a conversion control board (25), at least one AC input interface (21), at least one DC output interface (22) and at least two AC output interfaces (23, 24); the conversion control board (25) is used for converting an AC voltage into a DC voltage; the AC input end (11) is connected to the AC input interface (21); the DC output interface (22) is connected to the load unit; and the two AC output interfaces (23, 24) are respectively connected to the two AC output ends (12), which are connected in parallel to each other. Therefore, fast and simple combination of lamps can be achieved, and the arrangement and use of wire materials are reduced, thereby improving the light utilization efficiency; in addition, the cost input and light blocking are also reduced, thereby improving economic benefits and reducing potential safety risks caused by a complex circuit.



21: 2022/13718. 22: 2022/12/20. 43: 2023/03/17

51: H01M

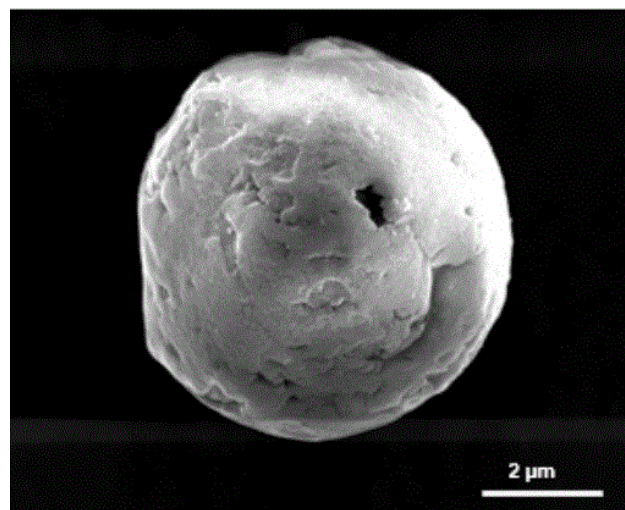
71: Guangdong Polytechnic Normal University

72: Shuaibo ZENG, Wei XU, Jing PENG, Haorong ZHENG, Ye CHEN, Shihan LUO, Xiyuan PAN, Yongyi LI, Jinying HONG, Hongjian GUAN, Junxiong TANG

54: A BIFUNCTIONAL CATALYST FOR ELECTROCHEMICAL REACTION OF SULFUR ELECTRODE AND ITS PREPARATION METHOD

00: -

The invention relates to the field of electrochemical energy storage technology. In order to solve the problem that the reversible reaction speed of sulfur and lithium metal in the reaction process of sulfur electrode leads to the poor rate charging-discharging performance, a bifunctional catalyst for the electrochemical reaction of sulfur electrode and its preparation method are disclosed. The preparation method of the bifunctional catalyst for electrochemical reaction of sulfur electrode includes the following steps: weigh titanium oxide sulfate, deionized water and concentrated sulfuric acid according to the weight ratio of 0.1: (150-300): (4-8), slowly introduce the concentrated sulfuric acid into the deionized water. The bifunctional catalyst material for electrochemical reaction of sulfur electrode prepared by the invention can obviously improve the magnification characteristics of sulfur electrode; the preparation process and yield of the bifunctional catalyst material were optimized and the unit cost of synthesis was reduced; the invention effectively solves the problem that the reversible reaction speed of sulfur and lithium metal in the reaction process of sulfur electrode is slow, resulting in poor rate charge-discharge performance.



21: 2022/13719. 22: 2022/12/20. 43: 2023/03/17

51: E21D

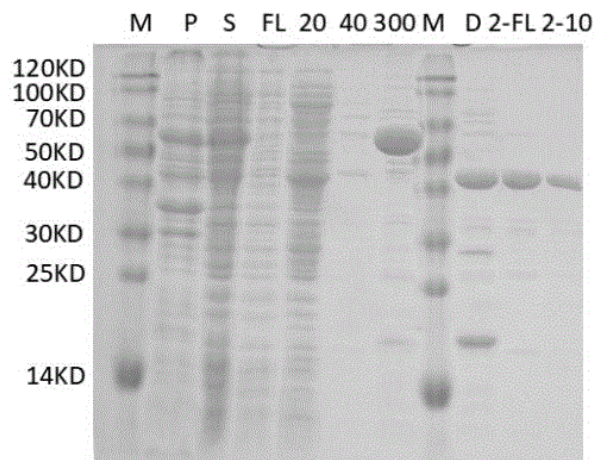
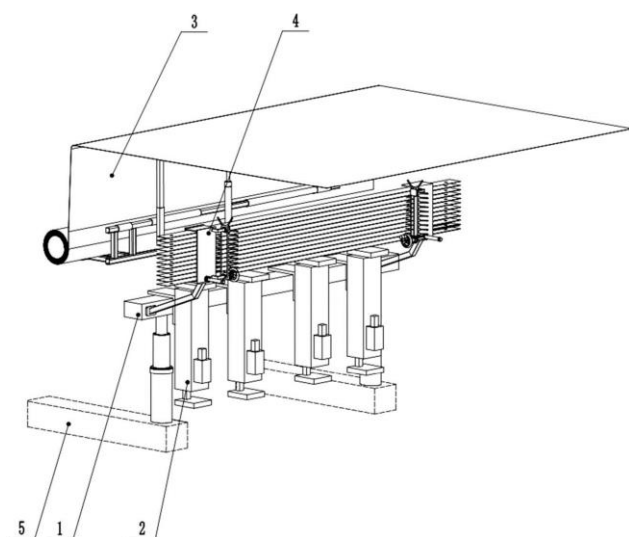
71: Liaoning Technical University, Huaneng Coal Technology Research Co., Ltd.

72: Miao XIE, Hongyu ZHANG, Weidong LI, Jie LIU, Zhixiang LIU, Dongxu LIU, Yilong WANG, Xiaohu SUN, Jinnan LU, Jun MAO, Pengfei MENG, Yaohui WANG, Bing HU, Guoqiang CHEN, Xiaochen GUO, Jisheng LI, Hao XU

54: AN ANCHORING SYSTEM WITH ITS TUNNELING EQUIPMENT AND TUNNELING ANCHORAGE METHOD

00: -

The invention provides an anchoring system with its tunneling equipment and tunneling anchorage method. The anchoring system is used for installation in the main body of the tunneling equipment. The anchoring system comprises a posture adjustment module, an anchoring unit module, a laying anchor net module, and a steel strip upper module. The posture adjustment module is used for installation in the main body of the tunneling equipment. The posture adjustment module is connected with the anchoring unit module to drive the anchoring unit module to move and adjust its position. The anchoring unit module is used for drilling holes, the laying anchor net module is used for laying anchor nets, and the steel strip upper module is used for storing belts and upper strip belts. The anchorage system can realize the mechanized operation of laying the anchor net, steel belt, and anchorage agent in the whole anchoring process.



21: 2022/13723. 22: 2022/12/20. 43: 2023/03/16

51: C12N

71: FUJIAN NORMAL UNIVERSITY

72: CHEN Lifei, WU Yunkun, ZHANG Hong

54: EXPRESSION, PURIFICATION, CRYSTAL STRUCTURE AND APPLICATION OF PROTEIN ESTERASE EST3563 CAPABLE OF DEGRADING PHTHALATES

00: -

Disclosed is a protein esterase Est3563 that degrades phthalates and is produced by Acinetobacter strain LMB-5, and its expression and purification, crystal structure and application, and relates to the technical field of biotechnology. The Acinetobacter strain LMB-5 of the invention produces a protein esterase Est3563 that degrades phthalates. However, the low activity of Est3563 protein esterase limits its large-scale application. By analyzing the three-dimensional structure of esterase Est3563 protein crystal, the esterase activity is improved by precise point mutation, and the success rate is higher. The invention aims to analyze the protein crystal of esterase Est3563, and it obtains better catalytic activity for industrial use through the reasonable design of esterase Est3563.

21: 2022/13724. 22: 2022/12/20. 43: 2023/03/16

51: A01G; C12N

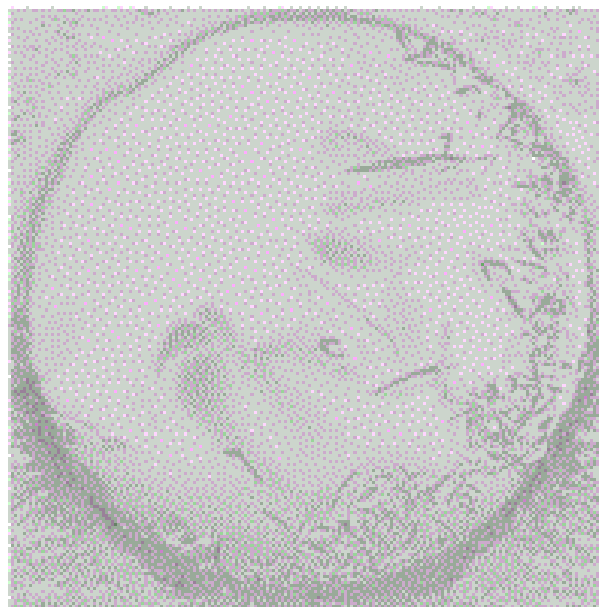
71: FUJIAN NORMAL UNIVERSITY

72: CHEN Lifei, WU Yunkun, HUANG Xiaojing

54: PROTEIN CRYSTAL IN THE CARBOXYL TERMINAL REGION OF NBREM1.1, PREPARATION METHOD AND APPLICATION THEREOF

00: -

The invention discloses a protein crystal in the carboxyl terminal region of NbREM1.1, a preparation method and application thereof, and belongs to the field of biotechnology. The crystal comprises the amino acid sequence of NbREM1.1 protein carboxyl terminal region; the crystal has P21 space group. According to the invention, the remorin protein NbREM1.1, which comes from the natural host of rice stripe virus, is rebuilt by genetic engineering to obtain the carboxyl terminal of remorin protein NbREM1.1, which is efficiently expressed, purified and crystallized in Escherichia coli, and the protein three-dimensional crystal structure of amino acids from the 97th to the 207th carboxyl end of remorin protein NbREM1.1 is analyzed, thus providing theoretical guidance for the prevention and treatment of rice stripe disease in the later period.



21: 2022/13731. 22: 2022/12/20. 43: 2023/03/16
51: F26B

71: XUZHOU COLLEGE OF INDUSTRIAL TECHNOLOGY

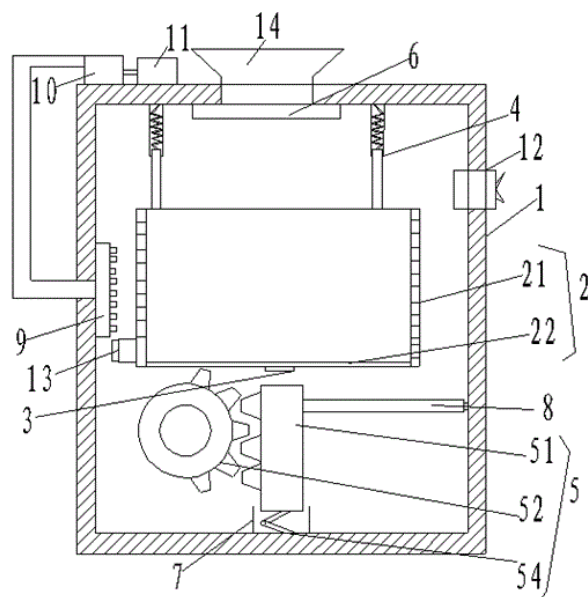
72: CONG Houluo, WANG Kai, XU Yunhui, WEI Bangfeng

54: DRYING DEVICE FOR PULVERIZED PARTICLES OF GRAPHENE MATERIALS

00: -

The invention discloses a drying device for pulverized particles of graphene materials, which comprises a charging port and a heating lamp arranged at the top of a box body; a mixing bin, arranged in the box body and directly below the charging port and the heating lamp, and comprises a first cylinder body with openings at the top and bottom, and an elastic membrane sealed on the bottom opening, the bottom of the elastic membrane is provided with a lightweight fixture, and the top of the cylinder body is connected with the inner wall of the box body through two symmetrically arranged length adjusting assemblies; the elastic membrane traction release mechanism is arranged below the lightweight fixture and comprises a vertical toothed plate detachably connected with the lightweight fixture, an incomplete gear meshed with the vertical toothed plate and a driving piece for driving the incomplete gear to rotate, the bottom of the vertical toothed plate is connected with the bottom wall of the box body through a first spring, and the driving piece is electrically connected with a power supply

through a first control switch. The invention solves the problem of uneven drying of pulverized particles.



21: 2022/13732. 22: 2022/12/20. 43: 2023/03/17
51: B25J; B28B

71: TANGSHAN UNIVERSITY

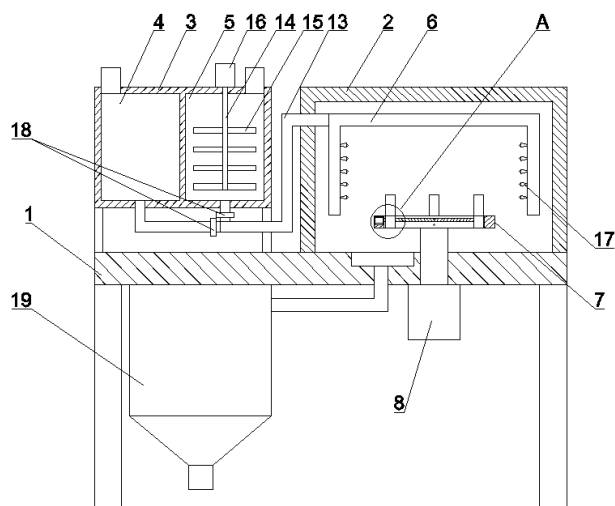
72: TIAN Lixin, DAI Yan, DONG Zhiwei

54: INTELLIGENT GLAZE SPRAYING DEVICE FOR SANITARY CERAMICS

00: -

The invention discloses an intelligent glaze spraying device for sanitary ceramics, which comprises a workbench, wherein the top end of the workbench is fixedly connected with a protective cover and a storage box, the storage box is provided with a water storage cavity and a glaze cavity, the top end of the storage box is provided with a stirring assembly, the stirring assembly is correspondingly arranged with the glaze cavity; the bottom end of the storage box is provided with a conveying assembly, the water storage cavity and the glaze cavity are respectively correspondingly arranged with the conveying assembly, and a spray pipe is fixedly connected in the protective cover. The conveying assembly is correspondingly arranged with the spray pipe, the top end of the workbench is rotatably connected with a turntable, the turntable is located in the protective cover and provided with a limiting assembly, the spray pipe is correspondingly arranged with the limiting assembly, the bottom end of the workbench is fixedly connected with a first motor, and the

turntable is in transmission connection with the first motor. The invention has simple structure and wide application range, ensures the stable clamping of products, realizes the cleaning of pipelines, avoids the deposition of glaze and ensures the quality of products.



21: 2022/13733. 22: 2022/12/20. 43: 2023/03/17
51: G09B

71: Guangdong Polytechnic Normal University

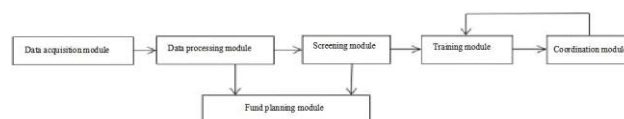
72: XIAO Bing, MA Xuelan

54: ACCURATE TRAINING PATH PLANNING SYSTEM FOR RURAL VOCATIONAL EDUCATION

00: -

The invention discloses a rural vocational education precise training path planning system, which comprises a data acquisition module for acquiring rural information; The project planning module is connected with the data acquisition module and used for project planning according to the rural information; The screening module is connected with the project planning module and used for screening the personnel to be trained according to rural information; The fund planning module is respectively connected with the project planning module and the screening module and used for planning funds according to rural information and screening results; The training module is connected with the screening module and used for training the screened personnel to be trained; And that coordination module is connected with the training module and use for adjusting the training module according to the opinion of trainers. This planning system can carry out local rural vocational education

according to different local environmental conditions, and solve the problem that rural vocational education cannot be carried out effectively.



21: 2022/13735. 22: 2022/12/20. 43: 2023/03/16
51: C12Q

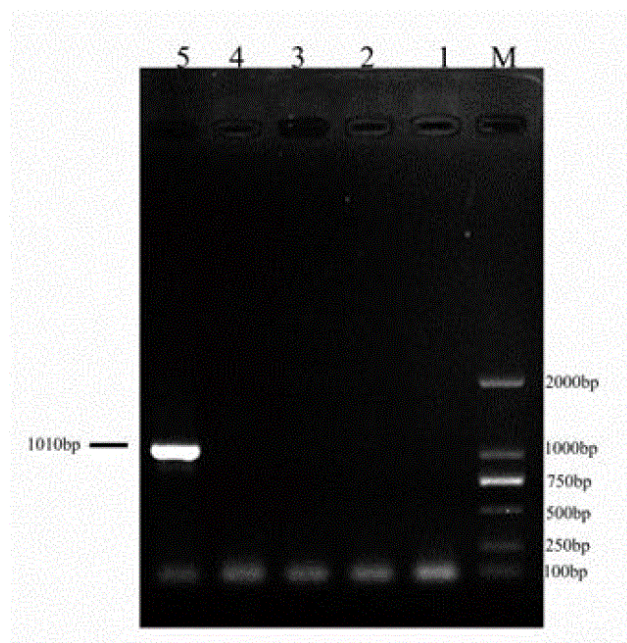
71: Institute of Veterinary Research, Xinjiang Academy of Animal Sciences (animal clinical medicine research center of Xinjiang Academy of Animal Sciences)

72: MA Xiaojing, GU Wenxi, LIU Liya, YE Feng, YI Xinping, LIU Shuai, GULIZHATI Talifuhan, XUE Xiaobo

54: RT-PCR DETECTION METHOD FOR IDENTIFYING SEROTYPE 29 BLUETONGUE VIRUS

00: -

The invention belongs to the field of molecular biology, and discloses an RT-PCR detection method for identifying serotype 29 bluetongue virus (BTV). The nucleotide sequences of the primers are shown in SEQ ID NO.1-2, and the kit contains the primers. It can be used to identify serotype 29 RNA of BTV, as well as trace amounts of serotype 29 RNA of BTV such as tissue samples, and distinguish serotype 29 BTV from other serotypes of BTV. This method has the advantages of high safety, convenient operation, high sensitivity, strong specificity, etc. It can detect a large number of samples at the same time, and has practical application value for the prevention, control and diagnosis of BT.



21: 2022/13736. 22: 2022/12/20. 43: 2023/03/17
51: E02D

71: Jiangsu Ocean University

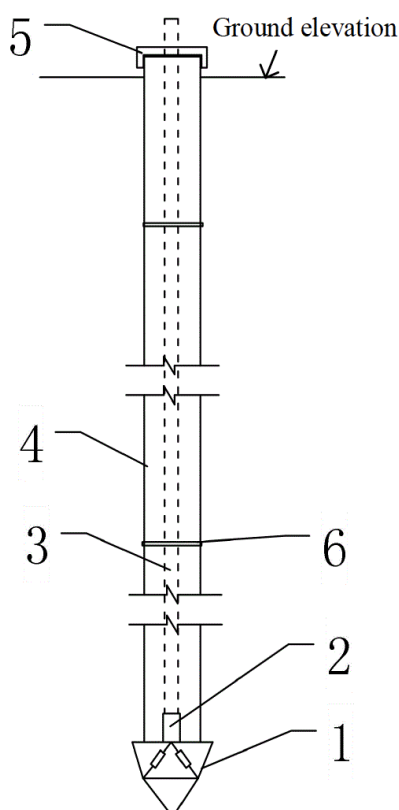
72: Junkai WU, Jianguo ZHU, Ming SHAN, Ke XU, Kaiwei ZHU, Xinxiao CHEN, Susu ZHAO, Panfeng REN, Bailong GONG, Lin YU

54: A CONSTRUCTION METHOD OF ROTARY SINKING PRECAST PILE

00: -

The invention discloses a construction method of rotary sinking precast pile, including the following steps: S1. Conduct alignment positioning of precast pipe piles according to drawing requirements; S2. Install the rotary bit at the position of the first pile; S3. Connect the drill pipe to the connecting rod, set the precast pipe pile on the outside of the drill pipe, and place the press plate above the precast pipe pile; S4. Open the drill rig, drill pipe drives the rotary bit to rotate into the earth, compacts the press plate, and the precast pipe pile sinks synchronously with the rotary bit; S5. When the first precast pipe pile is pressed to the ground elevation, the second drill pipe and the second precast pipe pile are connected, and the second precast pipe pile sink into the soil; S6. Repeat step S5 until the elevation required by the design is reached; S7. Relax the rotary bit, lift the drill pipe, and the construction of the first pile is completed; S8. Repeat steps S2-S7 until all the precast pipe piles are sunk. The invention adopts the construction method of rotary sinking precast pile, which can solve the problems of

pile sinking difficulty and disturbance to soil layer caused by the existing method.



21: 2022/13737. 22: 2022/12/20. 43: 2023/03/17
51: G06Q

71: Jiangsu Ocean University

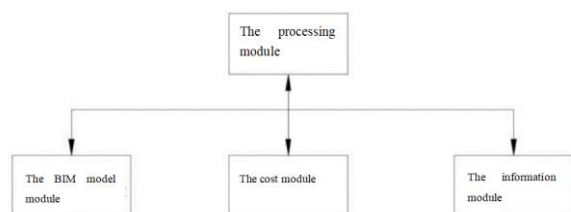
72: Xueni YAN, Jianguo ZHU, Junkai WU, Ming SHAN, Ke XU, Kaiwei ZHU, Xinxiao CHEN, Susu ZHAO, Panfeng REN, Bailong GONG

54: AN EPC PROJECT COST MANAGEMENT SYSTEM BASED ON BIM AND ITS APPLICATION

00: -

This invention discloses an EPC project cost management system based on BIM and its application which belongs to the technical field of construction project cost management. This invention includes a BIM model module, a cost module, and an information module for real-time data interaction. The BIM model module includes a design model module for the design phase, a construction model module for the construction phase, and a completion model module for the completion phase. The cost module includes a design and construction drawing budget module for the design phase, a material procurement module

for the procurement phase, a construction budget module for the construction phase, and a project settlement module for the completion phase. The information module includes a project data module for the preparation phase, a contract management module for the design phase, and a logistics tracking module for the procurement phase. The invention can effectively improve the accuracy of engineering quantity calculation, the efficiency of cost management, and the information and integration level of an EPC project, it also reduces the cost-effectively.



21: 2022/13738. 22: 2022/12/20. 43: 2023/03/17
51: A63B

71: Gansu Agricultural University

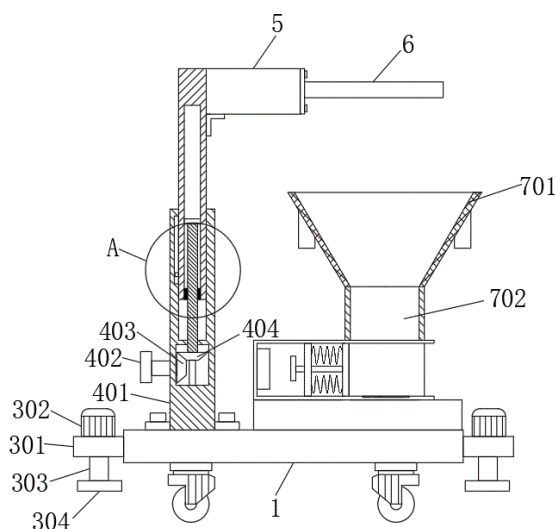
72: GUO Qing, HU Baohui

54: TRAINING DEVICE FOR DRIBBLING AND SHOOTING FOR BASKETBALL TEACHING

00: -

The invention discloses a dribbling and shooting training device for basketball teaching, which comprises a base, a lifting mechanism, a ball receiving mechanism and a serving mechanism. The invention has the advantages that the universal wheel is installed, so that the training device can be conveniently moved; By setting the lifting mechanism, the height of the backboard of the shooting device can be adjusted, which is convenient for training students of different ages and expands its application range; By setting the ball collecting mechanism, the ball collecting cover is used to collect the basketball. When the pressure sensor does not sense the basketball coming into the serving cavity, the electromagnet is in an energized state, and the iron block is attracted by the electromagnet, and the spring is compressed at this time; When the pressure sensor senses that there is a basketball in the serving cavity, the pressure sensor sends a signal to the controller, which then controls the electromagnet to be powered off, and then the electromagnet loses

magnetism, so that the iron block is separated from the electromagnet, and the ball pushing plate pushes the basketball out of the serving cavity through the elastic force of the spring, thus realizing automatic serving.



21: 2022/13739. 22: 2022/12/20. 43: 2023/03/17
51: A61K

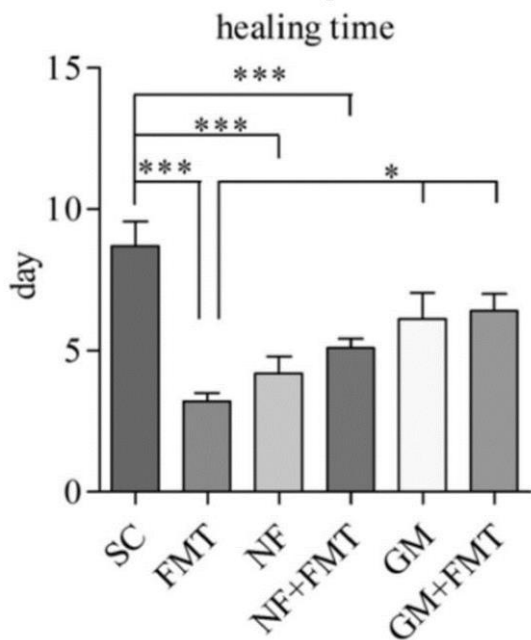
71: Xinjiang Agricultural University

72: Gang YAO, Xuelian MA, Yawei SUN, Na LI, Qi ZHONG, Wumaierjiang Yahefu, Tongjun GUO, Zhuo CHEN, Rulong CHEN, Xin LI, Chengxu YAN, Xuejun MA

54: A METHOD FOR THE PREPARATION OF LAMB FECAL MICROBIOTA SOLUTION

00: -

The present invention belongs to the technical field of designing and development of veterinary product for lamb health, and in particular relates to a method of preparing lamb fecal microbiota solution for lambs, the preparation method comprising the following steps: (1) strict selection of the donor of fecal bacteriological liquid; (2) rectal withholding of fresh feces that does not touch the ground; (3) dilution of fresh feces with physiological saline; (4) aseptic centrifugation to obtain a brownish-yellow turbid liquid; (5) centrifugation on the basis of coarse filtration to prepare a faecal bacteria liquid with a concentration of 33% to 40%. The faecal liquid prepared in this way is a fast and effective treatment for diarrhoea in lambs and acts as a biological medicine



51: F04C: F15B

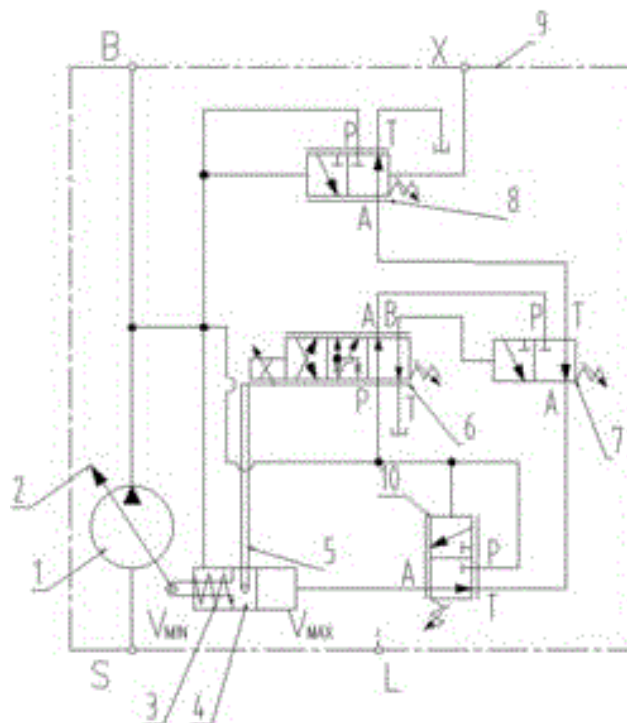
72: LI Jiansong, JI Zhi, SUN Jinhai, LI Haiyan

54: COMPOUND CONTROL HYDRAULIC PUMP AND COMPOUND HYDRAULIC CONTROL SYSTEM

The i

The invention relates to a compound control hydraulic pump and a compound hydraulic control system. In the hydraulic pump, a spring is arranged in a variable oil cylinder connected with a swashplate in a pump body, and a piston rod of the variable oil cylinder is connected with a valve sleeve of an electromagnetic proportional valve; the P port of the electromagnetic proportional valve, the P port of the flow control valve, the outlet of the pump body and the variable oil cylinder are communicated with each other through a rod cavity; the left control port and P port of the flow control valve are communicated; the pump housing is provided with an outlet, an inlet and a reverse feed port; Port A of the electromagnetic proportional valve and port A of the flow control valve are respectively connected to port P and port T of the switching valve; Port A of the switching valve is connected to the rodless cavity of the variable cylinder through a constant pressure control valve, and the switching valve is hydraulically or electrically controlled by port B of the

electromagnetic proportional valve. The system comprises a variable pump and a plurality of execution units composed of execution elements and load-sensitive valves, and the controller is connected with the electromagnetic proportional valve and the load-sensitive valve. The variable pump can solve the problem of aging acceleration of electrical components and prolong the service life. The system can automatically switch to the volume and load sensitive control mode.



51: C12Q

71: Xinjiang Agricultural University

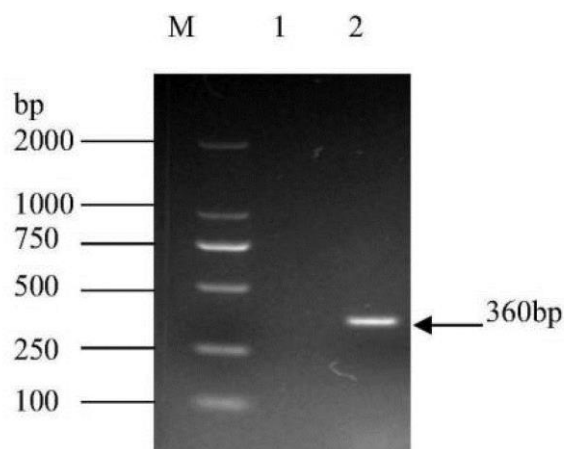
72: Gang YAO, Xuelian MA, Qiang FU, Yawei SUN, Na LI, Qi ZHONG, Wumaierjiang Yahefu, Qianglin REN, Xin LI, Liangtao LUO, Jianjun GE, Chuanjun WANG, Xuejun MA, Yan LI

54: A METHOD FOR THE DETECTION OF BOVINE INFECTIOUS RHINOTRACHEITIS VIRUS

00: -

The present invention belongs to the field of biotechnology and relates, in particular to a method for the detection of bovine infectious rhinotracheitis virus (IBRV), comprising a specific target sequence, as shown in SEQ ID NO .1, a kit comprising primer pairs and probes for fluorescent quantitative PCR detection, the primer pairs as shown in SEQ ID NO .2 and SEQ ID NO .3; the sequence of the probe is

shown in shown in SEQ ID NO .4. The present invention was designed for the detection of bovine The TaqMan probe fluorescent quantitative PCR for the detection of infectious rhinotracheitis virus The TaqMan probe fluorescence PCR kit for the detection of bovine infectious rhinotracheitis virus is highly specific and sensitive and can be used to screen clinical samples for the detection of bovine infectious The TaqMan probe fluorescent PCR kit for the detection of bovine infectious rhinotracheitis virus is highly specific and sensitive and can be used to screen clinical samples for positive bovine infectious rhinotracheitis. It has a short detection time, high sensitivity and high stability. The kit is designed for the screening of clinical samples for positive bovine rhinotracheitis.



21: 2022/13745. 22: 2022/12/20. 43: 2023/03/16
51: H02J

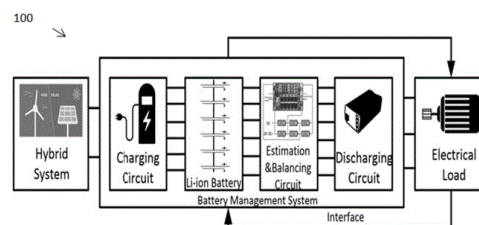
71: Jafar Ali Ibrahim Syed Masood, Surya Kalyan Chakravarthy Nidamanuri, Pachuru Mohan babu, Prof. (Dr.) Sasmita Samanta, Puneet Kumar Yadav, Hussain Basha Mahammad, Devakirubakaran Samidoss, Manchikalapati Manideepika, Srinivasulu Madala, Bujji Babu Dasari, Venkatasubramanian Krishnan, Narendra Mupparaju, Anjaneyashanmukh Ramachandruni

72: Jafar Ali Ibrahim Syed Masood, Surya Kalyan Chakravarthy Nidamanuri, Pachuru Mohan babu, Prof. (Dr.) Sasmita Samanta, Puneet Kumar Yadav, Hussain Basha Mahammad, Devakirubakaran Samidoss, Manchikalapati Manideepika, Srinivasulu Madala, Bujji Babu Dasari, Venkatasubramanian Krishnan, Narendra Mupparaju, Anjaneyashanmukh Ramachandruni

54: A SYSTEM ESTIMATION AND BALANCING OF BATTERY STATE OF CHARGE

00: -

The present invention relates to a system (100) for estimation and balancing of battery state of charge. The system (100) comprises a wind-solar hybrid unit, a battery management unit and an electrical load. The wind-solar hybrid unit is configured to generate power that may be used to charge battery. The battery management unit is configured to maintain an equal amount of cell voltages and improve the performance, reliability, life span, efficiency, and reduce the battery degradation problem. The battery management unit comprises a charging circuit unit, a lithium-ion battery, an estimation and balancing circuit, and a discharging circuit. The discharging circuit is configured to provide safe operation against temperature. The electrical load is operationally connected with the battery management unit. The electrical load is configured to consume power or energy.



21: 2022/13746. 22: 2022/12/20. 43: 2023/03/16
51: G05B

71: Jafar Ali Ibrahim Syed Masood, Surya Kalyan Chakravarthy Nidamanuri, Chinnaiyan Ramasubramanian, Prof. (Dr.) Sasmita Samanta, Puneet Kumar Yadav, S N Vittal Kollapudi, Suresh Kornepati, Srinivasulu Rompicharala, Jaya Krishna. K, Malakonda Rayudu, Siva Ratna Sai Thota, Kocharla Sreenath, Nourin Shaik

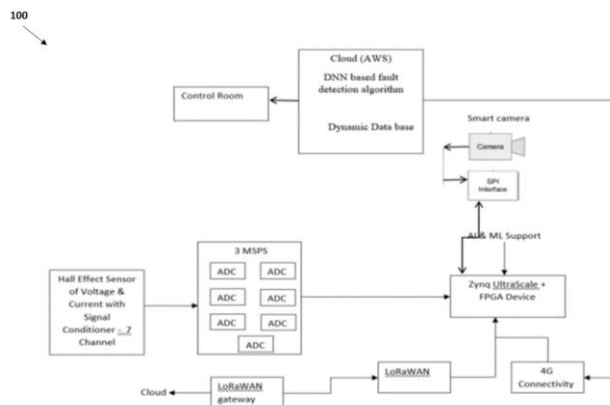
72: Jafar Ali Ibrahim Syed Masood, Surya Kalyan Chakravarthy Nidamanuri, Chinnaiyan Ramasubramanian, Prof. (Dr.) Sasmita Samanta, Puneet Kumar Yadav, S N Vittal Kollapudi, Suresh Kornepati, Srinivasulu Rompicharala, Jaya Krishna. K, Malakonda Rayudu, Siva Ratna Sai Thota, Kocharla Sreenath, Nourin Shaik

54: AN IOT BASED SYSTEM FOR DATA ACQUISITION

00: -

The present invention relates to an IoT based system (100) for data acquisition. The system (100) comprises a step-down transformer, a sensor unit, a microcontroller, a communication module, a fault

detection and a notification module. The IoT based system (100) for data acquisition includes power quality analyzer which detects the fault automatically on the cloud computing technology. The voltage and current measurements are capable for the inputs of DNN algorithm. The accurate training is given to the DNN with the large number of fault samples. The cloud based DNN algorithm is developed for processing the data. The control room and users will get intimation in the occurrence of fault.



21: 2022/13747. 22: 2022/12/20. 43: 2023/03/17
51: C12Q

71: Institute of Veterinary Research, Xinjiang Academy of Animal Sciences (animal clinical medicine research center of Xinjiang Academy of Animal Sciences)

72: YE Feng, YI Xinping, MA Xiaojing, LIU Liya, LIU Yinghao, GU Wenxi, WU Jian, DING Zeren

54: DOUBLE REAL-TIME FLUORESCENCE QUANTITATIVE PCR DETECTION METHOD AND KIT FOR IDENTIFYING BRUCELLA VACCINE STRAINS

00: -

This invention provides a double real-time fluorescence quantitative PCR detection method and kit for identifying brucella vaccine strains. The nucleotide sequences of the primers are shown in SEQ ID NO.1-4, the nucleotide sequences of the probes are shown in SEQ ID NO.5-6, and the kit contains the primers and probes. The method not only identifies Brucella nucleic acid DNA, but also identifies trace Brucella nucleic acid DNA such as tissue samples, and distinguishes the immune sample of bovine Brucella A19-delta VirB12 molecular marker vaccine from the existing commercial Brucella vaccine immune sample and wild strain infection sample. This method has the

advantages of high safety, convenient operation, high sensitivity, strong specificity, etc. It detects a large number of samples at the same time, and has practical application value for the prevention, control and diagnosis of brucellosis.

21: 2022/13748. 22: 2022/12/20. 43: 2023/03/17

51: A61N

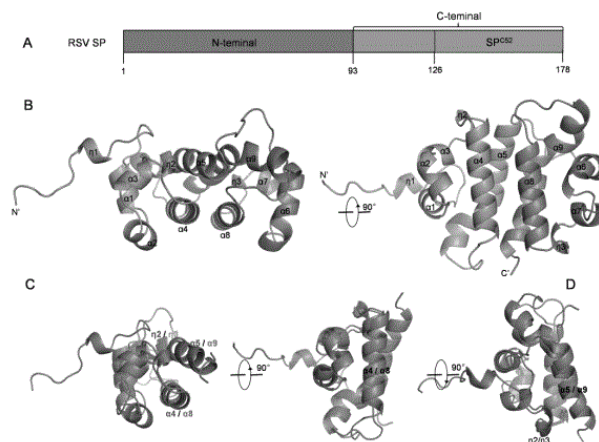
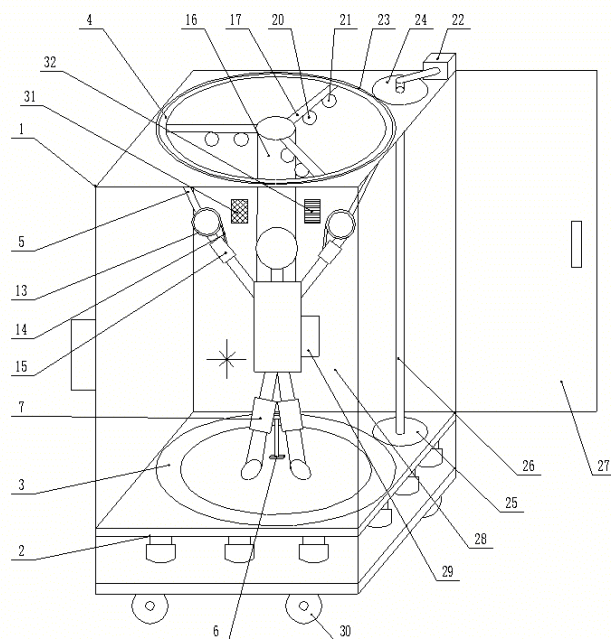
71: YIN Li

72: YIN Li

54: AN AUXILIARY POSITIONING DEVICE FOR ELECTRON BEAM IRRADIATION IN RADIOTHERAPY

00: -

The invention discloses a radiation electron irradiation auxiliary positioning device, which comprises an installation frame, a lifting base is fixed at the bottom of the installation frame, a turntable is installed on the lifting base, and a leg fixing mechanism is fixed on the turntable; the top of the installation frame rotates with a ring frame, the two ends of the ring frame are symmetrically hinged with an adjusting rod, and the end of the adjusting rod is equipped with a hand fixing mechanism. A driving part is installed on the installation frame, and the turntable is connected with the annular frame through the driving part; the inner side of the annular frame is fixed with a bracket, and the bottom of the bracket is provided with a trunk fixing mechanism. The invention uses the leg fixing mechanism to fix the legs of the patient, so as to avoid the change of the position of the patient during radiotherapy or when the turntable rotates, and to avoid negative influence on the normal tissue of the patient. The hand fixation mechanism is used to fix the patient's arms, and the negative pressure sucker on the trunk fixation mechanism is used to fix the patient's trunk, so as to locate the patient's body and ensure the accuracy of the treatment of the patient.



21: 2022/13749. 22: 2022/12/20. 43: 2023/03/16
51: A01G

71: FUJIAN NORMAL UNIVERSITY

72: CHEN Lifei, WU Yunkun, CHEN Pu

54: EXPRESSION, PURIFICATION, CRYSTAL STRUCTURE AND APPLICATION OF SP PROTEIN ENCODED BY RSV

00: -

The invention discloses an expression and purification of SP protein encoded by RSV, its crystal structure and application, and belongs to the field of biotechnology, comprising that crystal of the preferred SP protein obtain by the invention, and the resolution is 1.71Å. The crystal structure space group of SP is C2221. Resolution range (Å): 39.59-1.71. According to the invention, an Escherichia coli expression system is adopted to express SP protein in vitro, the protein is purified by affinity purification method, and the crystal of the protein is obtained, and then the crystal with the best diffraction data is optimized, so that the molecular structure of the protein is analyzed, and the structural domain or protein sequence which may interact with the host target protein is analyzed. It lays a good foundation for the later research on the function of this protein, and at the same time, it also provides a new idea for further research on the mode of action of other proteins of this virus.

21: 2022/13752. 22: 2022/12/20. 43: 2023/03/17
51: F04C; F15B

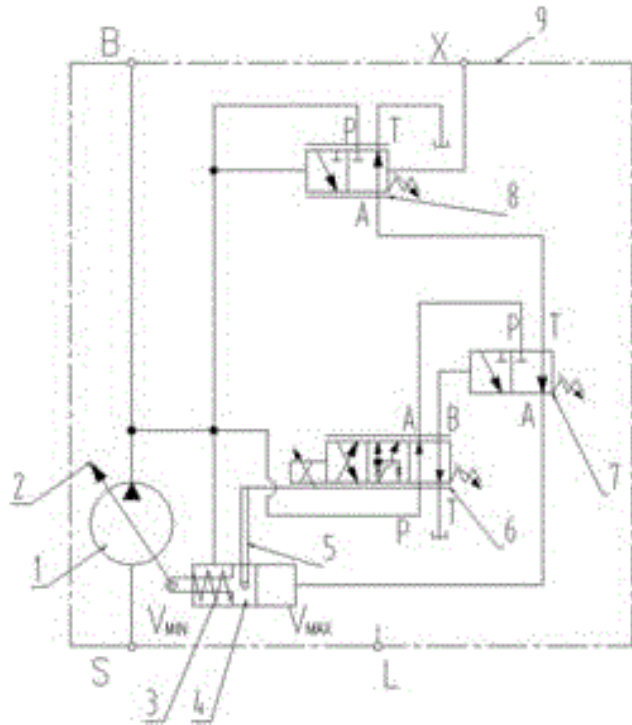
71: XUZHOU COLLEGE OF INDUSTRIAL TECHNOLOGY, JIANGSU COLLEGE OF SAFETY TECHNOLOGY

72: LI Jiansong, JI Zhi, SUN Jinhai, LI Haiyan
54: VARIABLE DISPLACEMENT PUMP AND HYDRAULIC CONTROL SYSTEM USING VARIABLE DISPLACEMENT PUMP

00: -

A variable displacement pump and a hydraulic control system using the variable displacement pump; the variable displacement pump, and variable control oil cylinder connected with the swash plate in the pump body are provided with springs, and the piston rod of the variable control oil cylinder is connected with the valve sleeve of the electromagnetic proportional valve; port P of the electromagnetic proportional valve, port P of the flow control valve, pump body outlet are communicated with the rod cavity of the variable control oil cylinder; the left control port of the flow control valve is connected with port P; the pump casing is provided with an outlet, an inlet and a feedback port; port A of the electromagnetic proportional valve is connected to port P of the switching valve; the port A of the flow control valve is connected to the port T of the switching valve; port A of the switching valve is connected to the rodless cavity of the variable control oil cylinder, and the switching valve is hydraulically or electrically controlled by port B of the electromagnetic proportional valve. The system includes the variable displacement pump and at least two execution units composed of an execution element and a load sensitive valve. The controller is connected with the electromagnetic proportional

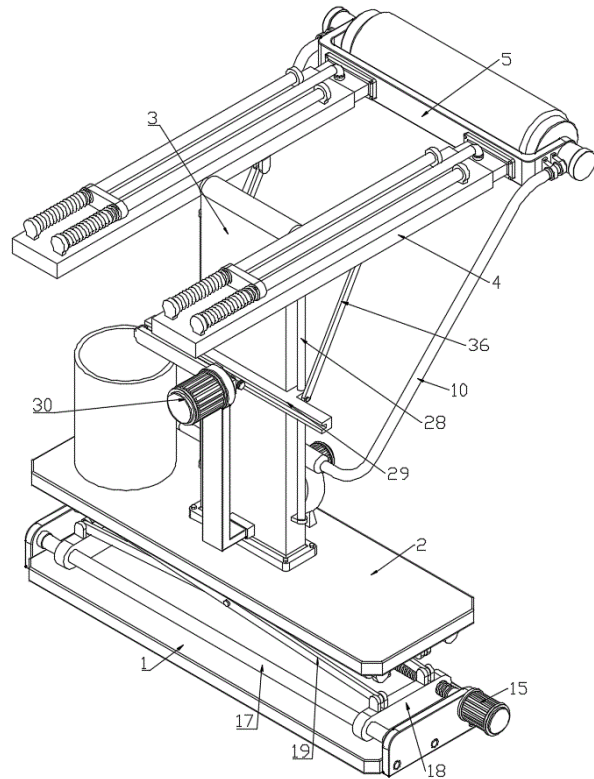
valve and the load sensitive valve. The variable displacement pump solves the problem of aging acceleration of electrical elements and prolongs the service life. The system automatically switches to volume and load sensitive control modes.



21: 2022/13839. 22: 2022/12/21. 43: 2023/04/04
51: E04B
71: THE FIRST CONSTRUCTION ENGINEERING
COMPANY LTD. OF CHINA CONSTRUCTION
SECOND ENGINEERING BUREAU, CHINA
CONSTRUCTION SECOND ENGINEERING
BUREAU LTD.
72: Junhong HE, Han ZHANG, Qingsong OU, Jing
LI, Pengfei LI, Liying SHANG, Zhongmao WU, Chao
CHEN
33: CN 31: 202210762098.9 32: 2022-06-29
**54: A DEVICE FOR PAINTING EXTERIOR WALLS
OF A HOSPITAL CONSTRUCTION**
00: -

Aspects of the disclosure provide a device for painting exterior walls of a hospital construction. The device includes a base (1) and a horizontal plate (2) that is movably arranged above the base (1) through a threaded lifting mechanism, and the horizontal plate (2) is parallel to the base (1); a vertical plate (3) is fixedly installed on the horizontal plate (2), and two oscillating plates (4) are respectively installed on both sides of the vertical plate (3), and the two

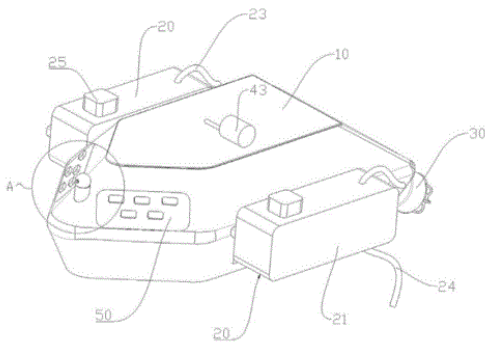
oscillating plates are all connected with a reciprocating push-pull mechanism installed on one side of the vertical plate (3).



21: 2023/00021. 22: 2023/01/03. 43: 2023/03/30
51: B63G; G05D; H04N; G06N
71: Zhejiang International Maritime College
72: Xunwen Liu, Wenliang Wang, Haifen Yu, Yifang
Xu
33: CN 31: 202220322170.1 32: 2022-02-17
**54: AUTONOMOUS TRACKING AND SHOOTING
DEVICE OF UNDERWATER VEHICLES**
00: -

The invention discloses an autonomous tracking shooting device of underwater vehicles, which comprises a main shell, a camera and a driver, and the driver comprises a sinking and floating assembly and a pushing assembly. The head of the main shell is provided with a camera, two sides are provided with sinking and floating assemblies, and the tail is provided with a propelling assembly; the camera is connected with a graphic processor; the central control system is connected with a neural network observation unit and a trajectory tracking unit; the neural network observation unit comprises a disturbance observer and a saturation compensator;

the trajectory tracking unit comprises a trajectory detection assembly and a trajectory controller, and the trajectory controller corrects the following shot trajectory according to the detection results of the trajectory detection assembly, the disturbance observer and the saturation compensator. According to the invention, the neural network observation unit is arranged, so that rapid and accurate autonomous docking can be realized, adverse effects of saturation constraints of the actuator on tracking control performance are overcome, and control precision is improved.



21: 2023/00108. 22: 2023/01/03. 43: 2023/03/16
51: E21B

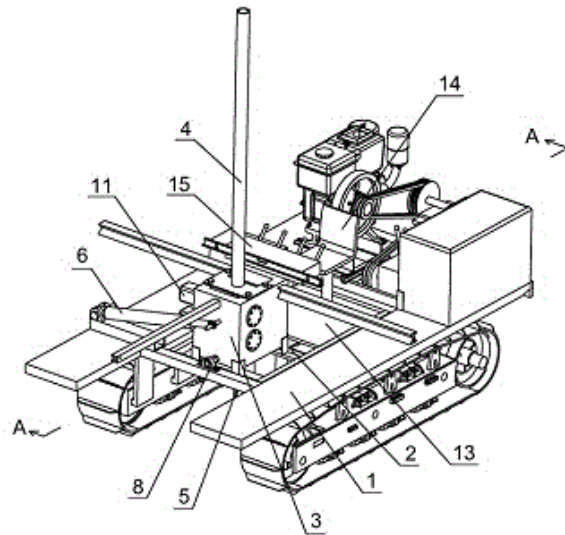
71: WUHAN JINRUIWEI FOUNDATION
ENGINEERING CO., LTD.

72: XU, JING, WU, DI, YANG, LEI, SONG, YI, LI,
YONGYU, WU, BINGQIAN, WU, YAWEI, JIANG, LI,
WU, HANPING, WU, YUEGANG

54: CRAWLER SLOPE CONE DRILLING MACHINE

00: -

There is a crawler slope cone drilling machine is provided. The crawler slope cone drilling machine includes a crawler chassis (1), a rotating platform (2) swinging on the crawler chassis (1), a control box (3) fixed on a side of the rotating platform (2) away from the crawler chassis (1), and a drilling rod (5) for drilling a drilling hole go up and down inside the control box (3).



21: 2023/00153. 22: 2023/01/03. 43: 2023/03/01
51: E04B

71: NANTONG VOCATIONAL UNIVERSITY

72: SHEN, HUA

33: CN 31: 202111047852.2 32: 2021-09-08

54: CONSTRUCTION PROCESS FOR JOINTS OF DRY PREFABRICATED INDUSTRIALIZED CONCRETE MAIN AND SECONDARY BEAMS

00: -

The invention provides a construction process for joints of dry total-prefabricated industrialized concrete main and secondary beams, which includes two steps of factory manufacturing and on-site installation. In the factory manufacturing, a section steel corbel assembly, a precast main beam and a precast secondary beam are separately manufactured. The on-site installation includes the following steps: (2-1) the section steel corbel assembly, the precast main beam and the precast secondary beam that are qualified are transported to a construction site; (2-2) the section steel corbel is fixed to a side of the precast main beam using a stud connection pair, and the accuracy of size and positioning is checked; (2-3) the precast secondary beam is lifted to a predetermined position, and secondary fixing bolt holes on upper and lower positioning steel plates and on flanges above a short section steel are aligned and fixed using a high-strength friction grip bolt; (2-4) a gap between joints of the precast main and secondary beams is filled with anti-corrosion materials. The invention provides a complete set of new build and construction process for joints of dry total-prefabricated

industrialized concrete main and secondary beams, which has better mechanical properties, reliability, economy, flexibility and adaptability as compared with other solutions.

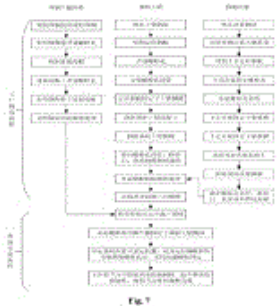


Fig. 7

Designing a layout method of approach channel	Designing a berthing area	Designing a navigation area
Designing a braking area, a berthing area, an adjusting area and a navigation area of approach channel between a main channel and ship lock, respectively	Designing a first berthing area and a second berthing area	Designing a water storage pit at braking area
Designing a water storage pit at braking area, storing water, and arranging a water inlet valve and water outlet valve at water storage pit	Designing a conveying pipe, wherein conveying pipe is communicated with first inlet valve, and an exit end of conveying pipe is connected to a water intake system of the ship lock	Designing a guide wall at bend
Designing a layout method of approach channel	Designing a water intake system of the ship lock	Designing a layout method of approach channel

21: 2023/00155. 22: 2023/01/03. 43: 2023/03/01
51: E02C
71: CHINA HARBOUR ENGINEERING COMPANY LTD.
72: LI, JINGJUN
33: CN 31: 2022108760572 32: 2022-07-25
54: LAYOUT METHOD OF APPROACH CHANNEL
00: -

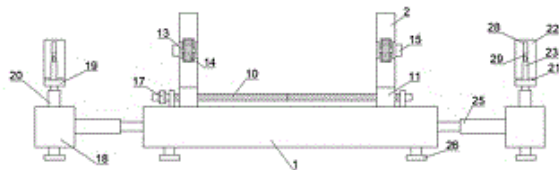
The present invention discloses a layout method of approach channel, including: arranging a braking area, berthing area, adjusting area and navigation area of approach channel between a main channel and ship lock, respectively, berthing area is arranged by laying a first berthing area and second berthing area; wherein first and second berthing area are connected to form a bend; digging a water storage pit at braking area, storing water, and arranging a water inlet valve and water outlet valve at water storage pit; arranging a conveying pipe, wherein conveying pipe is communicated with first inlet valve, and an exit end of conveying pipe is connected to a water intake system of the ship lock; arranging a guide wall at bend. The guide wall and water storage pit can stabilize water flow, can be prefabricated components to reduce operation time in water, which

reduces construction difficulty and cost, accelerates construction.



21: 2023/00156. 22: 2023/01/03. 43: 2023/03/01
51: B23K
71: CHINA HARBOUR ENGINEERING COMPANY LTD.
72: XU, HUAJIANG
33: CN 31: 2022108903256 32: 2022-07-27
54: CONSTRUCTION DEVICE OF PIPE
00: -

The present invention discloses a construction device of pipe, comprising: a pair of fixing mechanisms, wherein one of the pair of fixing mechanisms comprises: a support frame arranged on a first base; a positioning cylinder arranged in support frame; a limit frame arranged in positioning cylinder, and is a cuboid structure composed of a pair of first connecting plates arranged horizontally and a pair of second connecting plates arranged vertically; wherein one of the pair of first connecting plates and second connecting plates are telescopic structures; one first electric telescopic rod is correspondingly arranged between one first connecting plate and one positioning cylinder, one second electric telescopic rod is correspondingly arranged between one second connecting plate and one positioning cylinder. The present invention can be for alignment of pipes, has high structural stability and simple operation, and is conducive to ensuring the welding effect, thereby ensuring efficiency of pipe construction.



21: 2023/00157. 22: 2023/01/03. 43: 2023/03/01

51: E02B

71: CHINA HARBOUR ENGINEERING COMPANY LTD.

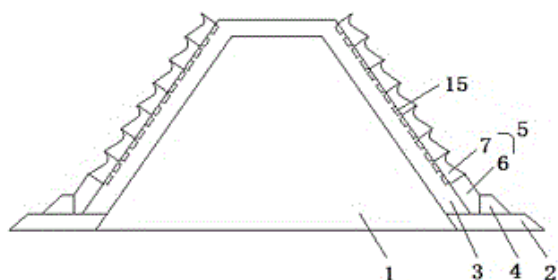
72: XIA, XINRUI

33: CN 31: 2022108844188 32: 2022-07-25

54: ISLAND BREAKWATER

00: -

The present invention discloses an island breakwater, comprising: a dike body with a trapezoidal cross section, wherein an outer side of a bottom of the dike body is provided with bottom protection stone; a cushion fixed on a side and a top surface of the dike body, wherein an outer side of a bottom of the cushion is provided with toe protection stone, and the bottom of the cushion and the toe protection stone are fixed on the bottom protection stone; a wave dissipation layer, which is fixed on the cushion located on the side of the dike body, wherein a bottom of the wave dissipation layer is abutted against an inner side of the toe protection stone; wherein multiple wave dissipation holes are arranged at the wave dissipation layer at intervals. The present invention has high wave impact resistance ability and low noise.



21: 2023/00176. 22: 2023/01/03. 43: 2023/03/27

51: C02F

71: HENAN UNIVERSITY OF URBAN CONSTRUCTION

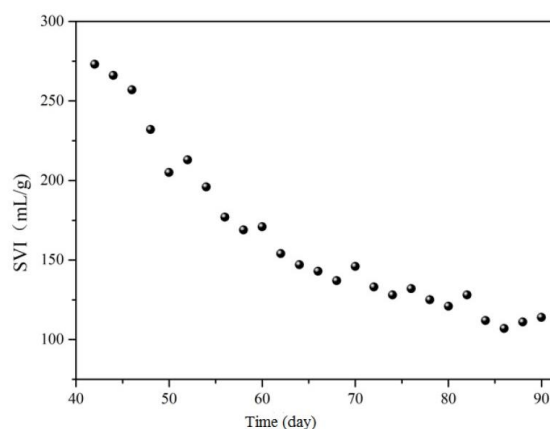
72: LI, Songya, WANG, Linpei, LIU, Biao, GU, Deming, WANG, Le, GAO, Hongbin, HE, Yali, WU, Junfeng, MAO, Yanli, ZHU, Xinfeng, KANG, Haiyan

33: CN 31: 202210406210.5 32: 2022-04-18

54: METHOD FOR CONTROLLING FILAMENTOUS SLUDGE BULKING BASED ON QUORUM SENSING

00: -

Disclosed is a method for controlling filamentous sludge bulking based on quorum sensing, and belongs to the technical field of the control of filamentous sludge bulking. The method includes the steps: operating an activated sludge reactor, and collecting an activated sludge sample; judging a sludge bulking degree and a sludge bulking type; performing Gram staining and Neisser staining; identifying dominant filamentous bacteria which cause the filamentous sludge bulking; determining a type and content of N-Acyl Homoserine Lactones (AHLs) signal molecules; performing correlation analysis to determine the AHLs signal molecules negatively correlated with the filamentous sludge bulking; adding the determined AHLs signal molecules into the activated sludge reactor, thereby controlling the filamentous sludge bulking in the activated sludge reactor. The method can rapidly reduce or eliminate adverse effects of difficulty in sludge settling and deterioration of water quality of discharged water when the sludge bulking occurs.



21: 2023/00177. 22: 2023/01/03. 43: 2023/03/27

51: A01H

71: INSTITUTE OF COTTON RESEARCH, SHANXI AGRICULTURAL UNIVERSITY

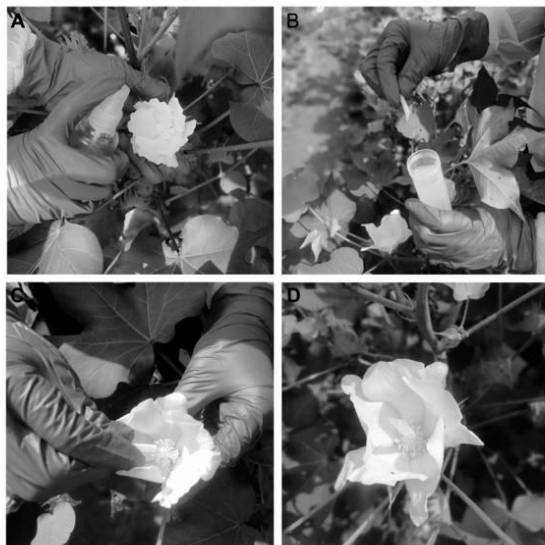
72: SHANGGUAN, Xiaoxia, YANG, Qinli

54: METHOD FOR IMPROVING IN-VIVO GENE TRANSFORMATION EFFICIENCY OF COTTON

00: -

The present invention discloses a method for improving in-vivo gene transformation efficiency of cotton, which comprises: spraying an Agrobacterium

tumefaciens bacterial solution containing a target gene on stamens and a stigma of a cotton flower when a petal blooms; sheathing a sleeve containing an absorbent cotton ball soaked with the *Agrobacterium tumefaciens* bacterial solution on the top of the stigma before the petal is closed; and spraying gibberellin at a flower stalk. The present invention improves the transformation efficiency by prolonging the moisturizing time of the stigma



21: 2023/00184. 22: 2023/01/04. 43: 2023/04/04
51: G01B

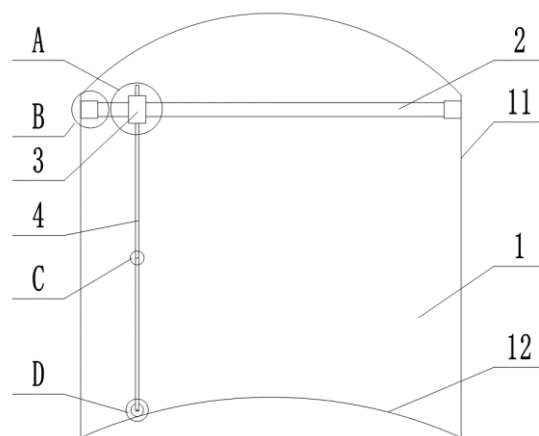
71: Huaihu Coal and Electricity Company Dingji Coal Mine, Anhui University of Science and Technology
72: PAN Hui, FAN Tongqing, GUO Yongjian, WANG Lebin, WANG Xianlong, ZHANG Liquan, QI Yabao, WANG Fei, HOU Jingjing, PANG Wen, CAI Zhiliang, HUA Xinzhu, CHEN Denghong, LI Chen

54: ROADWAY FLOOR HEAVE MEASURING DEVICE

00: -

The invention discloses a roadway floor heave measuring device, which comprises a track, and the two ends of the track are installed on the side walls on both sides of the roadway through side assemblies, and the track is horizontally arranged near the top of the roadway; a moving block, which is slidably sleeved on the track, and a driving assembly is arranged in the moving block, and the driving assembly is in transmission connection with the track; the top of the moving block is provided with a measuring assembly; a measuring rod, the bottom end of which is provided with a movable

wheel, and the movable wheel is in rolling contact with the floor heave of the roadway; the top end of the measuring rod penetrates through the moving block and extends into the measuring assembly; the measuring rod is connected with the moving block in a sliding way, and the measuring rod abuts against the measuring assembly. The invention has a simple structure, can realize remote control and recording, and can be placed close to the end of the track when not in use, thus reducing the influence on the traffic of vehicles and pedestrians.



21: 2023/00231. 22: 2023/01/05. 43: 2023/03/27
51: A61K; A61P

71: HENAN INTEGRATED MEDICINE HOSPITAL
72: LIU, Changhe, WANG, Yanyan, LI, Huani, LIU, Hongyi, GUO, Ronghua, REN, Xiaode, CHEN, Shenghu, JIAN, Dandan

54: PROCESS FOR EXTRACTING ANTI-OSTEOPOROSIS AND LIPID-LOWERING SUBSTANCE FROM CAJANUS CAJAN(L.) MILLISP.

00: -

The present invention relates to a process for extracting an anti-osteoporosis and lipid-lowering substance from *Cajanus cajan*(L.)Millisp. The anti-osteoporosis and lipid-lowering substance is prepared by performing coarse grinding, percolation, macroporous resin adsorption, vacuum concentration, low-temperature precipitation, elution, vacuum concentration and low-temperature crystallization on dry *Cajanus cajan*(L.)Millisp. According to the present invention, percolation extraction is performed, and heating is not carried out, so that the damage to active ingredients is small; macroporous resin DM21/D941 is combined for adsorbing different ingredients of the *Cajanus*

cajan(L.)Millisp.; the process is simple; the yield is high; the extracted active ingredients are nontoxic; and the anti-osteoporosis and lipid-lowering effects are remarkable.

21: 2023/00278. 22: 2023/01/06. 43: 2023/04/04

51: A61C

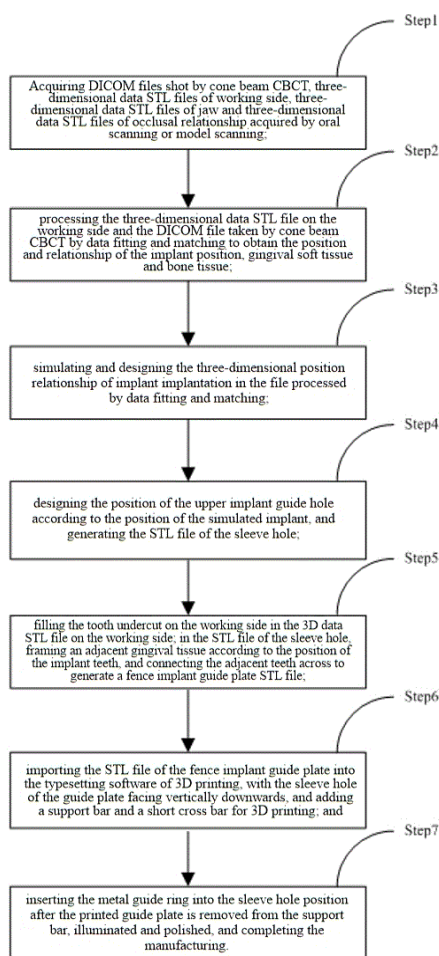
71: AFFILIATED HOSPITAL OF JIANGNAN UNIVERSITY

72: GAO Yufeng, ZHU Fangyong

54: MANUFACTURING METHOD OF NOVEL DIGITAL FENCE IMPLANT GUIDE PLATE

00: -

Disclosed is a manufacturing method of a novel digital fence implant guide plate, and related to the technical field of implant guide plate manufacturing. The manufacturing method of the invention includes the steps of data acquisition, data fitting, designing implant, designing sleeve hole, designing fence implant guide plate, 3D printing, and finishing products, wherein PlastyCAD software is used in the step of designing fence implant guide plate. The STL file of the three-dimensional data on the working side is filled with the undercut of the teeth on the working side; in the STL file of the sleeve hole, the adjacent gingival tissues are selected according to the position of the dental implant, and the adjacent teeth are connected across each other to generate the STL file of the fence implant guide plate. The fence implant guide plate made by the invention fully exposes the operation area, and is easily placed in the mouth, without undercut. The water easily comes out, without heat generation, so as to ensure the success of the operation and later repair. The manufacturing of the digital fence implant guide plate of the invention is an important topic explored by the global oral community and the direction of future oral diagnosis and development, representing the top level of modern digital medical technology, so that oral implant is faster, more accurate and safer.



21: 2023/00284. 22: 2023/01/06. 43: 2023/04/04

51: C04B

71: North China University of Science and Technology

72: WANG, Hui, ZHANG, Wei, WU, Jinhu, GU,

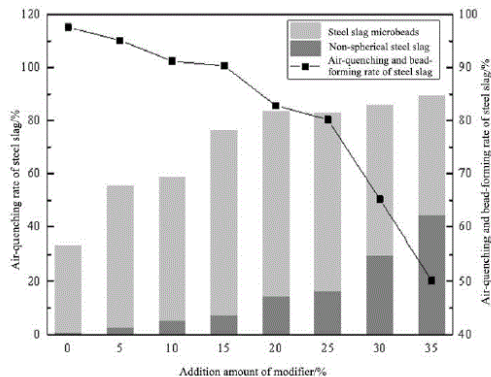
Shaopeng, LIU, Chao, PEI, Jingjing, XING, Hongwei

54: PREPARATION METHOD FOR STEEL SLAG MICROBEADS

00: -

The present invention provides a preparation method for steel slag microbeads, and relates to the technical field of comprehensive utilization of metallurgical slag. The preparation method for the steel slag microbeads provided by the present invention includes the following steps: mixing liquid-state steel slag and liquid-state blast furnace slag, to obtain liquid-state slag; air-quenching and granulating the liquid-state slag, to obtain the steel slag microbeads. The present invention may inject the liquid-state steel slag into the steel slag microbeads with uniform particle size, good performance and good stability. The present

invention not only fully uses the heat of the liquid-state steel slag, but also achieves the resource utilization of the liquid-state steel slag with the high added value, and solves problems of land resource waste and environmental pollution caused by the metallurgical slag.



21: 2023/00416. 22: 2023/01/10. 43: 2023/03/24
51: G01S

71: SOUTHWEST UNIVERSITY

72: LIN Xiaodong, GAO Ziye, WU Zhengmao, XIA Guangqiong, DENG Tao, TANG Xi, FAN Li, XIE Yingke

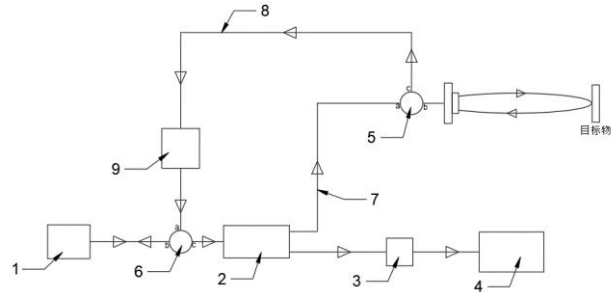
33: CN 31: 202211130320X 32: 2022-09-15

54: LASER RANGING SYSTEM BASED ON OPTICAL FEEDBACK SEMICONDUCTOR LASER DYNAMICS

00: -

The invention relates to the technical field of laser ranging, and discloses a laser ranging system based on optical feedback semiconductor laser dynamics, which comprises a semiconductor laser, an optical fiber coupler, a photodetector, a broadband oscilloscope, an ofirst optical circulator, a second optical circulator, a first optical path, a second optical path and an adjustable optical attenuator. Firstly, the laser emitted by the semiconductor laser is emitted through the optical fiber coupler, the laser is reflected when it meets the target, and the reflected optical signal is fed back to the content of the semiconductor laser through another loop, so that the feedback intensity is adjusted, and chaotic output is generated; the output chaotic signal is collected by a broadband oscilloscope after being converted by a photodetector, and the autocorrelation operation is performed; according to the position of the autocorrelation peak, the optical feedback delay time can be calculated, so that the

distance between the optical fiber coupler and the measured target can be calculated. The invention adopts only one optical fiber coupler for transmitting and receiving, and has the advantages of simple structure, low cost, easy realization and the like.



21: 2023/00417. 22: 2023/01/10. 43: 2023/03/24

51: A61B; G06F

71: SHENYANG UNIVERSITY OF TECHNOLOGY

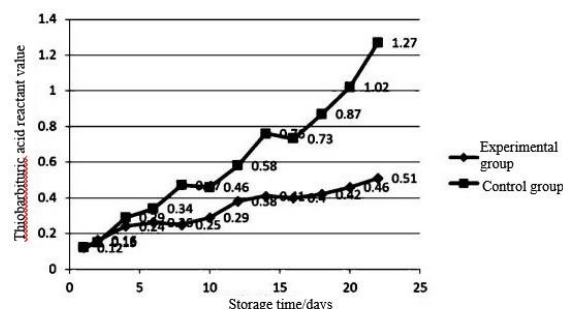
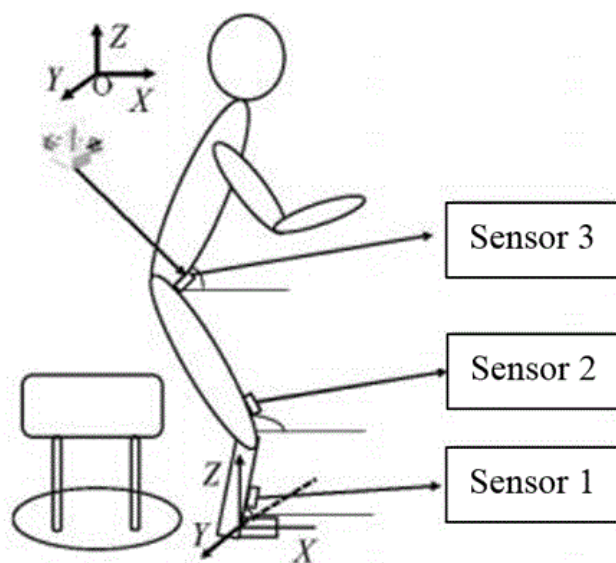
72: WANG Yina, WANG Tianjie, YANG Junyou, WANG Shuoyu

33: CN 31: 202210569906.X 32: 2022-05-24

54: METHOD FOR ESTIMATING JOINT FORCES

00: -

The invention belongs to the technical field of joint forces estimation, and in particular to a method for estimating joint forces. The method can ensure the elderly to stand up stably in sit-to-stand process and make the assistive robot provide appropriate contact force, which effectively improves the functionality and reliability of the assistive robot. The invention comprises the following steps: Step 1, acquiring attitude information of the human body in a sit-to-stand state; and judging the stability by the moving track of the center of gravity in the movement process; Step 2, after it is determined that the sit-to-stand process is in a stable state, regarding the human body as a zygomorphic simplified model, and calculating the movement track of the shoulder joint in the process according to the forward kinematics of the robot, and taking the moving track as a reference trajectory of the assistive robot; Step 3, when the assistive robot contacts with the user, estimating the shoulder joint torque of the assistive robot based on the reference trajectory, and controlling the robot to complete the assistive task according to the trajectory.



21: 2023/00418. 22: 2023/01/10. 43: 2023/03/27

51: A23L

71: XINJIANG ACADEMY OF AGRICULTURAL RECLAMATION SCIENCES

72: LIU, Chengjiang, LI, Yuhui, WANG, Juan, MA, Xiaomei, WANG, Ting, LI, Ziqin, LI, Binbin

33: CN 31: 202310019090.8 32: 2023-01-06

54: METHOD FOR CONTROLLING OXIDATION OF MUTTON FAT

00: -

The present application provides a method for controlling oxidation of mutton fat, and belongs to the technical field of food preservation. The method comprises: pretreating mutton fat, cooling, spraying an antioxidant solution on a surface layer of the mutton fat, airing in a dark place, packaging and storing in a cold storage. The method prolongs preservation time of the mutton fat, provides a preservation method for keeping original fat characteristics for a mutton fat material, also reduces energy consumption, saves cost, inhibits fat oxidation, and keeps processing characteristics of the mutton fat. Compared with an existing freezing technology for preserving the mutton fat, the method has low cost, safety and sanitation, and good material processing characteristics.

21: 2023/00473. 22: 2023/01/11. 43: 2023/03/27

51: C22C; C30B

71: SHENYANG UNIVERSITY OF TECHNOLOGY

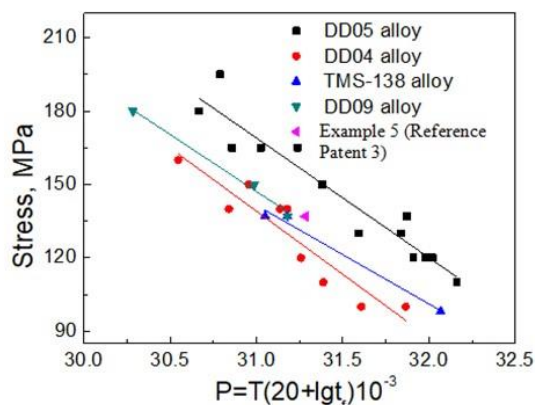
72: TIAN, Sugui, ZHAO, Guoqi, TIAN, Songwen, LIU, Lirong, YAN, Huajin, WANG, Guangyan, TIAN, Ning

33: CN 31: 202211277352.2 32: 2022-10-19

54: NICKEL-BASED SINGLE CRYSTAL SUPERALLOY WITH HIGH CONCENTRATION RE/RU AND HIGH TEMPERATURE BEARING CAPACITY AND PREPARATION METHOD THEREOF

00: -

Disclosed is a nickel-based single crystal superalloy with high concentration Re/Ru and high temperature bearing capacity and a preparation method thereof. The superalloy comprises the following components in percentage by mass: 5.3-6.5% of aluminum, 7.0-8.0% of tantalum, 2.5-4.0% of chromium, 4.2-5.5% of cobalt, 2.0-3.5% of molybdenum, 4.3-5.5% of tungsten, 5.8-6.8% of rhenium, 4.8-5.8% of ruthenium, 0.07-0.14% of hafnium, the balance of nickel and inevitable impurities. The preparation technology of the superalloy comprises design of an alloy component optimization method, formulation of pouring parameters and heat treatment process, etc. With adoption of the treatment process, the component segregation can be reduced, the initial melting and separation of a TCP phase can be avoided, excellent temperature bearing capacity, high-temperature mechanical property and durability of the alloy can be maintained. The superalloy Re/Ru and preparation technology thereof is suitable for preparing hot-end blade components of advanced aero-engines with high thrust-weight ratios.



21: 2023/00511. 22: 2023/01/12. 43: 2023/03/27
51: A23L

71: INSTITUTE OF VEGETABLES AND FLOWERS,
JIANGXI ACADEMY OF AGRICULTURAL
SCIENCES

72: YIN, Yuling, YE, Yanying, ZHANG, Bingbing,
ZHOU, Jinsong, LUO, Shaochun, TANG, Yongping

**54: METHOD FOR DETECTING RESPONSE
EFFECT OF ASPARAGUS OFFICINALIS L.
DECOMPOSED STRAWS**

00: -

Disclosed is a method for detecting a response effect of *Asparagus officinalis* L. decomposed straws comprising: selecting *Asparagus officinalis* L. straws and an offal part outside commercial *Asparagus officinalis* L.; drying and crushing the straws, adding the straws in proportion and mixing with garden soil, putting a mixture in a tissue culture bottle, pouring enough water and sealing, putting the mixture in a thermostat at 30°C and decomposing for 30 days; taking a decomposed material, and using a water extraction method to obtain a decomposed solution; and setting a concentration ratio of the decomposed solution, and determining a response effect thereof on other vegetables by a biological detection method. The response effect of decomposition of the *Asparagus officinalis* L. straws on other vegetables can be clearly defined; and a scientific basis can be provided for effective utilization of the *Asparagus officinalis* L. straws in production.

21: 2023/00527. 22: 2023/01/12. 43: 2023/04/14
51: C12Q; G16C

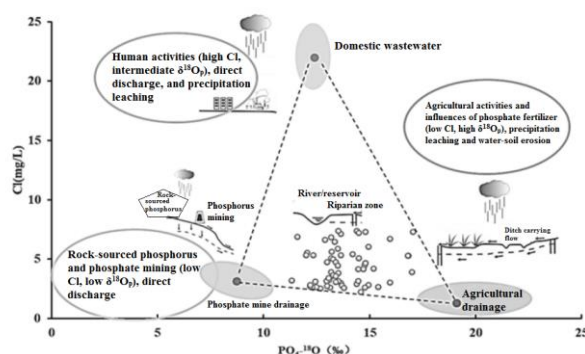
71: Wuhan Center, China Geological Survey
(Central South China Innovation Center for
Geosciences)

72: LIU, Yalei, SHI, Tingting, WANG, Chensheng,
ZHOU, Dankun, HUANG, Kun, HUANG, Xingkai, LI,
Mengru, ZHANG, Yu, YAN, Jusheng

**54: METHOD FOR TRACING SOURCES OF
PHOSPHATE IN WATER BASED ON OXY-GEN
ISOTOPES AND HYDROCHEMICAL
CHARACTERISTICS OF PHOSPHATE**

00: -

A method for tracing sources of phosphate in water based on oxygen isotopes and hydrochemical characteristics of phosphate. The method includes steps of: 1) determining three end members of a phosphate source; 2) acquiring a content of a stable oxygen isotope d18Op in phosphate of a water body of each end member and contents of hydro-chemical characteristic substances in the water body of each end member; 3) measuring traceability data in the water bodies being traced; and 4) identifying and calculating, based on a Bayesian algorithm and an end-member hybrid model of mass conservation, sources of the contents of the stable oxygen isotopes d18Op and the contents of the respective hydrochemical characteristic substances in the water bodies being traced, and a contribution ratio of each source. According to the present invention, the sources of the phosphate can be traced based on a Bayesian discriminant method and the end-member hybrid model by taking the contents of the phosphate oxygen isotopes (d18OP) in water and the contents of the hydrochemical characteristic substances in water as indicators.



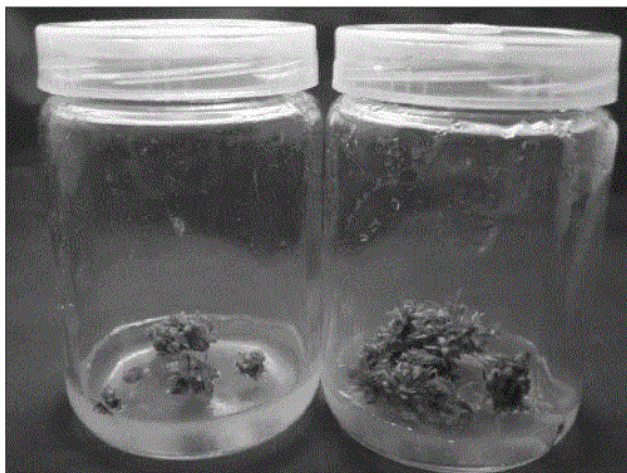
21: 2023/00567. 22: 2023/01/13. 43: 2023/04/04
51: A01G

71: Sichuan Agricultural University
72: LIU Fan, TIAN Mengliang, CHEN Ji, WANG
Xiaohui, QIU Yujie, CAI Chengcheng, LI Rui, LIU
Chen

**54: METHOD FOR CULTIVATING BLETILLA
STRIATA**

00: -

The present invention provides a method for cultivating *Bletilla Striata*, comprising: inoculating *Bletilla Striata* bulbs in a culture medium comprising MS medium, sucrose, agar and DA-6. The present invention adds sucrose and DA-6 to MS medium for cultivating *Bletilla Striata* bulbs, which can significantly improve the survival rate, seedling rate, seedling height, stem thickness, leaf number, leaf texture, root number, root length, root texture, bulb weight, bulb diameter, bulb texture, whole plant weight and other performance parameters of *Bletilla Striata* seedlings. The performance parameters such as survival rate, seedling rate, seedling height, stem thickness, leaf number, leaf texture, root number, root length, root texture, bulb weight, bulb diameter, bulb texture and whole plant weight are significantly improved. The experimental results show that the cultivation method provided by the invention can improve the survival rate, seedling rate, seedling height, stem thickness, number of leaves, leaf texture, number of roots, root length, root texture, bulb weight, bulb diameter, bulb texture, whole plant weight, etc. Moreover, 60 g/L sucrose combined with 8 mg/L DA-6 is the best concentration for cultivating *Bletilla Striata* in vitro seedlings, which can be used for cultivating *Bletilla Striata* in vitro seedlings in production. This concentration can be used in the production of *Bletilla Striata* in vitro seedlings for the cultivation of strong seedlings.



21: 2023/00579. 22: 2023/01/13. 43: 2023/03/27
51: B01J; C02F
71: HENAN UNIVERSITY OF URBAN CONSTRUCTION

72: ZHANG, Jinhui, HUANG, Zhenzhen, ZHU, Xinfeng, SONG, Zhongxian, LI, Ka, LI, Jiebing, KANG, Haiyan, YIN, Shiqiang, WANG, Kai, JIANG, Libin, GENG, Hongchao, LI, Leli, LIU, Luwei, SHI, Mengyao, LIU, Jingquan, CAO, Yuanzi, ZHAO, Zirun, MA, Fengfeng

54: SNO2@ BIOCHAR PHOTOCATALYST AND PREPARATION METHOD AND APPLICATION THEREOF

00: -

The present invention discloses a SnO₂@ biochar photocatalyst and a preparation method and application thereof. In the present invention, a solvothermal method is used. Firstly, biochar is dispersed into an aqueous solution containing sodium polystyrene sulfonate, and then stannic chloride and a precipitator are sequentially added to finally prepare a SnO₂@ biochar photocatalytic material. Due to large specific surface area, rich pore structure and inter-component close interface contact, the SnO₂@ biochar material prepared in the present invention promotes adsorption of VOCs and liquid-phase organic matters, mass transfer and rapid isolation and transfer of carriers, and finally significantly improves the efficiency of photocatalytically degrading the VOCs and liquid-phase pollutants. The prepared photocatalyst may be widely applied to the fields of water pollution control, air pollution control and the like.

21: 2023/00580. 22: 2023/01/13. 43: 2023/04/04
51: B63B

71: Zhejiang International Maritime College

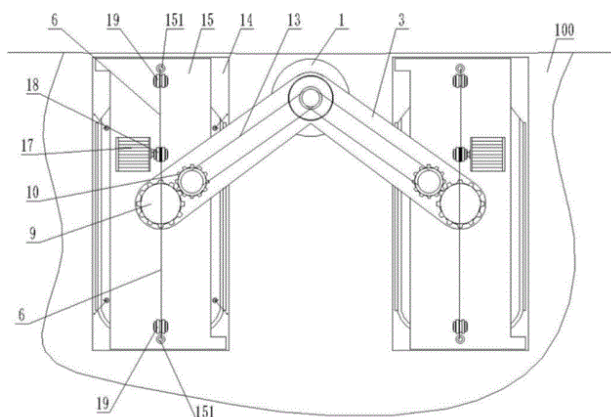
72: Xiaoping He, Qilei Yang, Huijun Liu

54: A LIFTING DEVICE FOR THE RESCUE WORK OF LIFEBOAT ON OFFSHORE HOISTING PLATFORM

00: -

A lifting device for the rescue work of lifeboat on offshore hoisting platform, comprising: a base, a rotating shaft, an arm board, and two supporting mechanisms for accommodating and lifting the lifeboat; the base is installed near the edge of the hoisting platform; the middle part of the arm board is fixedly connected to the top of the rotating shaft; the two supporting mechanisms are respectively arranged at both ends of the arm board, a projection is arranged on the top of each supporting mechanism, and the supporting mechanism is in rotation connection to the arm board through the

projection; a rotation adjustment mechanism for driving the supporting mechanism to rotate is provided on the arm board. The direction of the arm board can be adjusted to precisely place the lifeboat above the sea surface; it is also convenient to adjust the angle of the lifeboat on the surface of the hoisting platform for fixed installation. During the first half progress when the lifeboat is descending, the inner and outer rods can improve the stability of the lifeboat in the air. The efficiency of the lifeboat going out to sea is greatly improved.



21: 2023/00581. 22: 2023/01/13. 43: 2023/04/04
51: B02C

71: Guizhou Institute of Technology

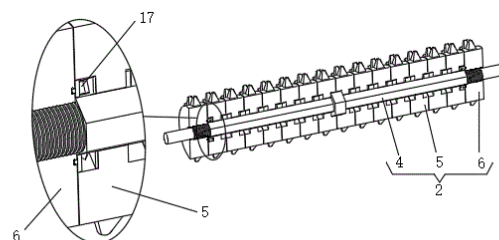
72: Jun Sun

54: AN EFFICIENT CRUSHING DEVICE FOR EXTRACTING SC ELEMENT FROM RED MUD

00: -

The invention relates to the related technical field of Sc element extraction, in particular to an efficient crushing device for extracting Sc element from red mud. The efficient crushing device for extracting Sc element from red mud includes a crushing bin, a first crushing roller and a second crushing roller. The crushing bin is a rectangular channel structure, and the upper side end of the crushing bin is equipped with a hopper, and the lower side end of the crushing bin is equipped with a material withdrawal port. The first crushing roller and the second crushing roller can be divided into multiple parts by setting up the crushing device composed of the crushing bin, the first crushing roller and the second crushing roller, and by setting the first crushing roller and the second crushing roller, which are arranged to be composed of the installation shaft, the central crushing roller body and the edge crushing roller

body. As a result, the first crushing roller and the second crushing roller can be replaced after part of the position is damaged, thus it can effectively reduce the overall maintenance cost of the crushing device.



21: 2023/00584. 22: 2023/01/13. 43: 2023/04/04
51: A01C

71: Chongqing Medical and Pharmaceutical College

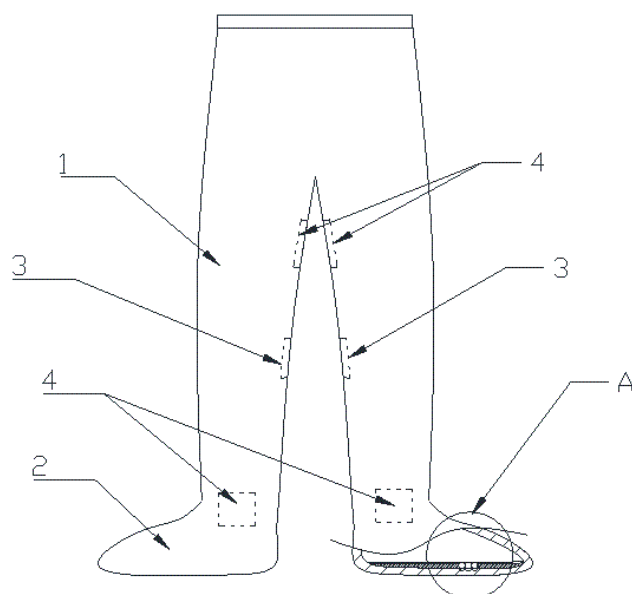
72: Xiang Xiao, Yu Deng, Xia Wu, Jing Peng, Feng Liu, Yuanhui Cheng

33: CN 31: 202220145098.X 32: 2022-01-19

54: TROUSERS FOR LOWER LIMB REHABILITATION OF CHILD WITH CEREBRAL PALSY

00: -

The utility model provides trousers for lower limb rehabilitation of a child with cerebral palsy. The trousers comprise a trousers body and foot straps connected with the trousers body into a whole, a plurality of balls for massaging soles are arranged in the foot straps, and are right opposite to Yongquan acupoints of the human body, the trousers body is made of elastic fabric, heaters are arranged on inner thighs and lateral ankles of the trousers body respectively, and magnetic knee joint correcting devices with the same polarity are arranged on the inner sides, located on two knee joints, of the trousers body respectively. The trousers are comfortable and convenient to wear; and the trousers can simultaneously inhibit abnormal gaits of the child in terms of feet, knees and legs.



21: 2023/00634. 22: 2023/01/16. 43: 2023/03/17
51: G01N

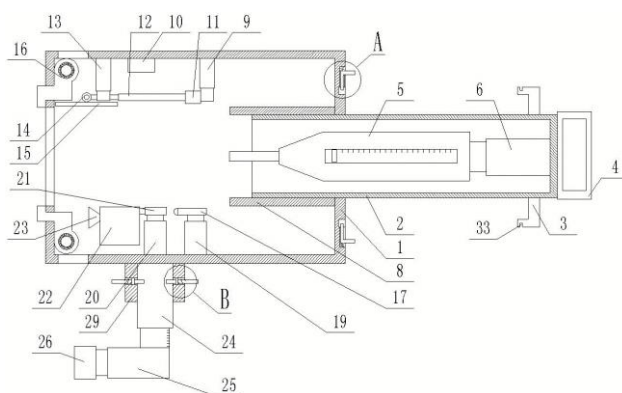
71: LIAONING TECHNICAL UNIVERSITY, Liaoning Non-ferrous Geological Exploration and Research Institute Co.,Ltd., China Coal Technology and Engineering Group Shenyang Research Institute
72: WU Pengfei, LIU Qiang, WANG Beifang, TAN Zhen, LI Runzhi

54: DEVICE AND METHOD FOR DETECTING STRENGTH OF COAL GANGUE CONCRETE

00: -

Disclosed are a device and a method for detecting the strength of coal gangue concrete. The device includes a first shell, wherein a side wall of the first shell is provided with a detection hole, and air blowing parts are positioned at both sides of the detection hole; the first shell is provided with a polishing mechanism, a monitoring mechanism and a marking mechanism; one end of the first shell away from the detection hole is provided with a sliding hole, both sides of the sliding hole are fixedly connected with slide tracks, and a detection mechanism is sleeved between the two slide tracks in a sliding way. The device polishes the surface of coal gangue concrete through the setting of the polishing mechanism; the device judges whether the polished coal gangue concrete surface is perpendicular to the rebound hammer through the setting of the monitoring mechanism, ensuring the verticality of the rebound hammer and the coal gangue concrete surface; through the setting of the air blowing parts, the debris generated in the

polishing process of concrete is blown away; through the setting of the marking mechanism, the detected positions are marked, avoiding repeated detection of the same position of coal gangue concrete.



21: 2023/00647. 22: 2023/01/16. 43: 2023/03/27
51: A01G; B28B; E02D

71: INSTITUTE OF WATER RESOURCES FOR PASTORAL AREA, MWR

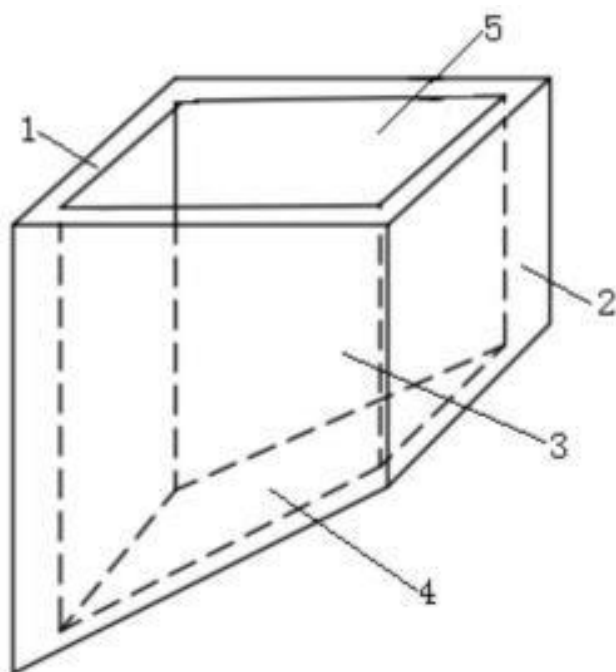
72: GAO, Tianming, ZHANG, Ruiqiang, GUO, Jianying, LIU, Yanping, XING, Ende, LIU, Jing, ZHANG, Tiegang, SHAN, Dan, ZHANG, Xin, YANG, Zhenqi, TANG, Guodong

33: CN 31: 202310019172.2 32: 2023-01-06

54: WEDGE SLOPE PROTECTION GRASS-PLANTING BRICK AND MANUFACTURING MOLD THEREOF

00: -

Disclosed is a wedge slope protection grass-planting brick and a manufacturing mould thereof. An upper and lower ends of the grass-planting brick have open shapes, with hollow interiors. The brick comprises a front wall which corresponds to a low position of a slope surface; a rear wall which corresponds to a high position of the slope surface and is perpendicular to the ground and parallel to the front wall; and side walls which are arranged parallel to each other and perpendicular to the ground, and respectively fixed on two side edges of the front wall and the rear wall, and form a rectangular shape; a bottom surface formed by bottom ends of the front wall, the rear wall and the two side walls is parallel to the slope surface. The soil loading amount of the grass-planting brick is large; the stability of the slope surface can be increased.



21: 2023/00649. 22: 2023/01/16. 43: 2023/03/27
51: C12M

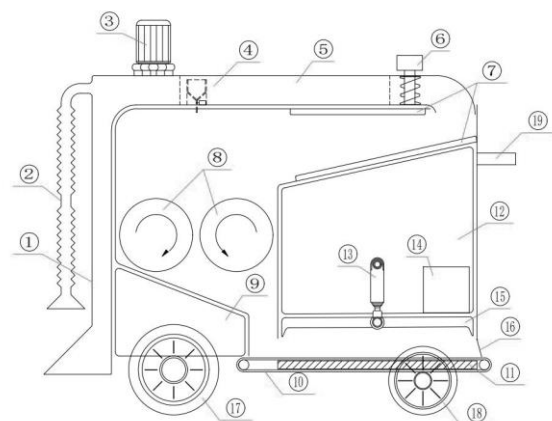
71: HENAN UNIVERSITY OF URBAN
CONSTRUCTION

72: HE, Yali, WU, Zekun, GU, Deming, LI, Songya,
WANG, Linpei, ZHOU, Jingbo, YAN, Xiaole,
ZHANG, Yan, HAO, Xueru, HAN, Shuaiqi

54: INTEGRATED BIOMASS TREATMENT EQUIPMENT

00: -

The present invention discloses an integrated biomass treatment equipment, which includes a vehicle body, front wheels and rear wheels that are located on the bottom of the vehicle body, a collection mechanism that is located at a front end of the vehicle body and can generate a suction force, and a handrail that is located at a rear end of the vehicle body, and further includes a divergent biomass conveying passage that is arranged inside the vehicle body and communicated with the collection mechanism, a biological agent dosing apparatus, a parallel-connection auger crushing component close to one side of an outlet end of the divergent biomass conveying passage, a twin-screw extruder for receiving materials from the outlet end of the divergent biomass conveying passage, a conveyor belt for receiving materials from an outlet end of the twin-screw extruder and an automatic compression apparatus located right above the conveyor belt.



21: 2023/00681. 22: 2023/01/16. 43: 2023/03/07

51: C02F

71: CHINA HARBOUR ENGINEERING COMPANY
LTD.

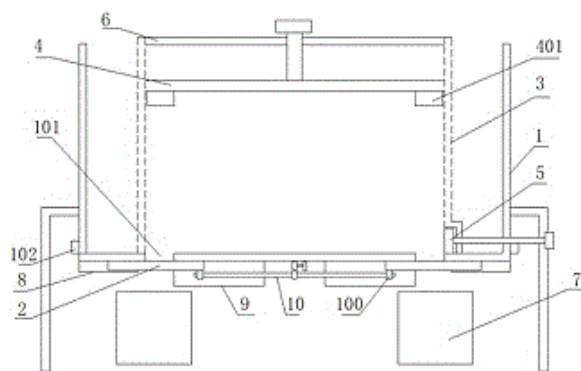
72: HE, JUNBIAO

33: CN 31: 2022109049268 32: 2022-07-29

54: TREATMENT DEVICE FOR SLUDGE

00: -

The present invention discloses a treatment device for sludge, comprising: a squeezing box with rectangular shape, whose bottom is provided with two first openings, two first openings are provided with a baffle, two drainage outlets are arranged at a lower part of squeezing box, and a sludge inlet is arranged at squeezing box; two filter plates, which divide an inside of squeezing box into three chambers, wherein two drainage outlets are communicated with chambers on both sides, and sludge inlet is communicated with chamber in the middle; a pressing plate arranged between two filter plates, wherein a squeezing column is arranged at a bottom of both ends of pressing plate that are spaced along a length direction of the squeezing box, and two squeezing columns are opposite to two first openings, respectively. The present invention can make the sludge discharge from two first openings, and collect the preliminary dehydrated sludge.



21: 2023/00801. 22: 2023/01/18. 43: 2023/03/16
51: C08L
71: GUANGRAO KERUI BIOTECHNOLOGY CO., LTD.

72: BAO, HANFANG, LIU, ZHENGUANG, ZHOU, JUNJIE, SUN, GUANGHAI

54: ANTISTATIC ADDITIVE

00: -

An antistatic additive is provided. The antistatic additive includes hydrogenated alkylamine, ethylene oxide and hartsalz. the antistatic additive having a composition containing 30% mass percent to 40% mass percent of the hydrogenated alkylamine, 10% mass percent to 15% mass percent of the ethylene oxide, 40% mass percent to 60% mass percent of the hartsalz.

21: 2023/00802. 22: 2023/01/18. 43: 2023/03/09
51: G01N

71: ACADEMY OF MEDICAL ENGINEERING AND TRANSLATIONAL MEDICINE, TIANJIN UNIVERSITY, TIANJIN UNIVERSITY OF SCIENCE AND TECHNOLOGY

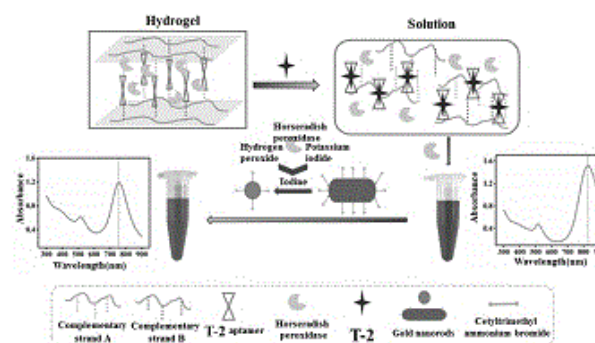
72: CHEN, LIQUN, LI, SHUANG, LIANG, JUN, SUN, YUNFENG

54: METHOD FOR RAPID DETECTION OF T-2 TOXIN IN FOOD BASED ON DNA HYDROGEL

00: -

The present application belongs to the technical field of food detection, and discloses a method for rapid detection of T-2 toxin in food based on DNA hydrogel, comprising the following steps: constructing a DNA hydrogel with T-2 toxin aptamer as a linker, wherein the DNA hydrogel is uniformly embedded with horseradish peroxidase; adding a sample to be tested to the DNA hydrogel, wherein the concentration of the T-2 toxin in the sample to be tested is 0.01 ng/mL - 10000 ng/mL, and when the

T-2 toxin aptamer binds to the T-2 toxin, the gel ruptures, releasing the horseradish peroxidase; and calculating the content of the T-2 toxin according to absorption peaks of gold nanorods under ultraviolet spectrophotometer based on that the horseradish peroxidase catalyzes a reaction of hydrogen peroxide and potassium iodide to form gold nanorods etched by iodine elements within a certain period of time. The detection method of the present application is convenient and sensitive.



21: 2023/00803. 22: 2023/01/18. 43: 2023/03/15
51: G01N

71: ACADEMY OF MEDICAL ENGINEERING AND TRANSLATIONAL MEDICINE, TIANJIN UNIVERSITY, TIANJIN UNIVERSITY OF SCIENCE AND TECHNOLOGY

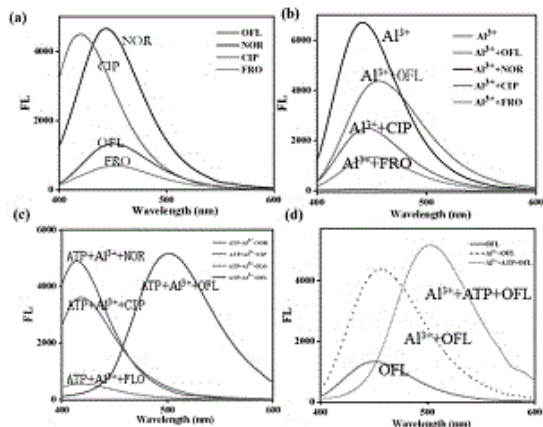
72: CHEN, LIQUN, LI, SHUANG, SHENG, WEI, LIN, XIAOXIAO

54: METHOD FOR DETERMINATION OF OFL IN MILK BY AL³⁺ AND ATP SYNERGISTIC SENSITIZATION FLUORESCENCE

00: -

The application discloses a method for determining OFL in milk by Al³⁺ and ATP synergistic sensitization fluorescence. The application discloses a method for quantitative determination of OFL in milk by Al³⁺ and ATP synergistic sensitization fluorescence. The excitation wavelength, pH, reaction temperature, reaction time are adjusted to carry out the spiked recovery detection of milk in an actual sample, which can clearly distinguish OFL from NOR, CIP and FLO. This application establishes a sensitive, rapid and accurate method for quantitative detection of OFL in milk by using the synergistic sensitization of aluminum ions (Al³⁺) and adenosine triphosphate (ATP) on the fluorescence of ofloxacin (OFL). The method has the advantages of simple operation, sensitive and fast detection, short detection time and

low detection limit. It has been successfully applied to the determination of OFL in milk with good recovery, providing a feasible method for the sensitive detection of ofloxacin in food.



21: 2023/00934. 22: 2023/01/20. 43: 2023/03/07
51: D06M

71: Sichuan University of Science & Engineering, Sichuan Zhixiangyi Technology Co., Ltd., Sichuan Bozhiduo Technology Co., Ltd., Chi-Hui Tsou, Chulalongkorn University, Zigong Zhishengxin Technology Co., Ltd.

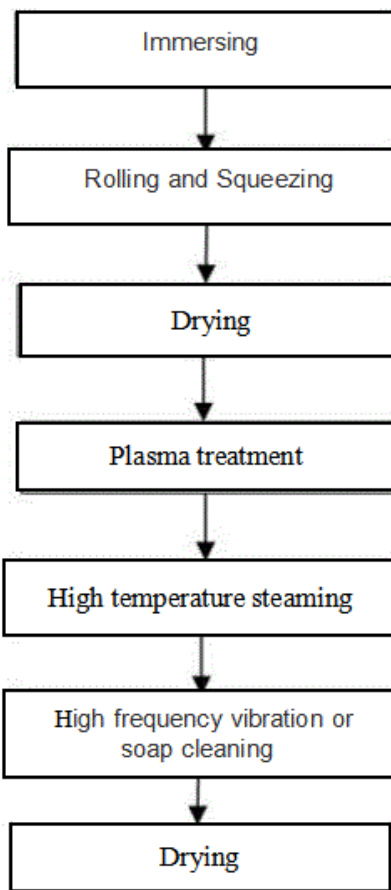
72: Chi-Hui Tsou, Shuang Chen, Fei-Fan Ge, Charasphat Preuksarattanawut (of Thailand), Jing-Zhong Huang, Pranut Potiyaraj, Xue-Fei Hu, Chih-Yuan Tsou, Ruo-Yao wang

33: CN 31: 202010894096.6 32: 2020-08-31

54: PLASMA MODIFICATION METHOD AND SYSTEM FOR FABRICS, NON-WOVEN AND POROUS FILMS

00: -

This invention discloses plasma modification method and system for fabrics, nonwovens and porous films, which comprises the following steps: S1. Soaking the material to be treated in grafting liquid for not less than 30 seconds, after soaking, rolling the material with rolling machine to squeeze out excess liquid, S2. putting the treated material into plasma equipment for plasma treatment, S3. cleaning the treated material in water with high frequency vibration mode or soap cleaning mode, wherein, the high frequency means vibration wave with frequency greater than 100KHZ.



21: 2023/01012. 22: 2023/01/24. 43: 2023/03/09
51: A01G

71: Prataculture Research Institute of Heilongjiang Academy of Agricultural Sciences

72: LIU, Jieli, KONG, Xiaolei, WANG, Xueshan, ZHANG, Qiang, KANG, Xintong

33: CN 31: 202210102962.2 32: 2022-01-27

54: METHOD FOR IMPROVING SUCCESS RATE OF PLANTING FORAGE GRASS IN EROSION GULLY IN BLACK SOIL REGION

00: -

Disclosed is a method for improving the success rate of planting forage grass in an erosion gully in a black soil region, and particularly relates to the field of pasture planting. The method includes the steps of seed treatment, terrain selection, sowing, field management, and harvesting and utilization. The characteristics of alfalfa and awnless brome are utilized, and the two kinds of forage grass seeds are planted in a mixed manner, which can not only improve the yield of the two kinds of forage grass, but also improve the environment of the erosion gullies in black soil regions of northeast China. The

more significant soil fixation and slope protection effects are achieved by mixed sowing of the alfalfa and the awnless brome.

21: 2023/01200. 22: 2023/01/30. 43: 2023/03/27

51: G01G; G01P

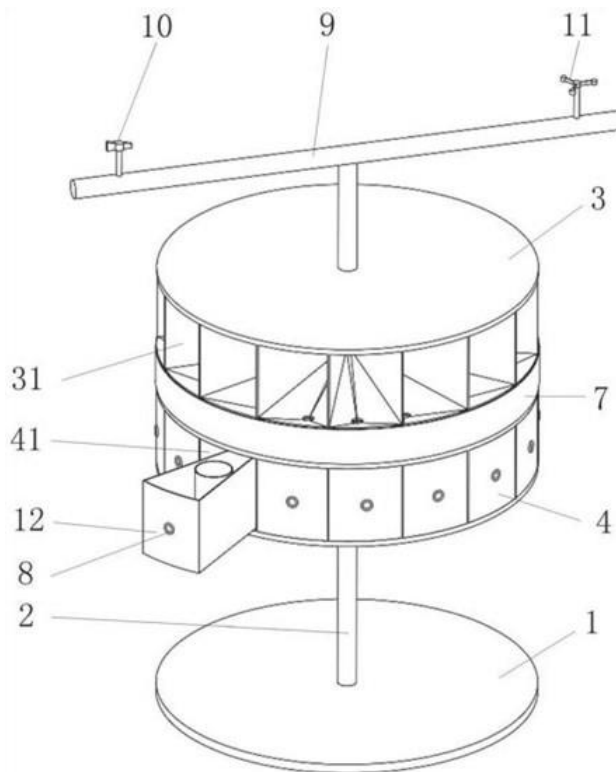
71: INSTITUTE OF WATER RESOURCES FOR PASTORAL AREA, MWR

72: MIAO, Henglu, WANG, Jian, LI, Jinrong, RONG, Hao, ABIAS, LI, Hongfang, LIU, Hu, CHENG, Bo

33: CN 31: 202210188752.X 32: 2022-02-28

54: DEVICE FOR MEASURING SAND COLLECTION AMOUNT IN 16 WIND AZIMUTHS
00: -

The present invention relates to a device for measuring sand collection amount in 16 wind azimuths, comprising a base, a supporting rod I, a sand collection disc, a weighing disc, 16 electronic scales, 16 containers for containing sand and a controller. In the present invention, 16 independent sand collection grooves are arranged corresponding to the 16 wind azimuths at the peripheral side of the sand collection disc; and sand grains entering the sand collection grooves enter the 16 containers successively through the sand leakage holes I and the sand leakage holes II; and the 16 electronic scales measure the change value of the weight of the 16 containers respectively, to measure the sand collection amount in the 16 wind azimuths to provide data support for subsequent topics of studying regional sand control, soil desertification caused by wind erosion and ecological environment improvement of desert steppe.



21: 2023/01201. 22: 2023/01/30. 43: 2023/03/27

51: G09F; G06Q

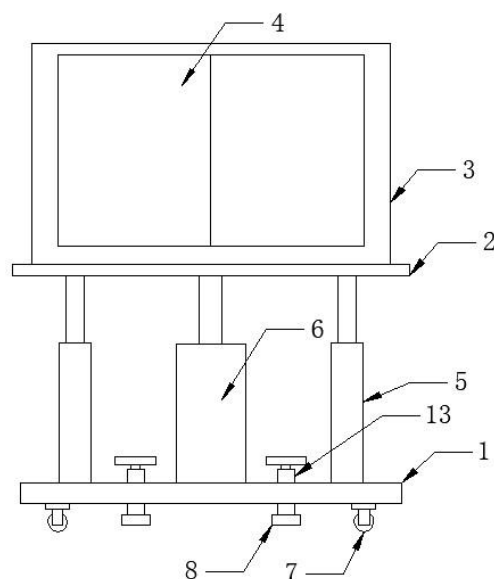
71: INSTITUTE OF AGRICULTURAL REMOTE SENSING AND INFORMATION, HEILONGJIANG ACADEMY OF AGRICULTURAL SCIENCES, ANIMAL HUSBANDRY AND VETERINARY BRANCH OF HEILONGJIANG ACADEMY OF AGRICULTURAL SCIENCES

72: JIANG, Ying, GUO, Lihong, DONG, Zhengde, HAN, Dong, ZHAO, Xiaochuan, WANG, Jingyuan, ZHANG, Haifeng, LIU, Kebao, QI, Xinyu, NAN, Jingdong, CHEN, Guowang, ZHANG, Jiansheng

54: DISPLAY DEVICE WITH PROTECTION FUNCTION
00: -

The present invention belongs to the technical field of display devices, and particularly discloses a display device with a protection function, comprising a base. The upper side of the base is provided with a lifting platform; the middle of the upper side of the base is provided with a hydraulic cylinder; the upper side of a telescopic end of the hydraulic cylinder is connected with the lifting platform; guide devices are installed between the lifting platform and base; the upper side of the lifting platform is connected with a protection cover through a screw; a magnetic suction door is installed at the front side of the protection cover; the upper side of the lifting platform is

provided with a bracket; a display is installed on the bracket; and a heat dissipation device is installed at the rear side of the protection cover.



21: 2023/01202. 22: 2023/01/30. 43: 2023/03/10
51: A61D

71: INSTITUTE OF AGRICULTURAL REMOTE SENSING AND INFORMATION, HEILONGJIANG ACADEMY OF AGRICULTURAL SCIENCES, ANIMAL HUSBANDRY AND VETERINARY BRANCH OF HEILONGJIANG ACADEMY OF AGRICULTURAL SCIENCES

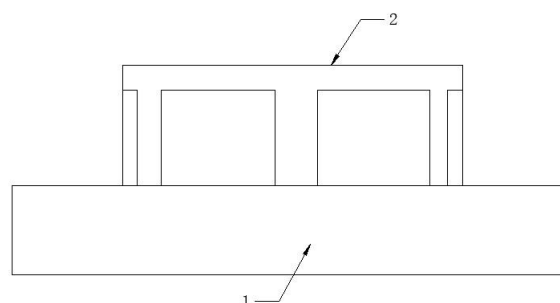
72: JIANG, Ying, GUO, Lihong, DONG, Zhengde, LIU, Yufeng, YANG, Zhao, HAI, Long, LIN, Qingjuan, ZHANG, Haifeng, YOU, Haiyang, FU, Bin, NAN, Jingdong, CHEN, Guowang, ZHANG, Jiansheng

54: ROTATING PLACING DEVICE FOR SHEEP

00: -

The present invention belongs to the technical field of placing devices, in particular to a rotating placing device for sheep, comprising a base. The middle height of the base is lower than an edge of an outer side; the middle of the base is connected with a rotary supporting bearing through a bolt; the rotary supporting bearing is connected with a supporting plate through a bolt; an annular fence is installed on the supporting plate; plurality of partition plates are installed at an equal angle in the annular fence; the partition plates evenly divide the annular fence into a plurality of placing regions; outer side of the annular fence is provided with a plurality of door plates; the door plates correspond to the positions of the

placing regions; the annular fence and rotary supporting bearing are coaxially arranged; the outer side of the base is provided with an annular groove.



21: 2023/01209. 22: 2023/01/30. 43: 2023/03/10
51: F23C; F23D

71: SHANGHAI JIAO TONG UNIVERSITY

72: MIAO, Zhengqing, LI, Zixiang

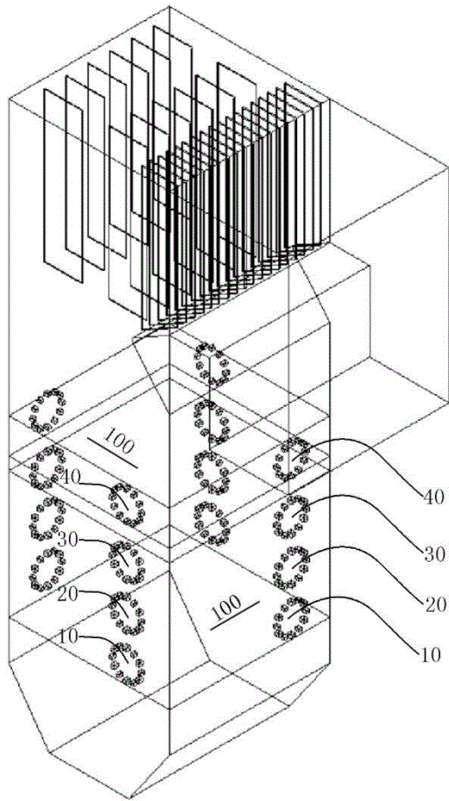
33: CN 31: 202010772928.7 32: 2020-08-04

33: CN 31: 202021591602.6 32: 2020-08-04

54: WALL-ARRANGED GIANT RING-SHAPED DIRECT-CURRENT PULVERIZED COAL BURNER

00: -

A wall-arranged giant ring-shaped direct-current pulverized coal burner includes burner nozzles arranged on four side furnace walls of a boiler. The burner nozzles on the four side furnace walls form a wall- tangential combustion mode in the furnace, and the burner nozzles on each side furnace wall are arranged in a ring by a plurality of small nozzles to form a giant ring-shaped combined nozzle. In the present invention, there are a plurality of small nozzles arranged in a ring on each side furnace wall to form a giant ring-shaped combined nozzle. The giant ring-shaped combined nozzles on the four side furnace walls may form a wall- tangential combustion mode in the furnace. Multiple jets in the giant ring-shaped combined nozzle are mutually entrained and supported by the fire-side and back-fire-side jets, which may effectively enhance the stiffness of each jet.



21: 2023/01210. 22: 2023/01/30. 43: 2023/03/10
51: G01C; B60W

71: "OMNICOMM ONLINE" LIMITED LIABILITY COMPANY

72: PANKOV, Boris Valerevich

33: RU 31: 2021128642 32: 2021-10-01

33: RU 31: 2021128643 32: 2021-10-01

33: RU 31: 2021128644 32: 2021-10-01

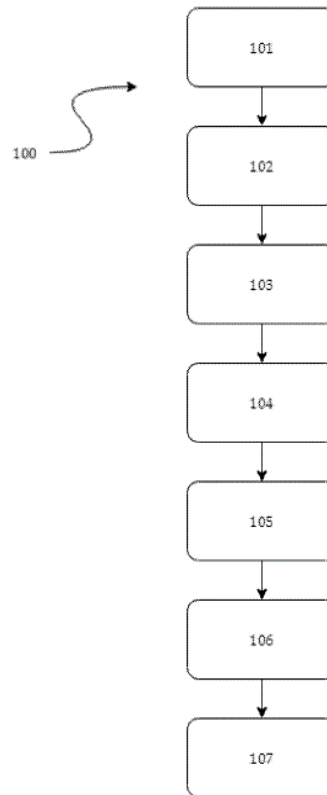
33: RU 31: 2021128645 32: 2021-10-01

54: METHOD FOR GENERATING AN ADJUSTMENT ENERGY-EFFICIENT TRACK

00: -

The inventions relate to a method for generating an energy-efficient track for the vehicle performed by the computer's CPU. The method comprises: generating the first energy-efficient track for the vehicle in operation moving along a portion of the route in an urban area, comprising a speed profile and trajectory, wherein the first track is generated for a portion of the route, which is free from other vehicles; detecting a second vehicle located on the same portion of the route and generating an energy-efficient track for the second vehicle, comprising a speed profile and trajectory, wherein the track for the second vehicle is generated for the portion of the route, which is free from other vehicles; comparing

the first energy-efficient track and the energy-efficient track for the second vehicle in order to obtain the comparison data; and generating the second energy-efficient track for the vehicle based on the comparison data obtained. The invention makes it possible to reduce energy consumption by the vehicle.



21: 2023/01211. 22: 2023/01/30. 43: 2023/03/10
51: G01C; B60W

71: "OMNICOMM ONLINE" LIMITED LIABILITY COMPANY

72: PANKOV, Boris Valerevich

33: RU 31: 2021128773 32: 2021-10-03

33: RU 31: 2021128774 32: 2021-10-03

33: RU 31: 2021128775 32: 2021-10-03

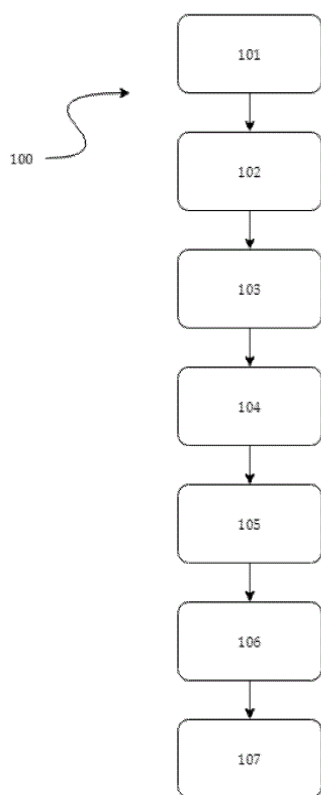
33: RU 31: 2021128776 32: 2021-10-03

54: METHOD FOR GENERATING AN ADJUSTMENT ENERGY-EFFICIENT TRACK

00: -

The invention relates to methods for generating an adjustment energy-efficient track for the vehicle performed by the computer's CPU. The method comprises: generating the first energy-efficient track for the vehicle in operation, comprising a speed profile of the vehicle in operation and its trajectory on

the portion of the route; detecting a second vehicle located on the same portion of the route using environmental sensors of the vehicle in operation, and generating a track for the second vehicle, based at least on its estimated speed profile and estimated trajectory on the portion of the route; and generating an adjustment energy-efficient track for the vehicle in operation, based on an adjusted speed profile, adjusted energy-efficiency evaluation, and adjusted trajectory of the vehicle in operation, as well as the estimated speed profile and estimated trajectory of the second vehicle on the portion of the route. The invention makes it possible to reduce energy consumption by the vehicle.



21: 2023/01214. 22: 2023/01/30. 43: 2023/03/10

51: G01N

71: NATIONAL INSTITUTE OF METROLOGY, CHINA

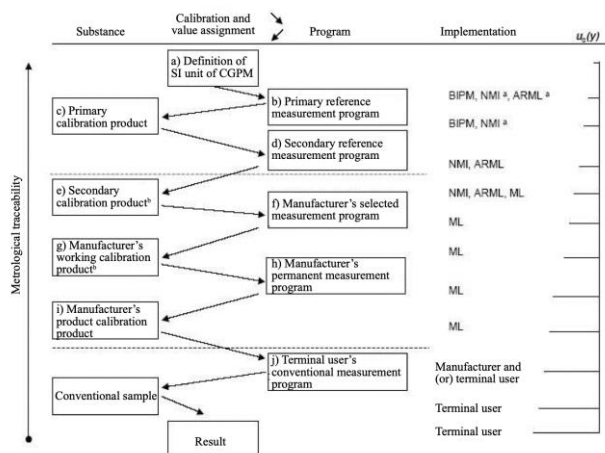
72: WU, Liqing, HU, Tingting, LIU, Yahui, JIN, Youxun

33: CN 31: 202010648589.1 32: 2020-07-07

54: METHOD FOR EVALUATING TRACEABILITY VALIDITY AND INTERCHANGEABILITY OF PROTEIN IN IMMUNOASSAY

00: -

Provided in the present invention is a method for evaluating traceability validity and interchangeability of protein in immunoassay, which comprises the steps of: (1) quantifying the protein by using a physicochemical analysis method; (2) quantifying the protein by using a label-free protein quantification method based on surface plasmon resonance; and (3) performing a statistical test on a measurement result of the physicochemical analysis method and a measurement result of the label-free protein quantification method. The present invention mainly aims to solve the problems of a lack of traceability validity evaluation methods in the current protein immunoassay and it being impossible to evaluate whether “measurands” in the protein interchangeability evaluation method are consistent or not, and provides a method capable of evaluating whether “measurands” in terms of protein are consistent or not between a physicochemical analysis method and an immunoassay method, and between different protein immunoassay methods, such that the method is used for evaluating the traceability validity of protein immunoassay results and evaluating the interchangeability of protein standard substances.



21: 2023/01329. 22: 2023/02/02. 43: 2023/03/17

51: B01J

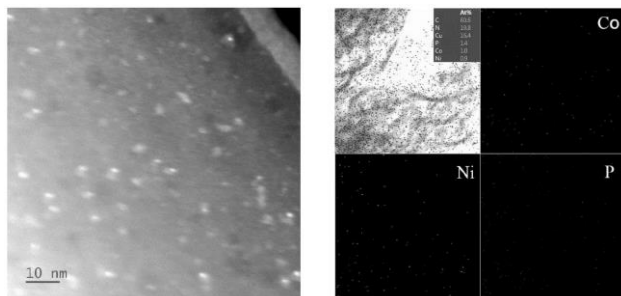
71: Henan University of Urban Construction

72: YANG Yilong, WU Wanying, LIU Xiaoyan, TENG Weili, XU Kaidong, ZHANG Haiyang, FAN Hua, ZHANG Zhiyuan, YANG Qingjie, LI Peng, LI Taifeng, ZHU Ying, WANG Jing, LI Xinyu, YOU Peibo

54: PREPARATION METHOD OF NOVEL CONIP CLUSTER DISPERSION MODIFIED PHOTOCATALYST

00: -

A preparation method of a novel CoNiP cluster dispersion modified photocatalyst belongs to the technical field of photocatalytic energy conversion materials. The method comprises the following steps: (1) mixing a small amount of $\text{Co}(\text{NO}_3)_2$ and $\text{Ni}(\text{NO}_3)_2$ solution with photocatalyst powder, oscillating and impregnating, and drying at a constant temperature of 60-90 degree Celsius to obtain mixed powder; (2) heat treating the mixed powder in step (1) at 180-240 degree Celsius for 1-4 h, then phosphating at 280-340 degree Celsius for 1-4 h, and cooling to obtain the novel CoNiP particle dispersion modified photocatalyst. The novel CoNiP cluster dispersion modified photocatalyst provided by the invention has good photocatalytic decomposition performance of aquatic hydrogen; The preparation method provided by the invention has the advantages of cheap raw materials, simple process, controllable structure and the like, and the prepared photocatalyst has certain universality and high application prospect and practical value.



21: 2023/01332. 22: 2023/02/02. 43: 2023/03/22
51: H01L

71: Zhengzhou University of Aeronautics

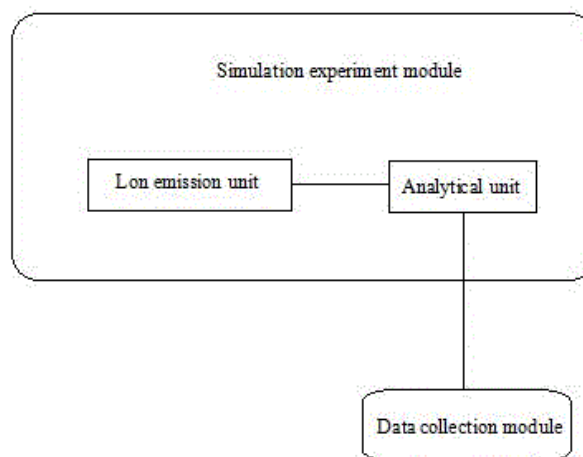
72: WANG Haili, WANG Xianli, YANG Mengjie, YANG Peng, WANG Yanyan, DUAN Xiangyang, XU Kun, FU Linjie

54: MODEL EXPERIMENTAL SYSTEM FOR RADIATION DAMAGE OF SEMICONDUCTOR DEVICES

00: -

The application discloses a model experimental system for radiation damage of semiconductor devices, which comprises a simulation experiment module and a data collection module; The simulation experiment module is used to simulate the real

situation of radiation damage of semiconductor devices and obtain experimental results; The data collection module is used to collect experimental results for the reference of subsequent staff. In this application, the real change reaction of the semiconductor after radiation is simulated through the particle collision simulation experiment, so as to restore and present the possible situation in detail, which is convenient for subsequent technicians to reinforce the semiconductor according to the experimental data.



21: 2023/01333. 22: 2023/02/02. 43: 2023/03/22
51: A61F

71: JILIN UNIVERSITY

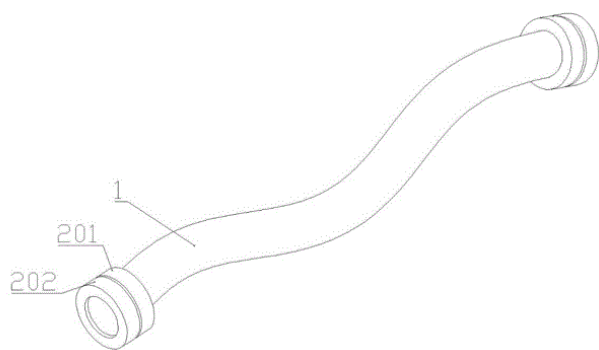
72: QU Wenrui, GUO Wenlai, LI Bo, ZHOU Huidong, LI Shihuai, YI Min, MENG Zifan, YOU Junyuan, YU Zehao, XING Haiyang

54: SELF-ASSEMBLED ARTIFICIAL BLOOD VESSEL

00: -

The invention discloses a self-assembled artificial blood vessel, which belongs to medical instruments and is applied to operations requiring blood vessel transplantation, such as arteriosclerosis, occlusion, aortic dissection and the like. The invention comprises an artificial blood vessel and two vascular staplers, wherein the two vascular staplers are detachably installed at two ends of the artificial blood vessel respectively; the vascular stapler comprises a fixed end and a free end, wherein the fixed end is connected with the end of the artificial blood vessel, and the free end is detachably connected with the fixed end; one end face of the fixed end and one end face of the free end are both fixedly provided with steel needles, and a plurality of steel needles are

arranged in an annular array; the fixed end is provided with mounting holes on the side surface where the steel needle is arranged and the free end is provided with mounting holes on the side surface where the steel needle is arranged; each mounting hole is located between two adjacent steel needles. The invention reduces the technical difficulty of vascular transplantation, shortens the operation time, reduces the occurrence of complications, provides convenience for the clinical popularization of the operation, reduces the medical consumption caused by a long operation time, and avoids the life and property damage of patients caused by postoperative complications.



21: 2023/01334. 22: 2023/02/02. 43: 2023/03/22

51: A01N

71: Shandong Academy of Pesticide Sciences

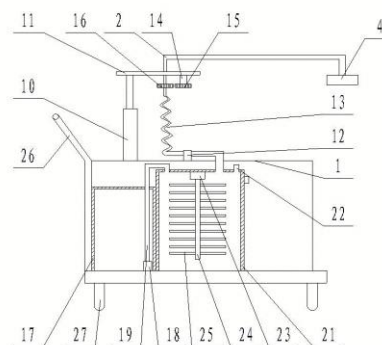
72: LIU Yu, XU Nana, GAO Deliang, ZHUANG Zhiguo, XU Yumei, LIANG Lin

54: THREE-DIMENSIONAL ACCURATE PESTICIDE SPRAYING DEVICE

00: -

The invention discloses a three-dimensional accurate pesticide spraying device, which comprises a walking vehicle, wherein a body is installed on the walking vehicle, and a liquid supply mechanism is arranged in the body, and the liquid supply mechanism is communicated with an adjusting mechanism, and the adjusting mechanism is communicated with a spraying mechanism; the adjusting mechanism comprises a lifting mechanism installed at the top end of the body, the lifting mechanism is rotatably connected with a rotating component, the inlet end of the rotating component is communicated with the liquid supply mechanism, and the outlet end of the rotating component is communicated with the spraying mechanism; the spraying mechanism comprises a water supply pipe

communicated with the rotating components, and the water supply pipe is communicated with a connecting pipe, which is communicated with an annular pipe, and the side wall of the annular pipe is threaded with a plurality of spraying components. The invention discloses a three-dimensional accurate pesticide spraying device, which can meet the pesticide spraying requirements of crops with different heights, and can also accurately implement pesticide spraying treatment, thus improving the practicability.



21: 2023/01335. 22: 2023/02/02. 43: 2023/03/22

51: G06F

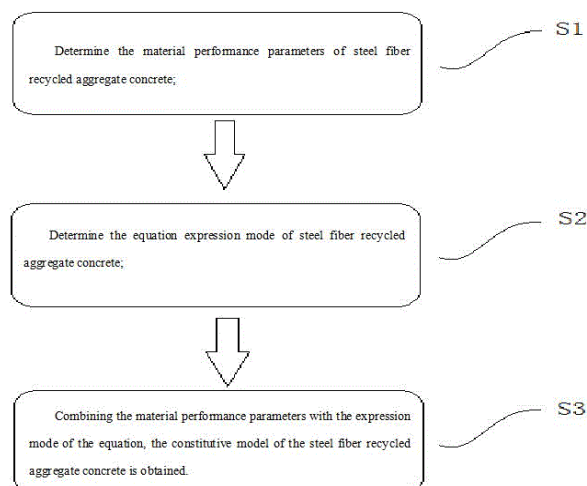
71: Zhengzhou University of Aeronautics

72: ZHU Qian

54: METHOD AND SYSTEM FOR CONSTRUCTING CONSTITUTIVE MODEL OF STEEL FIBER RECYCLED AGGREGATE CONCRETE

00: -

The application discloses a method and a system for constructing a constitutive model of steel fiber recycled aggregate concrete, wherein the method comprises the following steps: determining material performance parameters of steel fiber recycled aggregate concrete; Determine the equation expression mode of steel fiber recycled aggregate concrete; Combined with material performance parameters and equation expression mode, the constitutive model of steel fiber recycled aggregate concrete is obtained.



21: 2023/01336. 22: 2023/02/02. 43: 2023/03/22
51: A01G

71: Institute of Subtropical Crops of Zhejiang Province

72: SONG Yang, LIU Dongfeng, ZHAO Quan, GUO Xiuzhu, ZHANG Peian, LI Fayong

54: METHOD FOR BREEDING VIRUS-FREE CONTAINER SEEDLINGS OF CITRUS

00: -

Disclosed is a method for breeding virus-free container seedlings of citrus, and relate to that technical field of seedling cultivation. The method for breeding virus-free container seedlings of citrus of the invention includes: (1) preparation of substrate; (2) selection of seedling container; (3) cultivation of rootstock; (4) grafting treatment; (5) water and fertilizer management; (6) disease and pest control, and (7) virus detection and identification. The virus-free container seedlings of citrus bred by the method for breeding virus-free container seedlings of citrus of the invention have developed root systems, strong green growth, no infectious diseases, direct transportation and transplanting, and high transplanting survival rate; at the same time, the substrate in the seedling container is also beneficial to the growth of transplanted seedlings.

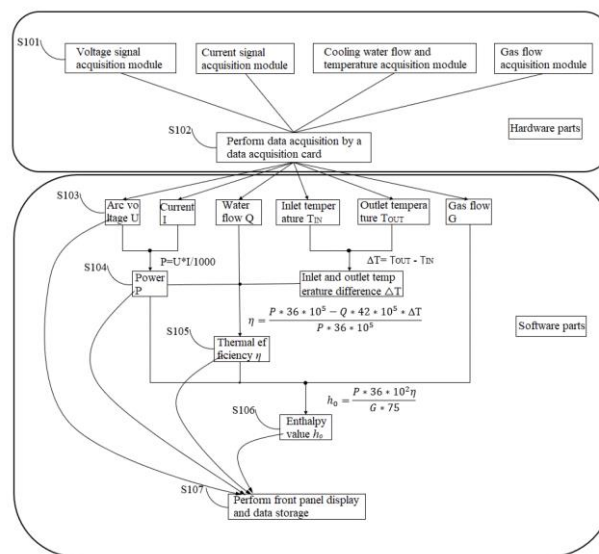
21: 2023/01339. 22: 2023/02/02. 43: 2023/03/22
51: G01D; H05H

71: Sichuan University of Science and Engineering
72: CAO, Xiuquan, GUO, Wenyu, ZHANG, Jiemei, DENG, Zhiyuan, ZHAO, Mingbo

54: ONLINE DIAGNOSIS SYSTEM AND METHOD FOR PROPERTIES OF PLASMA BEAMS

00: -

Disclosed in the present invention are an online diagnosis system and method for properties of plasma beams. The system includes a voltage signal acquisition module, a current signal acquisition module, a cooling water flow and temperature acquisition module, a gas flow acquisition module, a data acquisition card, a LabVIEW program and a computer, and all modules are connected by means of signal lines. The method includes: each original signal acquisition module sending acquired data representing the properties of the plasma beams to the data acquisition card, and the LabVIEW program controlling the data acquisition card to acquire data according to a set sampling frequency, and processing the data by using a logic relationship set in the LabVIEW program, thereby obtaining the real-time properties of the plasma beams, and achieving online diagnosis of the properties of the plasma beams.



21: 2023/01340. 22: 2023/02/02. 43: 2023/03/22
51: G01N

71: Beihua University

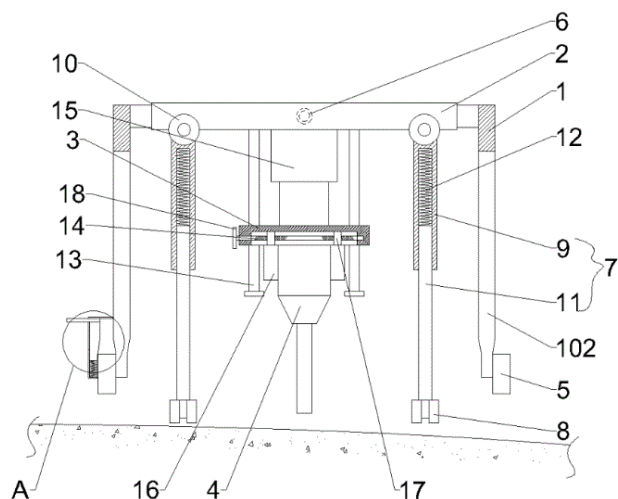
72: LI Kexin, LIU Jinxin, WANG Kaixing, WANG Jiaqi

54: ROAD CONCRETE STRENGTH DETECTION AND CONTROL DEVICE

00: -

The invention discloses a road concrete structure strength detection device, which comprises a moving rack and a control assembly, wherein the control assembly is arranged on the moving rack; the control assembly comprises a transmission plate which is connected with the moving rack; the bottom

end of the transmission plate is connected with a supporting piece in a transmission way; and the bottom end of the supporting piece is in sliding contact with the ground; the fixing piece is arranged on the transmission plate, and comprises a connecting plate which slides and lifts with the transmission plate, and the bottom end of the connecting plate is detachably connected with a rebound hammer; a positioning piece arranged at the bottom end of the moving rack, and used for fixing the roller. According to the invention, the rebound hammer can be effectively fixed, and the rebound hammer is always kept in vertical contact with the ground, thereby improving the accuracy of compressive detection of concrete pavement.



21: 2023/01341. 22: 2023/02/02. 43: 2023/03/22
51: E21B

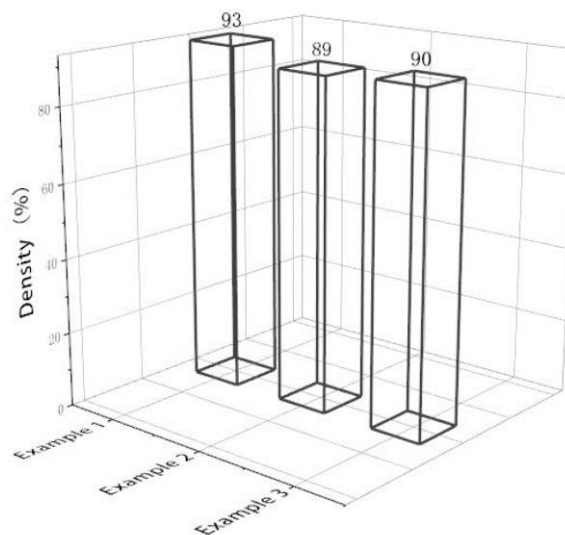
71: Hunan Institute of Science and Technology
72: Sheng LI, Yulin JIANG, Jianzeng REN, Zhining CHEN, Xiaoqing LI, Chunyang LIU, Zihao KUANG, Xiaoyu YAN, Zhiwei XU

54: A HEAT-RESISTANT DISSOLVABLE FRACTURING BALL

00: -

The invention relates to the production technology of tight shale gas fracturing ball, in particular to a heat-resistant dissolvable fracturing ball. A heat-resistant dissolvable fracturing balls is characterized in that it comprises antimony (0.3-1.7wt.%), aluminum (6wt.%) and the remainder is magnesium. When the antimony powder and magnesium aluminum matrix powder are mechanically dispersed, they are quickly sintered by spark plasma to obtain a fine and dense microstructure. The beneficial effect of the invention

is that the prepared magnesia-aluminum-antimony fracturing ball possesses heat resistance performance and sufficient fracturing strength when it is subjected to high temperature at the deep surface. Meanwhile the magnesia-aluminum-antimony fracturing ball possesses a bimodal second phase to activate the magnesium matrix and accelerate corrosion.



21: 2023/01342. 22: 2023/02/02. 43: 2023/03/22
51: G01N

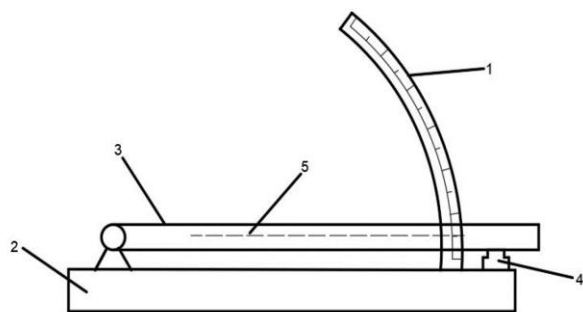
71: Hunan Institute of Science and Technology
72: Sheng LI, Yulin JIANG, Jianzeng REN, Zhining CHEN, Xiaoqing LI, Chunyang LIU, Zihao KUANG, Xiaoyu YAN, Zhiwei XU

54: A FRICTION COEFFICIENT MEASUREMENT DEVICE FOR ZINC-BASED ALLOY BONE IMPLANTS

00: -

The invention relates to a friction coefficient measuring device for zinc-based alloy bone implants, including a goniometer, a base, a friction coefficient detection plate, a hydraulic automatic lifting device and a pressure sensor. The goniometer is fixed on the base, and the base is connected with the friction coefficient detection plate by a hinge. The friction coefficient detection plate is in contact with the hydraulic automatic lifting device, and the tilt angle of the friction coefficient detection plate is controlled by the hydraulic automatic lifting device. The hydraulic automatic lifting device is fixed on the base, and the pressure sensor is located on the surface of the friction coefficient detection plate to transmit the pressure signal. The friction coefficient measuring device of the zinc-based alloy bone

implants can quickly measurement the friction coefficient. The invention relates to the measuring field of medical zinc-based alloy bone implants, which simplifies the measurement process and does not take up too much space. Compared with the industrialized large friction coefficient measurement instrument, the device is more suitable for the field of medical implants.



21: 2023/01343. 22: 2023/02/02. 43: 2023/03/22
51: A01G

71: Northeast Forestry University
72: WANG, Hongfeng, DONG, Xueyun, ZHENG, Lantao

33: CN 31: 202211313077.5 32: 2022-10-25

54: TRANSPLANTING AND DOMESTICATION METHOD FOR ANEMONE AMURENSIS

00: -

The present invention provides a transplanting and domestication method for *Anemone amurensis*. The present invention includes a transplanting nutrition cup planting and domestication technique; the transplanting nutrition cup planting and domestication technique cannot only improve the survival rate of transplanting, but also keep the consistency effect of natural and external conditions during digging and domestication, thereby contributing to improving the survival rate of *Anemone amurensis*. By utilizing the transplanting and domestication method provided by the present invention, through underwood domestication in nutrition cups, when the *Anemone amurensis* is transplanted to a field in later period, the transportation distance, weather and time and the like will not affect the survival rate of planting. Compared with the planting with bared roots, the survival rate of the transplanting and domestication method is increased by over 80 percent. *Anemone*

amurensis artificially planted can grow and bloom normally.

21: 2023/01344. 22: 2023/02/02. 43: 2023/03/22
51: A62D

71: Maoming Polytechnic

72: CHE, Wencheng, CHEN, Shaofeng

54: LIQUID FIRE EXTINGUISHING AGENT FOR SODIUM HYDROSULFITE FIRE SUPPRESSION AND CORRESPONDING SLOW RELEASE TYPE SODIUM HYDROSULFITE

00: -

The present invention belongs to the field of sodium hydrosulfite and sodium hydrosulfite fire suppression, and specifically relates to a liquid fire extinguishing agent for sodium hydrosulfite fire suppression and corresponding slow release type sodium hydrosulfite. Both the above-mentioned liquid fire extinguishing agent for sodium hydrosulfite fire suppression and the slow release type sodium hydrosulfite contain the following compositions: diammonium hydrogen phosphate, sodium silicate, ethylene glycol and urea. The water-based fire extinguishing agent is prepared by compounding the above-mentioned compositions, flows and permeates into an interior of sodium hydrosulfite, such that a temperature of the sodium hydrosulfite is rapidly reduced, thereby reducing reaction intensity and achieving cooling and fire extinguishing effects on the sodium hydrosulfite.

21: 2023/01345. 22: 2023/02/02. 43: 2023/03/22
51: G02F

71: Leshan Normal University

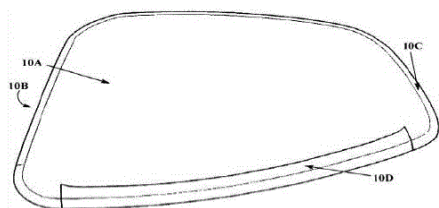
72: WEN, Zhiguo, HE, Zhaoxia, TIAN, Chong, CHEN, Qiao, CHEN, Jiaxuan

54: ELECTROCHROMIC LENS FOR AUTOMOBILE

00: -

Disclosed is a frameless electrochromic lens. The frameless electrochromic lens includes an upper lens and a lower lens. The upper lens is a platform type body. The lower lens is a groove type body. V-shaped groove structures are formed between two sides of the upper lens and inner walls of the groove type body respectively, and a shape and an area of the groove bottom surface are the same as those of the lower platform surface. A novel lens of the present invention employs a groove-type inlaid structure, and an electrochromic solution can be

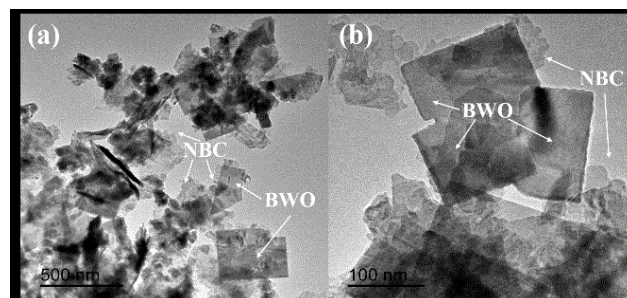
directly added into a groove of the lens for assembly. According to the process, bubbles are less likely to be remained in a lens interlayer, which not only improves assembly efficiency, but also reduces a defect rate of the lens.



21: 2023/01346. 22: 2023/02/02. 43: 2023/03/22
51: B01J
71: Henan University of Urban Construction
72: Yan Xu, Mao Yanli, Li Baixin, Zhu Xinfeng, Song Zhongxian, Pan Long, Zhu Han, Cui Leqi, Li Yanna
54: PREPARATION METHOD FOR NANO BIOMASS CARBON COMPOSITE PHOTOCATALYST

00: -

The invention relates to a preparation method for nano biomass carbon composite photocatalyst. And according to the invention, tea is used as the raw material to prepare nano biomass carbon; Different concentrations of tea are introduced in the hydrothermal synthesis of Bi_2WO_6 to adjust the content of biomass carbon; After hydrothermal reaction at 280°C for 24 hours, the catalyst is cleaned and dried to obtain nano biomass carbon and Bi_2WO_6 composite photocatalytic material. The concentration of tea has an important influence on the light energy utilization rate and antibiodegradation activity of nano-biochar composite Bi_2WO_6 photocatalytic material. The preparation process of the invention is simple, the production cost is low, the operation is easy, the source of raw materials is sufficient. And the advantages of advanced oxidation process are combined to have high photocatalytic activity, so that the preparation and application of the nano biomass carbon composite photocatalyst show great potential



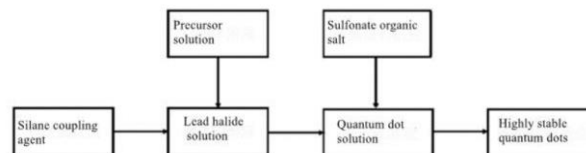
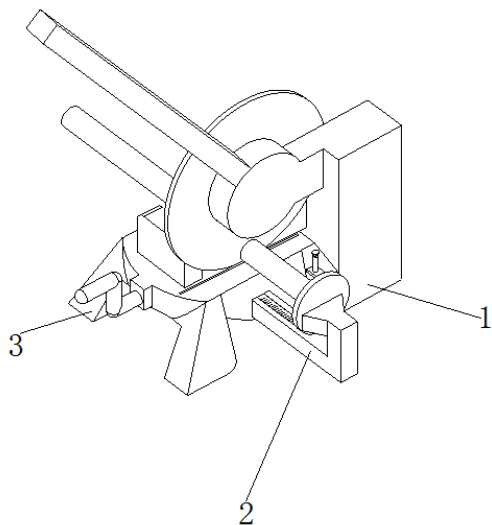
21: 2023/01347. 22: 2023/02/02. 43: 2023/03/22
51: B23D

71: Southwest Petroleum University
72: Yulin Lai, Xiangchao Shi, Linnan Liu, Yinghe Hong, Shuai Liu

54: AN ISOMETRIC ADJUSTING DEVICE FOR MECHANICAL PROCESSING

00: -

The invention disclose an isometric adjusting device for mechanical processing, which belongs to the technical field of mechanical processing. It includes a support base, the internal insertion of the support base is provided with a plugging mechanism; The invention is provided with a distance fixing component, the scale is inserted into the inside of the transparent box, and then the transparent box is placed into the mounting slot, and the limit plate is placed into the limit slot on the transparent box and the plugging mechanism, and the limit plate is connected with the transparent box and the plugging mechanism by countersunk bolts, so that the limit plate can be fixed to the transparent box and the plugging mechanism. Under the action of limit plate and convex block, it can fix the scale limit inside the transparent box. In the process of continuous mechanical processing operation, it can determine the size of the parts to be processed according to the scale. This facilitates the equidistant cutting operation of the part and avoids damage to the scale lines on the scale in the distance-setting component. This can ensure the use effect of the distance setting component, which in turn can ensure the use effect of the whole device.



21: 2023/01354. 22: 2023/02/02. 43: 2023/03/22

51: C09K

71: Xiamen University, Jiujiang Research Institute

72: Jun Yin, Tan Ping, Jing Li

54: HIGHLY STABLE PEROVSKITE QUANTUM DOTS AND PREPARATION METHOD THEREOF

00: -

The invention discloses a highly stable perovskite quantum dots and preparation method thereof. The quantum dot has a CsPbX_3 plus over SF (at) SiO_2 structure, X is one or more of Cl, Br and I, SF is sulfonate radical, and the particle size range of the quantum dot is 5 to 15nm. The preparation method comprises the following steps: injecting a cesium oleate solution into a precursor solution containing a silane coupling agent at a proper temperature to obtain a quantum dot stock solution; cooling, adding a proper amount of sulfonic acid organic salt or sulfonic acid organic salt into the quantum dot stock solution in a nitrogen atmosphere, fully stirring, centrifuging at a low speed, fully hydrolyzing supernate under an environmental condition, and centrifuging to obtain the in-situ surface modified and packaged quantum dots. Compared with the existing perovskite quantum dot preparation technology, the method has the advantages of one step surface modification and packaging, simple and efficient process, low cost and suitability for industrial production.

21: 2023/01355. 22: 2023/02/02. 43: 2023/03/22

51: G05B

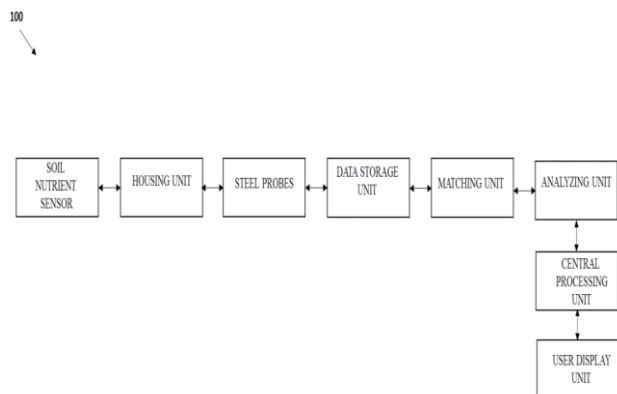
71: Secretary & Correspondent QIS College of Engineering & Technology, Jafar Ali Ibrahim Syed Masood

72: Jafar Ali Ibrahim Syed Masood, Surya Kalyan Chakravarthy Nidamanuri, Lalitha Krishnasamy, Bethapudi Rajesh, Suresh Pallepaga, Kanavath Chinna Kullayappa Naik, Tagore Kumar Pasupula, Malakonda Rayudu, Mahaboob Basha Shaik, Sunitha Thella, Abburi Venkata Pavani

54: A NOVEL IOT- BASED DIGITAL VERMICOMPOSTING MICRONUTRIENT QUALITY PREDICTION DEVICE

00: -

The present invention relates to a novel IoT-based digital vermicomposting micronutrient quality prediction device (100). The system comprises a soil nutrient sensor, a housing unit, one or more steel probes, a data storage unit, a matching unit, an analyzing unit, a central processing unit, and a user display unit. The soil nutrient sensor is configured to detect types of nutrients and the quality of nutrients present in the soil. The housing unit is configured to house the soil nutrient sensor. The data storage unit is configured to predefined information data of the types of nutrients and quality of nutrients in the soil and detected information by the soil nutrient sensor. The analyzing unit is configured to analyze the detected information. The user display unit is configured to provide a user interface unit and display score index of the types of nutrients and quality of nutrients present in the soil in real time.



21: 2023/01356. 22: 2023/02/02. 43: 2023/03/22
51: C09K

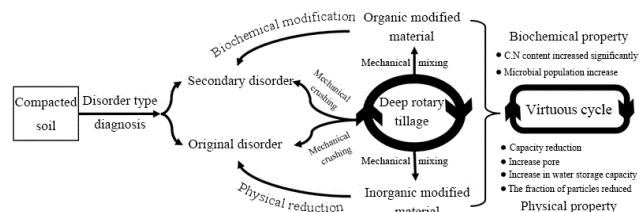
71: Henan University of Urban Construction
72: Zhanhui Zhao, Yanyan Zhan, Yanli Mao, Huijie Li

33: CN 31: 202210189821.9 32: 2022-02-28

54: A LONG-TERM METHOD FOR REPAIRING DEFECTIVE FARMLAND SOIL BY USING EXOGENOUS MATERIALS

00: -

The invention relates to the technical field of soil repair of the damaged land in the mining area, in particular to a long-term method of repairing the obstructed farmland soil by using external materials, including the following steps: sampling survey of the repaired soil: determination of soil clay percentage content and bulk density; According to the bulk density and clay content of soil, the soil barriers were divided into secondary hardening barriers and primary hardening barriers. Preparation of obstacle reduction materials; Leveling the land, clearing the surface debris, deep ploughing the cultivated land, break the laminated soil layer; Let stand for 3-15 days, after which conventional tillage and seeding are carried out; The beneficial effects are: According to the types of hardening obstacles in reclaimed land of damaged land in mining area, the hardening obstacles in reclaimed land of damaged land in mining area are divided into secondary barriers and primary barriers. According to the types of obstacles, scientific improvement materials are proportioned respectively to thoroughly improve the soil hardening properties at one time. The one-time application of improved materials is effective for a long time. Improved production process is simple.



21: 2023/01357. 22: 2023/02/02. 43: 2023/03/22
51: A01G

71: Guizhou Normal University, Guizhou Wuying Agricultural Technology Development Co., Ltd.
72: ZHANG, Yubin, GONG, Jiye, YI, Yin, LI, Yuke, LIU, Jie, QIN, Fanxin, TANG, Jiafu, CHEN, Yinhua
33: CN 31: 202210773261.1 32: 2022-07-01

54: CULTURE SUBSTRATE FOR RHODODENDRON LAPPONICUM, AND PREPARATION METHOD AND USE THEREOF

00: -

Disclosed are a culture substrate for Rhododendron lapponicum, and a preparation method and use thereof. The culture substrate includes 50 percent to 70 percent of mushroom stick particles having a particle size ranging from 5 mm to 10 mm, 20 percent to 30 percent of mushroom stick particles having a particle size ranging from 20 mm to 30 mm, and 10 percent to 20 percent of fermented rapeseed cake in percentage by mass. The present invention selects waste mushroom sticks and the fermented rapeseed cake as raw materials, and the culture substrate is integrally acidic, and is suitable for growth and development of the Rhododendron lapponicum; and the culture substrate provided in the present invention not only features improvement in resource utilization efficiency and efficient environmental friendliness compared with a traditional culture substrate for Rhododendron lapponicum, but also has higher nutrients and better water permeability compared with soil culture.

21: 2023/01358. 22: 2023/02/02. 43: 2023/03/22
51: B23H

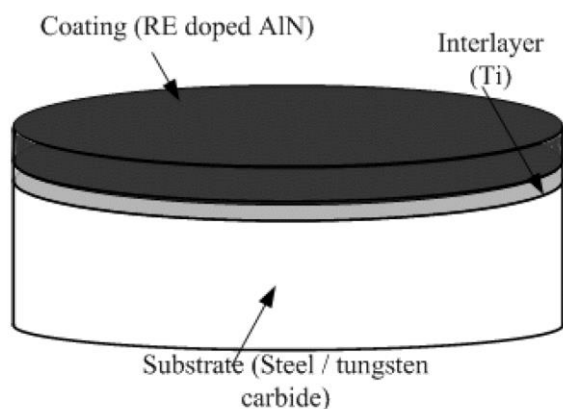
71: Secretary & Correspondent QIS College of Engineering & Technology, Jafar Ali Ibrahim Syed Masood

72: Saikumar Eedupalli, Sadineni Mourya Pravardhan, Jafar Ali Ibrahim Syed Masood, Surya Kalyan Chakravarthy Nidamanuri, Dr. David Asirvatham, Madhusudhanarao Sriram, Prof. Krishna Kishore Jampani, Hari Krishna Kharidu, Sarathkumar.D, Revalla Maheswararao

54: MULTILAYERED Ti/REXALN COATINGS ON HSS/TUNGSTEN CARBIDE CUTTING TOOL INSERTS BY PVD CO-SPUTTERING

00: -

The present invention relates to the Multilayered Ti/RexAlN coatings on HSS/tungsten carbide cutting tool inserts by PVD co-sputtering. Yet another embodiment of the invention is describes that the current invention concentrates on controlling residual stress by changing the deposition parameters and making the coating bi-layer. The process of multilayered coating on on HSS/tungsten carbide cutting tools, wherein the process involves the simultaneous deposition of coating materials were done by using the co-sputtering process. Results showed that the developed method helps in reducing the residual stress in coatings different multilayer structures were deposited by using the physical vapor deposition.



21: 2023/01364. 22: 2023/02/02. 43: 2023/03/22
51: C07F; C08G

71: SHANDONG SILICON TECHNOLOGY NEW MATERIAL CO., LTD.

72: QU, Yuan, KONG, Fanzhen, YANG, Tiantian, LI, Hanghang, LI, Pengtao

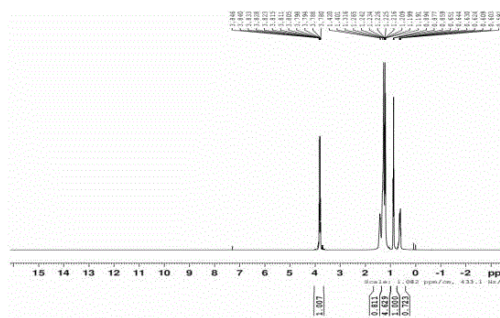
33: CN 31: 202110724340.9 32: 2021-06-29

54: (2,4,4-TRIMETHYLPENTYL)SILANE OLIGOMER, PREPARATION METHOD THEREFOR AND USE THEREOF

00: -

Provided are a (2,4,4-trimethylpentyl)silane oligomer, a preparation method therefor and the use thereof. The preparation method for the (2,4,4-trimethylpentyl)silane oligomer in the present invention comprises the following steps: adding, in a dropwise manner, a mixed solution of water and a lower alcohol into (2,4,4-trimethylpentyl)chlorosilane

under a positive pressure condition, and carrying out hydrolysis and esterification re-actions to obtain the (2,4,4-trimethylpentyl)silane oligomer. In the present invention, a (2,4,4-trimethylpentyl)chlorosilane monomer is used as a raw material, a mixed solution of water and an alcohol is added in a dropwise manner into the (2,4,4-trimethylpentyl)chlorosilane monomer under a positive pressure environment, and esterification and hydrolysis are carried out at the same time, such that the silane oligomer can be directly synthesized in one step. The method in the present invention has a simple process, low energy consumption and few by-products, reduces the usage of alcohol and decreases the total amount of the three wastes.



21: 2023/01365. 22: 2023/02/02. 43: 2023/03/22
51: G01M

71: Guangdong Ocean University

72: PANG Jianhua, ZHONG Linsen, CHEN Hui, ZHANG Jiwei, YAN Jin, PAN Xinxiang

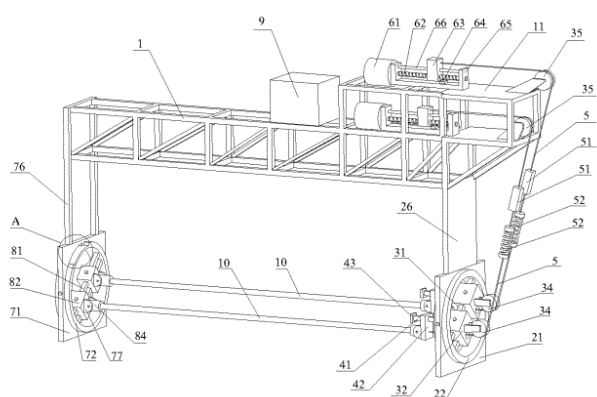
33: CN 31: 202110656541X 32: 2021-06-11

54: TESTING DEVICE FOR VORTEX-INDUCED VIBRATION RESPONSE OF RISER AND METHOD OF APPLICATION

00: -

The invention relates to the field of offshore engineering instruments, in particular to a testing device for vortex-induced vibration response of riser and method of application, wherein the testing device for vortex-induced vibration response of riser comprises a support frame, a first rotation adjusting structure, a wire rope, a power mechanism for driving the wire rope to reciprocate linearly, a first guide rail arranged on the first rotation adjusting structure, a first adjusting slider slidably connected to the first guide rail and a first pipe joint arranged on the first adjusting slider; the second rotation adjusting structure is provided with a second guide rail, a second adjusting slider is slidably connected

to the second guide rail, and a second pipe joint is arranged on the second adjusting slider; one end of the wire rope is connected with the power mechanism, and the other end is connected with the first pipe joint through a sliding structure. According to the invention, factors such as top tension, outflow velocity, series-parallel mode, shaft spacing between risers and the like which affect the vortex-induced vibration characteristics of risers can be tested and studied, and the actual working conditions of deep-sea risers can be simulated comprehensively.



21: 2023/01379. 22: 2023/02/02. 43: 2023/03/22
51: C09D; E04F
71: ANHUI YANGZI FLOORING INCORPORATED COMPANY
72: LEI, XIANG
33: CN 31: 202111445001.3 32: 2021-11-30
54: A HIGHLY MOISTURE-PROOF ENVIRONMENT-FRIENDLY MULTI-ELEMENT COMPOSITE FLOOR AND ITS PRODUCTION PROCESS

00: -

The present invention relates to the technical field of environment-friendly boards, in particular to a highly moisture-proof environment-friendly multi-element composite floor and its production process. The composite floor comprises a base layer, a decorative layer and a bottom layer, wherein the decorative layer is a wood paint layer with waterproof wood paint coated on one surface of the base layer, and both the bottom layer and the base layer are made of poplar veneers; one surface of the base layer is coated with waterproof wood paint to form a decorative layer, then the other surface of the base layer is adhered to the bottom layer with MDI

environment-friendly adhesive, and then wax is applied on the notch formed by the base layer and the bottom layer for sealing, and thus a moisture-proof environment-friendly multi-element composite floor is obtained; finally, the notch formed by the base layer and the bottom layer is sealed with wax, providing a denser waterproof oil film at the notch.

	Embodi- ment 1	Embodi- ment 2	Embodi- ment 3	Compara- tive Embodi- ment 1	Compara- tive Embodi- ment 2	National standard 6-9mm base material in high humidity
Static bending strength MPa	46	45	45	44	42	≥32
Moisture resistance (Wet static bending strength MPa-70°C hot water immersion)	17.2	17.3	17.3	16.8	15.6	≥15
Water absorption thickness expansion rate %	5.3	5.5	5.4	8.2	8.8	≤10

21: 2023/01393. 22: 2023/02/03. 43: 2023/04/03
51: A01C

71: SHANGHAI INSTITUTE OF TECHNOLOGY

72: YE, Sihao, HE, Kun

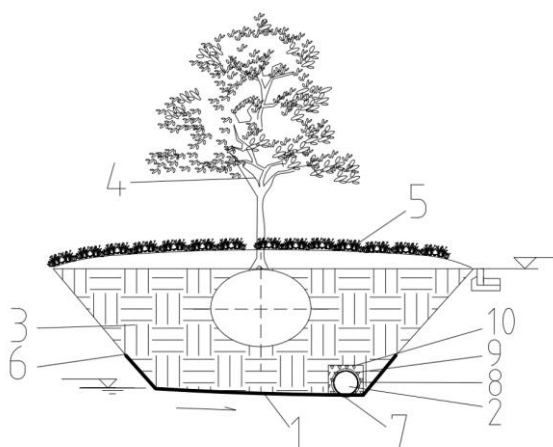
33: CN 31: 202211701249.6 32: 2022-12-29

54: GREENING PLANTING STRUCTURE DESIGN METHOD USING POLYMER DRAINAGE PROFILED SHEET TO DRAIN SALT

00: -

The invention discloses a greening planting structure design method using polymer drainage profiled sheets to drain and isolate salt, wherein polymer protective drainage profiled sheets are arranged on saline alkali land, the polymer protective drainage profiled sheets are arranged in a bowl shape, the bowl shape setting range includes the middle horizontal section and the slope shaped section around the middle horizontal section, the bowl shaped area composed of the protective drainage profiled sheets and the planting area above the bowl shaped area are filled with planting soil, An auxiliary blind ditch drainage system is set at the lower part of the planting area. The invention makes use of the drainage characteristics of the polymer protective

drainage special-shaped sheet, at the same time, it increases the space for plant planting soil, saves the project cost, and is more conducive to plant growth; When the temperature rises, the impermeability of the drainage profile is used to isolate the saline alkali components in the saline alkali soil from the soil in the planting area, which acts as a salt barrier.



21: 2023/01394. 22: 2023/02/03. 43: 2023/04/03
51: G06Q

71: Hainan University

72: LIU, Yongna

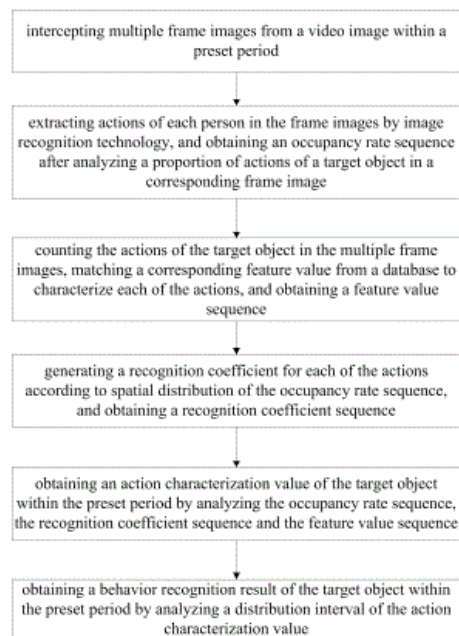
33: CN 31: 202210747957.7 32: 2022-06-29

54: CLASSROOM BEHAVIOR RECOGNITION METHOD AND SYSTEM BASED ON IMAGE ANALYSIS, COMPUTER TERMINAL AND MEDIUM

00: -

A classroom behavior recognition method and system based on image analysis, a computer terminal and a medium disclosed in the present disclosure: intercepting multiple frame images from a video image within a preset period; obtaining an occupancy rate sequence after analyzing a proportion of actions of a target object in a corresponding frame image; matching a corresponding feature value from a database to characterize each of the actions, and obtaining a feature value sequence; generating a recognition coefficient for each of the actions according to spatial distribution of the occupancy rate sequence, and obtaining a recognition coefficient sequence; obtaining an action characterization value of the target object within the preset period by analyzing the occupancy rate sequence, the recognition coefficient sequence and the feature value

sequence; and obtaining a behavior recognition result of the target object within the preset period by analyzing a distribution interval of the action characterization value.



21: 2023/01395. 22: 2023/02/03. 43: 2023/04/03

51: G05B; H04L; H04W

71: Hainan University

72: LIU, Debing

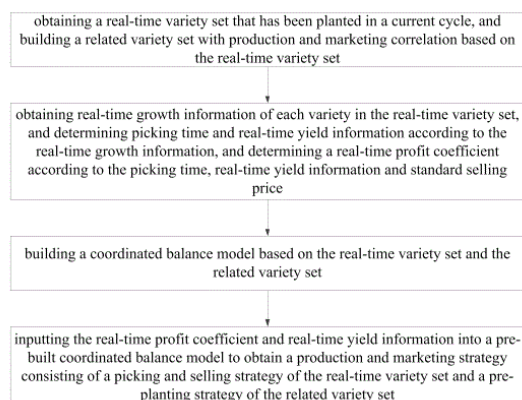
33: CN 31: 202210754246.2 32: 2022-06-29

54: DATA PROCESSING METHOD AND SYSTEM FOR INTELLIGENT AGRICULTURE BASED ON INTERNET OF THINGS, TERMINAL AND MEDIUM

00: -

A data processing method for intelligent agriculture based on Internet of Things, system, terminal and medium: obtaining a real-time variety set that has been planted in a current cycle, and building a related variety set with production and marketing correlation based on the real-time variety set; obtaining real-time growth information of each variety in the real-time variety set, and determining picking time and real-time yield information according to the real-time growth information, and determining a real-time profit coefficient according to the picking time, real-time yield information and standard selling price; building a coordinated balance model based on the real-time variety set and the related variety set; inputting the real-time profit coefficient and real-time yield information into a

pre-built coordinated balance model to obtain a production and marketing strategy consisting of a picking and selling strategy of the real-time variety set and a pre-planting strategy of the related variety set.



21: 2023/01396. 22: 2023/02/03. 43: 2023/04/03
51: F26B

71: YANTAI UNIVERSITY, Yantai Vocational College

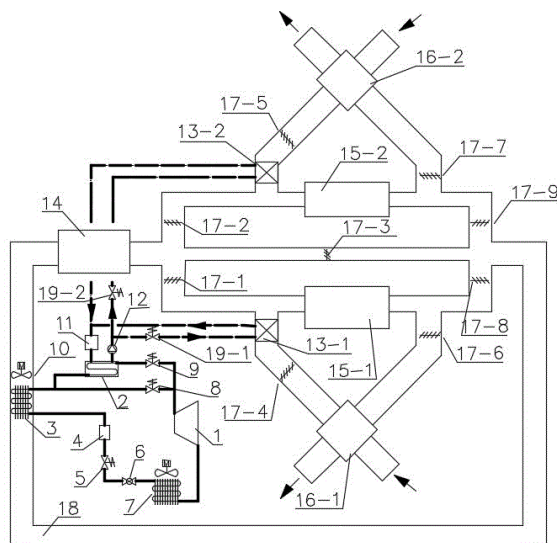
72: ZHAO Haibo, WU Kun

54: HUMIDITY ADJUSTABLE HEAT PUMP DRYING DEVICE

00: -

Disclosed is a humidity adjustable heat pump drying device, including: a heat pump subcomponent, includes a heating device, wherein a heat discharging end of the heating device is communicated with a hot water condenser or a first condenser, the first condenser is located in an air duct, an air outlet end of the air duct is communicated with a drying box, the air outlet end of the drying box is communicated with a plurality of branches, air outlet ends of the branches are communicated with the air inlet end of the air duct, and air inlet ends and the air outlet ends of the branches are respectively provided with valves; a drying air subcomponent, includes solid dehumidifying boxes arranged on at least two branches, and at least one of the branches is not provided with the solid dehumidifying boxes. The invention realizes that the heating and dehumidification of dry air are respectively completed by a heat pump and a solid dehumidifying material, and overcomes the problem of mismatch between cold and heat in system operation caused

by the heating and dehumidification of a heat pump condenser and an evaporator respectively.



21: 2023/01397. 22: 2023/02/03. 43: 2023/04/03
51: B02C

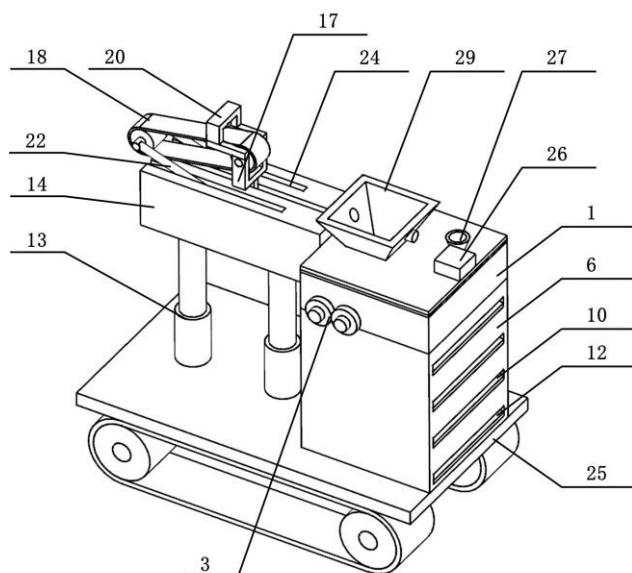
71: Huzhou Vocational and Technical College, Zhejiang Dadongwu Group Construction Co., Ltd
72: CHEN Jing, GAO Lixin, ZHUANG Liqiang, XU Bixiang, JIANG Xinying, XU Xueyong, WU Zeli

54: MOVABLE CONSTRUCTION WASTE PROCESSING EQUIPMENT

00: -

The invention discloses movable construction waste processing equipment, which comprises a crushing mechanism, which comprises a sealing cover, wherein the top surface of the sealing cover is fixedly connected and communicated with a feeding hopper, and the side wall of the sealing cover is rotatably connected with a crushing unit for crushing; the multistage screen mechanism comprises a material contain cover, wherein that inner cavity of the material containing cover is provided with multistage screens, and the top end of the material containing cover is fixedly connected with and communicated with the bottom end of the sealing cover; the feed mechanism comprises a lifting assembly and a feeding unit, wherein that feed unit is detachably connected with a feeding hopper, and the bottom surface of the feeding unit is fixedly connected with the top surface of the lifting assembly; the moving mechanism comprises a platform and a walking component fixedly installed on the bottom surface of the platform; the top

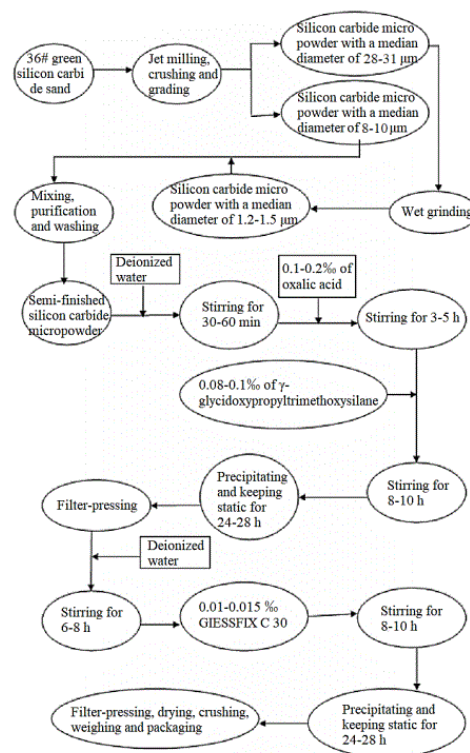
surface of that platform is fixedly connected with the bottom surface of the material containing cover of the lifting assembly respectively; the control assembly comprises a controller and an alarm, wherein the controller is electrically connected with the crushing unit, the feeding unit and the alarm respectively. According to the invention, the crushing and recycling treatment of construction waste can be realized, and the recycling of waste can be realized.



21: 2023/01398. 22: 2023/02/03. 43: 2023/04/03
51: C04B
71: SHENYANG CHANGXIN NEW MATERIAL CO., LTD
72: REN, Yun, LIU, Changchun, REN, Xia, REN, Jiang, ZHANG, Qiuyue
54: METHOD FOR PRODUCING SILICON CARBIDE MICROPOWDER FOR SILICON NITRIDE BONDED SILICON CARBIDE PRODUCT
00: -

Disclosed is a method for producing silicon carbide micropowder for a fine ceramics product. The silicon carbide micropowder can be used well with aluminium oxide auxiliary material and silicon powder auxiliary material in a silicon nitride bonded silicon carbide product, so that a water amount required by the raw material of 1 kg of silicon nitride bonded silicon carbide product is 175-180 g, and a fluidity is 23-27 s, meeting the requirements of grouting process well; a bulk density of the fired silicon nitride bonded silicon carbide product is 2.77-2.82 g/cm³, and a bending strength of the product at 20 degrees Celsius is 160-180 MP; the product

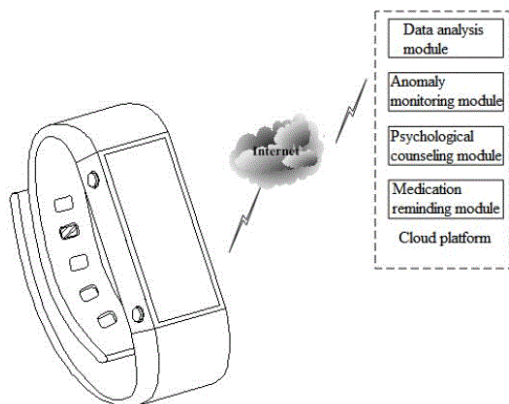
reaches the same operational performance as a special novel structural ceramic material of a foreign silicon nitride bonded silicon carbide product, and fills up the blank of the silicon carbide micropowder raw material for the silicon nitride bonded silicon carbide product in China.



21: 2023/01399. 22: 2023/02/03. 43: 2023/04/03
51: A61B; A61M
71: Air Force Medical University
72: YANG, Qun, QIN, Wei, WU, Zhongying, WANG, Yidi, MA, Di, SONG, Lei, LI, Xiao, MA, Zhujing
33: CN 31: 202210829852.6 32: 2022-07-15
54: WRIST STRAP TYPE HEALTH MONITOR BASED ON CLOUD PLATFORM
00: -

Disclosed is a wrist strap type health monitor based on a cloud platform. The health monitor includes a monitor body, wrist straps, and the cloud platform, where the wrist straps internally carry a photoplethysmography (PPG) biosensor module for achieving monitoring of a heart rate, blood oxygen, blood pressure, an effective exercise amount, a fatigue state and a sleep condition, and a self-checking module, and the cloud platform internally carries a data analysis module for achieving analysis of the heart rate, the blood oxygen, the blood

pressure, the effective exercise amount, the fatigue state and the sleep condition, and an anomaly monitoring module for achieving evaluation result recognition of an abnormal user physical state and/or psychological state. According to the present invention, real-time monitoring and evaluations of the physical state and the psychological state can be achieved, and abnormal intervention can be made in time.

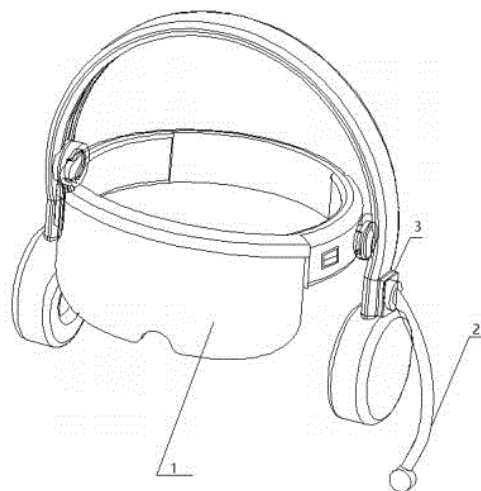


21: 2023/01400. 22: 2023/02/03. 43: 2023/04/03
51: A61B; A61M
71: Air Force Medical University
72: YANG, Qun, CHEN, Chen, WU, Zhongying, DAI, Hong, CUI, Longbiao, JIN, Yinchuan, GAO, Xing, MA, Zhujing
33: CN 31: 202210548318.8 32: 2022-05-20
54: IMMERSIVE PSYCHOLOGICAL MASSAGE INSTRUMENT

00: -

The present invention relates to the field of psychological treatment devices, and in particular to an immersive psychological massage instrument. The immersive psychological massage instrument includes a virtual reality (VR) head-mounted display, a body temperature sensor in communication connection with the VR head-mounted display, an electrodermal sensor, an electrocardiogram sensor, a respiration sensor, and an intelligent voice recognition module in communication connection with the VR head-mounted display, where the VR head-mounted display achieves release of corresponding relaxation scenes on the basis of monitoring results fed back by the body temperature sensor, the electrodermal sensor, the electrocardiogram sensor, the respiration sensor and the intelligent voice recognition module, and plays

corresponding relaxation music and/or sleep instructions. Based on a VR technology, the present invention enables a user to have an immersive feeling, is high in degree of relaxation introduction, good in effect, and can be carried around.



21: 2023/01401. 22: 2023/02/03. 43: 2023/04/03
51: A23L

71: Anhui Science And Technology University
72: Wu XiaoWei, Ge ChengDang, Li PeiYan
54: CRISPY FRAGRANT PASTE AND ITS PROCESSING METHOD

00: -

The invention discloses a crispy fragrant paste and its processing method, which comprise raw flour, corn starch, wheat starch, oatmeal (cornflakes), peanut powder, sesame seeds, shredded coconut stuffing, olive oil, egg yolk, pumpkin puree and the like. The crispy fragrant paste is prepared by a plurality of processes, and has the characteristics of pleasing color, diverse tastes, crispy skin, long aftertaste and the like after frying, and is suitable for being used as the crispy fragrant paste for the animal or plant raw materials with delicate texture.

21: 2023/01402. 22: 2023/02/03. 43: 2023/04/03
51: A23L

71: Anhui Science And Technology University
72: Wu XiaoWei, Yan Han, Li PeiYan
54: CRISPY FRAGRANT PASTE SUITABLE FOR FRENCH FRIES AND ITS PROCESSING METHOD

00: -

The invention discloses crispy fragrant paste suitable for French fries and its processing method,

which comprises raw flour, corn starch, wheat starch, sparerib powder (tomato powder, rose powder, celery powder, etc.), baking soda, olive oil, fruit juice, egg yolk, honey, etc. The crispy fragrant paste is prepared through multiple processes, and has the characteristics of pleasing color, diverse tastes, crisp texture, long aftertaste and the like after frying. And it is a kind of crispy fragrant paste for adding flavor and color to French fries.

21: 2023/01403. 22: 2023/02/03. 43: 2023/04/03
51: G06N

71: VISHWAKARMA INSTITUTE OF
INFORMATION TECHNOLOGY

72: MALI, Manisha Pravin, AGARWAL, Kashish,
BHAT, Aditya, WANJALE, Kirti, SAKHARE, Sachin

**54: A SYSTEM FOR CIGARETTE SMOKER
IDENTIFICATION AT PUBLIC PLACES USING
MACHINE LEARNING AND IOT**

00: -

The present invention relates to a system for cigarette smoker identification at public places using machine learning and IOT, consisting of a camera, Arduino, Raspberry Pi, four gas sensors: MQ-135, MQ-2, MQ-7, and MQ-9, as well as a PIR sensor, node MCU, and the Aadhaar database; Cameras will be installed on public places along with Arduino, Raspberry Pi, four gas sensors: MQ-135, MQ-2, MQ-7, and MQ-9, as well as a PIR sensor, node MCU; Camera will continuously keep on capturing images and smoke detecting sensors keep on sensing the cigarette smoke; Once cigarette smoke is detected by sensors, image database will be checked for the image having human being having cigarette or smoke; That specific image will be send to server; Then face detection of that human being will be taken place with the help of Aadhar database at the server; Once face is detected, penalty can be apply like deduct fine amount from his/her bank account and inform same to the person through SMS or email; To detect cigarette smoke, IoT sensors will be used; Once detected, it will notify to the system installed on Arduino and Raspberry Pi; Then Arduino and Raspberry Pi will be used to check the images (captured by the cameras) having human being with cigarette or smoke on appropriate time match.

21: 2023/01404. 22: 2023/02/03. 43: 2023/04/03
51: G06F

71: VISHWAKARMA INSTITUTE OF
INFORMATION TECHNOLOGY

72: GHULE, Gauri Vijukumar, KADGAONKAR,
Tejas Dhananjay, DESHPANDE, Pallavi Devendra,
RATNAPARKHI, Archana Kshitij, HABBU, Shraddha
Kiran

**54: A SYSTEM FOR SECURE FIRMWARE
UPGRADE**

00: -

Embedded devices are found in every field controlling our day to day activities of life. Upgrading firmware of a resource constrained embedded device installed in the field is the necessity of the present-day embedded systems. Taking device to the manufacturer or manufacturer reaching to the field becomes difficult once the embedded device is installed. The feature of infield firmware upgrade in the embedded device makes the task of upgrading firmware easy. Although, the process of upgrading gives rise to certain issues related to safety and security. Also upgrading firmware of device is needed when a new feature is to be added to the device improving the functionality of the system. The feature of upgrading firmware in field requires a bootloader residing in the device flash memory. The implemented system design has addressed most of the issues mainly bootloader architecture, safety and security. The system is tested for different sizes of firmware images and verified that the process does not fail. A firmware update was sent to the device while the device was in run mode and it was updated successfully in Flash. Rollback firmware feature is tested after firmware upgrade is done for MCUboot.

21: 2023/01405. 22: 2023/02/03. 43: 2023/04/03
51: G06F

71: VISHWAKARMA INSTITUTE OF
INFORMATION TECHNOLOGY

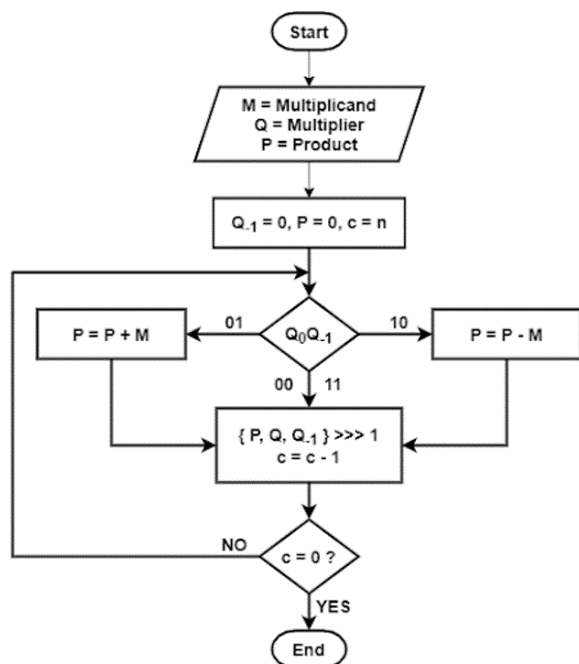
72: BHOSALE, Sharwari, RAUT, Ketan J.,
DESHMUKH, Minal, CHITRE, Abhijit V.,
PAVNASKAR, Vaibhav

**54: A SYSTEM FOR OPTIMIZATION OF PARTIAL
PRODUCTS IN MODIFIED BOOTH MULTIPLIER**

00: -

Modified Booth Multiplier is extensively used in applications requiring high-speed multiplications. Compared to traditional multiplication techniques, Modified Booth Encoding (MBE) algorithm reduces the number of partial products by half. This paper focuses on further minimization of the number of

partial products. The conventional MBE multiplier encodes every 3-bit sequence regardless of the number of times it gets repeated. This leads to repetitive encoding and partial product generation for the same sequence. The Proposed technique - Optimized Booth Multiplier (OBM) prevents encoding of the same sequence multiple times, ultimately reducing the overall number of partial products. The modified booth algorithm provides a 50% reduction in partial products, whereas the proposed technique on average provides an 81.25% reduction in partial products. This paper presents state of art technique for a 16x16 multiplication which reduces the number of partial products to 5 or less, thus enhancing the overall latency of the design. The design of 16x16 multiplication is synthesized and simulated using Xilinx ISE Design Suite 14.7 and ISIM.



21: 2023/01420. 22: 2023/02/03. 43: 2023/04/03
51: A01G

71: Anhui Science And Technology University
72: Duan Sumei, Shen Yan, Zhang Qianxi, Liu Shengqin, Li Ziyu, Shi Qingwen, Men Yuting, Zhao Chaoyue, Shen Yan

54: RICE CULTIVATION METHOD WITH HIGH WATER AND FERTILIZER UTILIZATION RATIO

00: -

The invention provides a rice cultivation method with high water and fertilizer utilization rate, and relates to

the technical field of rice cultivation. The rice cultivation method with high water and fertilizer utilization rate comprises the following steps: S1. Before sowing, the shed is covered 20 to 25 days before sowing, so that the frozen soil layer is thawed in advance and the temperature is increased; S2. Straw mulching: uniformly covering the surface of the paddy field with wheat straws or rape straws harvested from the previous crop; S3. Seed treatment 1) selecting plump seeds, drying the selected seeds, soaking the seeds with a seed soaking agent, and finally drying the soaked seeds. In the invention, the cultivation method can effectively reduce the use amount of chemical fertilizers, pesticides and herbicides, further conserve water and soil, ensure the quality of cultivated land, protect the ecological environment, realize the safe maturity of rice in cold regions and good quality of rice, meet the requirements of national green food production, and realize the purposes of high quality, high yield, high efficiency, environmental protection and safety of rice production.

21: 2023/01421. 22: 2023/02/03. 43: 2023/04/03
51: H01M

71: Anhui Science And Technology University,
Bengbu Yiai Electronic Technology Co., Ltd,
Tianchang Senior Technical School

72: Fan Xiaoyu, Guo Rui, Yao Yue, Zhang Yushan,
Fan Zhiping, Zhang Qiaolin, Ren Guodong

54: METHOD FOR PREPARING CATHODE CATALYST WITH HIGH CATALYTIC ACTIVITY FOR FUEL CELL

00: -

The invention provides a preparation method of a fuel cell cathode catalyst with high catalytic activity, and relates to the technical field of fuel cells. The fuel cell cathode catalyst with high catalytic activity is prepared from an active component Pt, a metal-coordinated porphyrin organic framework, a conductive nano carbon material, a carrier, an auxiliary agent and the like, wherein the carrier is selected from conductive metal oxides, metal nitrides, metal carbides or a mixture thereof; and the auxiliary agent is selected from other noble metals or oxides thereof. According to the invention, the fuel cell cathode catalyst prepared by the method is based on the transition metal-coordinated porphyrin

organic framework, and is dispersedly mixed with the conductive nano-carbon material, so that efficient electrochemical conversion of an oxygen reduction reaction is realized, and the half-wave potential of the fuel cell cathode catalyst can reach 0.82 V, which is close to the redox catalytic activity index of a noble metal catalyst and has high catalytic activity.

21: 2023/01422. 22: 2023/02/03. 43: 2023/04/03
51: H02B

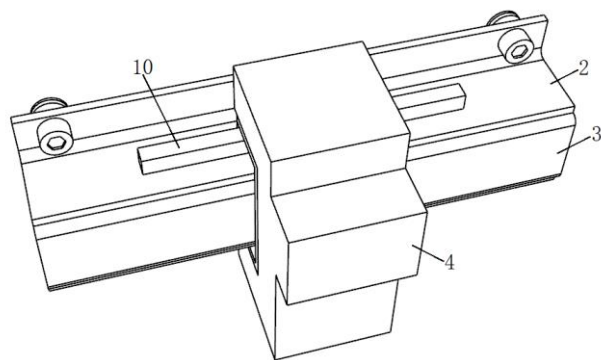
71: Jiangsu Province Xuzhou Technician College

72: Wang Haoran, Li Weitong, He Junhao, Sun Haoyang, Zhang Jianshuo, Chen Ziang, Dong Cuicui, Sheng Ziqi, Wang Ruixue, Xie Fei, Zhang Le, Wang Nan, Zhang Tianlei, Sun Lu, Li Yaqiu, Zhang Lin, Xu Haojun

54: ASSEMBLE STRUCTURE OF INTELLIGENT DATA ACQUISITION CONTROLLER

00: -

The invention relates to the technical field of electrical equipment, in particular to an installation structure of an intelligent data acquisition controller, which comprises two installation carrier plates, two fixing plates, a fixing clamp plate and the intelligent data acquisition controller, wherein one side of the intelligent data acquisition control is provided with an installation groove, a U-shaped plate is fixed on the inner wall of the installation groove, fixing clamping blocks are fixed on the opposite inner walls of the U-shaped plate, One side of the mounting support plate is fixedly provided with two first studs and a second stud which are arranged in parallel, and the fixing plate is provided with two movable through holes. According to the invention, the U-shaped plate is arranged on the intelligent data acquisition controller, and the fixing clamping blocks are arranged on the opposite inner walls of the U-shaped plate, so that the intelligent data acquisition controller can be clamped on the two limiting blocks by means of the two fixing clamping blocks; and the hexagonal plate is screwed by a wrench to drive the limiting sleeve to rotate, so that the combined length of a second stud and the limiting sleeve can be adjusted, And that fix clamping plate is pus to be matched with the two limiting blocks to fix the intelligent data acquisition control.



21: 2023/01423. 22: 2023/02/03. 43: 2023/04/03
51: G09B

71: JIAMUSI UNIVERSITY

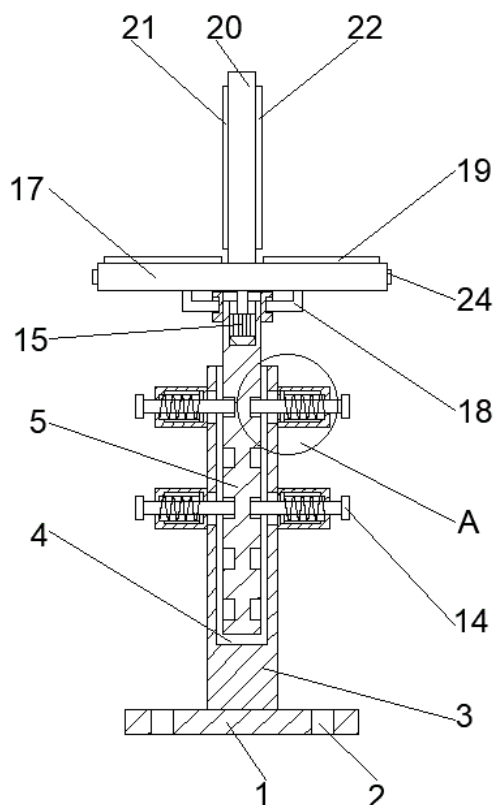
72: Sun Yan Bin, Wang Yong, Ma Li Guo, Wang Han Zhong, Wang Xian Kun, Li Sheng Ju, Han Zai Quan, Zhao Lin, Li Li

54: ANALYSIS DISPLAY RACK FOR INTELLIGENT MATHEMATIC AND APPLIED MATHEMATIC PROBLEM

00: -

The invention relates to the technical field of mathematical teaching AIDS, and discloses an intelligent mathematical and applied mathematical puzzle analysis display rack, which comprises a base, wherein a support column is fixedly connected to the center of the upper end face of the base; a movable groove is formed in the upper end face of the support column; a movable column is movably arranged in the movable groove; fixed outer cylinders are fixedly connected to the outer walls on both sides of the support column near the upper middle; One side of each fixed outer cylinder is provided with a moving groove, a plurality of moving rods are movably arranged in the moving grooves, the outer walls of the plurality of moving rods are movably sleeved with a return spring, and the upper end surface and the lower end surface of one side, close to the support column, of each moving rod are fixedly connected with a limiting slide block.

According to the invention, the height is convenient to adjust, and the rotating plate is convenient to rotate, so that the display screen and the writing board can be conveniently interchanged, and a better function rapid conversion effect can be achieved; and the display screen has better practicability and convenience.



21: 2023/01424. 22: 2023/02/03. 43: 2023/04/03
51: B22F

71: Bozhou University, Bozhou Science and Technology Bureau

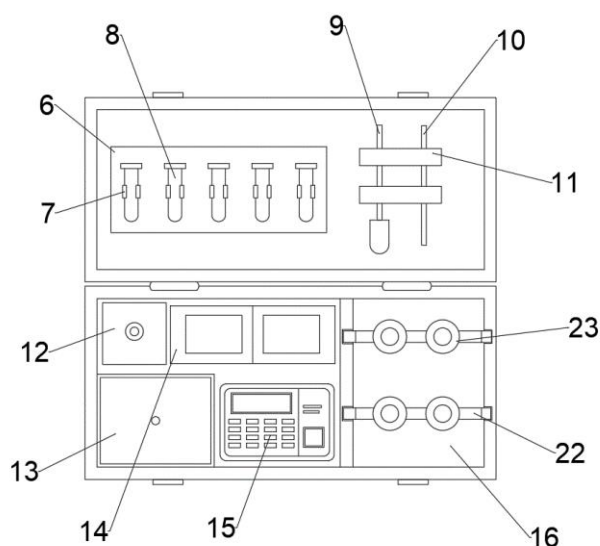
72: Mu Kui, Zhang Xiaoqian, Zhang Yu, Lu Ning, Pu Shunchang, Zhou Xiaohui, Yu Yue, Qian Zhengxing

54: NANO SIL CONTENT MONITORING DEVICE

00: -

The invention relates to the technical field of nano-silver detection devices, and discloses a nano-silver content monitoring device, which comprises a main box body, wherein a box cover is rotatably arranged at the top of the main box body, a constant-temperature water-bath oscillator is fixedly arranged at one side inside the main box body and a constant-temperature water-bath oscillation pool is fixedly arranged at the top of the constant-temperature water bath oscillator. A vortex centrifugal groove is fixedly arranged on one side of the inside of the main box body, which is far away from the constant-temperature water bath oscillator. According to the invention, a portable box body is arranged, a sampling tube, a centrifugal device and a constant-temperature water bath device are arranged in the

box body, soil is taken out through the sampling device, the soil is centrifuged through the centrifugal device, then a suspension reagent is added, the soil stands in the dark for one end of time, and is placed into a constant-temperature water bath oscillation tank for ultrasonic water bath after standing, And standing for a certain time after the ultrasonic water bath, so that the content of the nano silver in the soil can be detected by an SP-ICP-MS method.



21: 2023/01425. 22: 2023/02/03. 43: 2023/04/03
51: H01L

71: Xinyu University

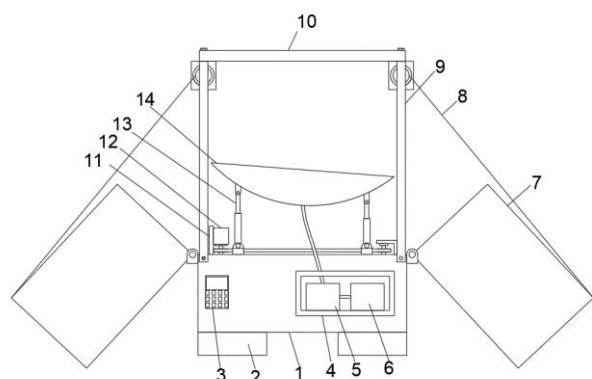
72: He Wei, Liu Danjuan

54: COMBINED SOLAR CELL CAPABLE OF IMPROVING SOLAR ENERGY UTILIZATION RATIO

00: -

The invention provides a combined solar cell capable of improving the utilization rate of solar energy, and relates to the technical field of solar cells. The combined solar cell capable of improving the utilization rate of solar energy comprises a base, a central processing unit, a control module and a sensing module, wherein one side of the upper end of the base is fixedly provided with a supporting plate, and one side wall of the supporting plate is fixedly provided with a first motor. The height of the condensing basin can be conveniently adjusted through the supporting plate, the first motor, the driving wheel, the belt, the driven wheel, the lead

screw, the sliding seat and the connecting block, and the angle of the condensing basin can be conveniently adjusted through the rotating seat, the electric telescopic rod, the plane mirror, the solar panel and the light length sensor, and meanwhile, an optimal light source can be detected by using the light length sensor to condense light to the solar panel, Through the support column, the bolt, the fastening frame, the mounting plate, the second motor, the pulley, the tenacious rope and the protective cover, a better protective effect can be achieved when the light-gathering basin is not used.



21: 2023/01426. 22: 2023/02/03. 43: 2023/04/03
51: A01G

71: XINJIANG INSTITUTE OF ECOLOGY AND GEOGRAPHY CHINESE ACADEMY OF SCIENCES, HEBEI AGRICULTURAL UNIVERSITY, China Agricultural University

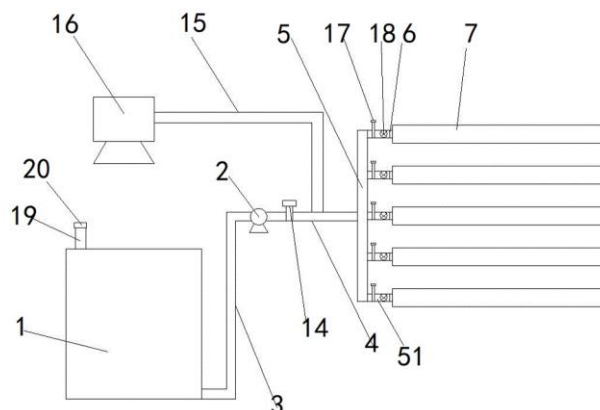
72: Tang gangliang, Zhang bo, Long lanlan, Zhang zhihao, Wang lixin, Guan pingyin

54: IRRIGATION DEVICE FOR PLANTING ALHAGI SPARSIFOLIA SHAP

00: -

The invention discloses an irrigation device for planting *Alhagi sparsifolia* Shap., comprising a water storage tank, a booster pump, a connecting system and an irrigation system; the connecting system comprises a first pipeline, a second pipeline and a third pipeline; the irrigation system comprises a drip irrigation pipe and a casing pipe sleeved on the drip irrigation pipe; the water storage tank is communicated with the water inlet end of the booster pump through the first pipeline, and the water outlet end of the booster pump is communicated with the third pipeline through the second pipeline; a plurality of branch pipes are arranged on the third pipeline; the drip irrigation pipe is communicated with the

branch pipes; and the casing pipe wall is provided with a water permeable window. Each ridge is paved with a set of drip irrigation pipe and casing pipe. During irrigation, the booster pump is turned on to let the water in the water storage tank enter the drip irrigation pipe, and then enter the casing pipe through the drip irrigation hole, and then irrigation is carried out through the permeable window. The invention adopts the structure of drip irrigation pipe and casing pipe, which avoids the evaporation of irrigation water in high temperature and drought environment to the greatest extent, and also avoids the blockage of irrigation pipeline; moreover, the invention has simple structure, which is easy to perform maintenance.



21: 2023/01427. 22: 2023/02/03. 43: 2023/04/03
51: G09B

71: Jiangsu College of Safety Technology, Jiangsu Academy Of Safety Science And Technology, General Hospital of Xuzhou Mining Group

72: Sheng Qi, Gao Zhenning, Wang Lin

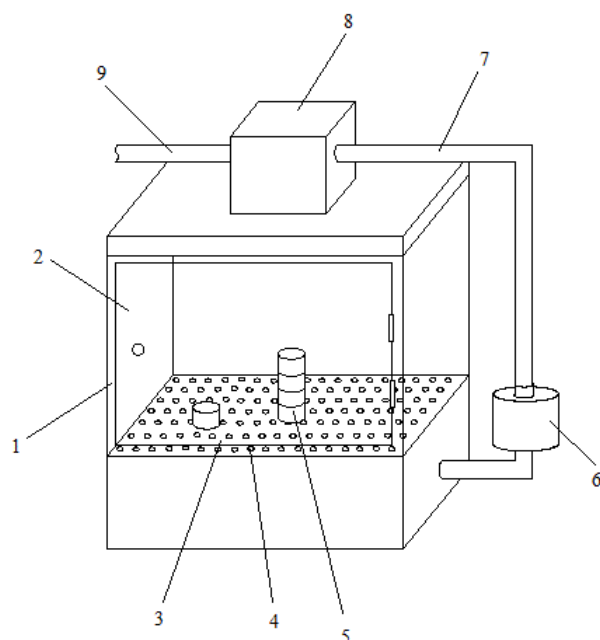
33: CN 31: 202210248179.7 32: 2022-03-14

54: COMBINE URBAN DISASTER SIMULATION EXPERIMENT DEVICE

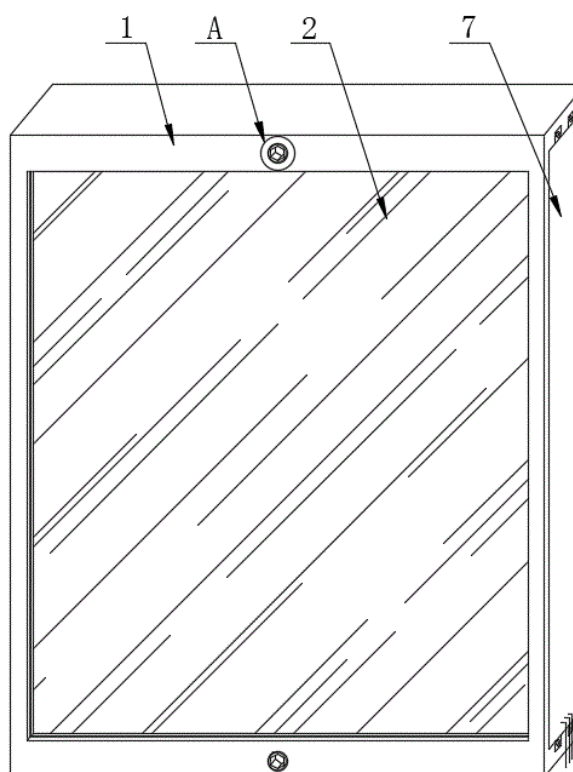
00: -

The invention relates to the technical field of experimental devices, and discloses a combined type urban disaster simulation experimental device which comprises a box body, a horizontal partition plate, a plurality of permeable pipes, a plurality of first electromagnetic valves and a plurality of second electromagnetic valves, wherein the horizontal partition plate divides the box body into an upper part and a lower part, and the horizontal partition plate is uniformly provided with multiple permeable holes; the multiple permeable pipes are correspondingly arranged at the bottoms of the

permeable holes one by one; the first electromagnetic valves are correspondingly arranged on the multiple permeable pipes one by one; The coil pipe is uniformly arranged on the inner side surface of the top of the box body, a plurality of spray heads are uniformly arranged at the bottom of the coil pipe, a plurality of second electromagnetic valves are correspondingly arranged on the plurality of spray heads one by one, and a plurality of water holding devices are sealed, detachably inserted and connected on the water permeable holes; The combined urban disaster simulation experimental device can simulate the relationship between urban rainfall and drainage capacity of different green areas.



closely attached to the outer surfaces of the two glass substrates. According to the electrochromic glass and the preparation method thereof, the heat-insulating electrochromic layer and the protective electrochromic layer are arranged between the two glass substrates, and a sealed space is formed by the heat-insulating electrochromic layer, the protective electrochromic layer, the reflective sealing plate, the irradiation sealing plate and the mounting outer frame, so that a convenient condition is provided for assembly of a liquid electrolyte; and meanwhile, Light beams are emitted into the liquid electrolyte through the irradiation sealing plate and return through the reflection sealing plate after penetrating through the liquid electrolyte, so that a detection environment of the liquid electrolyte is formed while an illumination effect is provided, real-time detection of the packaging state of the liquid electrolyte is realized, and the quality of a packaged finished product is guaranteed.



21: 2023/01428. 22: 2023/02/03. 43: 2023/04/03
51: G02F

71: Jiangsu Urban and Rural Construction
Vocational College

72: Lin Gai, Li Xiaobo

54: ELECTROCHROMIC GLASS AND PREPARATION METHOD THEREOF

00: -

The invention discloses an electrochromic glass and a preparation method thereof, which comprises a mounting outer frame and two glass substrates arranged inside the mounting outer frame, wherein the front side and the rear side of an inner cavity of the mounting outer frame are respectively and

21: 2023/01435. 22: 2023/02/03. 43: 2023/04/03

51: A61B

71: WEI, Shijun

72: WEI, Shijun, WU, Helin

33: CN 31: 202121203352.9 32: 2021-05-31

54: ENDOSCOPIC SUTURE GRASPER FOR ACHILLES TENDON REPAIR

00: -

An endoscopic suture grasper for Achilles tendon repair, the suture grasper comprising inverted Y-shaped grasper handles (1, 2), a fixed grasper rod (3), a movable grasper rod (4), a fixed jaw (5) and a movable jaw (6), wherein one end of each of the inverted Y-shaped grasper handles (1, 2) is a hand-held end, and the other ends thereof are connected to the fixed grasper rod (3) and the movable grasper rod (4); the fixed grasper rod (3) is of a hollow structure, and has a front end connected to the fixed jaw (5); the fixed jaw (5) is provided with a first hole (7); the movable grasper rod (4) passes through the fixed grasper rod (3), and has a front end rotatably connected to the movable jaw (6); a front end of the movable jaw (6) is a needle tip that faces the first hole (7) of the fixed jaw (5); and a rear portion of the needle tip of the movable jaw (6) is provided with a second hole (8) for a suture thread to pass through. The hand-held ends of the inverted Y-shaped grasper handles (1, 2) are operated to enable the movable jaw (4) to slide in the fixed jaw (3) to drive the movable jaw (6) to rotate, so that the suture thread in the movable jaw (6) and the second hole (8) thereof passes through the joint tissue and the first hole (7) of the fixed jaw (5) to complete suturing once. The suture grasper can perform suturing in a narrow space, can be operated with one hand, and can effectively improve the suturing accuracy and efficiency, shorten the operation time and save on practice costs.

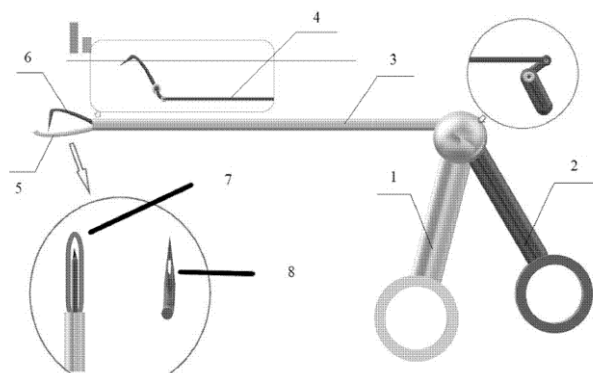


图 1

51: A01H

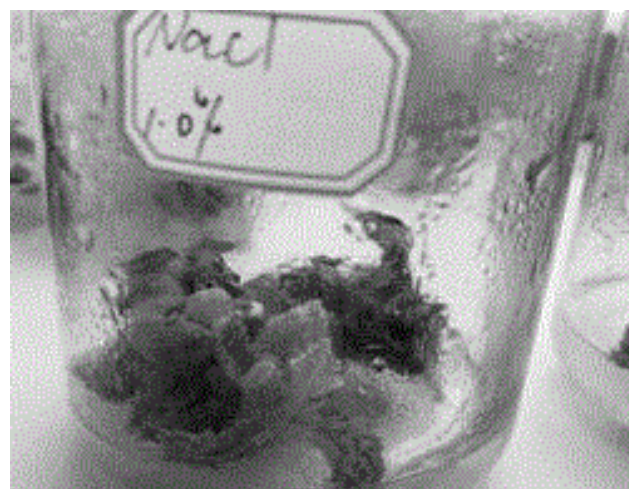
71: Southwest Forestry University

72: Liu Xiaozhen, Wu Jiexin, Zhang Hanyao, Wei Zhuo, Zhang Zhiming, Bian Wen

54: METHOD FOR CULTIVATING SALT-TOLERANT PLANTS OF XUXIANG KIWIFRUIT

00: -

The invention belongs to the technical field of agricultural breeding, in particular to a method for inducing salt-tolerant mutants of tissue-cultured seedlings of Xuxiang kiwifruits. In this method, fresh and healthy leaves of Xuxiang kiwifruits are used as explants to establish an aseptic tissue-cultured system, and EMS mutant plants are obtained by combining tissue-cultured technology with EMS mutagenesis, and NaCl is used as a salt-tolerant screening agent to screen salt-tolerant mutants of EMS mutant plants. The salt-tolerant Xuxiang kiwifruit plants obtained by this method are suitable for saline-alkali soil environment, which is of great significance for improving land utilization and economic benefits, as well as for agricultural and forestry productivity and sustainability.



21: 2023/01473. 22: 2023/02/06. 43: 2023/04/12

51: G06F

71: Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences

72: Yu Ruide, Wang Qingqing, Zhang Yinling, Liu Na, Gao Yuting, Yang Jinhua, Zhang Haiyan

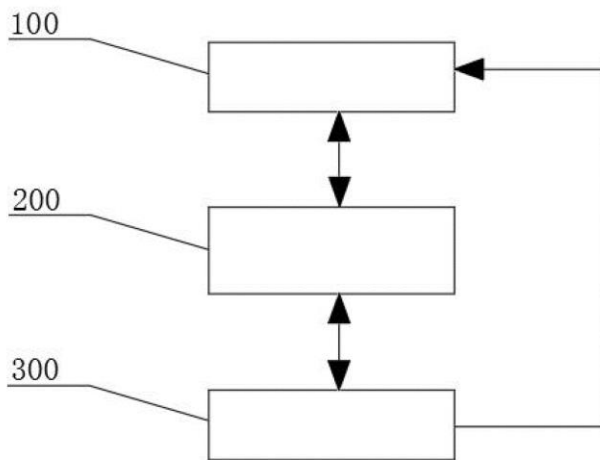
54: SUPPORT SYSTEM FOR CROSS-VALIDATION METHODS OF ACADEMIC JOURNAL PAPERS

00: -

The invention discloses a support system for cross-validation methods of academic journal papers, which comprises the information acquisition terminal,

21: 2023/01472. 22: 2023/02/06. 43: 2023/04/12

the first server and the second server. According to the invention, a plurality of servers are arranged, the first server uses a certain amount of paper reserves for preliminary cross-validation to feedback the preliminary cross-validation results as quickly as possible, and the second server has a complete paper reserve. On the basis of preliminary validation, in-depth cross-validation can be carried out to obtain more comprehensive cross-validation results. The multi-server design can alleviate the server pressure and improve the validation efficiency.



21: 2023/01475. 22: 2023/02/06. 43: 2023/04/12

51: A47J

71: JINHUA POLYTECHNIC

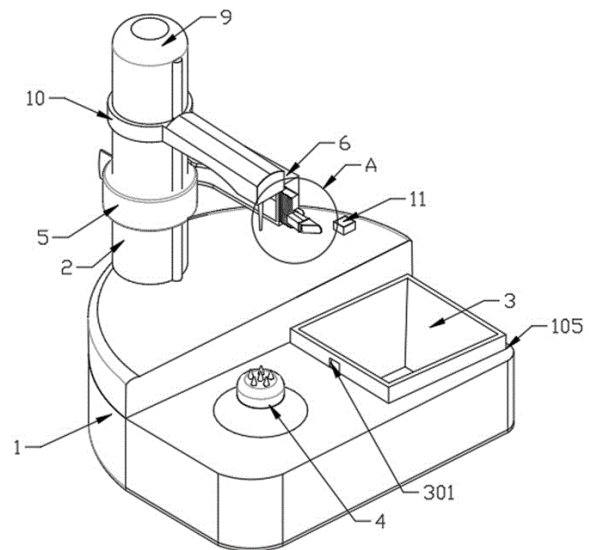
72: ZHANG, Zhengzhong, XIONG,Yongsen,
WANG,Zhiming

54: AN APPLE PEELING DEVICE WITH PEEL COLLECTION STRUCTURE

00: -

The present invention provides an apple peeling device with peel collection structure, and belongs to the fruit peeling device. The apple peeling device includes a base. A circular recess is provided on the bottom back of the base. There is a power box on the front of the circular groove. There is a motor inside the base, and the outlet end of the motor is fixedly connected to the fixer body through a coupling. The top right side of the base is connected with a peel box through the peel slot. There is a lid on the top of the base, a column on the top of the lid, a collar is slidingly connected to the column, and a support arm is rotatably connected to the right side of the collar. There is a support plate on the front of the support arm, and a peeling device is fixedly

connected to the front of the support plate. There is a fruit press body coaxially connected to the column, and the fruit press body is equipped with a ring, and a large arm is welded on the front of the ring, and a fruit press needle is fixedly connected to the front of the lower surface of the large arm. This design avoids unnecessary waste and waste in the processing of apples, achieves effective recycling of peels, and facilitates the disassembly and cleaning of tools.



21: 2023/01478. 22: 2023/02/06. 43: 2023/04/12

51: G06Q

71: Xuzhou Mining Group Co., Ltd., CHINA
UNIVERSITY OF MINING AND TECHNOLOGY,
Jiangsu Guoneng Deep Well Safety Mining
Technology Co., Ltd., Jiangsu Xukuang Energy Co.,
Ltd.

72: FENG Xingzhen, SHI Binghua, CHEN Qinghua,
LIU Jinhu, XIN Haihui, LI Jianfeng, WANG
Xiangyang, LIU Sanxing

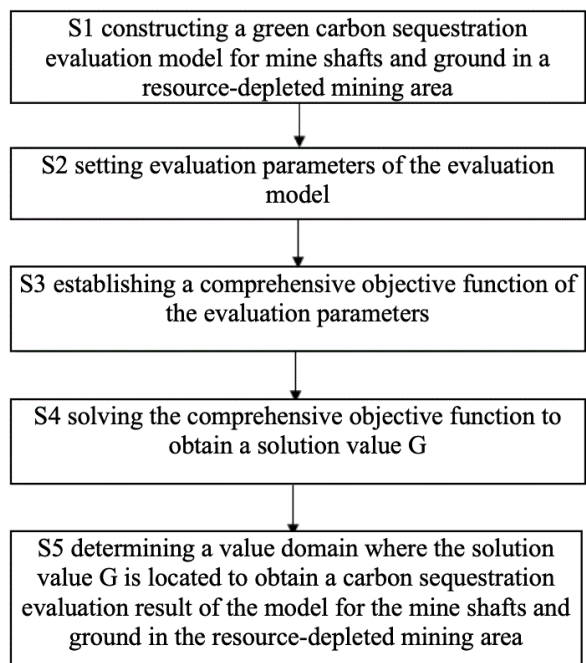
33: CN 31: 202211411185.6 32: 2022-11-11

54: EVALUATION METHOD CONCERNING GREEN CARBON SEQUESTRATION IN COMPREHENSIVE LOW-CARBON TRANSFORMATION OF MINE SHAFTS AND GROUND IN RESOURCE-DEPLETED MINING AREA

00: -

The present invention discloses an evaluation method concerning green carbon sequestration in comprehensive low-carbon transformation of mine shafts and ground in a resource-depleted mining area, which specifically comprises the following

steps: firstly constructing a green carbon sequestration evaluation model for the mine shafts and ground in the resource-depleted mining area according to a resource depletion level; setting evaluation parameters of the green carbon sequestration evaluation model for the mine shafts and ground in the resource-depleted mining area, wherein the evaluation parameters comprise green carbon sequestration value and economic benefit equivalence; establishing a comprehensive objective function of the evaluation parameters for the green carbon sequestration of the mine shafts and ground in the resource-depleted mining area; obtaining a solution value thereof, and determining a value domain where the solution value is located to obtain a carbon sequestration evaluation result of the model for the mine shafts and ground in the resource-depleted mining area. The evaluation method concerning green carbon sequestration in comprehensive low-carbon transformation of mine shafts and ground in a resource-depleted mining area of the present invention realizes evaluation concerning green carbon sequestration of a low-carbon transformation region of mine shafts and ground in a resource-depleted mining area, and it is easy to implement and meets requirements of green development.



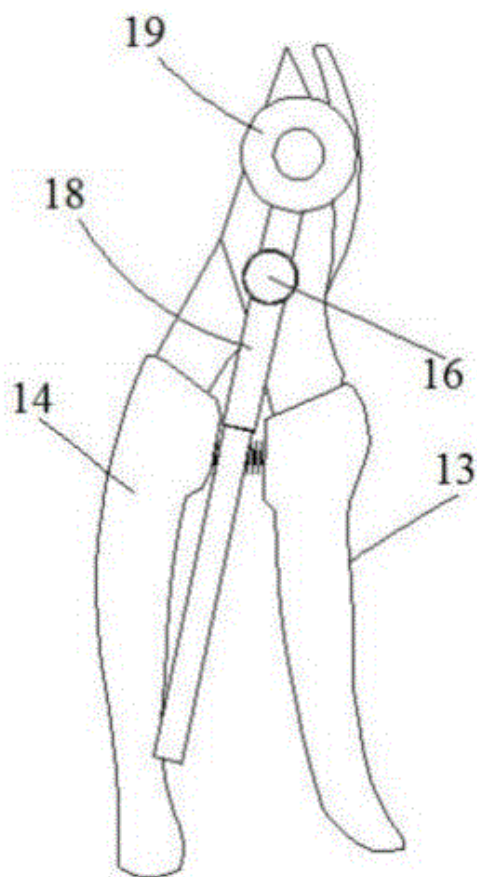
21: 2023/01479. 22: 2023/02/06. 43: 2023/04/12
51: A01G

71: Gansu Province Academy of Qilian Water
Resource Conservation Forests Research Institute
72: Ming ZHAO, Xiaoyan LI, Yilin WANG

54: A HIGHLY EFFICIENT PRUNING DEVICE FOR XANTHOCERAS SORBIFOLIA BUNG

00: -

The invention provides a branch and leaf pruning device, belongs to the field of branch and leaf pruning device, including a first shear body and a second shear body, the first shear body is connected with a first handle, the second shear body is connected with a second handle, the first shear body and the second shear body are hinged, and the first shear body and the second shear body are connected by a pin; the pin is connected with a connection post, the connection post is opened with a connection hole, the connection post is connected with a connecting rod, the connecting rod Through the connection hole, the end of the rod is connected to a hemispherical housing, which is close to the first shear body and the second shear body. The pruning device can be used to prune the branches and leaves of the fruit, enabling quick pruning of the branches and leaves, and it is versatile and can be used for planting the fruit.



21: 2023/01482. 22: 2023/02/06. 43: 2023/04/12
51: F23B

71: Shenyang University of Technology

72: Liu Weiwei, Huang Xiaoyue, Zou Mingyang, Qi Shuo, Jin Hong, Wu Lingfeng, Wu Yao, Dong Shiyuan

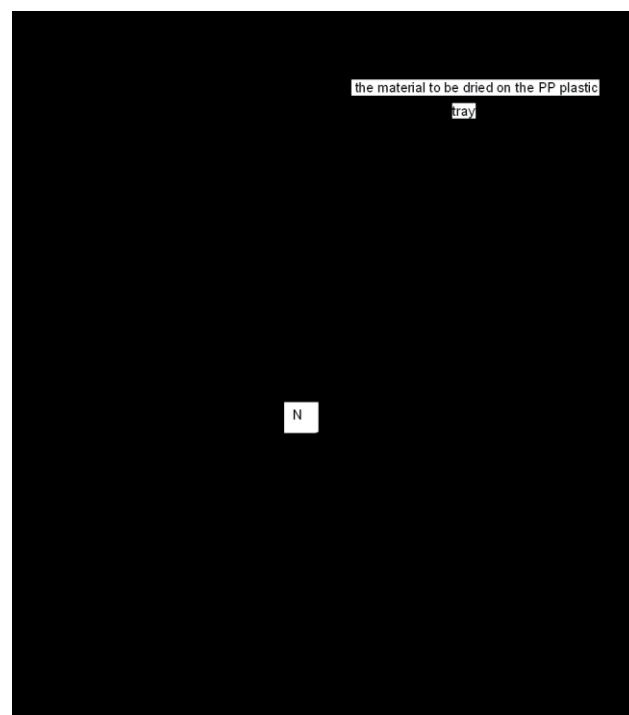
54: AGRICULTURAL AND SIDELINE PRODUCT DRYING DEVICE AND A CONTROL METHOD

00: -

The invention discloses an agricultural and sideline product drying device based on the terahertz technology, and the device is provided with five units: drying unit, PLC control unit, ventilation unit, condensation unit and heat preservation box body.

The drying device unit is provided with six groups of terahertz plates with specific frequencies, which are arranged on the upper and lower sides of the Ceramic tray; The main controller of the PLC control unit is electrically connected with a temperature and humidity detection sensor, and the temperature and humidity detection sensor is arranged on the upper ventilation duct. In the invention, the terahertz wave

is utilized to resonate with water molecules, so that the water molecules are rapidly gasified at a low temperature, thereby reducing the drying energy consumption; Accurately match the terahertz radiation frequency band that is sensitive to water but insensitive to its main nutritional components of the materials to be dried, so as to improve the drying quality; Taguchi experiment and spss function fitting are used to construct drying dynamic model, and finally the optimal parameter solution set of drying process is determined to improve drying efficiency.



21: 2023/01483. 22: 2023/02/06. 43: 2023/04/12
51: C12Q

71: Peking Union Medical College Hospital, Chinese Academy of Medical Sciences

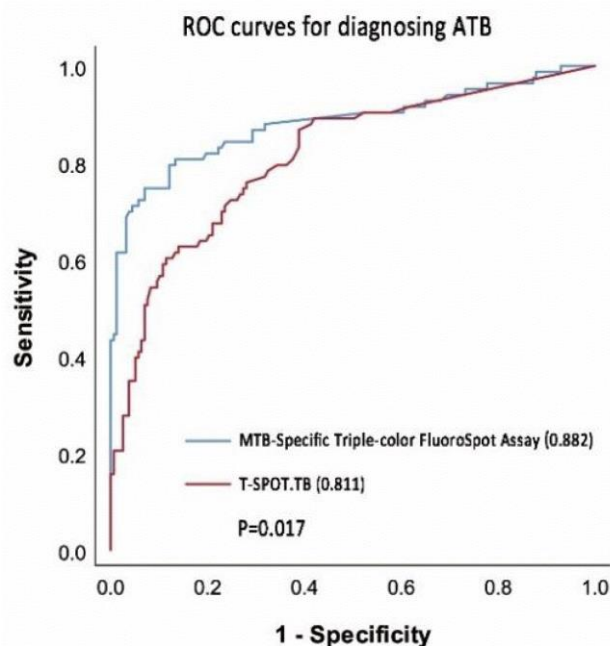
72: Liu Xiaoqing, Zhang Lifan

54: MYCOBACTERIUM TUBERCULOSIS SPECIFIC IFN-GAMMA/IL-2/TNF-ALPHA TRIPLE-COLOR FLUOROSPOT ASSAY KIT AND ITS APPLICATION

00: -

The invention relates to the field of biological detection, and provides a fluorescent immunodotting assay detection kit with high sensitivity, specificity, accuracy and precision. And the kit comprises a 96-well monoclonal antibody reaction plate pre-coated with anti-IFN-gamma, anti-IL-2 and anti-TNF-Alpha Triple, antigen solution, positive quality control, anti-

CD28 antibody, enzyme-labelled secondary antibodies, fluorescent binders and fluorescent enhancer.



21: 2023/01494. 22: 2023/02/06. 43: 2023/04/12
51: G01N

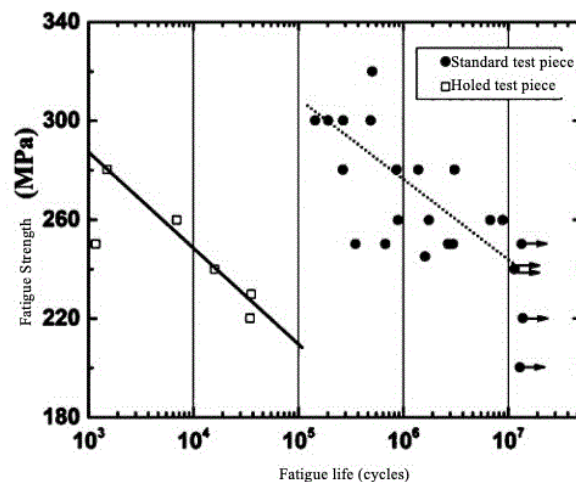
71: CIVIL AVIATION FLIGHT UNIVERSITY OF CHINA

72: Luopeng XU, Mengquan HAO, Rulun ZHANG, Youquan DAN, Zhixin LI, Shi HU, Lei XIONG

54: A TEST METHOD FOR DETERMINING THE FATIGUE CRACK INITIATION LIFE

00: -

The present invention discloses a test method for determining the fatigue crack initiation life, and provides a solution for determining the crack initiation life of a material during the fatigue test. The present invention comprises a test method for determining the fatigue crack initiation life and a pretreatment method of a standard test piece in a fatigue test process. According to the present invention, a reverse reasoning method is adopted to predict the fatigue crack initiation life; the method has the advantages that the micro-crack initiation life can be estimated only by using a small amount of sample data; a simple, feasible and operable test method is provided for predicting the fatigue crack initiation life, and a large amount of manpower, material resources and financial resources can be saved in the fatigue test process.



21: 2023/01514. 22: 2023/02/07. 43: 2023/04/12
51: A61B

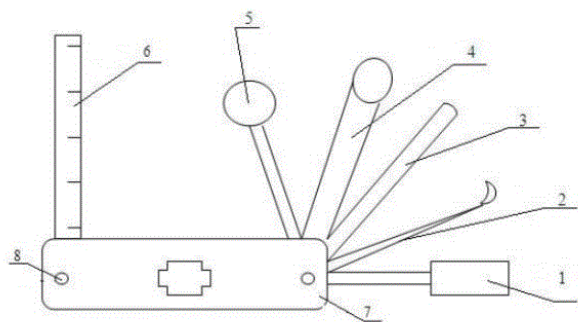
71: The Second Affiliated Hospital of Shandong First Medical University

72: SUN, Ying, QI, Yan

54: MULTIFUNCTIONAL SKIN EXAMINING DEVICE

00: -

Disclosed is a multifunctional skin examining device, including a shell (7), where a groove is provided in the shell (7), two ends of the groove are provided with shafts (8) separately, and slides (1), spatulas (2), scratchers (3), Nikolsky sign examining devices (4), magnifying lenses (5) and measuring rulers (6) which can rotate along the shafts (8) and are accommodated in the groove are provided on the two shafts (8) separately. The present invention has a simple structure, special tools for simple clinical examination of skin disease are centralized in one shell, the corresponding special tools are used for rapid examination as needed during an examination process, and the special tools can be stored in the shell after usage and disinfection, and the problem that clinicians in a dermatological department have no special tools available for simple examination is completely solved.



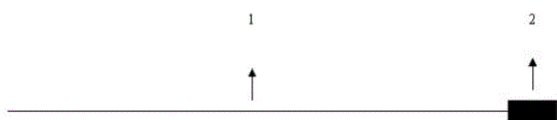
21: 2023/01515. 22: 2023/02/07. 43: 2023/04/12
51: A61M

71: The Second Affiliated Hospital of Shandong First Medical University

72: QI, Yan, SUN, Ying

54: CATHETER BALLOON PUNCTURING DEVICE 00: -

The present invention provides a catheter balloon puncturing device, which is specially used for solving the problem in urology that a water injecting channel is blocked and a catheter cannot be pulled out after a balloon catheter is filled with water. The catheter balloon puncturing device is a medical-grade stainless steel high-hardness straight wire having a length of about 55 cm and a diameter of about 0.8 mm, a pointed head and a metal handle at a tail. The pointed head facilitates puncturing of a balloon wall of a balloon of the catheter, and the metal handle at the tail facilitates holding. The present invention has simple structure, practicality, portability, repeated disinfection and usage, easy mastery and no trauma, thus reducing pain and an economic burden of patients to the maximum extent.



21: 2023/01516. 22: 2023/02/07. 43: 2023/04/12
51: A61K

71: Li Zude

72: Li Zude

54: A TRADITIONAL CHINESE MEDICINE PRODUCT AND PREPARATION METHOD THAT CAN IMPROVE IMMUNITY AND KILL CORONAVIRUS 00: -

A traditional Chinese medicine product and preparation method that can improve immunity and

kill coronavirus, made of 22 kinds of raw materials, specifically Flos Lonicerae Japonicae, Rhizoma Atractylodis Macrocephalae, Radix Astragali, Radix Saposhnikoviae, Fructus Forsythiae, Ophiopogon japonicus, Herba Schizonepetae, Herba Menthae Haplocalycis, Radix Polygoni Multiflori, Rhizoma Dioscoreae, Radix Rehmanniae Praeparata, Fructus Lycii, Radix et Rhizoma ginseng, Fructus Schisandrae Chinensis, Radix Morindae Officinalis, Cortex Eucommiae, Fructus Mori, Herba Cistanches, Herba Portulacae, Semen Sesami Nigrum, Zingiber officinale Roscoe, Radix et Rhizoma Glycyrrhizae, the traditional Chinese medicine product is a special-effect product developed for men to prevent and kill COVID-19, Omicron and various mutant viruses on the basis of improving immunity, this product can cure both the symptoms and the root causes of patients; it can not only treat a variety of difficult and miscellaneous diseases, but also kill COVID-19, Omicron and improve the body's immunity and prolong life, and has the effect of preventing influenza, delaying the aging of cells, prolonging life, supplementing vitality Qi to consolidate basis, nourishing the marrow and replenishing the essence, tonifying the kidney and strengthening yang, detoxifying.

21: 2023/01517. 22: 2023/02/07. 43: 2023/04/12
51: F21S

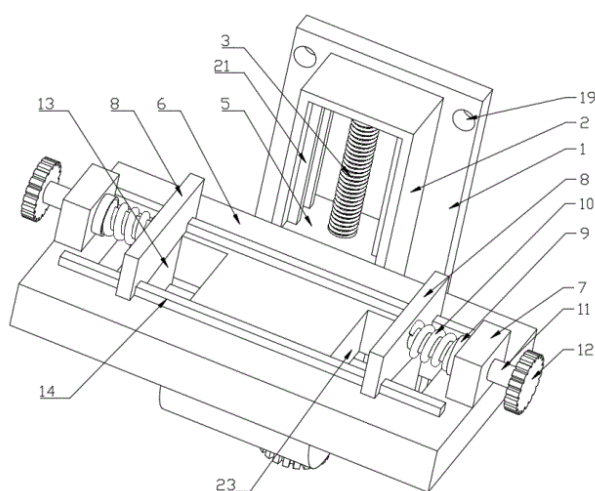
71: xuzhou college of industrial technology

72: Yang Qiong, Yue Zixuan, Chen Yan

54: INTELLIGENT LIGHTING DEVICE FOR BUILDINGS THAT IS EASY TO INSTALL 00: -

The invention provides an intelligent lighting device for buildings that is easy to install, belonging to the technical field of lighting devices, comprising an assembly plate, wherein the side wall of the assembly plate is provided with a rectangular frame, and the top inner wall of the rectangular frame is rotatably connected with a screw rod; the rectangular frame is slidably connected with a moving block, the side wall of the moving block is provided with a mounting plate, and both sides of the top of the mounting plate are symmetrically provided with positioning and fixing structures; the positioning and fixing structure comprises a fixing block arranged on the top side of the mounting plate, and the side wall of the fixing block is provided with a

spring sleeve; the side wall of the fixing block is provided with a spring arranged inside the spring sleeve; both sides of the top wall of the positioning plate are symmetrically provided with positioning blocks; the inner side wall of the L-shaped plate is provided with a positioning rod. The invention positions and fixes the positioning plate on the inner bottom wall of the L-shaped plate, and can quickly and conveniently install the lighting equipment; after the assembly plate is fixed on the building wall, the height of the lighting lamp can be adjusted, and the lighting range of the lighting lamp can be adjusted conveniently.



21: 2023/01520. 22: 2023/02/07. 43: 2023/04/12
51: A01C; A01G; C05G
71: Jiangsu Xuhuai Huaiyin Agricultural Science Research Institute
72: WANG, Wei, WANG, Guolian, WU, Chuanwan, ZHAO, Jianfeng
54: SELENIUM-ENRICHED FOLIAR FERTILIZER AND APPLICATION THEREOF

00: -

The present invention belongs to the field of agricultural production, specifically a selenium-enriched foliar fertilizer and application thereof. In the present invention, aminopolysaccharide, sodium selenite, melatonin, biochemical potassium fulvic acid and a chelating agent are used together to prepare a selenium-enriched foliar fertilizer. Results of the embodiment show that the selenium-enriched foliar fertilizer can promote the absorption of selenium by plants, significantly increase the selenium content of asparagus, effectively increase the contents of protein, carbohydrate, organic acid

and calcium in asparagus, significantly improve the quality of asparagus, increase the output of asparagus, and improve the planting efficiency. Eating selenium-enriched agricultural products, such as selenium-enriched asparagus, is conducive to the absorption and utilization of selenium, thus avoiding the potential risk brought by supplementation of a large amount of inorganic selenium.

21: 2023/01521. 22: 2023/02/07. 43: 2023/04/12
51: A01H

71: Ningxia University

72: WANG, Xiaomin, WANG, Kaibin, WANG, Lin, ZHAO, Wen, MA, Haixia, CHENG, Guoxin, GUO, Meng, ZHANG, Xueyan, GAO, Yanming

54: IN VITRO CULTURE METHOD FOR IMMATURE EMBRYO OF TOMATO

00: -

The present invention provides an in vitro culture method for an immature embryo of a tomato. The immature embryo of the tomato is disinfected and pre-treated, and is then inoculated into an induction medium and a rooting medium to obtain a tissue culture seedling of the immature embryo, and the tissue culture seedling is subjected to seedling exercising and transplanting to grow normally. Compared with the prior art, according to the present invention, factors such as a pre-treatment, the induction medium and a hormone proportion that affect germination of the immature embryo are studied, respectively, and the optimum processing of the factors is obtained after the factors are screened and adjusted.



21: 2023/01523. 22: 2023/02/07. 43: 2023/04/12
51: B09C

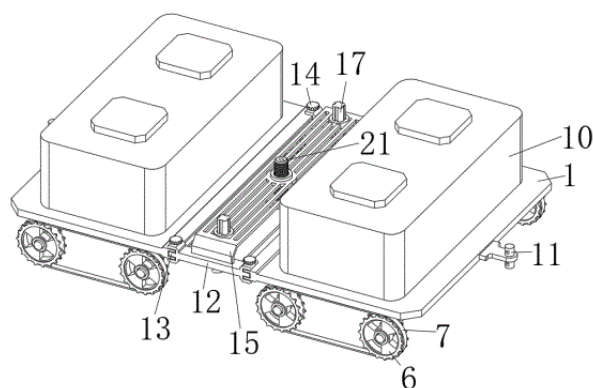
71: Gansu Agricultural University

72: Jun WU

54: A KIND OF DRENCHING DEVICE FOR REMEDIATION OF HEAVY METAL CONTAMINATED SOIL

00: -

The present invention relates to the field of soil remediation technology, in particular, a drenching device for remediation of heavy metal contaminated soil, including a spraying assembly, a soil turning assembly, the spraying assembly is set in two groups at the front and rear, the two groups of spraying assembly are connected to the soil turning assembly through a connecting assembly, the lower end of both groups of spraying assembly is installed with a moving assembly, the spraying assembly includes a support plate, a mixing mechanism is fixedly installed on the upper end surface of the support plate, the lower end of the support plate is fixedly installed with a spraying member connected to the output end of said mixing mechanism, the said heavy metal The spraying unit includes a support plate, a mixing mechanism is fixed on the upper end of the support plate, a spraying unit is fixed on the lower end of the support plate and connected to the output end of the mixing mechanism, and a plurality of spraying heads are fixed on the lower end of the support plate and connected to the output end of the spraying unit.



21: 2023/01524. 22: 2023/02/07. 43: 2023/03/30

51: G01B

71: Hunan City University

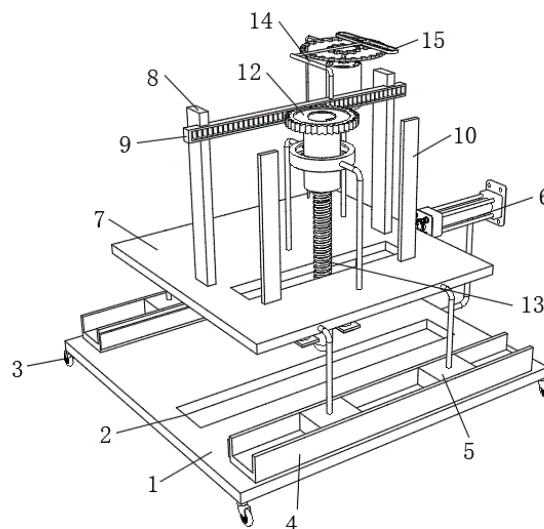
72: PENG Zhigao, WANG Xinzong, FENG Haoxiong, YANG Aocheng, FANG Weiqi

33: CN 31: 2022101693257 32: 2022-02-23

54: BRIDGE CRACK MEASURING DEVICE FOR BRIDGE ENGINEERING

00: -

The invention discloses a bridge crack measuring device for bridge engineering, and relates to the technical field of bridge engineering. The invention comprises a bottom plate, a top plate is arranged at the top of the bottom plate, a groove is formed in the top plate, a limiting plate and a first measuring ruler are respectively arranged at the top of the top plate, a rack is arranged in the limiting plate, the rack is connected with the limiting plate in a sliding way, a ring is arranged at the top of the top plate, an annular groove is formed in the ring, and a threaded cylinder is arranged in the ring. According to the invention, by arranging the infrared camera, the radar probe, the first measuring ruler, the second measuring ruler, the threaded rod, the threaded cylinder, the cylinder and the transverse plate, the infrared camera and the radar probe can be driven to move downwards, and the internal shape of the crack can be photographed by the infrared camera and the radar probe, so that workers can carry out special treatment on the bridge according to the internal shape of the crack, and at the same time, the first measuring ruler and the second measuring ruler can measure the depth and length of the crack, thereby improving the comprehensiveness of the whole measuring device when in use.



21: 2023/01525. 22: 2023/02/07. 43: 2023/04/12

51: A01G

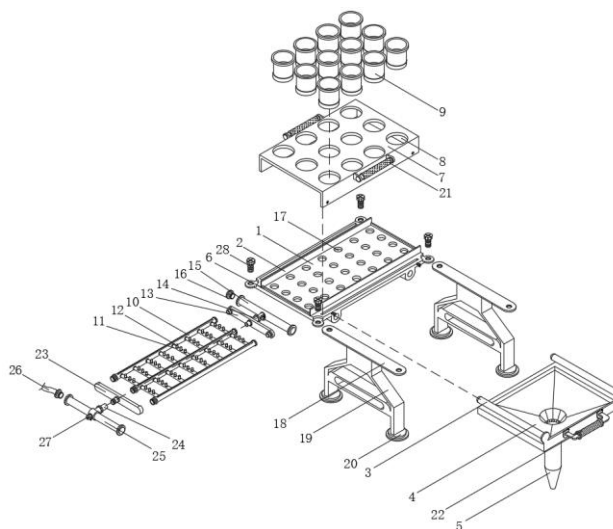
71: Research Institute of Non-timber Forestry, Chinese Academy of Forestry

72: Yang Zhao, Baoping Wang, Yanzhi Feng, Chaowei Yang, Jie Qiao, Haijiang Zhou, Wei Duan, Shanshan Xu

54: CONTAINER SEEDLING CULTIVATION METHOD AND DEVICE FOR PAULOWNIAS

00: -

The present disclosure relates to the technical field of container seedling cultivation tools for paulownias, and particularly to a container seedling cultivation method and device for paulownia. The method includes steps as follows: S1: selecting a seminal root; S2: selecting a container seedling cultivation device; S3: preparing a seedling cultivation substrate; and S4: managing a container seedling, and transplanting the seedling to a field or directly carrying out afforestation when a height of the seedling reaches 20 cm-30 cm. According to the container seedling cultivation method and device for paulownia, through arrangement of a planting cylinder, a water outlet nozzle and a water supplying pipe, technicians can put the paulownia seedling into the planting cylinder and opens an external water pipe, water can be conveyed to interiors of the water supplying pipe, a water passing pipe, a water conveying pipe and the water outlet nozzle by the external water pipe and sprayed out from the water outlet nozzle, further, the technicians can clamp the planting cylinder into a clamping hole to limit the planting cylinder, and the water sprayed out from the water outlet nozzle can water a bottom of the planting cylinder. Therefore, the technicians can advantageously water and conveniently transplant the paulownia seedling, and waste of water resources is avoided.



21: 2023/01570. 22: 2023/02/08. 43: 2023/03/16

51: F16C

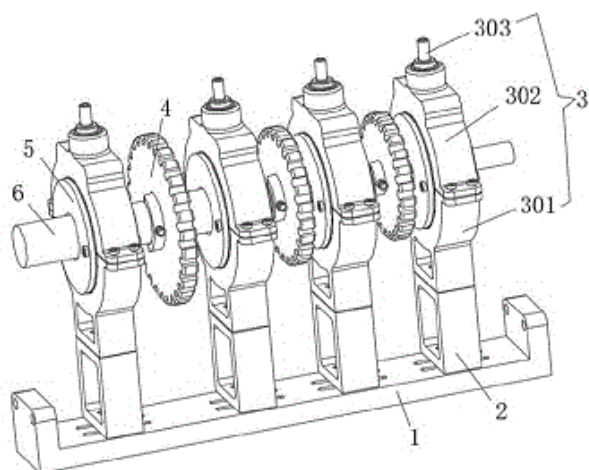
71: ZHUCHENG HUILIN PRECISION MACHINERY CO. LTD.

72: HAN, ZHIYUN

54: CONNECTING DEVICE FOR BEARS OF MULTI-STAGE GEAR MECHANISM

00: -

A connecting device for bears of a multi-stage gear mechanism including a stepped shaft, at least two gears for transmission are installed on the stepped shaft, and the stepped shaft has bearings with different outer ring diameters at different stepped parts, and the outer ring of the bearings is sleeve-mounted with an adapter seat, and the left and right ends of the adapter seat are mounted with end caps. The beneficial effect is: the connection device can be adapted to bears of a multi-stage gear mechanism so as to effectively reduce the design and assembly difficulties of the multi-stage gear mechanism by using universal adaptation parts, effectively reducing the production difficulties and production costs.



21: 2023/01572. 22: 2023/02/08. 43: 2023/04/12
51: B23Q

71: QINGDAO VOCATIONAL AND TECHNICAL COLLEGE

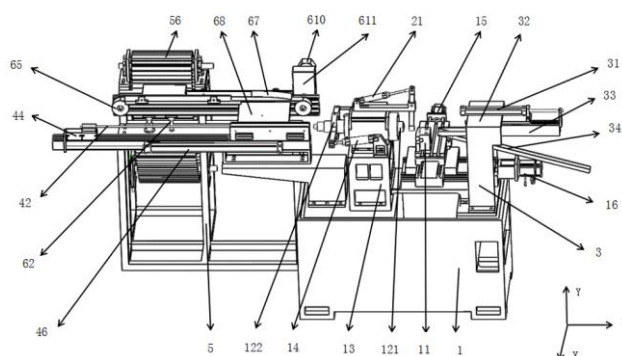
72: LI, Wen, GAO, Jian, ZONG, Deyun

54: AN AUTOMATED LATHE FOR SHAFT MACHINING

00: -

The present invention relates to the field of CNC machine tool equipment, and in particular to an automated lathe for machining shaft parts, comprising: a machine tool body for cutting the shaft parts to be machined, including a base, a bed, a spindle rotation unit, and a feed motion unit; a loading mechanism, installed on the left side of said machine tool body, for loading the shaft parts to be machined; a flat belt conveyor, installed directly below the discharge end of said loading mechanism, for moving the shaft to be machined to the right; a pusher mechanism, installed in front of said flat belt conveyor, for receiving the shaft to be machined from said flat belt conveyor and pushing the shaft to be machined into the collet chuck in the spindle of a workpiece clamping mechanism; a workpiece clamping mechanism, installed on the front side of said machine tool body, for clamping and unclamping of the shaft to be machined; a workpiece positioning mechanism, installed on the top side of said machine tool body, for positioning the shaft to be machined in conjunction with the pusher mechanism; and a receiving mechanism, installed on the right side of the tool body, for collecting the machined shaft. The invention is compact, adapts to

the rhythm of high-volume and fast-paced production, and solves the problems of low efficiency and high equipment costs of existing equipment for processing shaft parts.



21: 2023/01628. 22: 2023/02/09. 43: 2023/04/12
51: A61K

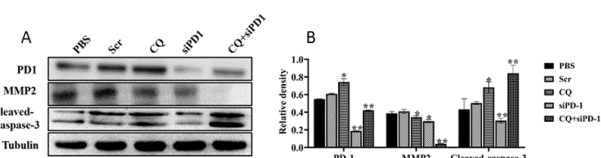
71: THE FIRST AFFILIATED HOSPITAL OF XINXIANG MEDICAL UNIVERSITY

72: Jiateng ZHONG, Shuya LU, Tiesuo ZHAO, Wei SU, Xiaoyu YANG, Huijie JIA, Qingzu GAO

54: APPLICATION OF PD-1siRNA COMBINED WITH CHLOROQUINE IN PREPARING A MEDICINE FOR TREATING RECTAL CANCER

00: -

The present invention relates to the technical field of cancer treatment, in particular discloses an application of PD-1siRNA combined with chloroquine in preparing a medicine for treating rectal cancer, the nucleotide sequence of the said PD-1siRNA is as shown in SEQ ID NO.1. In the present invention, the cancer cell apoptosis is induced and the proliferation of tumor cells is inhibited by combining PD-1siRNA and chloroquine.



21: 2023/01653. 22: 2023/02/10. 43: 2023/04/12
51: A23L

71: Inner Mongolia Academy of Agricultural and Animal Husbandry Sciences

72: ZHANG, Yuanyuan, KANG, Lianhe, ZHANG, Zhifen, WANG, Limei, QIAO, Jianmin, MOU, Yingnan, WANG, Liwei, YANG, Minghao, LI, Xingyun

54: POTATO AND OAT INSTANT NOODLES AND MAKING METHOD THEREFOR

00: -

The present invention discloses a method for making potato and oat instant noodles and belongs to the technical field of instant noodles. The method specifically includes: mixing high gluten flour of wheat, potato flour, oat meal, an edible salt and wheat gluten at a certain proportion to obtain mixed flour; mixing fresh perilla leaves with water in a ratio of 1: 4 to prepare a homogenate, and performing still standing and filtration to obtain perilla leaf leach liquor; putting the aforementioned mixed flour into a noodle making device, adding the perilla leaf leach liquor and water, and performing dough kneading; and curing the kneaded dough at room temperature, delivering noodles after curing, steaming the prepared fresh noodles, and drying the noodles after steaming to obtain the potato and oat instant noodles.

21: 2023/01654. 22: 2023/02/10. 43: 2023/04/12
51: C05G

71: China Tobacco Henan Industrial Co., Ltd
72: Shen Hongtao, Yang Xinling, Chen Xiaolong, Jia Guotao, Ma Yiqiong, Duan Weidong, Bai Feng

54: BASE FERTILIZER AND FERTILIZER FOR IMPROVING THE QUALITY OF UPPER TOBACCO LEAVES AND APPLICATION METHOD THEREOF

00: -

The invention discloses a base fertilizer and fertilizer for improving the quality of upper tobacco leaves and application method thereof, wherein, the biological organic fertilizer of the fertilizer for improving the quality of upper tobacco leaves comprises the following components in parts by weight: 50-65 parts of animal manure, 31-40 parts of high-carbon base fertilizer and 0.6-0.8 part of Trichoderma and 0.6-0.8 part of Bacillus subtilis. The compound fertilizer comprises the following components in percentage by mass: more than or equal to 8% of N, more than or equal to 8% of P₂O₅ and more than or equal to 16% of K₂O; The mass ratio of potassium in the bio-organic fertilizer and the compound fertilizer is (1-2):(2-3). The fertilizer for improving the quality of upper tobacco leaves disclosed by the invention can effectively improve the soil moisture content, increase the contents of alkali-hydrolyzable nitrogen, rapid available phosphorus and rapid available potassium, help maintain the high level of soil rapid available

nutrients, and reduce the occurrence of diseases such as black shank disease, brown spot disease and mosaic disease in the growth process of tobacco plants.

21: 2023/01655. 22: 2023/02/10. 43: 2023/04/12
51: G01N

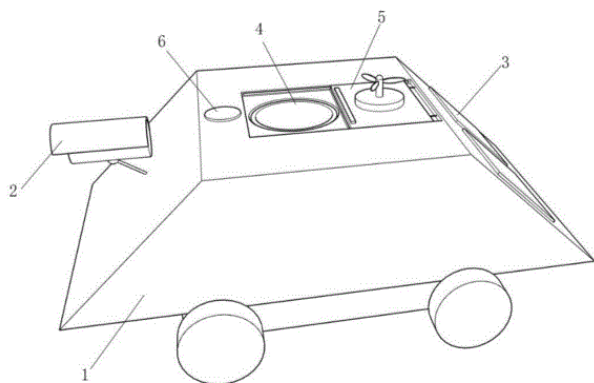
71: Gansu Province Academy of Qilian Water Resource Conservation Forests Research Institute

72: Xiaoping SHI, Shunli WANG, Wenmao JING, Pengyu SHI, Rongxin WANG, Minglong LIU

54: A DEVICE FOR FOREST ENVIRONMENT MONITORING

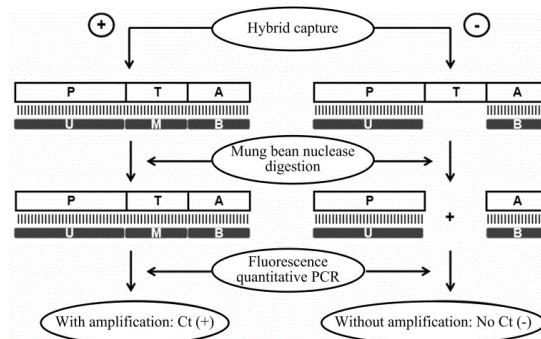
00: -

The invention relates to the field of forest protection technology, and discloses a forest environment detection device, which solves the problem of monitoring the rain and wind volume of the forest. It includes a monitoring trolley, a camera is installed on one side of the monitoring trolley, a solar panel is installed on the other side of the monitoring trolley, a water collection mechanism is installed inside the monitoring trolley, an electromagnet is installed on one side of the top of the monitoring trolley, a shading mechanism is installed on the other side of the top of the monitoring trolley, the water collection mechanism includes a barrel slot, the barrel slot is opened in the middle of the monitoring trolley, a bottom plate is installed inside the barrel slot, and a compression spring is installed at the bottom of the bottom plate. spring. The invention, in the work, through the setting of the water collection barrel in the open air constantly receive rainwater, and after a certain period of time to electrify the electromagnet to generate magnetic force, the magnetic block will be attracted to the electromagnet until the block plate will completely cover the water collection barrel, and then detect the amount of rainfall within a certain period of time, and then improve the protection of the forest environment.



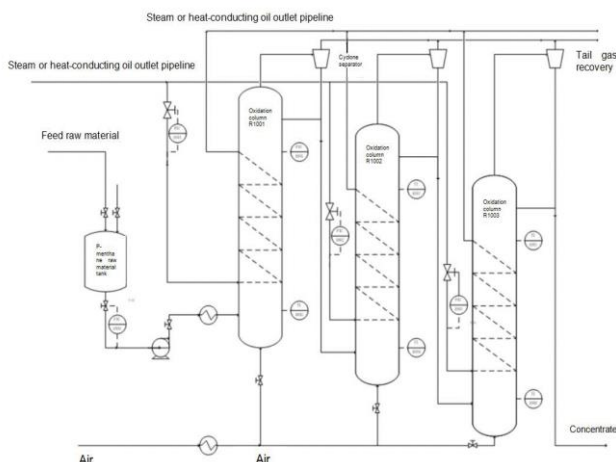
21: 2023/01656. 22: 2023/02/10. 43: 2023/04/12
 51: C12Q; C12R
 71: Zhejiang University
 72: WANG, Kai, XU, Yili, CHEN, Ran
 33: CN 31: 202211389048.7 32: 2022-11-08
54: MICRO RIBONUCLEIC ACID (MIRNA) DETECTION KIT BASED ON PROBE-ANCHORED DUPLEX AND USE THEREOF
 00: -

The present disclosure provides a micro ribonucleic acid (miRNA) detection kit based on a probe-anchored duplex and use thereof. The miRNA detection kit based on a probe-anchored duplex includes a main probe, an auxiliary probe, an anchor probe, and a fluorescent probe, as well as an amplification primer pair for target miRNAs, and a magnetic bead sample releasing agent; the main probe includes an auxiliary probe binding region, a target miRNA binding region, and an anchor probe binding region sequentially; the auxiliary probe binding region includes an upstream primer complementary region and a fluorescent probe complementary region for amplifying the target miRNAs; the anchor probe binding region is complementary to a downstream primer for amplifying the target miRNAs; a 5'-end of the anchor probe or the main probe is labeled with biotin; and the magnetic bead sample releasing agent includes a streptavidin-modified magnetic bead.



21: 2023/01657. 22: 2023/02/10. 43: 2023/04/12
 51: C07C
 71: Jiaying University
 72: Dai Chuanbo, He Baitian, Chen Guiting, Wang Hua
54: NEW METHOD FOR PRODUCING P-MENTHANE HYDROPEROXIDE BY MULTIPLE BUBBLE COLUMN REACTORS IN SERIES
 00: -

The invention adopts multiple (two or more) bubble column reactors in series to produce p-menthane hydroperoxide. Due to the small output and high energy consumption of batch production, multiple (two or more) bubble column reactors are used for the reaction to increase the residence time of the reaction materials in the reactors. Multiple bubble column reactors are connected in series to form a plug-flow reactor with a very large length-diameter ratio, which is conducive to eliminating the influence of backmixing on the reaction, increasing the contact time of gas-liquid phase reaction and increasing the conversion rate of the reaction.



21: 2023/01658. 22: 2023/02/10. 43: 2023/04/12

51: G01N

71: China Tobacco Henan Industrial Co., Ltd

72: Shen Hongtao, Bai Feng, Liu Yong, Chen Xiaolong, Duan Weidong, Zhang Ziying, Wang Xinzhong

54: METHOD FOR MEASURING WEIGHT LOSS OF SLICED CIGARETTES DURING STORAGE

00: -

The invention belongs to the technical field of tobacco leaves raw material storage and maintenance, and particularly relates to a method for measuring weight loss of sliced cigarettes during storage. The main technical idea of the method is as follows: based on the current tobacco strip storage and maintenance mode, select the tobacco strip sample, cut the block sample in an overall cutting way, put into a non-woven fabric bag, place in-situ in an tobacco strip storage box, manage according to the current tobacco maintenance mode, and calculate the tobacco strip technology loss according to the weight changes of experimental sample in different storage periods. The application provides a refined method for measuring the weight loss in tobacco strip storage technology. Compared with the existing extensive method for measuring and estimating the weight loss in tobacco strip storage technology, it can accurately reflect the weight loss situation of tobacco strip storage technology, and at the same time, combined with the measurement results in different periods, it can reflect the law of tobacco strip storage weight loss, thus providing more accurate basic support for the scientific setting of tobacco strip storage consumption index and the improvement of storage technology.

21: 2023/01659. 22: 2023/02/10. 43: 2023/04/12

51: A01G

71: Guizhou Horticultural Institute (Guizhou Horticultural Engineering Technology Research Center)

72: ZHANG, Chaojun, CHEN, Zhilin, WEN, Linhong, LI, Yurong

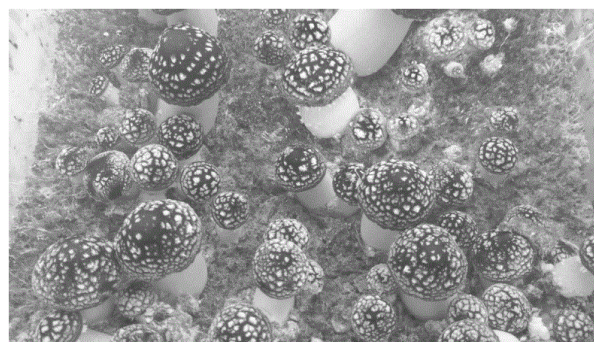
33: CN 31: 202211492484.7 32: 2022-11-25

54: STROPHARIA RUGOSOANNULATA FRUITING INDUCER WITHOUT SOIL COVERING AND PREPARATION METHOD THEREOF

00: -

Provided is a Stropharia Rugosoannulata fruiting inducer without soil covering and preparation method thereof. The present invention adopts the triacontanol cyclodextrin inclusion solution as

Solution A and the methyl jasmonate solution as Solution B to prepare a Stropharia Rugosoannulata fruiting inducer without soil covering, and the inducer is prepared immediately before use and is sprayed after the mycelia overgrow, such that the fruiting bodies are induced under the normal fruiting conditions of Stropharia Rugosoannulata, and the bioconversion rate of the first crop of Stropharia Rugosoannulata can reach 32 percent. Adopting the inducer of the present invention to cultivate the Stropharia Rugosoannulata does not require the soil covering in the cultivation process, thereby preventing the fruiting bodies and stalks from being contaminated, and guaranteeing the grade of commercial mushrooms to a certain extent.



21: 2023/01660. 22: 2023/02/10. 43: 2023/04/12

51: H02J

71: National Grid Shandong Electric Power Company Marketing Service Center (Measurement Center), Electric Power Research Institute of Shandong Electric Power Company, Shandong University

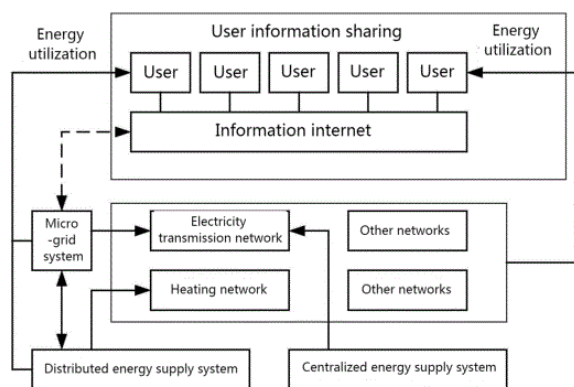
72: Congcong LI, Pingxin WANG, Qing WANG, Yanjie DAI, Hongxia ZHU, Chao YU, Jiaqi ZHANG

54: A COORDINATED AND OPTIMIZED OPERATING METHOD AND SYSTEM FOR REGIONAL ENERGY INTERNET

00: -

The invention belongs to the field of electrical information technology, and a coordinated and optimized operating method and system for regional energy internet are provided. The method includes, based on the energy Internet structure, obtaining the characteristics of the energy Internet; The characteristics of energy internet are obtained based on the structure of energy internet. Based on the characteristics of the energy internet, the coordinated and optimized operation scheme of the

regional energy internet is obtained by using the coordinated and optimized control technology of the regional energy internet, which combines all the energy consumption information of the users, the basic data of the energy supply side and the data information of the power generation side.



21: 2023/01661. 22: 2023/02/10. 43: 2023/04/12

51: C09K

71: Ma'anshan Jiupeng Jiateng Machinery Industry Co., Ltd.

72: CAO, Cheng, HUANG, Zhenyi, LI, Jun, HE, Hao, MEI, Jianhua, HUANG, Huaqin

54: POWDER FOR COMPRESSOR END COVER AND PREPARATION METHOD THEREOF

00: -

The present invention provides powder for a compressor end cover and a preparation method thereof, and belongs to the technical field of a compressor. In the present invention, a mill scale and a reductant are mixed for a preliminary reduction, and the strength and formability of a reduced iron powder can be improved by controlling a temperature for the preliminary reduction. Then a fine reduction is performed in a hydrogen atmosphere, so that the damage of nitrogen to the performance of the reduced iron powder can be reduced and the stability of the performance of powder for an end cover can be ensured. The quality of the reduced iron powder can be further improved by reasonably setting a temperature for the fine reduction, thereby improving the gas tightness of the end cover.

21: 2023/01663. 22: 2023/02/10. 43: 2023/04/12

51: A61H

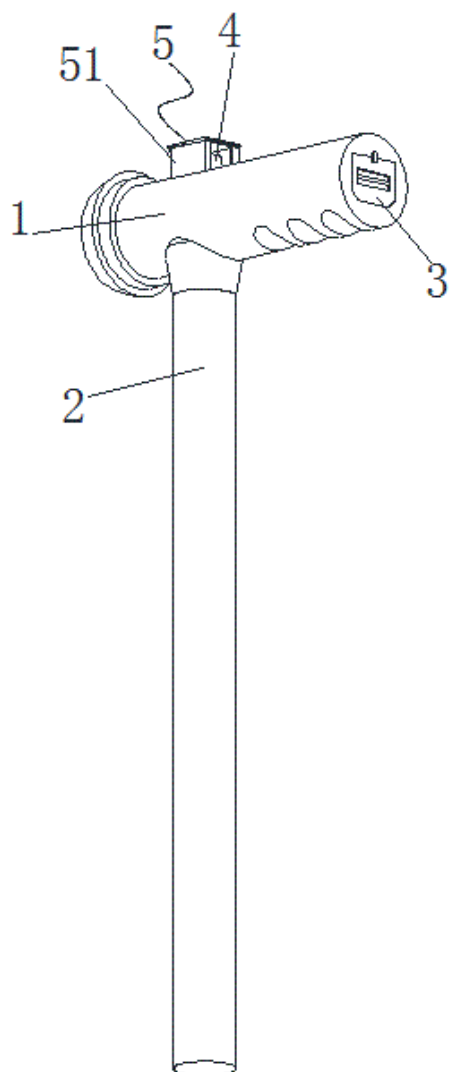
71: Zaozhuang Vocational College

72: Rong Chen, Hu Li, Yajuan Wang, Weiwei Wei

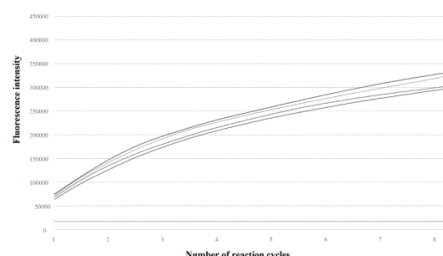
54: A MULTIFUNCTIONAL INTELLIGENT NAVIGATION CRUTCH

00: -

The invention discloses a multifunctional intelligent navigation crutch, belonging to the technical field of crutch. It includes the crutch head. The inside of the crutch head is provided with an intelligent control system, the lower end of the crutch head is provided with a crutch pole, the end of the crutch head is provided with a first emergency button on one side, and the end of the crutch head is provided with a protective component on the position corresponding to the first emergency button. A protective component is arranged at the position corresponding to the first emergency button at the head end of the crutch. When it is necessary to press the first emergency button, the cover plate is rotated on the protective box through the dial plate. At the same time, the magnetic strip one on the protective box is separated from the magnetic strip two on the cover plate. The user can press the first emergency button through the notch. When the first emergency button is not in use, close the cover plate. Magnetic strip i and magnetic strip ii are adsorbed to fix the cover plate. Protective components can be set to protect the first emergency button. This can prevent users from accidentally touching the emergency button when using crutches, which may occupy public resources.



culmorum, and precisely identifies the gene loci of *Fusarium culmorum* for rapid detection. Compared with the mature and widely used real-time fluorescent PCR method, the present invention does not require a thermal cycler with temperature rising and decreasing function, and can detect whether food and grains contain *Fusarium culmorum* only by a metal bath device, therefore, it has the advantages of high sensitivity, high specificity, rapid and accurate detection and simple operation, and further improves the rapid detection of mold.



21: 2023/01664. 22: 2023/02/10. 43: 2023/04/12
51: C12N; C12Q; C12R
71: Dalian Minzu University
72: ZHENG, Qiuyue, YANG, Aifu, CAO, Jijuan, YANG, Chunhua, CHEN, Liang, WANG, Pin, WANG, Jinling, LI, Xin, JIANG, Bin

54: CRISPR CAS12A-BASED METHOD AND KIT FOR DETECTING FUSARIUM CULMORUM AND APPLICATION OF THE SAME

00: -

Disclosed is a CRISPR Cas12a-based method and kit for detecting *Fusarium culmorum* and application of the same. The kit amplifies the target gene fragment of *Fusarium culmorum* by using the recombinase polymerase amplification (RPA) technology, uses CRISPR Cas12a to specifically target the target gene fragment of *Fusarium*

21: 2023/01665. 22: 2023/02/10. 43: 2023/04/12
51: E01D

71: CHINA RAILWAY FIRST GROUP CO.,LTD, CHINA RAILWAY FIRST GROUP BRIDGE ENGINEERING CO., LTD

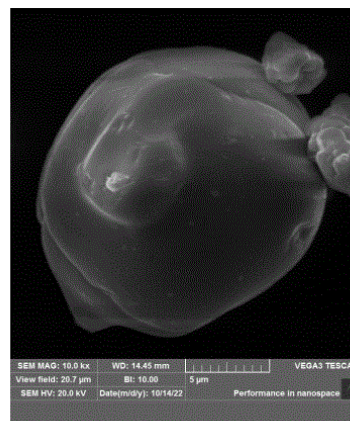
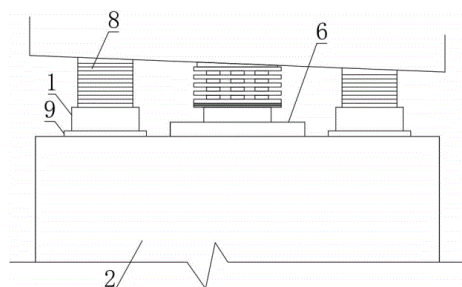
72: WANG, Hu, QIN, Dingsong, TONG, Ligang, XU, Hong, ZHAO, Bin, XU, Changfei, WANG, Zenghui, FENG, Sichao, BI, Zhanglong, SHEN, Jie, CHEN, Qingyun, XING, Liao, XUAN, Xinpeng, LI, Xiaoxia
33: CN 31: 202211107638.6 32: 2022-09-13

54: CONSTRUCTION METHOD OF JACKING-UP AND LOWERING OF STEEL BOX BEAM

00: -

A construction method of jacking-up and lowering of a steel box beam is provided, including the following steps: S1, construction preparation; S2, arranging of jack; S3, jacking up the steel beam through the jack, padding a layer of steel cushion block at the top of the support with the jack falling back, and padding a layer of supporting-cushion steel plate at the top of the jack, such operation being repeated until the steel beam reaches the designed jacking-up height; and S4, jacking up the steel beam through the jack, removing the uppermost steel cushion block on the support with the jack falling back, and removing the uppermost supporting-cushion steel plate on the jack; jacking up the steel beam again through the jack, removing the uppermost steel cushion block on the support with the jack falling back again, and

removing the uppermost supporting-cushion steel plate on the jack.



21: 2023/01667. 22: 2023/02/10. 43: 2023/04/12

51: H01M

71: Kunming University of Science and Technology
72: MENG, Qi, FEI, Zitong, DONG, Peng, ZHANG, Yingjie, LI, Chenchen

54: DEEP EUTECTIC SOLVENT AND METHOD FOR REGENERATING WASTE LITHIUM BATTERY CATHODE MATERIAL BY SAME

00: -

The present invention provides a deep eutectic solvent for regenerating a waste lithium battery cathode material, which is prepared from betaine monohydrate, fructose and a lithium glycol solution. A molar ratio of the betaine monohydrate to the fructose is 1.0-1.4:1, and a molar volume ratio of the betaine monohydrate to the lithium glycol solution is 1.0-1.5 mol/L. A preparation method of the deep eutectic solvent is as follows: mixing the various raw materials and then performing ultrasonic treatment in a normal-temperature water bath environment. The deep eutectic solvent is used to soak the waste lithium ion battery cathode material and heat the same by microwaves to obtain a regenerated cathode material. The deep eutectic solvent provided by the present invention can not only achieve lithium ion supplementation and cobalt ion reduction, but also can be recycled, thus greatly reducing the reagent cost in the recycling process.

21: 2023/01668. 22: 2023/02/10. 43: 2023/04/12

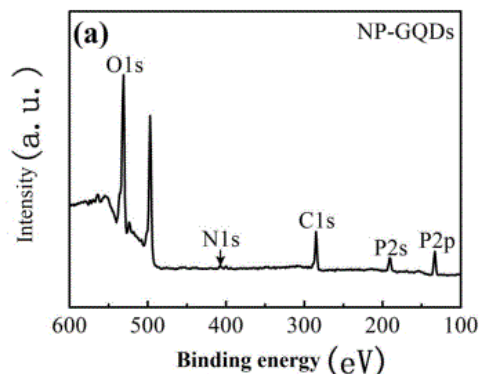
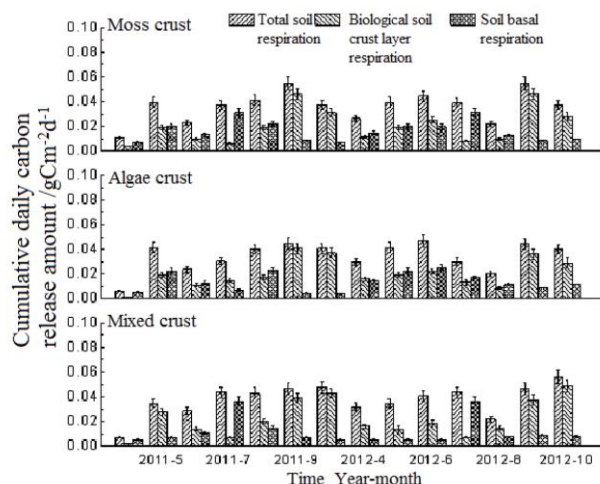
51: G01N

71: Northwest Institute of Eco-Environment and Resources, Chinese Academy of Sciences
72: ZHAO, Yang, LI, Xinrong, ZHANG, Zhishan

54: METHOD FOR DISTINGUISHING BIOLOGICAL SOIL CRUST RESPIRATION FROM UNDERLYING SOIL BASAL RESPIRATION

00: -

Disclosed is a method for distinguishing biological soil crust respiration from underlying soil basal respiration. The method includes: separating a biological soil crust layer from a surface of the soil, loading the biological soil crust layer into a 130-mesh sieve, heating underlying soil of biological soil crust, and placing the sieve filled with the biological soil crust layer on a surface layer of the underlying soil. The method has the advantages that operation is simple; a test result is high in accuracy; interference to the soil is less, and a measurement result is relatively close to a real value; and continuous monitoring can be performed under a field condition. Through the method, a soil respiration rate of each component of the soil covered by the biological soil crust can be accurately determined.



21: 2023/01669. 22: 2023/02/10. 43: 2023/04/12
51: B01J; C01B; C09K; B82Y

71: GUILIN UNIVERSITY OF TECHNOLOGY

72: LI, Ming, WEI, Guiyu, TANG, Tao, CHEN, Dinghan

54: NITROGEN AND PHOSPHORUS CO-DOPED GRAPHENE QUANTUM DOTS AND PREPARATION METHOD THEREFOR

00: -

Provided are nitrogen and phosphorus co-doped graphene quantum dots and a preparation method therefor. The preparation method includes steps as follows: adding 1,3,6-trinitropyrene and a nitrogen and phosphorus co-doped source into deionized water, adjusting a pH value to 11-12, carrying out ultrasonic dispersion, a hydrothermal reaction and cooling, filtration, dialysis, freezing and drying to obtain the nitrogen and phosphorus co-doped graphene quantum dots. According to the method, the nitrogen and phosphorus co-doped source is used as a nitrogen source and a phosphorus source, such that introduction of other impurity atoms is avoided; and the nitrogen and phosphorus co-doped graphene quantum dots are prepared through a simple one-step hydrothermal method.

Photocatalytic efficiency of photocatalytic composites obtained by combining the prepared nitrogen and phosphorus co-doped graphene quantum dots and anatase-type TiO₂ can reach nearly 90 percent after 10 min under ultraviolet light, which shows excellent photocatalytic performance.

21: 2023/01670. 22: 2023/02/10. 43: 2023/04/12
51: G06K

71: Nanjing Rongxin Intelligent Technology Co., Ltd.

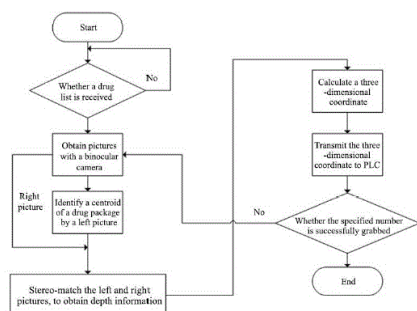
72: CHEN, Chen, HE, Xin, MA, Xuan

33: CN 31: 202211412596.7 32: 2022-11-11

54: POSITIONING METHOD FOR SMALL PACKAGE OF TRADITIONAL CHINESE MEDICINE BASED ON BINOCULAR VISION

00: -

The present invention provides a positioning method for a small package of a traditional Chinese medicine based on a binocular vision, and the method includes: collecting an image of the small package of the traditional Chinese medicine by a binocular camera; using a YOLO-V4-based target identification algorithm to identify a left image, to obtain a coordinate of a center point of the small package of the traditional Chinese medicine; selecting an oriented fast and rotated brief (ORB) algorithm to extract a feature point, and using an improved random sample consensus (RANSAC) algorithm to calculate a homography matrix, to obtain a matching coordinate of the center point in a right image; calculating depth information by calculating a parallax of the left and right images according to a binocular vision ranging principle, and three-dimensionally reconstructing the center point of the small package of the traditional Chinese medicine.



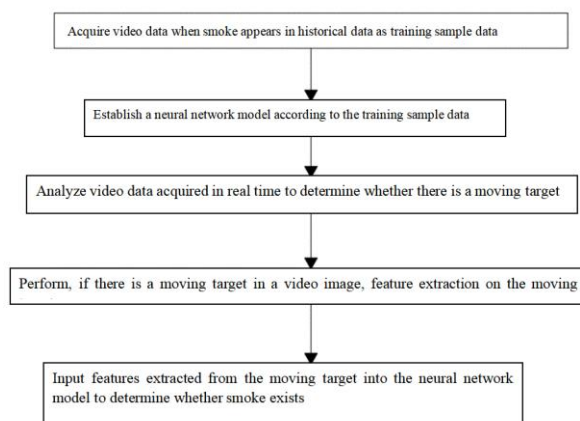
21: 2023/01674. 22: 2023/02/10. 43: 2023/04/12
 51: C09D
 71: JIANGSU JINYANG NEW MATERIAL TECHNOLOGY CO., LTD.
 72: XIAO, Furong, LU, Feng, CAO, Chunxia
54: AN ANIONIC ASPHALT EMULSIFIER FOR SPRAYING QUICK-SETTING RUBBER ASPHALT WATERPROOF PAINT AND PREPARATION METHOD THEREOF
 00: -

The present invention relates to an anionic asphalt emulsifier for spraying quick-setting rubber asphalt waterproof paint, which is composed by the following components in parts by weight: Oleic acid: 1.8-2.4 parts, water: 7.8-8.8 parts, liquid caustic soda: 1.2-1.6 parts, surfactant A: 1.2-1.6 parts, surfactant B: 2.2-2.6 parts, rosin: 5-8 parts. The anionic asphalt emulsifier is a key technology for emulsified asphalt in spraying quick-setting rubber asphalt waterproof paint and enables the emulsified asphalt to harden and form rapidly within 5 seconds to reach the technical index of the bonding strength. The invention further provides a preparation method and a specific application of the anionic asphalt emulsifier.

21: 2023/01675. 22: 2023/02/10. 43: 2023/04/12
 51: G06K
 71: PLA Armored Force Academy
 72: Qu Qiang, Wang Ziqiang, Ji Bogong, Wang Xi, Song Cheng, Liu Zhongxuan, Xie Xiaozhu
54: SMOKE DETECTION METHOD AND APPARATUS BASED ON COMPUTER VISION
 00: -

The present invention discloses a smoke detection method and apparatus based on computer vision, and specifically relates to the technical field of image processing, the method including: acquiring video data when smoke appears in historical data as

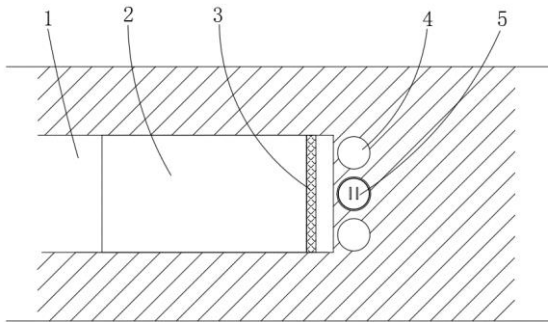
training sample data; establishing a neural network model according to the training sample data; and inputting features extracted from a moving target into the neural network model to determine whether smoke exists. According to the present invention, by analyzing video image content with a computer vision method, a fire alarm system based on video monitoring in a large space and an open area can be monitored, rich on-site image information data can be obtained, a preliminary determination of a fire location and fire size can be provided in time, fire information is provided immediately, and the fire loss is reduced. Meanwhile, comprehensive judgment is performed to attributes of the moving target according to the relationship of moving areas, which can realize real-time smoke detection in large indoor and outdoor spaces, and provides a technical support for fire prevention and control in places such as a large warehouse.



21: 2023/01676. 22: 2023/02/10. 43: 2023/04/12
 51: E21D
 71: China Railway No.8 Engineering Group Co., Ltd
 72: Zhou Xibing, Zhang Zilong, Li Luqian, Hu Jian, Hu Qiming, Ran Quansheng, Liang Shengyou, Zhou Bo, Xie Mingkun
54: A SHIELD CUTTER HEAD REPLACEMENT CONSTRUCTION STRUCTURE BY ENTERING HOLLOW PILE FROM GROUND
 00: -

A shield cutter head replacement construction structure by entering hollow pile from ground is disclosed in the invention, comprising a tunnel and a shield tunneling machine body, wherein the shield tunneling machine body is inside the tunnel, and one end of the shield tunneling machine body is provided with cutter head assembly; With a higher safety

factor of the cutter head replacement method of the invention, when the tunnel collapses unexpectedly, the workers can hide in the hollow pile quickly and be protected in the distance from the ground to the front of the cutter head assembly. No workers will be injured by falling foreign objects such as rocks and soil blocks, which enhancing the safety factor and continence degree of replacing the cutter head; The exit is provided for easy access to the tunnel from the hollow pile to replace the cutter head; Support mechanism is provided to reinforce and prevent the sealing plate from moving after being squeezed, meanwhile, the soil in the surroundings will not enter the hollow pile when it is driven to ground.



21: 2023/01677. 22: 2023/02/10. 43: 2023/04/12
51: G01F

71: Second Institute of Oceanography, Ministry of Natural Resources

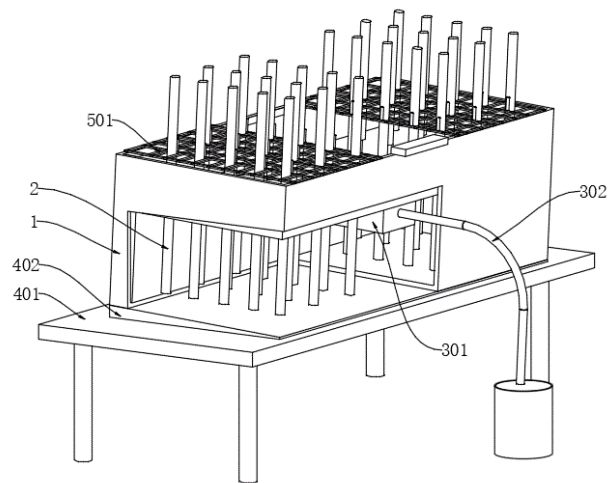
72: Chen Zhongxuan, Song Sheng, Ji Youjun

54: A THREE-DIMENSIONAL MONITORING DEVICE FOR SOIL MASS AND WATER LEVEL IN SIPHON DRAINAGE EXPERIMENT

00: -

The present invention discloses a three-dimensional monitoring device for soil mass and water level in siphon drainage experiment, comprising a mold box, S-type piezometric tubes, siphon experimental devices and experimental support devices. Both S-type piezometric tubes and siphon experimental devices are connected to the mold box with the experimental support device is supported below. One end of the S-type piezometric tube is connected to the mold box by a holder and is below model soil mass. The another end of the S-type piezometric tube is positioned on one side of a displaying stand. There is stratum spongiosum used to simulate groundwater recharge between one side of the model soil mass and inner side of the mold box. The

invention can make sensitive reaction to the water level of the measurement point by setting a mold box, S-type piezometric tubes and siphon experimental devices, adopting S-type piezometric tube and taking advantage of the principle of communicating vessels. Due to the piezometric tube having a smaller diameter and low cost, it has more advantages in measurement, which can gain grid data and is in favor of software process data visually.



21: 2023/01678. 22: 2023/02/10. 43: 2023/04/12
51: E21D

71: China Railway No.8 Engineering Group Co., Ltd

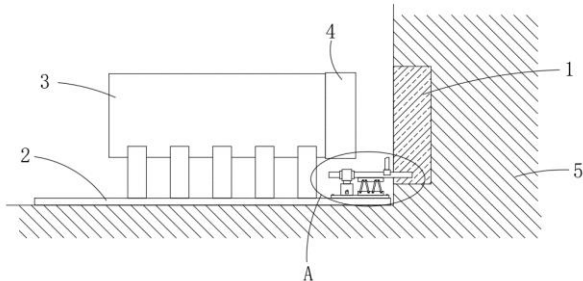
72: Zhou Xibing, Li Luqian, Hu Qiming, Zhang Zilong, Hu Jian, Ran Quansheng, Liang Shengyou, Zhou Bo, Xie Mingkun

54: A CONTROL STRUCTURE TO PREVENT HEAD DOWN AT THE START OF THE SHIELD TUNNELING MACHINE

00: -

A control structure to prevent head down at the start of the shield tunneling machine is disclosed in the invention, comprising soil mass, a portal and a starting base, wherein the portal is arranged on one side of the soil mass, and the starting base is arranged on the top of the soil mass. On the top of the starting base, a shield tunneling machine body that comprises a cutter head assembly installed on the side near the portal is provided; The top of the starting base and the front and rear ends near the portal side are provided with support assembly, the top of which is equipped with cylindrical tracks; By providing cylindrical tracks in the invention, after the shield tunneling machine body entering the portal,

the soil and rock layer inside the portal supports the front end of the shield tunneling machine body. The bearing capacity of the soil and rock layer is improved by the cylindrical track, enabling to support the shield tunneling machine body as the continuation of the starting base, and preventing the cutter head assembly of the shield tunneling machine body from the phenomenon of head down and rear up.



21: 2023/01679. 22: 2023/02/10. 43: 2023/04/12

51: E21D

71: China Railway No.8 Engineering Group Co., Ltd
72: Zhou Xibing, Li Luqian, Zhang Zilong, Hu Jian, Hu Qiming, Ran Quansheng, Liang Shengyou, Zhou Bo, Xie Mingkun

54: A CONSTRUCTION METHOD FOR FINAL DEMOLISHING THE STATION REINFORCEMENT COLUMN

00: -

The present invention discloses a construction method for final demolishing the station reinforcement column, comprising: the reserved hole in the middle plate is reinforced, and due to the middle plate is through by temporary columns, the hole is poured after the middle plate is reserved. First the temporary columns near the middle plate are demolished, and supporting arms for temporary beams are required to perform auxiliary support during the demolition. After that, the columns near the middle plate are cut off one time and assisted by external forklift. During the demolition, the first stage is demolished firstly in top-down order, that is, the basement is demolished first, then the lower basement, and finally the base plate. In demolishing the base plate, its lower part is broken directly by mechanical equipment, and its hole is sealed. Through the above method, the reinforcement columns can be demolished after the construction is completed, achieving the effect of top-down

demolition, which is beneficial to be used and operated and the impassable ground is avoided.

S1. Reinforcing the reserved hole of the middle plate, and due to which is through by the temporary columns, the hole is poured after the middle plate is reserved; To avoid the the construction load caused by the forklift exerts concentrated stress on the hole and damage the middle plate structure of the station in the construction process, the bracket is set up on the lower basement to reinforce the orifice;



S2. Erecting the supporting arms for temporary beams to pre-support the temporary beams before the temporary columns are demolished;



S3. Demolishing the temporary columns near the middle plate, and cutting off the columns near the middle plate first and assisted by the forklift in the first stage;



S4. Demolishing the temporary columns; After demolishing the first stage, the lifting holes are positioned on the upper of the temporary columns, and demolishing the temporary columns of the low basement to the base of the temporary beam in down-top order; After completed, the temporary columns in lower basement are demolished;



S5. Demolishing the temporary columns in the base plate; After demolishing the temporary columns near the base plate, the lower part of which is broken by mechanical equipment; And after that, the hole in the base plate is sealed.

21: 2023/01707. 22: 2023/02/13. 43: 2023/04/12

51: B23K

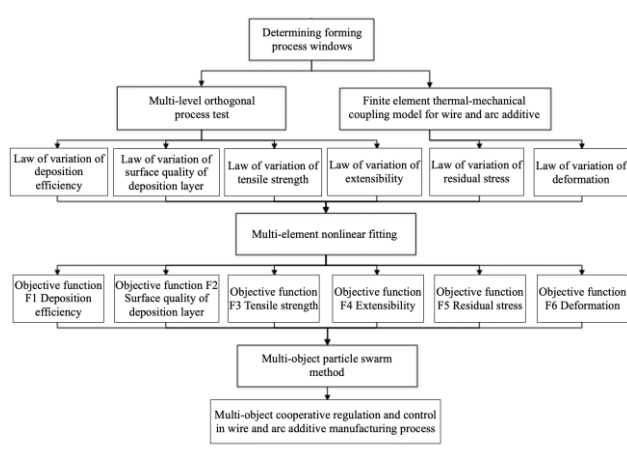
71: CHINA UNIVERSITY OF MINING AND TECHNOLOGY, Shandong Jiaotong University Mechanical Equipment Technology Co., Ltd
72: GENG Ruwei, CHAO Luqiang, CHENG Yanhai
33: CN 31: 202210550154.2 32: 2022-05-20

54: METHOD FOR MULTI-OBJECT COOPERATIVE REGULATION AND CONTROL IN WIRE AND ARC ADDITIVE MANUFACTURING

00: -

The present invention discloses a method for multi-object cooperative regulation and control in wire and arc additive manufacturing, which comprises the following steps: determining process windows of wire and arc additive forming, performing single-factor wire and arc additive process tests and mechanical performance tests of members on this basis, and establishing multi-element nonlinear

objective functions of deposition efficiency, surface quality of a deposition layer and mechanical performance relative to process parameters; establishing a finite element thermal-mechanical coupling model to calculate residual stress and deformation of the members, and obtaining objective functions of the residual stress and the deformation according to tests and numerical simulation results; and realizing cooperative regulation and control among multiple indexes by using a multi-object particle swarm method to obtain an optimal combination of the process parameters. The present invention can form a wire and arc additive member featuring all of high efficiency, high surface quality, high mechanical performance and low residual stress and deformation, thus realizing multi-object cooperative regulation and control during a wire and arc additive process, which is of significant referential value for other additive manufacturing processes in their cooperative optimization.



21: 2023/01708. 22: 2023/02/13. 43: 2023/04/12
51: C12P; C12R

71: Jining University

72: SHI, Yanqiu, ZHANG, Hongmei, CHANG, Yanhong, LI, Yanlian, CUI, Fengxia, LI, Mingli, XIAO, Chuan, YUAN, Qipeng

54: METHOD FOR INCREASING YIELD OF BETA-CAROTENE PRODUCED BY FERMENTATION OF BLAKESLEA TRISPORA

00: -

The present invention particularly relates to a method for increasing yield of beta-carotene produced by fermentation of *Blakeslea trispora*. When *Blakeslea trispora* is used for liquid submerged fermentation, an ethephon solution with a certain concentration is added, ethephon releases

ethylene slowly, and the ethylene plays a role of promoting carotenoid synthesis related genes on the transcriptional level, so that massive accumulation of beta-carotene is promoted, and the fermentation yield of beta-carotene is increased. The method is low in cost, simple and convenient to operate and obvious in effect, and can replace various fermentation accelerators such as an oxygen carrier, a surfactant and a precursor substance to increase the yield of beta-carotene. Compared with a blank control group, the yield of beta-carotene is increased by 54-78 percent, and moreover, the fermentation period is shortened to 2 days from the original 5 days and is shortened by 60 percent.

21: 2023/01709. 22: 2023/02/13. 43: 2023/04/12
51: E02D

71: SHAANXI HISTORIC STYLE BUILDING AND GARDEN CONSTRUCTION GROUP COMPANY LTD.

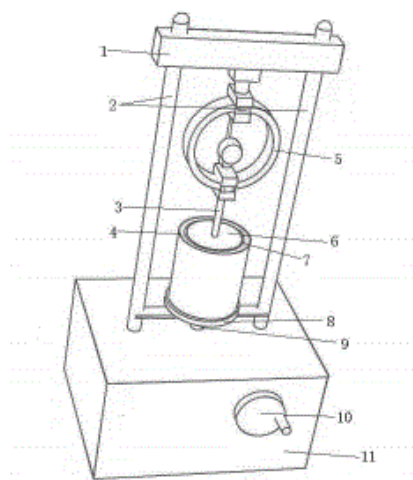
72: JU, Junpeng, NIU, Xiaoyu, SI, Jianhui, HE, Lizhe, WANG, Yi, WANG, Di, XIANG, Junlin, ZHOU, Xuwen, WANG, Zhen, ZHOU, Yuan, LIU, Yefeng, MA, Peiyuan

33: CN 31: 202223562913.1 32: 2022-12-30

54: REACTION TESTER FOR LIME SAND PILE

00: -

Disclosed is a reaction tester for a lime sand pile, including a bracket, a height adjusting mechanism and a force measuring mechanism, and a sample filling mechanism, wherein the sample filling mechanism includes a transparent water injection tube, a sample tube and a cover plate, wherein a water injection cavity for injecting water is formed between the inner wall of the water injection tube and the outer wall of the test tube, and several through holes are formed in the side wall of the sample tube and plugged with cotton ropes; the force measuring mechanism includes a force measuring ring and a force transfer rod; the height adjusting mechanism is configured to adjust the height of the sample tube. By using the reaction tester, expansive forces of different soils or dilatants can be measured, and the proportional relation between the sample volume and the expansive force can be obtained.



21: 2023/01710. 22: 2023/02/13. 43: 2023/04/12
51: C09D; C10M; C10N
71: Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences
72: XU, Haiyan, WAN, Hongqi, YE, Yinping, CHEN, Lei, ZHOU, Huidi, CHEN, Jianmin, LI, Hongxuan
54: HIGH-STRENGTH LONG-SERVICE-LIFE SOLID LUBRICATING COATING FOR MAIN FUEL PUMP OF AERO-ENGINE

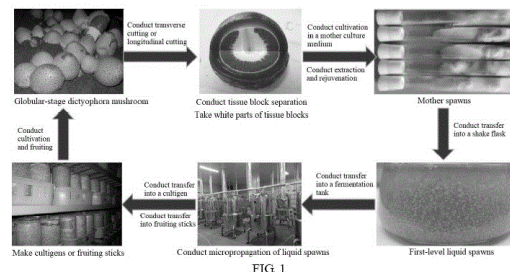
00: -

The present invention relates to a high-strength long-service-life solid lubricating coating for a main fuel pump of an aero-engine. The coating is prepared from the following components by weight: 15-25 percent of polyamide imide, 1-4 percent of epoxy resin, 6-12 percent of graphite, 0.2-0.8 percent of silver powder, 1-2 percent of antimony trioxide, 0.6-0.8 percent of nano trifluoride and the balance a mixed solvent, where the mixed solvent is formed by uniformly mixing 25-75 percent of N, N-dimethylformamide and 25-75 percent of 1-methyl-2-pyrrolidone by volume. The present invention has good adhesion to a metal substrate, has excellent tribological properties under high loads (980 N and 1120 N), and especially has a lower friction coefficient and quite high friction durability under lubrication of RP-3 aviation kerosene.

21: 2023/01711. 22: 2023/02/13. 43: 2023/04/12
51: A01G
71: Guizhou Institute of Crop Germplasm Resources
72: GONG, Guanglu, ZHU, Guosheng, LIU, Qingcheng, HUANG, Wanbing, YANG, Tongjing, GUI, Yang, LU, Yingying, LIU, Hongyu, LI, Biao, HUANG, Xiaorun, SHANG, Nianjie

54: FUNGUS BAG REMOVING AND SOIL COVERING CULTIVATION TECHNOLOGY FOR DICTYOPHORA RUBROVALVATA IN GUIZHOU
00: -

The present invention provides a fungus bag removing and soil covering cultivation technology for dictyophora rubrovalvata in Guizhou. The technology mainly includes the following steps: (1) fungus stick production; (2) fungus bag removing and soil covering cultivation; (3) planting management; (4) disease and pest control; (5) harvesting; and (6) processing. The present invention uses a liquid spawn technology to produce fungus sticks, such that stability and consistency of spawns are improved, and a production cycle is shortened; sawdust, cottonseed hulls, wheat bran and other agricultural and forestry wastes replace wood blocks, so as to improve a conversion rate; fruiting is facilitated, a cycle is short, occurrence of diseases and pests is reduced, and cost is decreased; and multi-mode planting is achieved, such that an application range of dictyophora rubrovalvata is improved, and development of the dictyophora rubrovalvata to a wider area is promoted.



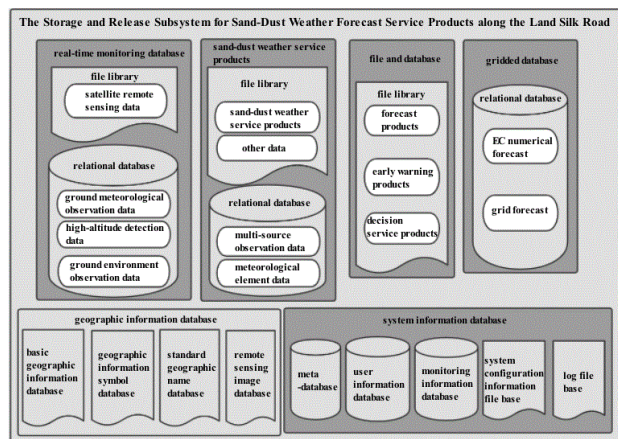
21: 2023/01713. 22: 2023/02/13. 43: 2023/04/12
51: G06T

71: Lanzhou Central Meteorological Observatory (Lanzhou Drought Ecological Environment Monitoring and Prediction Center)
72: Yong Wang, Dong Wei, Xiaohong Di, Hong Sha, Rong Li, Haojun Qin, Junxia Zhang, Qiang Song

54: A STORAGE AND RELEASE SYSTEM FOR SAND-DUST WEATHER FORECAST SERVICE PRODUCTS
00: -

A storage and release system for sand-dust weather forecast service products, comprising real-time monitoring database, sand-dust weather service product database, file and database, gridded database, geographic information database and

system information database, the real-time monitoring database, sand-dust weather service product database, file and database, gridded database are business databases; the geographic information database and system information database are support databases; the invention not only reduces redundant storage of data, but also can obtain observation data from the database in real time; the storage architecture of the invention is mainly based on the traditional storage service support composed of the relational database and the shared file system, supplemented by cloud storage service support; traditional storage services support data transmission, data processing and monitoring management, while cloud storage services support some data sharing services and decision support, the two modes can coexist.



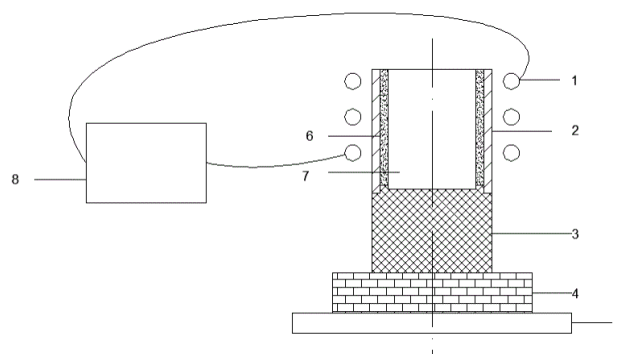
21: 2023/01714. 22: 2023/02/13. 43: 2023/04/12
51: C23C

71: Shenyang University of Technology
72: ZHANG, Chunhua, ZHUANG, Siming, WU, Chenliang, WU, Hao, ZHAO, Te, ZHANG, Song
54: A LOW-COST METHOD FOR PREPARING HIGH ENTROPY ALLOY COATINGS

00: -

The invention relates to a low-cost method for preparing high entropy alloy coatings, which is used for induction cladding of high entropy alloy coatings by using an ultrasonic induction heating power supply. The CoCrFeMnNi high entropy alloy coating with certain thickness is prepared by induction cladding technology on the surface of C45E4 steel rod by using ultrasonic induction heating power supply. The CoCrFeMnNi high entropy alloy coating

prepared on the surface of C45E4 steel by induction cladding technology presents a single FCC structure and has a dendrite-dendrite structure. The coating is firmly bonded to the substrate. The high entropy alloy coating prepared on the surface of C45E4 steel by induction cladding can effectively improve the hardness, corrosion resistance and other properties of C45E4 steel.



21: 2023/01715. 22: 2023/02/13. 43: 2023/04/12
51: B23K

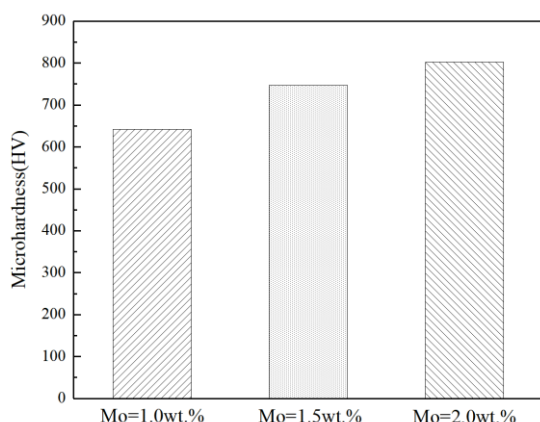
71: Shenyang University of Technology
72: ZHANG, Chunhua, ZHANG, Hanfang, WU, Hao, DU, Yi, WU, Chenliang, ZHANG, Song

54: A POWDER AND TECHNICAL METHOD USED FOR LASER MELTING DEPOSITION OF FERRITIC STAINLESS STEEL

00: -

The invention involves a powder and technical method used for laser melting deposition of ferritic stainless steel. The ferritic stainless steel powder is characterized by nominal composition in wt.%: 0.15-0.20 C, 16.50-17.0 Cr, 1.70-1.75 Ni, 1.25-1.35 B, 1.15-1.2 Si, 0.10-0.30 La, 1.0-2.0 Mo and balance Fe. A technical method for preparing corrosion-resistant stainless steel using the powder used for laser melting deposition of ferritic stainless steel: Step 1: vacuum smelting, gas atomization and sieving; Step 2: drying; Step 3: polish, clean and dry the 35CrMo substrate, and then the powder is melted and deposited on the surface of the 35CrMo substrate; Step 4: Conduct multiple laser melting and deposition. The as-deposited ferritic stainless steel specimens are homogeneous without airholes or other defects and observed the laser track with apparent squamose structure. The typical dendrite and interdendrite structures are observed, and the grains are obviously refined with the increase of Mo element. The addition of Mo can effectively improve

the electrochemical corrosion performance of materials.



21: 2023/01716. 22: 2023/02/13. 43: 2023/04/12
51: B60T

71: Shenzhen Polytechnic

72: Xiaochun ZHU, Zhengkun CHENG, Hua XIA,
Zhurong DONG, Zhijun DENG, Yang ZHAO

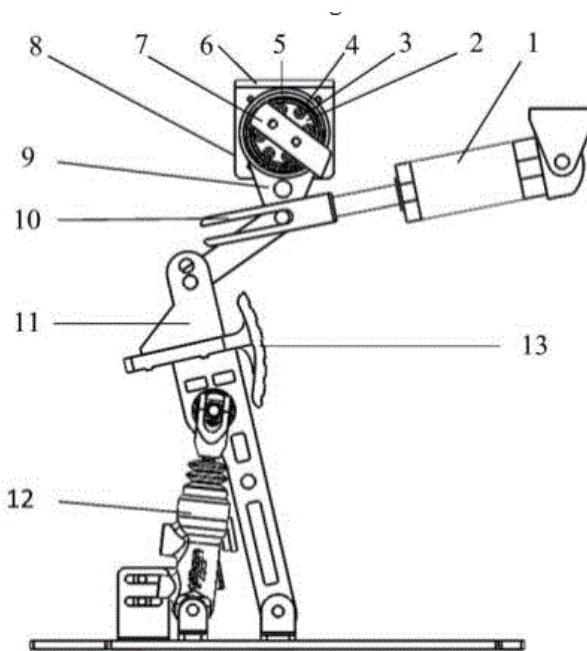
33: CN 31: 202210735612.X 32: 2022-06-27

54: A DRIVERLESS BRAKE SYSTEM FOR AUTOMOBILES

00: -

The invention discloses a driverless brake system for automobiles, the system comprises a brake pedal, a brake cylinder movably connected with the brake pedal, and a first brake mechanism, a second brake mechanism and a connecting rod, wherein the first brake mechanism and the second brake mechanism are respectively hinged to one end of the connecting rod, and the other end of the connecting rod is hinged to the brake pedal; When the braking condition is driverless, the first brake mechanism rotates the connecting rod to push the brake pedal to generate braking action; In case of emergency braking condition in unmanned driving, the second brake mechanism pushes the connecting rod to make the brake pedal produce braking action.

Through the invention, the two working conditions of artificial braking and driverless braking are parallel, and the mechanical structure does not interfere with each other; At the same time, normal braking and emergency braking are realized without interference under the driverless condition. The problems of controllability, control flexibility and accuracy of braking force are solved.



21: 2023/01717. 22: 2023/02/13. 43: 2023/04/12
51: G08B

71: Shaanxi Institute of International Trade & Commerce

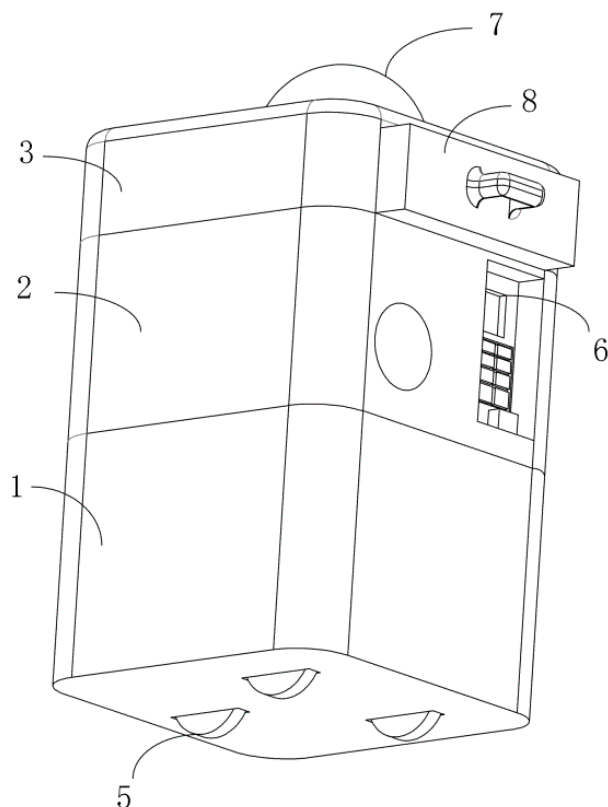
72: Yanrong Liu, Hengni Ren, Rong Miao, Lijun Wang

54: A COMMUNITY SMART HEALTH ALARM DEVICE

00: -

This invention relates to the field of life health monitoring technology, in particular to a community intelligent health alarm device, including a first component, a second component, a third component, a driving device, a slave wheel, a communication device, a signal receiver and a drug box. The first component comprises a first shell, a connecting platform and a control system, and the driving device is fixedly connected with the first shell. The rotating connection between the driving wheel and the connecting table, and the control system controls the operation of the driving device to realize the community smart health alarm equipment cruise in the community; The signal receiver is fixed on the upper surface of the third component for receiving and sending information; The communication device is fixedly connected with the second component, and the communication device is used to realize the function of communication and emergency call. The drug box is connected with the third component. The drug box is used to store commonly used drugs. The

advantages of this invention are that it can cruise in the community, users who need to use it can use it, and the device can be moved nearby through the calling function.



21: 2023/01718. 22: 2023/02/13. 43: 2023/04/12

51: D06M

71: JIHUA 3542 TEXTILE CO., LTD.

72: TANG, Jiandong, FENG, Xiangwei, DENG, Yunlong, ZHAO, Shengnan, LI, Mengxiang, ZHENG, Minbo, FAN, Yonggang, CHEN, Guoxiang, DENG, Xiaohong, ZHOU, Yongyou

54: PRODUCTION PROCESS FOR SIZING FLAME-RETARDANT WARP YARNS BY USING WATER-SOLUBLE POLYESTER SIZE

00: -

Disclosed is a production process for sizing flame-retardant warp yarns by using a water-soluble polyester size. The production process includes the following steps: S1, feeding some water, water-soluble polyester size, polyacrylic acid, modified starch and auxiliary agent into a high-pressure barrel; S2, boiling the slurry for a while, and letting it stand until the slurry concentration and viscosity reach the standard; S3, pumping the slurry to a slurry box, boiling it, and measuring the slurry

concentration and viscosity again; S4, recording and comparing the differences between the concentrations and viscosities measured in S3 and S2, and adjusting a slurry formula; and S5, sizing flame-retardant warp yarns by using the slurry in S3. By adjusting a polymerization component, the slurry can also be mixed with starch and PVA for staple fiber yarn sizing, which greatly reduces the production cost, while improving a cloth machine production efficiency to 89 percent.

21: 2023/01719. 22: 2023/02/13. 43: 2023/04/12

51: A01K

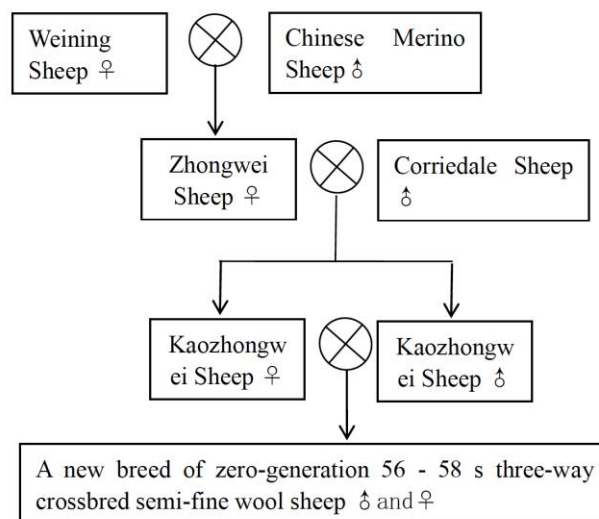
71: Bijie Institute of Animal Husbandry and Veterinary Science, Guizhou Xinwumeng Ecological Animal Husbandry Development Co., Ltd.

72: SONG, Derong, ZHOU, Darong, PENG, Hua, GUO, Zhengang, WANG, Zhonggui, WU, Ying, LIAO, Jiafa, LIU, Qichang, WU, Ping, WU, Ruiru, MA, Jinping

54: METHOD FOR CULTIVATING NEW BREED OF 48 - 58 S THREE-WAY CROSSBRED SEMI-FINE WOOL SHEEP

00: -

The present invention relates to the technical field of animal genetics and breeding, in particular to a method for cultivating a new breed of 48 - 58 s three-way crossbred semi-fine wool sheep.



21: 2023/01720. 22: 2023/02/13. 43: 2023/03/30

51: A61K

71: Jinan University

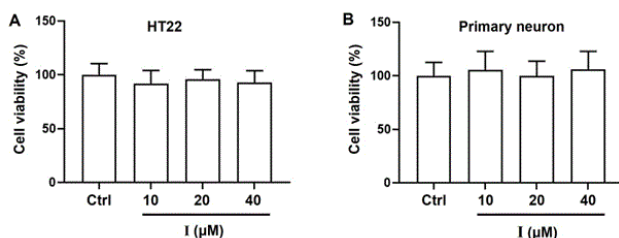
72: ZHANG Shiqing, WANG Guiyang, HU Lijun, WU Zhenlong, WANG Ying, SHI Lei, YE Wencai

33: CN 31: 2023100594210 32: 2023-01-18

54: APPLICATION OF PYRIDINE-QUINOLIZIDINE ALKALOIDS IN PREPARING DRUGS FOR PREVENTING AND TREATING NEURODEGENERATIVE DISEASES

00: -

The invention discloses an application of pyridine-quinolizidine alkaloids in preparing drugs for preventing and treating neurodegenerative diseases, and belongs to the technical field of natural pharmaceutical chemistry and pharmacology. The molecular formula of pyridine-quinolizidine alkaloids disclosed by the invention is $C_{18}H_{20}N_2O_3$; the neurodegenerative diseases include diseases caused by ischemia and hypoxia or amyloid Beta-protein's disease. According to the invention, it is found for the first time that the prepared pyridine-quinolizidine alkaloids can effectively improve oxygen and glucose deprivation/reoxygenation and amyloid Beta-protein-induced neuronal damage, and can promote the spatial learning and memory ability of mouse model of Alzheimer's disease and improve cognitive impairment. The experimental results of the invention prove that the prepared pyridine-quinolizidine alkaloids has the potential to treat neurodegenerative diseases including ischemic stroke and Alzheimer's disease, provides a new treatment idea for stroke and AD diseases, and has broad application and development prospects.



21: 2023/01724. 22: 2023/02/13. 43: 2023/03/30

51: C04B

71: Zhengzhou University of Aeronautics

72: ZHU Qian

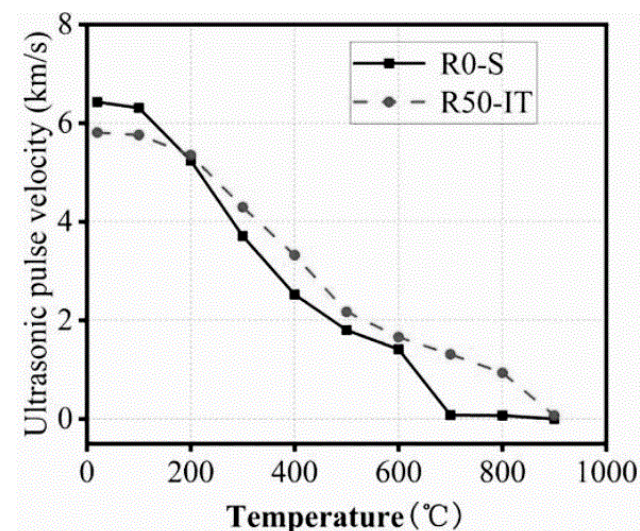
33: CN 31: 202310078895X 32: 2023-01-16

54: HIGH-TEMPERATURE RESISTANT IRON TAILINGS RECYCLED AGGREGATE CONCRETE AND PREPARATION METHOD THEREOF

00: -

The invention discloses a high-temperature resistant iron tailings recycled aggregate concrete and a preparation method thereof, and relates to the technical field of concrete preparation. According to

parts by mass, the raw materials of high-temperature resistant recycled aggregate concrete from iron tailings include: 164.00 parts of water, 307.50 parts of cement, 102.50 parts of fly ash, 768.00 parts of iron tailings, 330.00-1,100.00 parts of recycled coarse aggregate, 0.00-1,100.00 parts of natural gravel, 3.28 parts of water reducer and 0.5 percent of additional water. The sum of the usage of the recycled coarse aggregate and the natural gravel is 1100.00 parts. The invention makes full use of construction waste and industrial solid waste, and can solve the problems of natural resource shortage and storage of construction waste and industrial waste. The concrete prepared by the invention basically has no strength loss at about 200 degree Celsius, and has excellent high temperature resistance.



21: 2023/01725. 22: 2023/02/13. 43: 2023/04/12

51: C12Q

71: Zhejiang Academy of Agricultural Science

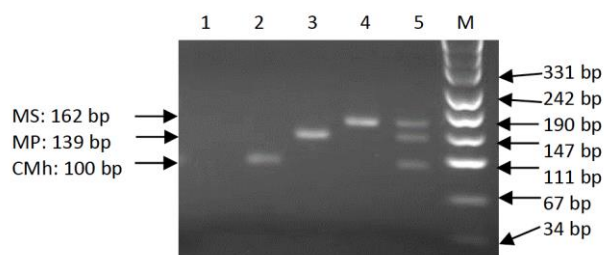
72: Yuan Fu, Tuanyuan Shi, Hongchao Sun, Lihua Xu, Xiufang Yuan, Deqian Wang, Junxing Li, Bin Yu, Fei Su

54: DETECTION METHOD AND APPLICATION OF MYCOPLASMA SUIS, MYCOPLASMA PARVUM AND CANDIDATUS MYCOPLASMA HAEMOSUIS

00: -

The invention discloses primer, probe and kit for fluorescent quantitative detection of Mycoplasma suis, Mycoplasma parvum and Candidatus Mycoplasma haemosuis. The primers and probes are shown in sequence tables SEQIDNO: 1 to SEQIDNO: 9. The invention also discloses a

fluorescent quantitative PCR detection kit containing the primers and the probes. By using the detection kit of the invention, three important Hemotropic mycoplasma suis infections can be detected and distinguished at the same time, so that once sampling and once analysis are realized, and technical support is provided for the research and prevention and control of the disease.



21: 2023/01726. 22: 2023/02/13. 43: 2023/04/12
51: B09C

71: Shanghai Polytechnic University

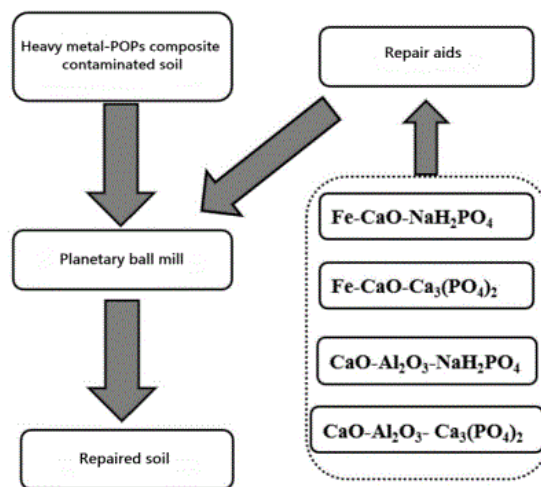
72: Xiaoyan WANG, Junying XIE, Yingjie SHEN, Kaiyou HUANG, Qing HUANG, Lifei CHEN, Wenyi YUAN

54: A MECHANOCHEMICAL REMEDIATION METHOD FOR HEAVY METAL-POPS CONTAMINATED SOIL

00: -

The invention belongs to the field of heavy metal-persistent organic composite pollution soil treatment technology, in particular to a mechanochemical remediation method for heavy metal-POPs composite contaminated soil. The specific steps of this method are as follows: Firstly, the natural air-dried heavy metal composite contaminated soil was coarsely crushed and sieved, and then the screened contaminated soil, remediation additives, and zirconia grinding balls were placed in a zirconia ball mill in a planetary ball mill for mechanochemical ball milling reaction. The invention transforms heavy metals in contaminated soil from easy-to-migrate ion form to a stable insoluble state by mechanochemical ball milling reaction with additional repair aid to achieve its solidification and stabilization. At the same time, the POPs organic matter in contaminated soil is dehalogenated and the benzene ring is opened to achieve its efficient degradation. The method has the advantages of simple operation, clean and efficiency, and no secondary pollution. It is

a promising remediation method for heavy metal-POPs composite contaminated soil.



21: 2023/01728. 22: 2023/02/13. 43: 2023/04/12
51: A01G

71: Dalian Ocean University

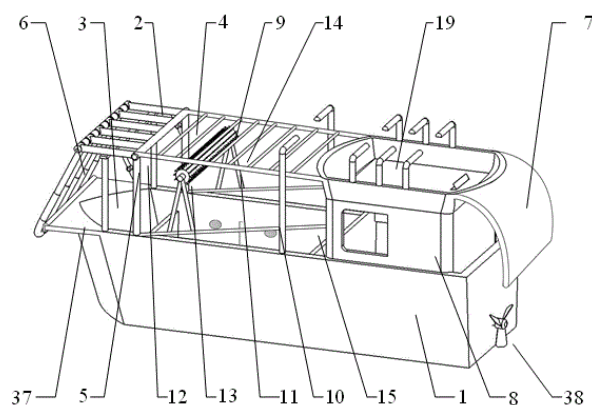
72: Shang NI, Gang MU, Yilin ZHAI, Jiahong TANG, Wei LU, Wei CHANG, Zhuo CHEN

54: A KIND OF HARVESTING AND ACIDIFICATION INTEGRATED LAVER HARVESTING BOAT

00: -

The invention discloses a kind of harvesting and acidification integrated laver harvesting ship, including a ship hull and a net curtain lifting structure set above the ship hull, a T-shaped telescopic shaft is set below the net curtain lifting structure, the T-shaped telescopic shaft is fixed on the ship hull, a T-shaped telescopic frame is set on one side of the T-shaped telescopic shaft, a motorized telescopic rod is set on the T-shaped telescopic frame, a motorized telescopic rod is connected to the net curtain lifting structure, a free There is an acidification structure on one side of the acidification structure, and there is a fixed stopper on one end of the acidification structure, and there is a control room under the acidification structure, and the control room is fixed on the hull of the ship. This invention adopts the above structure of a kind of harvesting and acidification integrated seaweed harvesting boat, using the net curtain lifting structure, harvesting structure and acidification structure to reduce the cost of harvesting, reduce the number of personnel

work and safety risks, adding the design of short spray device and long spray device to improve the efficiency and quality of harvesting.



21: 2023/01729. 22: 2023/02/13. 43: 2023/03/02

51: A61K; A61P

71: ZHONGYIANKE BIOTECH CO., LTD

72: GAO, Hui

54: QUADRIVALENT INFLUENZA VIRUS SUBUNIT VACCINE AND PREPARATION METHOD THEREOF

00: -

The present invention belongs to the field of biotechnology, and particularly relates to a quadrivalent influenza virus subunit vaccine and a preparation method thereof. Each dose of the quadrivalent influenza virus subunit vaccine contains four component of H1N1, H3N2 and two influenza B viruses. The quadrivalent influenza virus subunit vaccine is prepared by virus inoculation, virus proliferation culturing, allantoic fluid harvesting, clarification, inactivation, ultrafiltration concentration, splitting and ultracentrifugation purification, mixing, filtration and sterilization, subpackaging and packaging, wherein the inactivation comprises the following steps: firstly adding a carboxymethyl dextran solution into a univalent virus harvesting solution, and then adding formaldehyde for inactivation. The method provided by the present invention reduces the content of free formaldehyde in the prepared quadrivalent influenza virus subunit vaccine, prolongs the storage life of the vaccine, and improves the antibody level after vaccine immunization.

21: 2023/01735. 22: 2023/02/13. 43: 2023/04/12

51: H02B

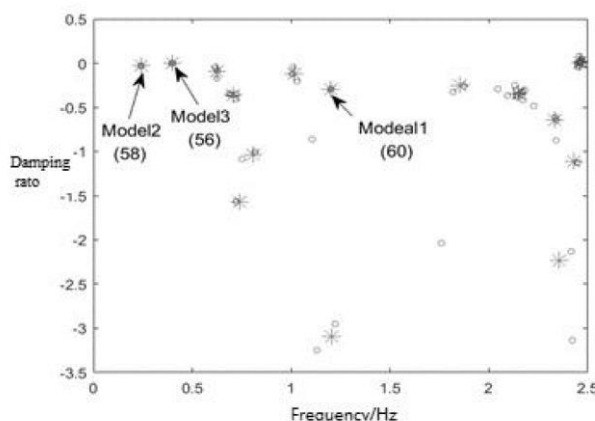
71: Tianjin University, State Grid Nanjing Power Supply Company

72: Tengmu Li, Zhiyuan Wang, Yandi Wang, Xiaodong Jiang

54: A SUBSPACE-BASED MODE RECOGNITION METHOD FOR DYNAMIC STABILITY OSCILLATIONS IN POWER SYSTEMS

00: -

A low frequency oscillation mode parameter identification method based on FCM clustering is disclosed, which belongs to the field of power system oscillation mode identification technology. It preprocesses at least one measurement data of the power system collected by phasor measuring unit (PMU). With the pre-processed measurement data as input, the multi-order stochastic subspace calculation is carried out to obtain the identification results under different orders of the power system. By using fuzzy C-means clustering (FCM), the minimum order of the system oscillation is determined according to the number of elements in each class, and the identification values of oscillation parameters can be obtained by clustering center. In this invention, all possible oscillation modes are captured by multi-order calculation. The identification results are clustered by FCM, and the real modes are easy to be clustered.



21: 2023/01736. 22: 2023/02/13. 43: 2023/04/12

51: G08G

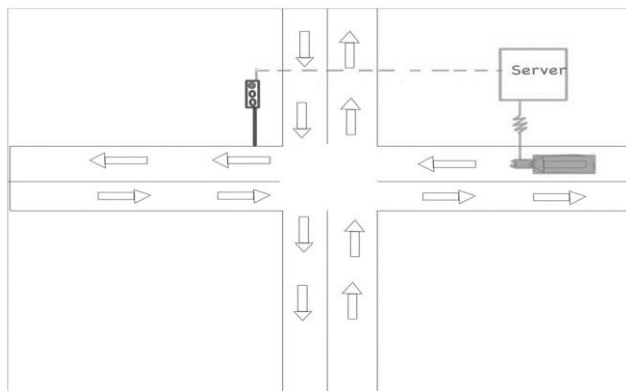
71: DR. VISHWANATH KARAD MIT -WORLD PEACE UNIVERSITY, CHINCHMALATPURE, Suyash Vijaykumar, PAWAR, Rajendra G., DIXIT, Bharati

72: CHINCHMALATPURE, Suyash Vijaykumar, PAWAR, Rajendra G., DIXIT, Bharati

54: AN EMERGENCY VEHICLE FRIENDLY SMART TRAFFIC SIGNAL

00: -

The present invention relates to an emergency vehicle friendly smart traffic signal. This is a smart signal which will use computer vision to determine the amount of traffic and compute the time required for the traffic to clear the signal. Hence a locating only the required green signal timing. Hence reducing the wasted time on signal.



21: 2023/01737. 22: 2023/02/13. 43: 2023/04/12

51: A61K

71: SECOND AFFILIATED HOSPITAL OF NANCHANG UNIVERSITY

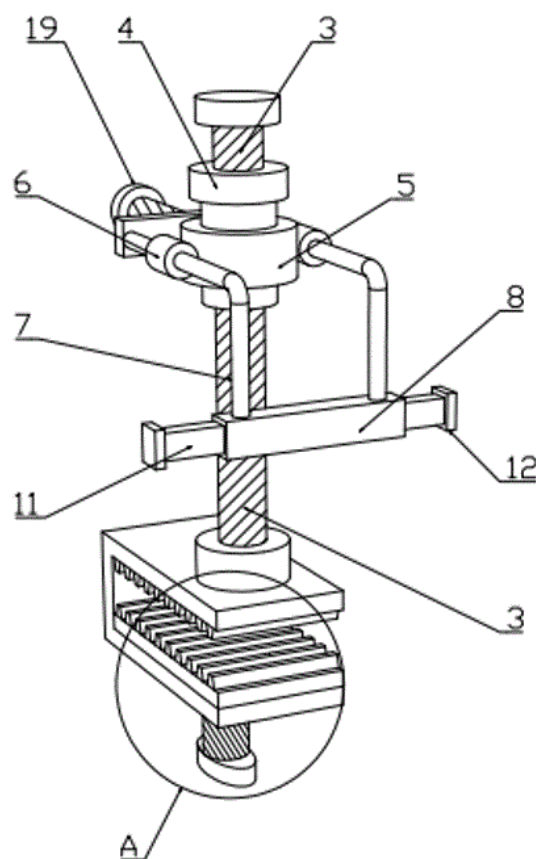
72: Rongfa YUAN, Rui SUN, Zhimeng CHEN, Kuiyuan LAI, Xuliang HU

54: UNFOLDING AND FIXING DEVICE FOR PANCREATIC TUMOR OPERATION

00: -

The present disclosure relates to the field of operation instruments, in particular to an unfolding and fixing device for a pancreatic tumor operation. The unfolding and fixing device for the pancreatic tumor operation includes a pedestal, where a rotary base is disposed on the pedestal, a detachable regulating rod is disposed on the rotary base, a regulating sleeve that is in threaded connection with the regulating rod is disposed on the regulating rod; an installation sleeve that is in rotary connection with the regulating sleeve is sleeved outside the regulating sleeve, and an unfolding and fixing assembly is disposed on the installation sleeve. The unfolding and fixing assembly includes support members, which are disposed at two sides of the installation sleeve, and horizontally sliding unfolding and fixing rods are respectively disposed on two groups of support members; each unfolding and fixing rod is a bending structure, one end of the

unfolding and fixing rod is downwards and connected to an unfolding and fixing frame, and the other end of the unfolding and fixing rod is backwards and connected to a translation base; a threaded rod I that is in threaded connection with the translation base is disposed on the translation base; and one end of the threaded rod I is rotationally connected to the installation sleeve, and the other end of the threaded rod I is connected to a handle I. The unfolding and fixing device provided by the present disclosure may regulate an unfolding and fixing angle, an unfolding and fixing height and an unfolding degree. A single-side unfolding and fixing mode or a two-side unfolding and fixing mode may also be selected, without affecting the operation vision of doctors, so as to ensure the smooth pancreatic tumor operation.



21: 2023/01738. 22: 2023/02/13. 43: 2023/04/12

51: G06N

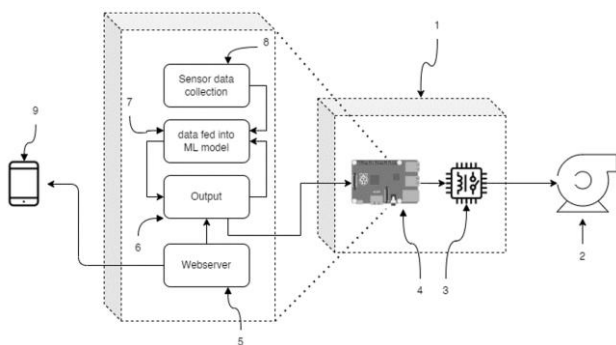
71: DR. VISHWANATH KARAD MIT -WORLD PEACE UNIVERSITY, KALE, Preeti Amit, PUROHIT, Swaraj, SALUJA, Dhairya

72: KALE, Preeti Amit, PUROHIT, Swaraj, SALUJA, Dhairya

54: AN OFFLINE SMART IRRIGATION SYSTEM ENABLED WITH MACHINE LEARNING AND RASPBERRY-PI

00: -

A smart irrigation management (SIM) system is invented to predict irrigation requirements and make efficient water application. The SIM system utilizes sensing nodes, deployed in a crop field, to observe soil moisture, soil temperature, air temperature, ultraviolet (UV) radiation, and relative humidity. These sensing data are applied to or combined with solar radiation data to make an accurate crop water requirement prediction. The intelligent algorithm predicts the irrigation requirements based on the above-mentioned physical factors and the measured plant attribute data from variables from simple crop models, such as the soil evaporation function and the water use efficiency function. Moreover, the implemented scheme provides for closed-loop control of water delivery, resulting in a fully autonomous irrigation system. The proposed smart irrigation management scheme is applicable to precision farming for resource-saving agricultural operations.



21: 2023/01739. 22: 2023/02/13. 43: 2023/04/12
51: G06Q

71: DR. VISHWANATH KARAD MIT -WORLD PEACE UNIVERSITY, KULKARNI, Pradnya Vaibhav, BHAMARE, Mamta, NAIK, Udayan, NIRFARAKE, Chaitanya, DATAR, Aditya, NAGARKAR, Ajinkya

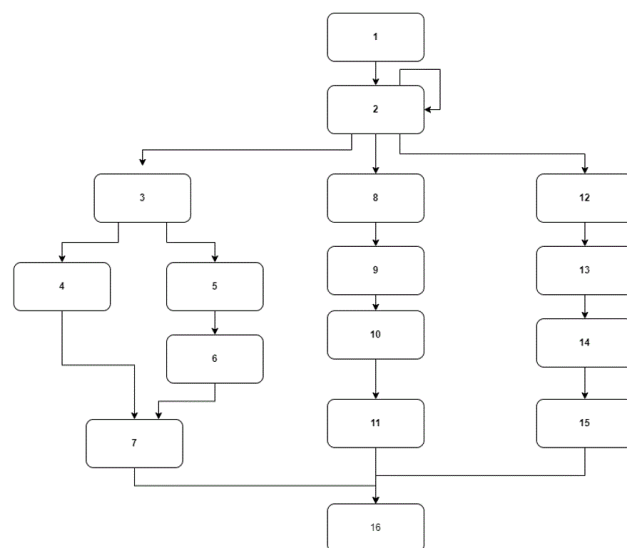
72: KULKARNI, Pradnya Vaibhav, BHAMARE, Mamta, NAIK, Udayan, NIRFARAKE, Chaitanya, DATAR, Aditya, NAGARKAR, Ajinkya

54: A CRYPTO WALLET FOR FARMERS

00: -

The present invention relates to a secure hardware crypto wallet consisting of a raspberry pi, linked to

UDI (Unique Device Identification), which is secured by a fingerprint scanner and a camera. In the near future, the Indian Government is planning to issue crypto in the form of CBDC (Central Bank Digital Currency). To make sure cryptocurrencies which are issued by the government reach the last person in the economy, a cheap yet secure crypto wallet will be needed.



21: 2023/01740. 22: 2023/02/13. 43: 2023/04/12
51: F24S

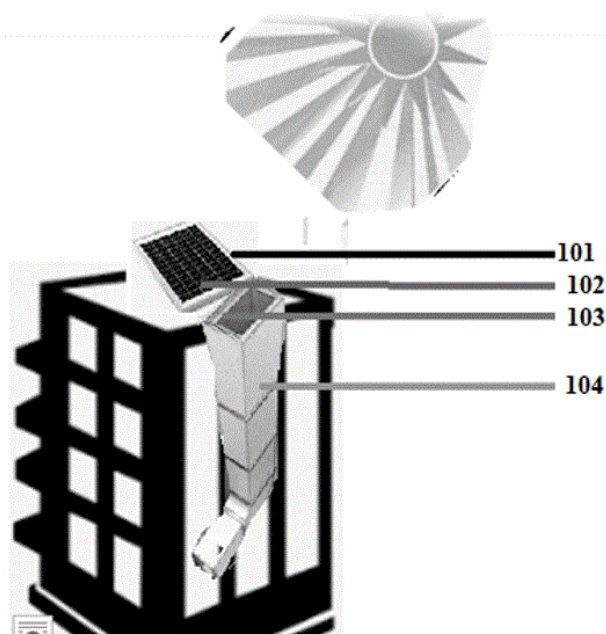
71: DR. VISHWANATH KARAD MIT -WORLD PEACE UNIVERSITY, JAVALE, Deepali Pankaj

72: JAVALE, Deepali Pankaj

54: SOLAR REFLECTOR FOR HOME FOR VITAMIN D ENHANCEMENT

00: -

Reflectors are used in the solar technology to concentrate the sunlight onto the solar panels. They employ glass as a base material with a silver coating and a protective layer over it. They elevate the energy input of solar panels as the whole solar spectrum is reflected on them. Materials with more reflective properties are needed to be used to increase the reflectivity and efficiency of solar reflectors. Here we are proposing a solar reflector design which is capable of exposing home with no sunlight exposure. A unique design using Silicone sheet, aluminum foil sheets and aluminum ducts are used which is beneficial for high elevated buildings and cheaper too.



21: 2023/01741. 22: 2023/02/13. 43: 2023/04/12
51: F16B

71: TIANJIN UNIVERSITY

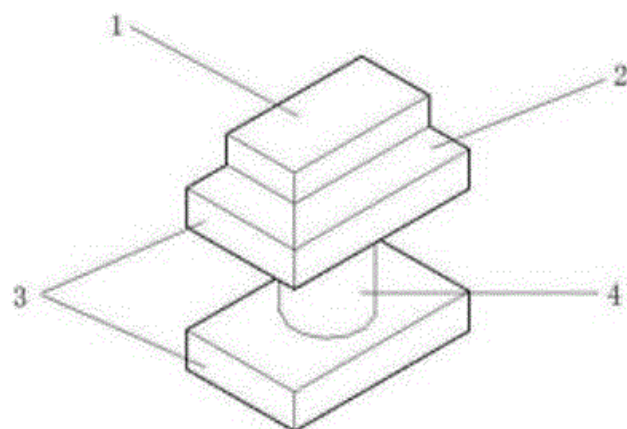
72: LIU, Jiadi, CHEN, Zhihua, ZHOU, Zidong, LIU, Yang

54: A CORNER FITTING ROTARY CONNECTING NODE FOR MODULAR CONSTRUCTION

00: -

The present invention relates to a corner fitting rotary connecting node for modular construction for connecting upper and lower modules, which comprises a connector and corner fittings constituting the corner of the module, wherein, the connector comprises a rotary column head and a connecting part; The rotary column head comprises a cylindrical part, an upper rotating part and a lower rotating part that are located on the upper end and the lower end of the cylindrical part, respectively, wherein the upper rotating part and the lower rotating part are rectangular cuboids; The connecting part comprises a connecting plate fixedly connected with the corner fittings, and an anti-shear boss is fixedly connected with the connecting plate, a groove is provided on the anti-shear boss, wherein the width of the groove is matched with that of the upper rotating part of the rotary column head; the middle of the groove is provided with a hole for containing the cylindrical part of the rotary column head; the corner fitting is a hollow cube, wherein one of the top and bottom surfaces is provided with a

connector socket, whose dimensions are matched with that of the anti-shear boss of the connecting plate, and the two adjacent side surfaces around the four sides are provided with a rotary port. The node of the present invention is simple and reasonable in structure, fast and convenient to install.



21: 2023/01742. 22: 2023/02/13. 43: 2023/04/12
51: C23C

71: Shenyang University of Technology

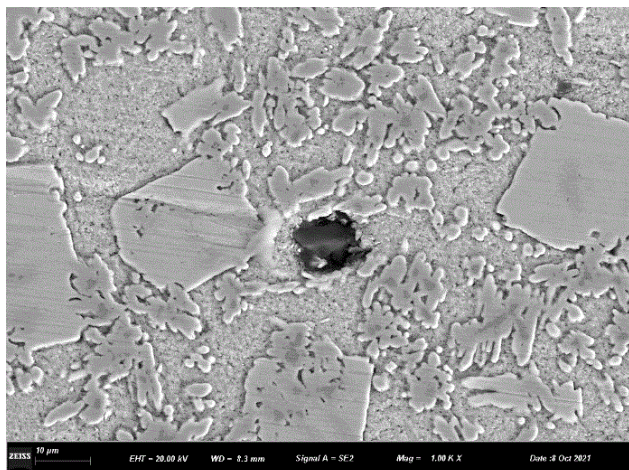
72: ZHANG, Song, XU, Tongzhou, HUANG, Yichi, DU, Yi, WU, Chenliang, ZHANG, Chunhua

54: A POWER AND METHOD FOR PREPARING A SELF-LUBRICATING BABBITT ALLOY/GRAPHITE COATING ON THE SURFACE OF LOW-CARBON STEEL

00: -

The invention provides a powder and a preparing method for laser cladding self-lubricating Babbitt alloy/graphite coating, including Babbitt alloy powder with a purity of not less than 99.99%, Ni-coated graphite powder with a purity of not less than 99.99%, and the Babbitt alloy powder and Ni-coated graphite powder are in a weight ratio of 95:5, in which the Babbitt alloy powder requires uniform spheroidization, the powder diameter is between 53-105micron, and the Ni-coated graphite powder is irregular in shape, and the particle size is between 20-50micron. By using laser cladding technology and synchronous powder feeding method, a self-lubricating Babbitt alloy/graphite coating is prepared. The prepared Babbitt alloy/graphite coating has uniform microstructure, good self-lubricating and wear behavior on the surface. To provide a novel powder and corresponding process method for the preparation of self-lubricating Babbitt alloy coating by laser cladding, which can be widely used in laser

manufacturing and remanufacturing of essential components of heavy-duty bearing bush.



21: 2023/01743. 22: 2023/02/13. 43: 2023/04/12
51: B22D

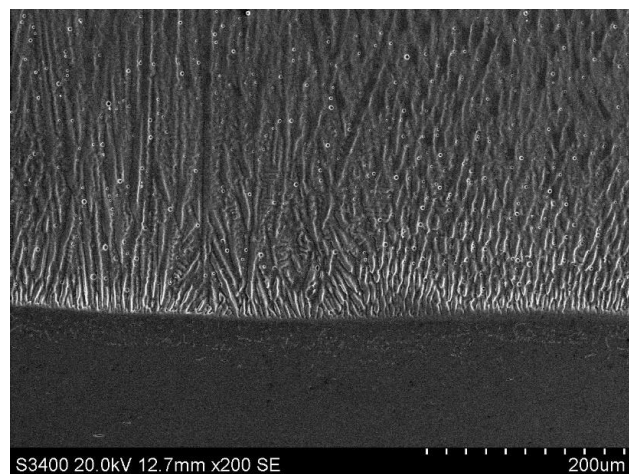
71: Shenyang University of Technology

72: ZHANG, Song, ZHAO, Te, WANG, Dingchen, HUO, Renjie, WU, Chenliang, ZHANG, Chunhua

54: A METHOD FOR PREPARING A WEAR-CORROSION-EROSION-RESISTANT MODIFICATION HASTELLOY C-276 COATING

00: -

The invention relates to a method for preparing a wear-corrosion-erosion-resistant modification Hastelloy C-276 coating on the surface of 316 stainless steel. Using welding wire material with diameter of 1.0-1.6 mm as raw material, modification Hastelloy C-276 coating is prepared on CMT system, which can effectively control the dilution rate and thus the deterioration of corrosion resistance. In addition, the modification Hastelloy C-276 coating containing high content of Ni, Mo, Cr and appropriate amount of W and Re element can effectively strengthen the overall mechanical properties of the coating and enhance the corrosion resistance, thus showing excellent comprehensive performance in seawater environment. Thereby effectively protecting 316 stainless steel seawater pump deposits and butterfly valves, and maximizing both practical value and economy.



21: 2023/01744. 22: 2023/02/13. 43: 2023/04/12
51: C23C

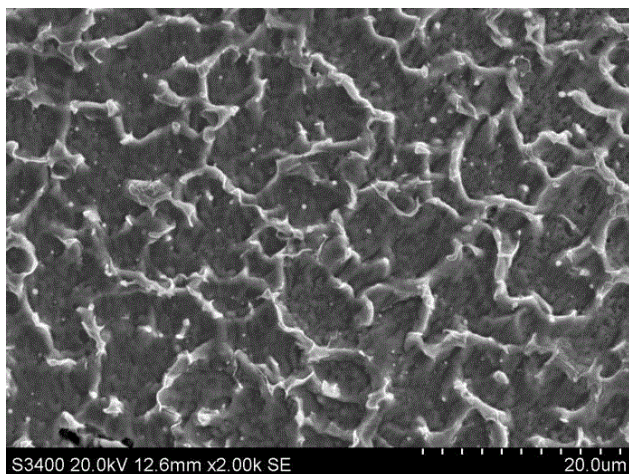
71: Shenyang University of Technology

72: ZHANG, Song, WU, Hao, CHEN, Shengyuan, ZHUANG, Siming, WU, Chenliang, ZHANG, Chunhua

54: A POWDER AND METHOD FOR LASER CLADDING 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 corrosion-resistant high entropy alloy coating, including FeNiCoCr based high entropy alloy powder and Nb powder. The high entropy alloy material is composed of Fe, Ni, Co, Cr and Nb elements, and the expression is FeNiCoCrNbx, the value range of x is 0-2. The specific composition of the alloy coating is Fe: 24.5wt.%-25wt.%, Ni: 24.5wt.%-25wt.%, Co: 24.5wt.%-25wt.%, Cr: 24.5wt.%-25wt.%, and the rest is Nb. The method for preparing corrosion-resistant high entropy alloy coating is as follows: 1) Vacuum melting, atomization and screening process to prepare spherical FeNiCoCr base alloy powder and Nb powder, ball milling and drying; 2) Grind, clean and dry 316 stainless steel substrate, and then preheat; 3) The fiber laser is multi-pass coated with FeNiCoCrNbx high entropy alloy powder as the preset powder. The prepared FeNiCoCr based high entropy alloy coating has uniform microstructure and good surface corrosion resistance, significantly improving the corrosion resistance of the substrate.



21: 2023/01793. 22: 2023/02/14. 43: 2023/04/12
51: A01N; C07C; A01P

71: INSTITUTE OF ZOOLOGY, GUANGDONG
ACADEMY OF SCIENCES

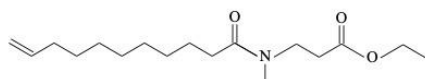
72: Hua WU, Jianqing DAI, Dasong CHEN, Hong
HUANG, Jihuan ZHENG

33: CN 31: 202110088370.5 32: 2021-01-22

**54: ETHYL METHYL 10-
UNDECYLAMINOPROPIONATE, AS WELL AS
PREPARATION METHOD THEREFOR AND
APPLICATION THEREOF IN REPELLING
MOSQUITOES**

00: -

Disclosed are ethyl methyl 10-undecylaminopropionate, as well as a preparation method thereof and application thereof in repelling mosquitoes. The compound of ethyl methyl 10-undecylaminopropionate has a structural formula as shown in formula I. The compound has the advantages of simple synthesis process route, readily available raw materials, low toxicity, no allergenicity, no irritation, and safety in use, and shows a good mosquito repelling effect. The ethyl methyl 10-undecylaminopropionate with a mass fraction of 10% has an effective protection time of 8.3 ± 1.0 h, which meets the requirements of Grade A in GB/T13917.9-2009 Laboratory efficacy test methods and criteria of public health insecticides for pesticide registration - Part 9: Repellent, showing the values for further researches and extended applications.



Formula I

21: 2023/01811. 22: 2023/02/15. 43: 2023/03/30

51: B82Y

71: Electric Power Research Institute of Jilin Electric Power Co., Ltd., Jilin, China., Northeast Electric Power University, Jilin Electric Power Research Institute Co., Ltd.

72: LIN Haidan, ZHANG Haifeng, WANG Bolin, ZHANG Zilong, YANG Daiyong, GUO Jiachang, LI Jiashuai, YU Qunying, LIE Jianping, LI Shouxue, LUAN Jingyao, CUI Tiancheng, DONG Hongda, ZHAO Tiancheng, JIAO Lixin, LIU Dan, TAI Yufeng

33: CN 31: 2023100768585 32: 2023-01-29

**54: PREPARATION METHOD AND APPLICATION
OF METAL IN-DOPED ZNO QUANTUM DOT
SENSOR**

00: -

Disclosed is a preparation method and an application of a metal In-doped ZnO quantum dot sensor, and relates to the technical field of ethylene detection. The preparation method includes: dropping metal In-doped ZnO quantum dots on a Pt electrode, drying and annealing to obtain the metal In-doped ZnO quantum dot sensor to detect ethylene gas. The doping of metal In leads to smaller crystal size, lower crystallinity, larger band gap and larger surface area, and changes in oxidation state and electronic state, which has more reaction sites for detecting ethylene, thus greatly enhancing the sensitivity of gas sensors

21: 2023/01815. 22: 2023/02/15. 43: 2023/03/30

51: E21B

71: Hua Hui Engineering Design Group Co., Ltd, SHAOXING UNIVERSITY

72: WU Zaosheng, HU Chundong, LIN Dongming, ZHANG Xin, HUANG Man, SHA Peng, CHEN Zhangwei

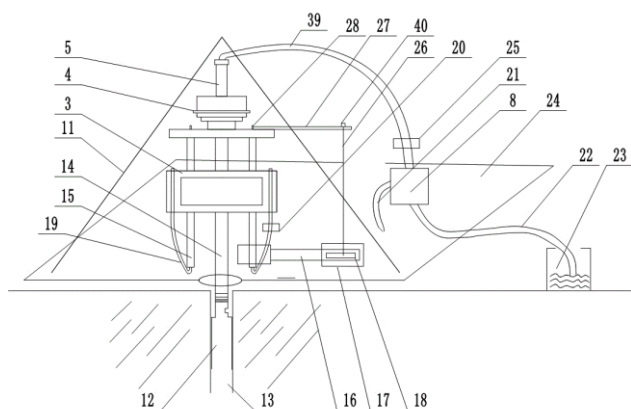
33: CN 31: 2022112265440 32: 2022-10-09

**54: INTELLIGENT DEVICE FOR REAL-TIME
MONITORING DRILLING PARAMETERS OF
DRILLING RIG**

00: -

The invention discloses an intelligent device for real-time monitoring drilling parameters of drilling rig, which comprises a drilling rig device, wherein a monitoring device is installed on the drilling rig device, and the monitoring device comprises a fixing mechanism, a protection mechanism, a monitoring mechanism and a transmission early warning mechanism; the fixing mechanism is fixedly installed on the drilling rig device, the protection mechanism is fixedly installed with the fixing mechanism, and the monitoring mechanism and the transmission early

warning mechanism are installed in the protection mechanism; the fixing mechanism comprises an upper fixing device and a lower fixing device which are correspondingly arranged up and down, and the protection mechanism is fixedly installed on the lower fixing device; the protection mechanism comprises two equipment boxes, one of which is fixedly provided with a monitoring mechanism; a transmission early warning mechanism is fixedly installed in the other equipment box. The invention has the advantages of simple structure, high strength, adaptability to harsh field environment and strong applicability; the installation and operation are simple and convenient, and the compatibility is high, which solves the problems of artificial statistical drilling pipe data fraud, low work efficiency and difficult supervision in the existing monitoring methods.



21: 2023/01879. 22: 2023/02/16. 43: 2023/03/30
51: G01N

71: Electric Power Research Institute of Jilin Electric Power Co., Ltd., Jilin, China., Northeast Electric Power University, Jilin Electric Power Research Institute Co.,Ltd.

72: LIN Haidan, ZHANG Haifeng, WANG Bolin, ZHANG Zilong, YANG Daiyong, GUO Jiachang, LI Jiashuai, YU Qunying, LIE Jianping, LI Shouxue, LUAN Jingyao, CUI Tiancheng, DONG Hongda, ZHAO Tiancheng, JIAO Lixin, LIU Dan, TAI Yufeng
33: CN 31: 2023100768299 32: 2023-01-29

54: PREPARATION METHOD AND APPLICATION OF NANO-MODIFIED GRAPHENE-BASED THIN-FILM SENSOR

00: -

The invention discloses a preparation method of nano-modified graphene-based thin-film sensor and its application, which relates to the technical field of

transformer fault characteristic gas detection. The preparation method comprises the following steps: dissolving $AlCl_3$ in absolute ethanol, mixing with graphene oxide aqueous solution, heating and stirring until the concentration of Al^{3+} is 0.3-1.5mol/L to obtain sol; mixing the sol with glycerol to obtain a coating solution; immersing the interdigitated Cu/Ni metal electrode into the coat solution, pulling the coating, standing, heat treating, washing and drying to obtain the Al_2O_3/GO thin-film sensor, namely the nano-modified graphene-based thin-film sensor, which is a nano-modified graphene-based thin-film sensor. The prepared sensor has high detection sensitivity, rapid detection response and high temperature resistance in transformer oil.

21: 2023/01889. 22: 2023/02/16. 43: 2023/03/16
51: D03D

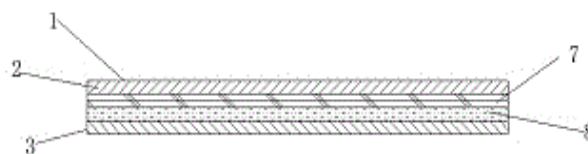
71: ZHENGZHOU ZHONGKE TEXTILE TECHNOLOGY CO., LTD.

72: HUA, JINGHUA

54: DOUBLE-LAYER FLAME RETARDANT FABRIC WITH WATER-REPELLENT SURFACE LAYER AND WATER-ABSORBENT INNER LAYER

00: -

A double-layer flame retardant fabric with a water-repellent surface layer and a water-absorbent inner layer provided includes a fabric body (1), the fabric body (1) comprises a fabric outer layer (3), inside of the fabric outer layer (3) is set with a waterproof layer (4), a bottom of the waterproof layer (4) is set with a waterproof adhesive film (5), a water-absorbent layer (6) is set below the waterproof adhesive film (5), a cotton absorbent fabric (61) is set inside the water-absorbent layer (6), and a bottom of the cotton absorbent fabric (61) is provided with an anti-bacterial layer (62), the anti-bacterial layer (62) is provided with an anti-static layer (7), and the bottom of the anti-static layer (7) is provided with a breathable structure (8).



21: 2023/01890. 22: 2023/02/16. 43: 2023/03/27
51: A23L; A61K

71: INSTITUTE OF ANIMAL HUSBANDRY OF HEILONGJIANG ACADEMY OF AGRICULTURAL SCIENCES

72: TIAN, Ming

54: NATURAL PLANT GLYCOLYSIS SUBSTANCE FOR PREVENTING AND CONTROLLING PORCINE ENTERITIS AND PREPARATION METHOD AND APPLICATION THEREOF

00: -

Disclosed is a natural plant glycolysis substance for preventing and controlling porcine enteritis, comprising: 5 to 10 parts of *Lactobacillus rhamnosus*, 5 to 10 parts of *Lactobacillus plantarum*, 15 to 25 parts of *Coptis chinensis* Franch., 15 to 20 parts of *Atractylodes macrocephala* Koidz., 10 to 15 parts of *Forsythia suspensa* (Thunb.) Vahl and 25 to 35 parts of *Astragalus membranaceus* (Fisch.) Bunge. A preparation method comprises: weighing raw materials; mixing *Lactobacillus rhamnosus* and *Lactobacillus plantarum* to prepare a bacterial solution; crushing *Coptis chinensis* Franch., *Atractylodes macrocephala* Koidz., *Forsythia suspensa* (Thunb.) Vahl and *Astragalus membranaceus* (Fisch.) Bunge, and sieving to obtain a traditional Chinese medicine mixture; soaking the medicine mixture in the bacterial solution for anaerobic fermentation to obtain the natural plant glycolysis substance for preventing and controlling porcine enteritis. The substance can be used for effectively degrading mycotoxin in feed, so that the porcine enteritis is prevented and controlled.

21: 2023/01925. 22: 2023/02/16. 43: 2023/03/27
51: C08L

71: NORTHEAST FORESTRY UNIVERSITY

72: LI, Shujun, LAI, Shuorong, ZHANG, Xianquan, XU, Yongli, XU, Wenyan

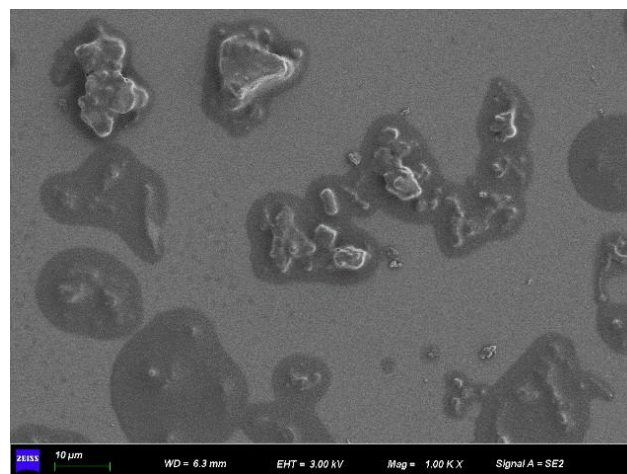
33: CN 31: 202111430998.5 32: 2021-11-29

54: FURFURAL RESIDUE/USED COOKING OIL MODIFIED ASPHALT AND PREPARATION METHOD THEREFOR

00: -

Disclosed is a furfural residue/used cooking oil modified asphalt and a preparation method therefor and aims at solving the technical problems of massive consumption of fossil resources and the harm of petroleum asphalt to the environment and the health of construction personnel. The modified asphalt is composed of furfural residue/used cooking oil composite modifier and asphalt. The preparation

method includes: drying the furfural residue, and then filtering with an 80-mesh sieve; mixing the furfural residue and used cooking oil, cutting, and filtering to obtain the furfural residue/used cooking oil composite modifier; pouring the composite modifier into the asphalt, cutting, and cooling to obtain the furfural residue/used cooking oil modified asphalt. The furfural residue can be uniformly dispersed in the used cooking oil and asphalt system, the compatibility is good. The present invention belongs to the technical field of asphalt modification.



21: 2023/01945. 22: 2023/02/17. 43: 2023/03/30
51: A62C

71: China University of Petroleum, East China

72: Depeng KONG, Xinyi DAI, Ping PING

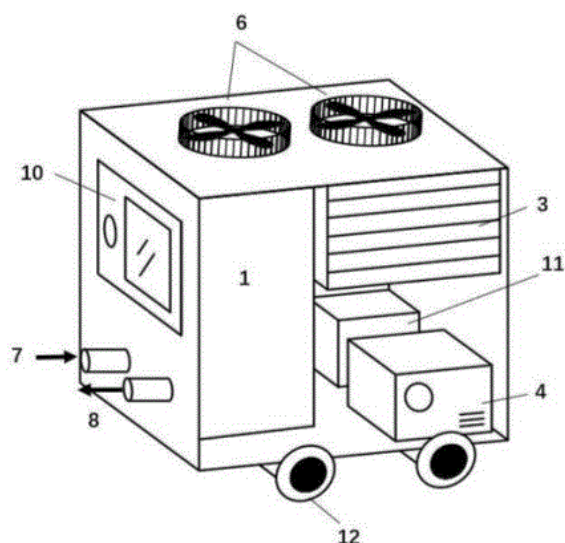
33: CN 31: 2022104580161 32: 2022-04-27

54: A FIRE EXTINGUISHING DEVICE OF COOLING FIRE WATER AND ITS USE METHOD, A BATTERY FIRE EXTINGUISHING METHOD

00: -

The invention discloses a fire extinguishing device of cooling fire water and its use method, a battery fire extinguishing method. The device includes a cooling cycle unit, which includes a water tank, an evaporator, a condenser, a compressor, an expansion valve, and a radiator fan. In the water tank where the evaporator is placed, the condenser, the compressor, and the expansion valve are connected in series between the outlet and the inlet of the evaporator, and the radiator fan is used for heat dissipation of the condenser; the fire water circulation unit includes a fire water inlet pipe, a pump, and a fire water outlet pipe. The fire water inlet pipe and the fire water outlet pipe are connected to the water tank, and the pump is

arranged on the fire water outlet pipe. The control unit, the pump, and the compressor are electrically connected to the control unit. There are two working modes in the control unit. In the no-fire mode, the idle cooling is carried out and the low-temperature fire water is stored. In the fire disposal mode, high-speed cooling is carried out and the low-temperature fire water is quickly output. The storage of low-temperature water storage is realized, which is suitable for fire extinguishing in new energy vehicle charging and parking areas, energy storage power stations, and related scenarios.



21: 2023/01947. 22: 2023/02/17. 43: 2023/03/27
51: A23L

71: HEBEI NORMAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

72: ZHAO, Yuhua, GUO, Xueying, WU, Jiaxiu, CHANG, Xuedong

54: PROCESSING METHOD FOR SPICED FREEZE-DRIED SLICES OF CHINESE CHESTNUT

00: -

A processing method for spiced freeze-dried slices of Chinese chestnut, including: rinsing and boiling Yanshan Chinese chestnut with a content of total soluble sugar greater than or equal to 8.5% in boiled water, and then peeling; performing correction by referring to articles of Sheng Jiping and Zhang Huipo according to an experimental effect; performing color protection for the chestnut core with a compound solution with 0.30% Vc, 0.20% chitosan and 0.35% sodium chloride for 1 hour; cutting the chestnut into slices of 2.5-4 mm, performing the color protection

again for 1 hour; hydrolyzing the slices with amylase for 1 hour in a normal temperature environment, wherein the consumption of the amylase is 2000-2500 u/g (pH=7.0); curing with prepared spices for 2 hours; pre-freezing for 8-10 hour; drying in a freeze drying machine until a computer shows that a level weight curve; taking out the chestnut slices, packing in nitrogen-filled packages.

21: 2023/01959. 22: 2023/02/17. 43: 2023/03/30
51: C12N

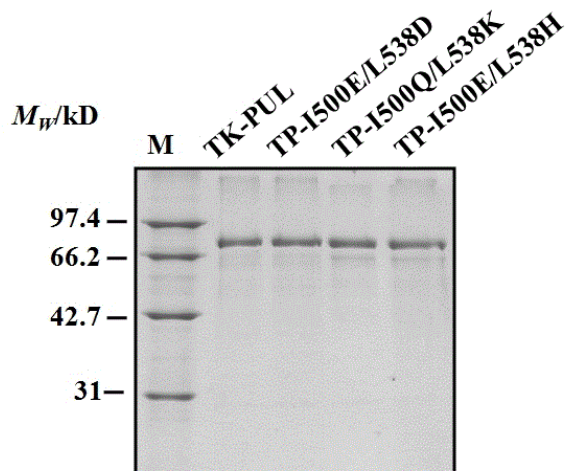
71: Institute of Microbiology, Jiangxi Academy of Sciences (Jiangxi Institute of Watershed Ecology)
72: GUO Jianjun, WANG Tong, ZENG Jing, YUAN Lin

33: CN 31: 202310056259.7 32: 2023-01-17

54: TYPE III PULLULAN HYDROLASE MUTANT FOR PREPARING CORN RESISTANT STARCH, PREPARATION METHOD AND APPLICATION THEREOF

00: -

Disclosed is a type III pullulan hydrolase mutant for preparing corn resistant starch, a preparation method and an application thereof, and relates to the technical field of biological enzyme engineering and genetic engineering. An amino acid sequence of the type III pullulan hydrolase mutant is shown in SEQ ID NO.1. The invention carries out saturation mutation on isoleucine at the 500th position and leucine at the 538th position adjacent to the catalytic active center in the type III pullulan hydrolase TK-PUL, and constructs the type III pullulan hydrolase mutant with the amino acid sequence as shown in SEQ ID NO.1. The specific activity of the mutant type III pullulan hydrolase provided by the invention to common corn starch increases from 48.08 U/mg before the mutation to 133.66 U/mg, and the yield of corn resistant starch prepared by the mutant type III pullulan hydrolase system increases from 30.87 percent before the mutation to 59.15 percent.



21: 2023/01969. 22: 2023/02/17. 43: 2023/03/27

51: A23L

71: HEBEI NORMAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

72: ZHAO, Yuhua, LIU, Xu, GUO, Xueying, CHANG, Xuedong

54: INSTANT CHESTNUT FREEZE-DRIED SLICE OF MILK FLAVOR AND PROCESSING METHOD THEREOF

00: -

Disclosed is instant Chinese chestnut freeze-dried slice of a milk flavour and a processing method thereof comprising: selecting chestnuts, cooking and peeling; performing whole-fruit colour protection on chestnut pulp; slicing the chestnuts after colour protection, performing colour protection; soaking the slices in fresh milk after colour protection processing, taking out and pre-freezing; performing freeze-drying to obtain the instant chestnut freeze-dried slices of the milk flavour. According to the processing method the chestnut slices are soaked in the milk, so that a taste is improved; the nutritional value of the slices is improved; and compared with various cooking technologies, a freeze-drying processing technology retains original nutritional components and aroma components of Yanshan Chinese chestnuts to the greatest extent. The prepared instant Chinese chestnut freeze-dried slices of the milk flavour have the characteristics of a soft taste, a light flavour, strong palatability and a wide range of consumers.

21: 2023/01975. 22: 2023/02/17. 43: 2023/03/27

51: B01J

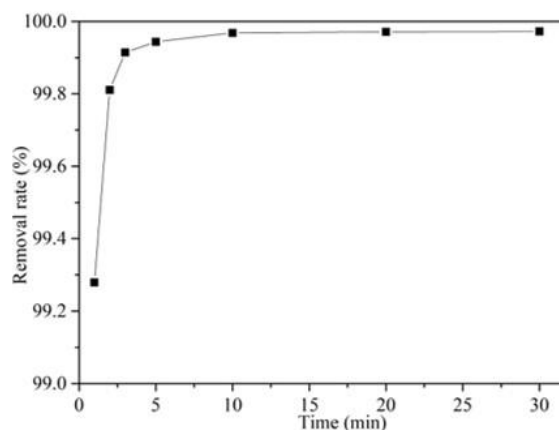
71: HENAN UNIVERSITY OF URBAN CONSTRUCTION

72: ZHANG, Jinhui, ZHU, Xinfeng, HUANG, Zhenzhen, ZHAO, Yanyang, SONG, Zhongxian, LI, Jiebing, ZHANG, Yan, LIU, Xueping, YIN, Shiqiang, WANG, Chaohai, GUO, Cuicui, LI, Jiaxuan, WANG, Jingyu, WANG, Tuo, WANG, Yunlong, LI, Wenjing, SUN, Jiawei, LI, Xiaoyue, CHANG, Linlin, REN, Shiyang

54: MGO ADSORBENT FOR ENVIRONMENTAL POLLUTION EMERGENCY AND PREPARATION METHOD AND APPLICATION THEREOF

00: -

The present invention discloses an MgO adsorbent and a preparation method and application thereof. The present invention adopts a roasting method for firstly crushing and screening magnesite, and then placing the magnesite into a muffle furnace for roasting to obtain MgO adsorption material after cooling. Compared with activated carbon, biochar, Ce-MOF, UiO-66, ZIF-67, MIL-100-Fe, ZSM-5, PDVB, MgO and Mg(OH)₂, MgO prepared by the present invention has high performance of rapid adsorption of liquid organic pollutants and also has good cycle stability. The preparation method is cheap and easy to obtain raw materials, has no environmental pollution, and is capable of scale preparation and easy for actual application. The prepared adsorbent can be widely used in water pollution control and air pollution control.



21: 2023/01976. 22: 2023/02/17. 43: 2023/03/27

51: G01N; G01R

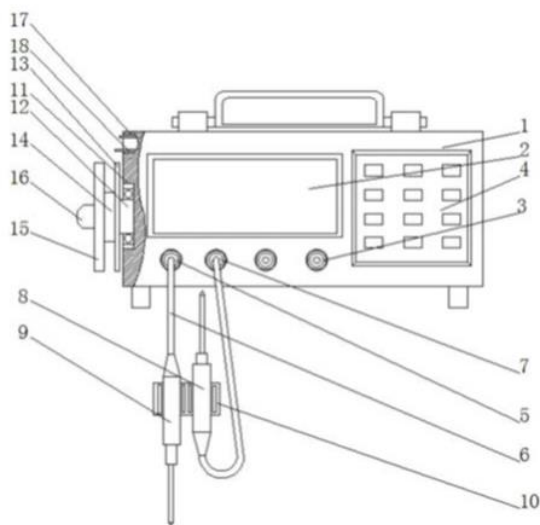
71: GUANGXI NORMAL UNIVERSITY FOR NATIONALITIES

72: YANG, Baohai, KANG, Jiarong, LI, Ruili

54: NOVEL FAULT DIAGNOSTIC APPARATUS FOR NONLINEAR ANALOG CIRCUIT

00: -

Disclosed is a fault diagnostic apparatus for a nonlinear analog circuit. A front surface of an oscilloscope main body is provided with an oscilloscope screen, a probe socket and an operation panel; a low-voltage plug is inserted in the surface of the socket; the surface of the plug is connected to a probe wire at one end to a low-voltage probe at the other end; the surface of the low-voltage probe is connected to a switching apparatus; the switching apparatus includes a probe arc pallet; the surface of the pallet is connected to the surface of the probe; the back surface of the probe arc pallet is connected with a switching disc. The apparatus achieves an effect of convenient measurement through an elastic wristband, a rotating fixed block, the probe arc pallet, the low-voltage probe, a high-voltage probe, an arm supporting column, a switching adjusting column and the switching disc.



21: 2023/01980. 22: 2023/02/17. 43: 2023/04/12

51: G06F

71: CHINESE RESEARCH ACADEMY OF ENVIRONMENTAL SCIENCES

72: XU, Chunlian, DONG, Liwei, BAI, Lu, ZHANG, Wei, ZHANG, Yue

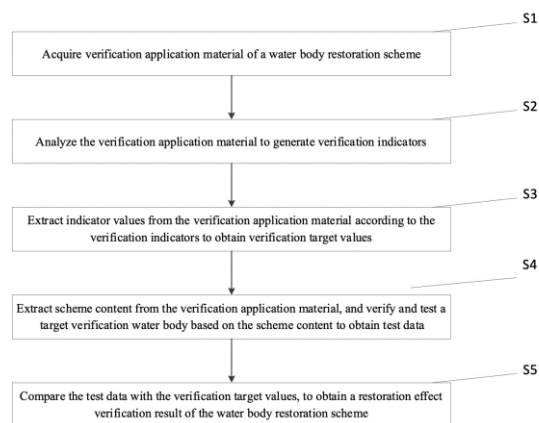
33: CN 31: 2022111918488 32: 2022-09-28

54: METHOD AND APPARATUS FOR VERIFYING RESTORATION EFFECT OF WATER BODY RESTORATION SCHEME AND ELECTRONIC DEVICE

00: -

Disclosed in the present invention are a method and an apparatus for verifying a restoration effect of a

water body restoration scheme and an electronic device. The method includes: acquiring verification application material of a water body restoration scheme; analyzing the verification application material to generate verification indicators; extracting indicator values from the verification application material according to the verification indicators to obtain verification target values; extracting scheme content from the verification application material, and verifying and testing a target verification water body based on the scheme content to obtain test data; and comparing the test data with the verification target values, to obtain a restoration effect verification result of the water body restoration scheme. In the present invention, verification application material is analyzed, an experiment is performed according to scheme content, it is checked whether an experimental result obtained by using the scheme content can reach a value in the verification application material, and a statistical analysis is performed, to obtain an objective and more reliable verification result, thereby providing scientific and objective reference information to a user needing to use this water body restoration scheme.



21: 2023/02053. 22: 2023/02/20. 43: 2023/03/30

51: A61K

71: The Second Affiliated Hospital of Guangzhou Medical University

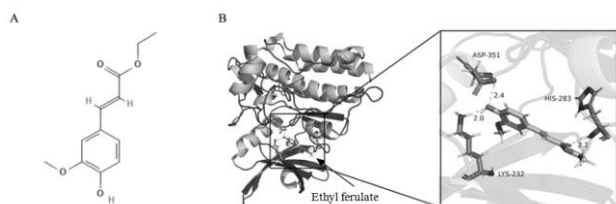
72: TAN Zhangbin, ZHANG Jingzhi, LIU Bin

33: CN 31: 2023101220169 32: 2023-02-15

54: APPLICATION OF ETHYL FERULATE IN PREPARING TRANSFORMING GROWTH FACTOR-BETA RECEPTOR 1 INHIBITOR

00: -

The invention discloses an application of ethyl ferulate in preparing a transforming growth factor beta receptor 1 inhibitor, and belongs to the technical field of medicine. According to the invention, molecular docking, molecular dynamics and surface plasmon resonance technologies prove that ethyl ferulate can be directly combined with TGFBR1, experiments prove that ethyl ferulate can inhibit the activation of phosphorylated TGFBR1 of cardiac fibroblasts and downstream signal molecules, and based on the above results, it is proved that ethyl ferulate is a natural TGFBR1 inhibitor. Furthermore, it is confirmed by the mouse myocardial infarction model that ethyl ferulate can respond to myocardial infarction, ventricular remodeling, myocardial fibrosis and heart failure caused by abnormal TGFBR1, which provides data basis for effective prevention and treatment of cardiovascular diseases related to TGF beta pathway disorder, especially myocardial infarction, ventricular remodeling, myocardial fibrosis and heart failure.



21: 2023/02062. 22: 2023/02/20. 43: 2023/03/27
51: A01G

71: GUIZHOU BOTANICAL GARDEN (GUIZHOU INSTITUTE OF HORTICULTURAL SCIENCE, GUIZHOU INSTITUTE OF BOTANY)

72: REN, Qifei, LIU, Fang, OU, Mingzhu, HU, Yi, MA, Jinghua, CHEN, Yunfei

54: SOILLESS CULTIVATION METHOD OF CYMBIDIUM SSP.

00: -

The present invention discloses a soilless cultivation method of Cymbidium spp., which comprises the following steps: step 1: selecting a Cymbidium spp. hydroponic flowerpot; step 2: transplanting; step 3: disinfecting; step 4: implanting; step 5: fixing; step 6: adding liquid; and step 7: replacing water. According to the cultivation method in the present invention, an optimal nutritional formula can be prepared according to requirements of Cymbidium spp. for nutrient elements and a pH value, so that a root

group of a Cymbidium spp. plant is strong and vigorous with sturdy growth vigor, high germination rate and high flowering rate. An inner pot has a cotton rope, which can provide enough water for the Cymbidium spp. plant through principles of infiltration and water absorption, thereby making the Cymbidium spp. plant easier to grow; and an outer pot is transparent for observation of a water level.

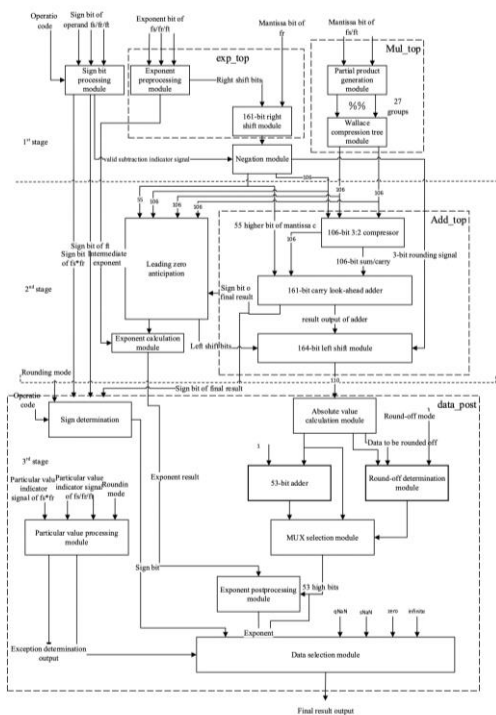
21: 2023/02071. 22: 2023/02/20. 43: 2023/04/12
51: G06F

71: JIANGSU HUACHUNG MICROSYSTEM COMPANY LIMITED, NANJING RESEARCH INSTITUTE OF ELECTRONICS TECHNOLOGY
72: Siming WANG, Sibao YANG, Ming LI, Shiping LI, Ming HAO

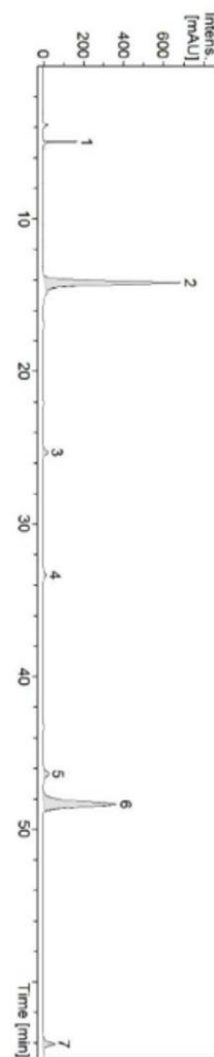
33: CN 31: 202210350374.0 32: 2022-04-02

54: FLOATING-POINT FUSED MULTIPLY-ADD
00: -

The invention discloses a floating-point multiply-add device, which realizes floating-point multiply-add operation in a form of $A * B + C$. The floating-point multiply-add device adopts a three-stage pipeline mode to realize the floating-point multiply-add operation, completes floating-point multiplication in a first pipeline beat, completes addition in a second pipeline beat and completes rounding operation and exception judgment in a third pipeline beat, and outputs a final result. The floating-point multiply-add device has the advantages that single-double-precision floating-point number multiply-add operation is achieved, and a three-level assembly line framework of non-normalized numbers is supported.



stirring for enzymolysis for 4-8 hours, then decreasing the temperature to 15-25°C, and performing continuous countercurrent extraction that is ultrasonic-assisted; separating solid residues and adjusting the pH to 7.0-8.0 with an alkaline pH regulator. The present invention employs a facultative bio-coupling enzyme-assisted low-temperature countercurrent extraction method, thereby enabling an improved bioavailability of dark tea, a high extraction efficiency, and a high retention of active components.



21: 2023/02091. 22: 2023/02/20. 43: 2023/04/12
51: A23F; A23L; A61K; A61P
71: SHANDONG ACADEMY OF AGRICULTURAL SCIENCES, JI NAN ASIA PHARMA TECH CO. LTD
72: SUN, Sujun, DENG, Peng, LIU, Xiaofei, LI, Yan, WANG, Hengzhen, ZHANG, Congjing, ZHAN, Xiaoguang, SUN, Zhou, MAO, Longfei, PENG, Lizeng
33: CN 31: 202111541276.7 32: 2021-12-16
54: METHOD FOR EXTRACTING ACTIVE COMPONENTS FROM DARK TEA AND USE THEREOF

00: -

The present invention relates to the technical field of food processing, in particular to a method for extracting active components from dark tea and use thereof, including the following steps: mixing dark tea powder containing Jinhua fungus with water and sodium erythorbate, increasing the temperature to 30-35°C and pre-treating the mixture by stirring and fermentation for 36-48 hours, adding cellulase and pectinase to the mixture, increasing the temperature to 45-50°C and stirring the mixture for enzymolysis for 3-6 hours to obtain a second extracted solution; adjusting the pH of the second extracted solution to 6.0-6.5 with an acidic pH regulator, and then adding protease and tannase and continuing

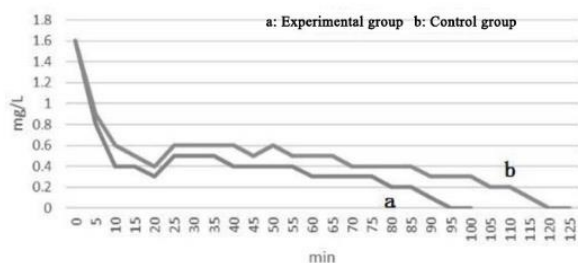
21: 2023/02092. 22: 2023/02/20. 43: 2023/04/12
51: A23L
71: SHANDONG ACADEMY OF AGRICULTURAL SCIENCES, JI NAN ASIA PHARMA TECH CO. LTD
72: SUN, Sujun, DENG, Peng, LIU, Xiaofei, ZHAN, Xiaoguang, JIANG, Bin, JI, Tao, PENG, Lizeng

33: CN 31: 202210255481.5 32: 2022-03-15

54: LIVER-PROTECTING AND DE-ALCOHOLIC COMPOSITE BEVERAGE AND PREPARATION METHOD THEREOF

00: -

Disclosed is a liver-protecting and de-alcoholic composite beverage and a preparation method thereof in the technical field of health beverage. Contents of each raw material in each 100 mL of the composite beverage, in parts by weight, are: 300 mg crystalline fructose, 200 to 500 mg soybean lecithin, 100 to 250 mg vine tea extract, 100 to 400 mg kudzu root extract, 50 to 200 mg purslane extract, 50 to 200 mg Silybum marianum extract, 50 to 200 mg water-soluble curcumin, 150 to 700 mg flavor additives, 100 to 400 mg corn peptide, 5 mg sodium hyaluronate, 100 mg citric acid, 100 mg sodium citrate, 100 mg xanthan gum, 20 mg sodium carboxymethyl cellulose, 10 mg vitamin C, 3 mg ethyl maltol, 3 mg sucralose, and 12 mL hawthorn juice, balance being distilled water. The composite beverage prepared in the present disclosure not only has effects of protecting and nourishing the liver, but also has certain effects of invigorating and nourishing the stomach. In addition, the composite beverage prepared by the present disclosure has not only high nutritional value but also unique flavor.



21: 2023/02097. 22: 2023/02/21. 43: 2023/03/30

51: A61K

71: Ying Huaming

72: Ying Huaming

33: CN 31: 202310051445.1 32: 2023-02-02

54: DRUG FOR TREATING TUBERCULOSIS

00: -

The invention discloses a drug for treating tuberculosis, comprising: 10-15 grams of wild buckwheat, 8-12 grams of wild chrysanthemum, 10-12 grams of bulb of thunberg fritillary, 10-15 grams of gall, 10-12 grams of Poria cocos, 6-8 grams of licorice, 15-20 grams of rhizoma imperatae, 8-12

grams of radix rehmanniae preparata, 8-12 grams of radix scrophulariae, 8-12 grams of polygonum cuspidatum, 10-15 grams of radix ranunculi ternati, 15-20 grams of astragalus, and 20-30 grams of rhizoma phragmitis. The invention has reasonable prescription, simple process, convenient taking, no side effect, low cost and remarkable effect; compared with the current anti-tuberculosis drugs such as isoniazid and rifampicin, it has the characteristics of better curative effect and shorter course of treatment, and is especially suitable for patients with poor liver and kidney function who are not suitable for taking the current combined anti-tuberculosis drugs. A large number of examples have confirmed that the pharmaceutical composition has good therapeutic effect, no toxicity, no side effects, no drug resistance, and no recurrence. At the same time, it also has the functions of detoxifying and dispelling stagnation, reducing phlegm and relieving cough, nourishing qi and nourishing yin, replenishing essence and blood, and enhancing immunity.

21: 2023/02112. 22: 2023/02/21. 43: 2023/03/30

51: G01N

71: Inner Mongolia Minzu University

72: Liu Yushuang, Chen Furong, Zhang Ying, Bao Layue, Hai Wenfeng, Liu Jinghai

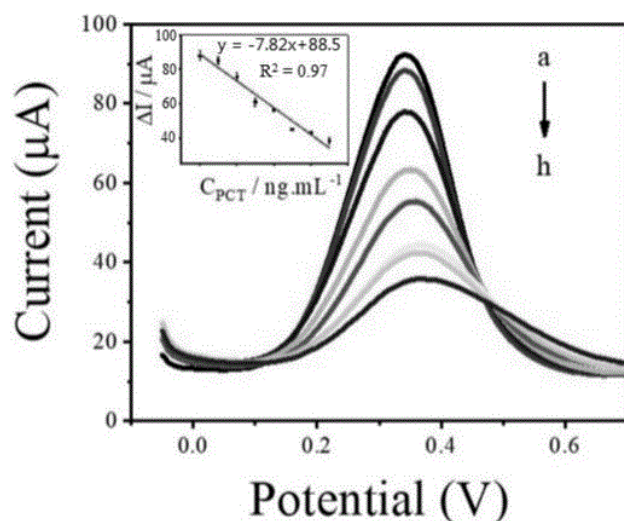
33: CN 31: 202210582645.5 32: 2022-05-26

54: AN ELECTROCHEMICAL IMMUNOSENSOR AND THE PREPARATION METHOD AND APPLICATION THEREOF

00: -

The invention relates to the technical field of electrochemical sensors and discloses an electrochemical immunosensor and the preparation method and application thereof. The preparation method comprises the following steps: S1. dissolving the NiCoP/g-C₃N₄ nanocomposite material in nitric acid and carrying out an oil bath reaction at the temperature of 120-130 degree celsius to obtain the COOH-NiCoP/g-C₃N₄ nanocomposite material; S2. preparing the COOH-NiCoP/g-C₃N₄ obtained from S1 as a suspension and adding dropwise to the treated electrode surface for the first incubation, then carrying out condensation reaction on 1-(3-dimethylaminopropyl)-3-ethylcarbodiimide hydrochloride and N-hydroxy succinimide to carry out coupling reaction with the monoclonal antibody,

and then adding dropwise to the electrode surface for the second incubation to obtain electrochemical immunosensor. The invention constructs a label-free electrochemical immunosensor for procalcitonin detection with excellent electrochemical sensing performance and a more comprehensive detection range.



21: 2023/02135. 22: 2023/02/21. 43: 2023/03/24

51: C12Q

71: CENTER FOR CONSERVATION AND UTILIZATION OF RARE AND ENDEMIC FISHES IN SICHUAN, FISHERIES INSTITUTE OF SICHUAN ACADEMY OF AGRICULTURAL SCIENCES, SOUTHWEST UNIVERSITY

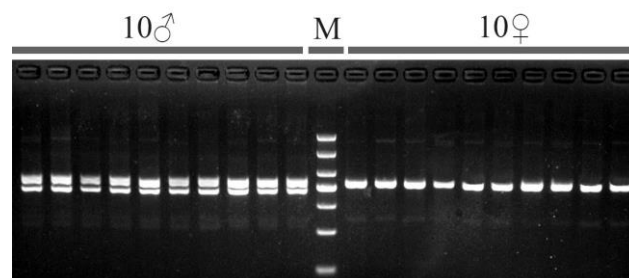
72: WEI, Zhen, ZHOU, Jian, YE, Hua, ZHANG, Lu, CHEN, Xiaojing, LUO, Hui, LI, Qiang, XIONG, Yinlin, KE, Hongyu, JIANG, Menghao, ZHENG, Wei, MOU, Chengyan

54: MOLECULAR MARKER FOR IDENTIFYING GENETIC SEXES OF LEIOCASSIS LONGIROSTRIS AND APPLICATION

00: -

The present invention discloses an Indel molecular marker for identifying genetic sexes of *Leiocassis longirostris*. The molecular marker is an insertion/deletion sequence of 32bp at the base 1130404 of Chromosome 7, and is subjected to PCR amplification by utilizing specific primers to obtain an intersexual differential product of the *Leiocassis longirostris*, thereby achieving an aim of accurately identifying the sexes of the *Leiocassis longirostris*. The present invention may simply, rapidly and stably identify the genetic sexes at embryo, larvae, juvenile and adult stages of the *Leiocassis longirostris*,

contributes to developing a monosex breeding technology of the *Leiocassis longirostris*, realizes all-male breeding of the *Leiocassis longirostris*, and can greatly increase yield on the premise of not increasing breeding capacity, thereby increasing economic benefits of *Leiocassis longirostris* breeding.



21: 2023/02142. 22: 2023/02/21. 43: 2023/03/27

51: G06Q

71: FUZHOU METEOROLOGICAL BUREAU, FUJIAN PROVINCE

72: CHEN, Jianyun, LIN, Jianbin, FANG, Ming, YU, Siyuan, WANG, Lijun

54: HIGH-RESOLUTION METEOROLOGICAL PREDICTION DEVICE

00: -

The present invention relates to the technical field of meteorology, in particular to a high-resolution meteorological prediction device. A meteorological detection group is established with predicted meteorology as a center; a meteorological detection point is set every other 30 km from the center position in eight directions thereof; seven differential equations of hydromechanics and thermodynamics are applied to manifest laws of atmospheric motion; seven agendas comprise seven unknown numbers, namely, a maximum temperature, a minimum temperature, a precipitation amount, humidity, an air pressure, a wind direction and a wind speed; each meteorological detection point sends the seven detected agendas back to a terminal through a communication chain at intervals of 3 hours; and through the terminal, under certain initial and boundary value conditions, hydrodynamic and thermodynamic equation sets through a weather evolution process are solved by numerical calculation.

21: 2023/02215. 22: 2023/02/22. 43: 2023/03/24

51: A01G

71: GAOTAI COUNTY FORESTRY SURVEY AND PLANNING TEAM, GANZHOU DISTRICT FORESTRY SURVEY AND DESIGN TEAM, GANZHOU DISTRICT SHIGANGDUN NATURAL VEGETATION MANAGEMENT AND PROTECTION STATION

72: XING, Zhijun, XIE, Xiaolong, FANG, You, JIANG, Shengping, XU, Guocai, JIN, Xiaoying, ZHOU, Guoyuan

54: IMPROVED SEEDLING GRAFTING METHOD
00: -

The present invention discloses an improved seedling grafting method, comprising rootstock cultivation, scion collection and treatment, grafting and management after grafting. In the present invention, by planting, cultivating, selecting and cutting the grafted rootstocks and scions and inserting transverse incisions of the scions into transverse incisions of the rootstocks, cortexes of the scions and rootstocks are aligned and grafted together and bound with special plastic tapes. The seedlings are grafted by an attached grafting method. The grafting method is simple in operation, easy to learn, understand and master, high in grafting rate and high in survival rate. Further, the attached grafting method is wide in application range and can be applied to seedlings needing to be grafted, such as apple, pear, peach, apricot, poplar and elm. The method can be used when the cortexes of the grafted seedlings are not separated from xylems, and practicability is high.

21: 2023/02322. 22: 2023/02/23. 43: 2023/03/24
51: C12N; C12Q

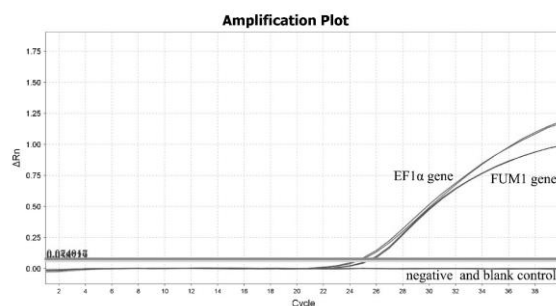
71: YANG, Aifu

72: YANG, Aifu, SUN, Jiyang, XU, Junyi, ZHAO, Yue, ZHENG, Qiuyue, HU, Jiangtao, LIU, Xuehua, WAN, Chao, ZHAO, Liangjuan, LIANG, Bing, MA, Xing

54: PRIMERS AND PROBES FOR SPECIFICALLY DETECTING FUMONISIN-PRODUCING FUSARIUM VERTICILLIOIDE AND APPLICATION
00: -

The present invention discloses primers and probes for specifically detecting fumonisin-producing *Fusarium verticillioide* and belongs to the technical field of detection of fumonisin-producing *Fusarium verticillioide*. The primers and probes include sequences shown by SEQ ID NO.1-SEQ ID NO.6. The primers and the probes are prepared into a

detection kit, so that detection time may be shortened, and detection efficiency and accuracy are increased.



21: 2023/02323. 22: 2023/02/23. 43: 2023/03/24

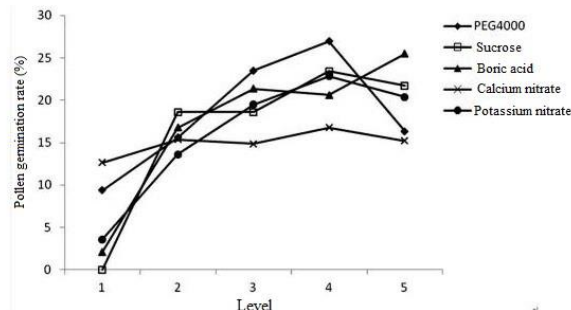
51: A01C; G01N

71: INSTITUTE OF NANFAN & SEED INDUSTRY, GUANGDONG ACADEMY OF SCIENCES, GDAS HAINAN INDUSTRIAL TECHNOLOGY RESEARCH INSTITUTE

72: CHANG, Hailong, QIN, Yuanxia, WANG, Jianqiang, WANG, Qinnan, ZHANG, Wei, CHEN, Daoqin, XIAO, Hongyan, WU, Qingdan, LIANG, Lei

54: METHOD FOR RAPIDLY DETECTING POLLEN VIABILITY
00: -

The present invention provides a method for rapidly detecting pollen viability, and relates to culture modes and culture conditions for efficiently increasing a germination rate of sugarcane pollen. The method mainly comprises steps of collection of sugarcane pollen, germination culture in vitro of pollen, determination of pollen viability and the like. The invention has the advantages that a liquid culture medium for germination in vitro of sugarcane pollen provided by the present invention is used, takes purified water as solvent, and comprises the following components: 50 g•L⁻¹-150 g•L⁻¹ of Polyethylene Glycol 4000 (PEG4000), 100 g•L⁻¹-200 g•L⁻¹ of sucrose, 200 mg•L⁻¹-500 mg•L⁻¹ of boric acid, 100 mg•L⁻¹-300 mg•L⁻¹ of calcium nitrate, and 100 mg•L⁻¹-300 mg•L⁻¹ of potassium nitrate; a 2 ml plastic centrifuge tube is used as a culture dish, for culturing at 28-32°C; the germination rate is greater than 85%.

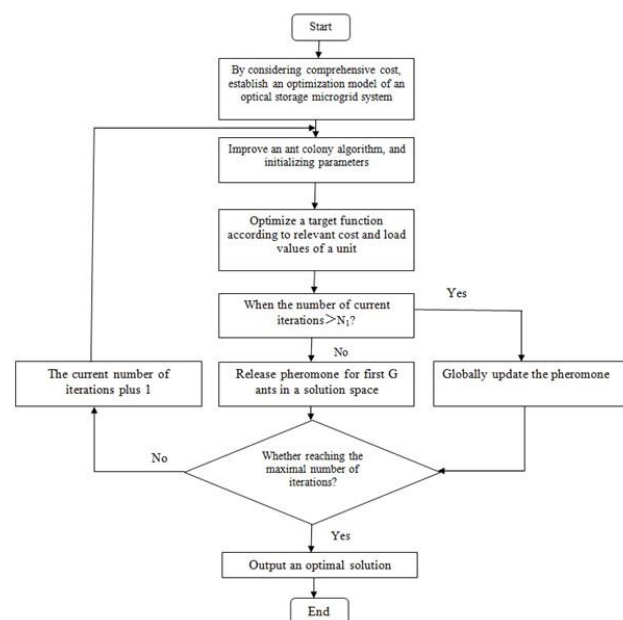


21: 2023/02363. 22: 2023/02/23. 43: 2023/03/24
 51: H02J; G06Q
 71: HUNAN UNIVERSITY OF TECHNOLOGY
 72: LI, Shengqing, WEN, Yanxi, LI, Huanping, WU, Jinghang

54: OPTIMAL ALLOCATION METHOD FOR CAPACITY OF OPTICAL STORAGE MICROGRID BASED ON IMPROVED ANT COLONY DYNAMIC PROGRAMMING

00: -

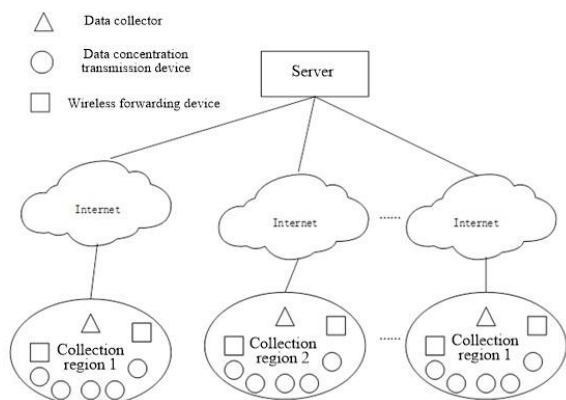
The present invention discloses an optimal allocation method for capacity of an optical storage microgrid based on improved ant colony dynamic programming, which establishes an optimization model of an optical storage microgrid system by considering the comprehensive cost; and a regulation factor attenuation parameter, a Boltzmann selection strategy, a deflection angle factor and an inflection point parameter are introduced to improve an ant colony algorithm, and the improved ant colony algorithm is used for solving the optimization model so as to optimize the capacity allocation of the optical storage microgrid system. In the present invention, the allocation method for the capacity of the optical storage microgrid considers factors of power generation cost, and improves the algorithm to improve the operational accuracy and convergence speed, thereby improving the capacity allocation performance of the optical storage microgrid system.



21: 2023/02367. 22: 2023/02/23. 43: 2023/03/24
 51: G08C
 71: LUOYANG INSTITUTE OF SCIENCE AND TECHNOLOGY
 72: WANG, Guoyong, GONG, Lei, DING, Simiao, HAN, Zhe, LI, Mingzhao, SUN, Zhaofeng, CUI, Wen
 54: INTERNET OF THINGS-BASED CITY HEATING DATA COLLECTION AND FAULT LOCATING SYSTEM

00: -

The present invention discloses an Internet of Things-based city heating data collection and fault locating system. Data collectors are connected with sensors for sensing heating information. Signal collection points in the whole heating system are divided into a plurality of collection regions, each collection region is provided with a data concentration transmission device, the data concentration transmission device is connected with the data collector in a collection region through a wireless forwarding device distributed in the corresponding collection region, the data concentration transmission devices in all collection regions are connected with a server controlling the heating system through data transmission lines, and each of the data collector, the data concentration transmission device and the wireless forwarding device is provided therein with a single chip microcomputer and a data cache.



21: 2023/02463. 22: 2023/02/24. 43: 2023/03/30

51: B02C

71: Wuxiang County Xianghui Runsen Coal Preparation Co., Ltd

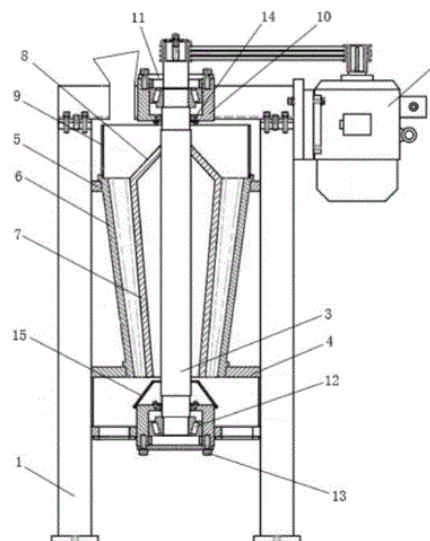
72: Zhang Yingxiang

33: CN 31: 202210684973.6 32: 2022-06-14

54: SPECIAL CRUSHER FOR COAL WASHING

00: -

The invention discloses a special crusher for coal washing, comprising: a machine base wherein a placing space is defined inside, and one side of the top of the machine base is fixed with a motor; a rotor, coaxially arranged at the center of the machine base, and the top end of the rotor is connected to the output shaft of the motor; discharge cylinders, fixed in the machine base; limiting rings, fixed in the machine base; rotating component, provided with two, one of which is provided on the top of the machine base and connected to the rotor, and the other thereof is provided at the bottom of the discharge cylinder and connected to the rotor; first cones, coaxially arranged outside the rotor, and the upper and lower ends are respectively limited by the limiting ring and the discharge cylinder, the inner wall is provided with several sieve bars; second cones, coaxially arranged inside the first cone, and the upper end is connected to the rotor through a third cone, the outer wall is provided with several sieve bars; cylinders, coaxially arranged on the upper end of the first cone; a feed inlet, arranged on the top of the machine base. The medium coal can be ground to the finest through the crusher, which is convenient for the recovery of clean coal. More than 20 million tons of clean coal can be recovered every year, which creates huge economic benefits.



21: 2023/02469. 22: 2023/02/24. 43: 2023/03/30

51: E21F

71: China University of Geosciences, Beijing

72: LIU Jianli, YAO Jun, ZHOU Deliang, ZHAO Chenchen, MA Bo, ZHU Junjie

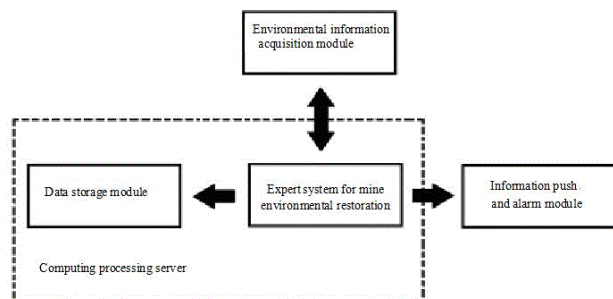
33: CN 31: 2022101973898 32: 2022-03-02

54: MINE AMBIENT INTELLIGENCE MONITORING SYSTEM AND METHOD

00: -

The invention relates to a mine ambient intelligence monitoring system and method, wherein the system comprises an environmental information acquisition module for acquiring environmental information data of a monitoring area; The mine environment restoration expert system is used for receiving environmental information data, generating a detection result and feeding the detection result back to the environmental information acquisition module. The data storage module is used for receiving and storing the alarm level, the treatment scheme and the corresponding original environmental data given by the mine environmental restoration expert system; Information push and alarm module: used to push the relevant information of alarm level and governance scheme to relevant responsible persons in real time; The expert system for mine environment restoration is connected with the environmental information acquisition module, the data storage module and the information push and alarm module respectively. The invention saves a lot of manpower, material resources, time and other costs, simplifies the whole process from the discovery of pollution to the end of the treatment

plan given by the expert consultation, and greatly improves the detection efficiency and accuracy.



21: 2023/02488. 22: 2023/02/24. 43: 2023/03/24

51: C12Q

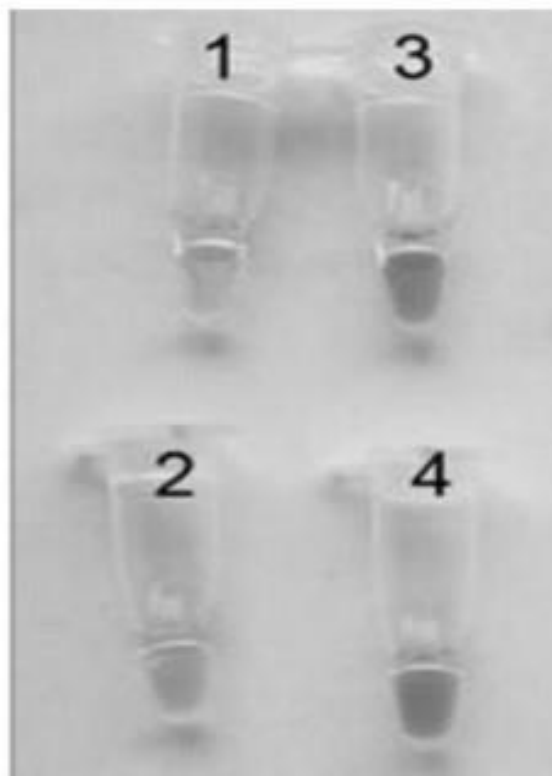
71: CHINESE ACADEMY OF INSPECTION AND QUARANTINE, BEIJING ANZONE TECHNOLOGY CO., LTD

72: WANG, Jing, NIE, Cong, LI, Li, YANG, Yu, LIU, Wei, SHI, Qi, CI, Ying, ZOU, Dayang, ZHANG, Qiao, SUN, Xiaoxia

54: KIT FOR RAPIDLY DETECTING PSEUDOMONAS AERUGINOSA

00: -

The present invention discloses a kit for rapidly detecting *Pseudomonas aeruginosa*, including a specific primer pair and a kit including the primer pair, wherein the kit includes a reagent 1, a reagent 2 and a sealant; the reagent 1 includes Ft, Bt, IF, IB, dNTP, Bst DNA polymerase and an indicator; and the reagent 2 includes (NH₄)₂SO₄, KCl, MgSO₄, Tween 20 and glycine betaine and has a pH value of 8.0. The kit provided by the present invention adopts a unique buffer system, has the advantage of high amplification compatibility, can conduct efficient specific amplification without completely removing proteins and other impurities, and is suitable for on-site inspection and quarantine testing requirements under big-crowd faster customs clearance backgrounds and also suitable for rapid laboratory testing.



21: 2023/02510. 22: 2023/02/24. 43: 2023/03/24

51: C12Q

71: CHINESE ACADEMY OF INSPECTION AND QUARANTINE, BEIJING ANZONE TECHNOLOGY CO., LTD

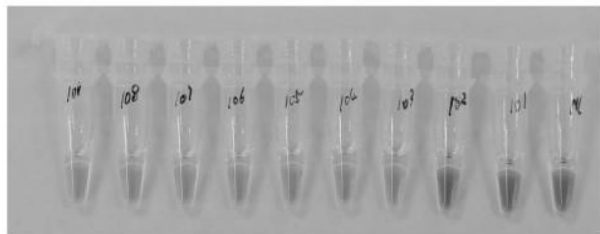
72: WANG, Jing, CI, Ying, SHI, Qi, LIU, Wei, NIE, Cong, SUN, Xiaoxia, LI, Li, YANG, Yu, ZOU, Dayang, ZHANG, Qiao

54: KIT FOR RAPIDLY DETECTING FRANCISELLA TULARENSIS

00: -

The present invention discloses a kit for rapidly detecting *Francisella tularensis*, including a reaction solution having a pH value of 8.8, dNTPs, BstDNA polymerase, FP and BP primers, an indicator and a sealant. The present invention provides the kit for rapidly detecting *Francisella tularensis*. The kit specifically recognizes an independent area of a target fragment by utilizing 2 primers, has high specificity and high sensitivity of nucleic acid testing, also has the characteristics of quick response, simplicity in operation and independence of large-scale instruments, is suitable for rapid laboratory testing and field use, and may meet on-site quarantine inspection and detection requirements

under big-crowd and fast customs clearance backgrounds.



21: 2023/02519. 22: 2023/02/24. 43: 2023/03/24

51: C12N; C12Q

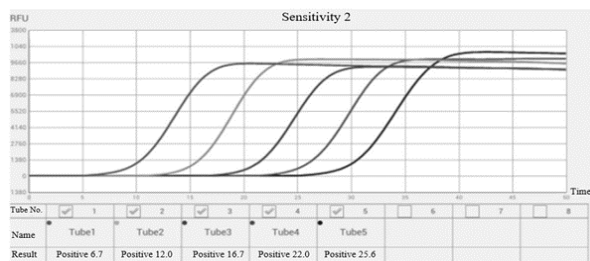
71: CHINESE ACADEMY OF INSPECTION AND QUARANTINE, BEIJING ANZONE TECHNOLOGY CO., LTD

72: WANG, Jing, LIU, Wei, SHI, Qi, ZOU, Dayang, LI, Li, SUN, Xiaoxia, YANG, Yu, NIE, Cong, CI, Ying, ZHANG, Qiao

54: PRIMER COMBINATION, KIT AND PSR METHOD FOR DETECTING BRUCELLA

00: -

The present invention discloses a primer combination, a kit and a PSR method for detecting Brucella and belongs to the technical field of biological detection. In the present invention, a PSR is carried out on to-be-detected samples by using the primer combination; and a reaction product of the PSR is detected to determine whether the to-be-detected samples contain Brucella. The PSR method in the present invention is simple and convenient in operation, short in reaction time, high in sensitivity and strong in specificity.



21: 2023/02520. 22: 2023/02/24. 43: 2023/03/24

51: H02J

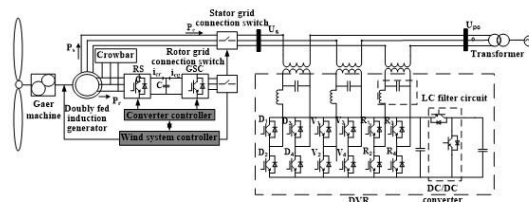
71: HUNAN UNIVERSITY OF TECHNOLOGY

72: LI, Shengqing, WEN, Yanxi, LI, Huanping, WU, Jinghang

54: DOUBLE Q-P COORDINATION CONTROL SYSTEM AND METHOD FOR DOUBLY FED WIND TURBINE AND DVR

00: -

The present invention provides a double Q-P coordination control system and method for a doubly fed wind turbine and a DVR. According to a reactive power demand situation when a voltage of a grid connection point drops, a DFIG is linked with the DVR to carry out staged reactive power compensation; a first stage gives priority to completion of reactive power supporting by a unit itself; a grid-side converter is converted from a unit power factor mode to a reactive power compensation mode; a rest reactive power vacancy is input into the DVR to assist the unit in the reactive power compensation; according to control characteristics of the DVR, the reference value of the DVR output voltage is obtained by using the double Q-P theoretical control algorithm of coordinate transformation; an error between the reference value and the actual value is checked by using a hysteresis voltage controller.



21: 2023/02608. 22: 2023/02/27. 43: 2023/03/30

51: A61D

71: Xinxiang Medical University

72: LI Chengzhang, DU Ailin, XU Hongyan, LU Na, CHEN Xin, XIE Tianyu, LI Ao, MA Heqiao, ZHANG Pengxiang, DING Qian, ZHOU Yujing, YANG Chongyao, BIAN Yanjie

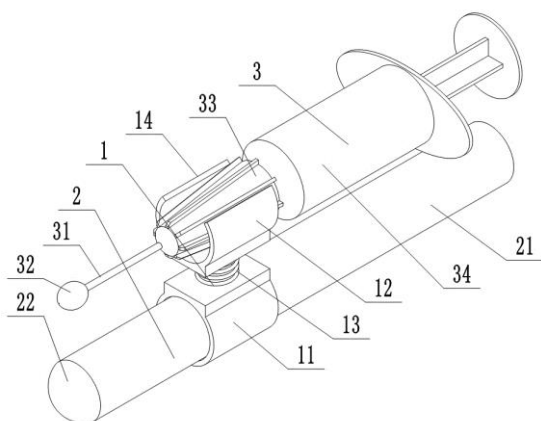
33: CN 31: 2023100666666 32: 2023-02-06

54: DEVELOPMENT OF ENDOSCOPE ASSISTED DEVICE FOR MICE GASTRIC PERFUSION

00: -

The invention discloses a device for assisting gastric perfusion of mice with endoscope development, comprising a connecting frame; the connecting frame comprises a fixing ring and a snap ring, and the fixing ring and the snap ring are arranged in a same direction, and a supporting spring is fixedly connected between the fixing ring and the snap ring; an endoscope arranged in the fixing ring; and a gastric perfusion device detachably connected in the snap ring, and the gastric perfusion device is

correspondingly arranged with the endoscope. The invention effectively solves a defect that mice are easy to die due to a high requirement of gastric perfusion operation, greatly reduces death rate of mice caused by gastric perfusion, brings convenience for operation, increases success rate of gastric perfusion operation, and improves accuracy of experimental data of gastric perfusion.



21: 2023/02683. 22: 2023/02/27. 43: 2023/03/30
51: G06F; G09B

71: ZHENGZHOU RAILWAY VOCATIONAL & TECHNICAL COLLEGE

72: ZHOU Sujing, YU Min, SUN Ying, ZHANG Ying, QIAO Tie, LIU Donghua, CHEN Bin

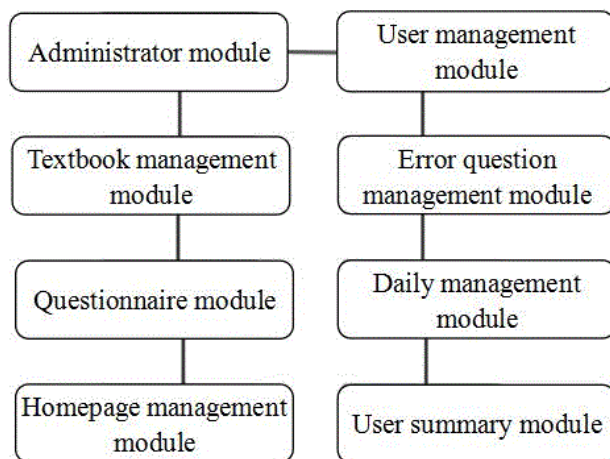
33: CN 31: 2023100812041 32: 2023-01-30

54: MATHEMATICS LEARNING ASSISTANT SYSTEM

00: -

The invention discloses a mathematics learning assistant system, which comprises an administrator module for managing the personal information of the administrator; the user management module is used for managing learner information and leaving messages for learners; the textbook management module is used for editing and auditing the textbook information; the questionnaire module is used for acquiring a mathematical questionnaire related to the textbook information; the error question management module is used to obtain the error questions that appear in the process of learners' answering mathematical questionnaires, and analyze and evaluate the error questions; the homepage management module is use for displaying the message left by the learner and the textbook information; the user summary module is used to obtain and manage the revision of learners'

error questions. The invention can timely find and effectively analyze the error-prone questions and related knowledge points of math learners, and realize online communication of the learners.



21: 2023/02684. 22: 2023/02/27. 43: 2023/03/30
51: G06F; G06Q

71: ZHENGZHOU RAILWAY VOCATIONAL & TECHNICAL COLLEGE

72: HU Xiangang, HU Yixuan, LIU Xinfang, LEI Yu, WANG Yu, SHEN Yanting, YIN Hang

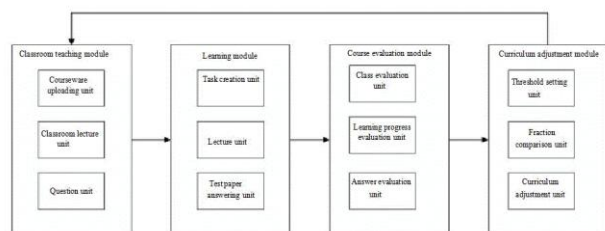
33: CN 31: 2023100825287 32: 2023-01-17

54: ONLINE TEACHING SYSTEM FOR IDEOLOGICAL AND POLITICAL EDUCATION

00: -

The invention discloses an online teaching system for ideological and political education, which belongs to the field of online teaching, and comprises a teacher teaching module, a student learning module, a course evaluation module and a course adjustment module, wherein the teacher teaching module is used for teaching ideological and political knowledge through an online platform for ideological and political education and writing corresponding answer papers; the student learning module is used for learning ideological and political knowledge through the online platform of ideological and political education and answering corresponding answer papers; the course evaluation module is used to evaluate students' learning level; Calculate the course evaluation score based on the learning level; the course adjustment module is used to set the score threshold of course quality, compare the course evaluation score with the score threshold to obtain a comparison result, and adjust the teacher's course teaching mode based on the comparison

result. The invention can form effective and personalized course planning for different learners, and finally realize a comprehensive and personalized online teaching system.



21: 2023/02751. 22: 2023/02/27. 43: 2023/03/30
51: F01N

71: Shanghai Polytechnic University

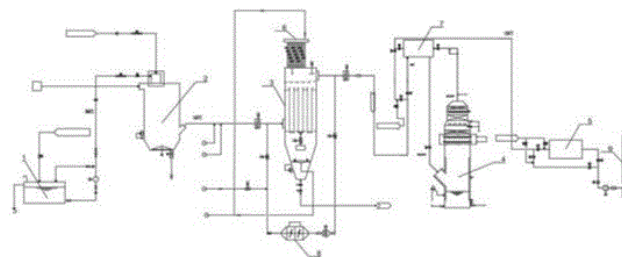
72: HUANG Qing, WU Yuxin, ZHU Bin, ZHANG Jinyu, ZHANG Xihua, YUAN Wenyi, WANG Lincui
33: CN 31: 202211293497.1 32: 2022-10-21

54: EXHAUST GAS TREATMENT SYSTEM IN THE CRUSHING AND SORTING PROCESS OF DISCARDED POWER LITHIUM BATTERIES

00: -

The invention discloses an exhaust gas treatment system in the crushing and sorting process of discarded power lithium batteries, which comprises a cooling tower; the process water tank supplies water to the cooling tower; the cooling tower is used for cooling the exhaust gas, humidifying and settling the black powder in the exhaust gas; a bag type dust remover; the bag type dust remover is used for bag type dust removal of the exhaust gas conveyed by the cooling tower; a filter bag dedusting device; the filter bag dedusting device is fixedly installed on the top of the bag type dust remover; a wet scrubber; the wet scrubber is communicated with the bag type dust remover through the exhaust gas heating exchanger; the wet gas scrubber is used for cooling and dehumidifying the high-temperature exhaust gas in the bag type dust remover to absorb acid gas; an activated carbon adsorption tower; the activated carbon adsorption tower is used to adsorb and filter the exhaust gas discharged from the exhaust gas heating exchanger and discharge the gas to the outside through the chimney. The system adopts dry method to treat exhaust gas, which is easy to maintain. The design of the cooling tower is compact and optimized. The system has good controllability against load changes. The overall pressure difference is very low, which can save the power of

the induced draft fan. The system is highly integrated and easy to operate.



21: 2023/02792. 22: 2023/02/27. 43: 2023/03/24

51: C05G; C09K

71: SHANDONG ACADEMY OF AGRICULTURAL SCIENCES, SHANDONG AGRICULTURAL UNIVERSITY

72: Ma, Changjian, Yuan, Huabin, Li, Quanqi, Hu, Xinhui, Sun, Zeqiang, Liu, Shenglin, Wang, Xuejun, Liu, Zhaohui

54: SALINE-ALKALI SOIL CONDITIONER AND PREPARATION METHOD THEREOF

00: -

The present invention discloses a saline-alkali soil conditioner, comprising the following raw materials in parts by weight: 120-180 kitchen waste, 120-180 urban riverway sludge, 120-180 phosphogypsum, 75-140 biochar particles, 40-80 humus, 10-20 microbial fermentation agent, 20-30 straws, 15-30 calcium superphosphate, 15-30 potassium fulvate, 30-60 urea, 25-40 carboxymethyl cellulose, 25-40 ammonium lauryl sulfate, 10-20 decomposition agent and 20-40 EDTA. The kitchen waste in the soil conditioner of the present invention has a bonding effect and can promote formation of a granular structure; formation of the granular structure is beneficial for loosening soil by a riverway sludge constituent, reducing soil salinity and increasing soil porosity; the phosphogypsum promotes formation of the soil granular structure, makes a soil layer structure more stable, and effectively reduces a soil pH and the soil salinity; and various constituents are reasonably matched and interact with each other to reduce the soil salinity and pH.

21: 2023/02794. 22: 2023/02/27. 43: 2023/03/24

51: C02F

71: HENAN UNIVERSITY OF URBAN CONSTRUCTION

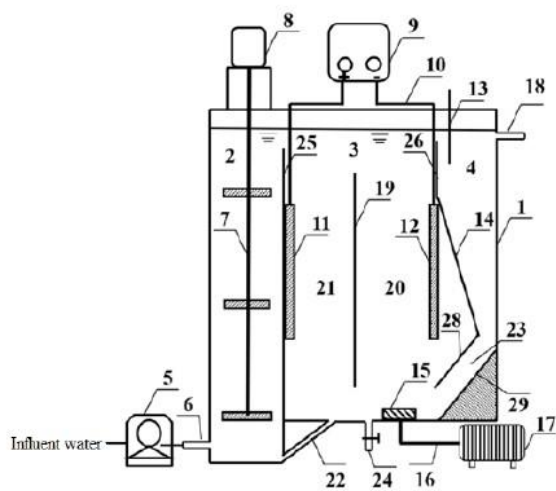
72: LI, Songya, WANG, Linpei, WU, Junfeng, LIU, Biao, WANG, Le, GAO, Hongbin, CHEN, Binghua,

ZHOU, Yiming, WANG, Xiaoyan, MAO, Yanli, ZHU, Xinfeng, KANG, Haiyan

54: CONTINUOUS-FLOW REACTION DEVICE FOR RAPIDLY CULTURING AEROBIC GRANULAR SLUDGE

00: -

Disclosed is a continuous-flow reaction device for rapidly culturing aerobic granular sludge, wherein influent water enters a reaction device body through an influent pump; a reaction device body comprises an anoxic zone, where sludge-water is mixed by mechanical stirring, an aerobic zone wherein an electric field system and an aeration system are arranged and a sedimentation zone where an inclined sludge sliding plate and a height-adjustable baffle plate forms a selective pressure of sedimentation speed, thereby adjusting and controlling the sedimentation speed. The settled effluent water overflows through a water outlet and is discharged through an effluent pipe. electrodes in the aerobic zone applies an electric field, creating weak current stimulation to induce microorganism aggregation; the high Dissolved Oxygen (DO) zone can create Hydraulic shear force; anoxic and aerobic alternation can form satiety-starvation conditions, which can accelerate sludge granulation and realize rapid culturing of aerobic granular sludge



21: 2023/02797. 22: 2023/02/27. 43: 2023/03/24
51: C05F; C12P
71: GANSU NATURAL ENERGY RESEARCH INSTITUTE (UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

INTERNATIONAL SOLAR ENERGY CENTER FOR TECHNOLOGY PROMOTION AND TRANSFER)

72: MA, Hongruo, CHEN, Long, MA, Songyao

54: METHOD OF PROMOTING ANAEROBIC FERMENTATION OF VEGETABLE WASTES

00: -

The present invention discloses a method of promoting anaerobic fermentation of vegetable wastes and relates to the technical field of microbial fermentation. The method includes the following steps: 1) culturing an inoculum; 2) pretreating a fermentation raw material of the vegetable wastes; 3) producing biogas with anaerobic fermentation; and 4) recovering an Fe₃O₄@BC nanometer material. In the present invention, by compounding an iron-based nanometer semiconductor material and biochar (BC), an Fe₃O₄@BC material (a biochar-loaded nanometer Fe₃O₄) is prepared; and during anaerobic fermentation of the vegetable wastes, the Fe₃O₄@BC material is added according to a certain ratio, and a maximum organic load and a maximum volumetric biogas production rate of anaerobic fermentation of the vegetable wastes may be effectively promoted.

21: 2023/02798. 22: 2023/02/27. 43: 2024/04/03
51: C12Q

71: INSTITUTE OF ANIMAL HUSBANDRY OF HEILONGJIANG ACADEMY OF AGRICULTURAL SCIENCES

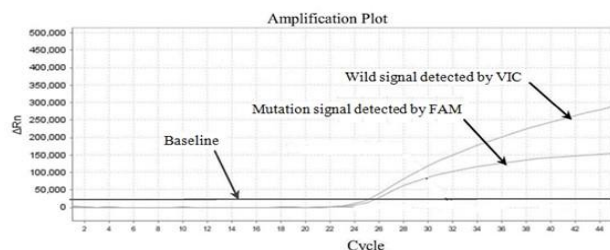
72: TIAN, Ming, HE, Xinmiao, LIU, Di

33: CN 31: 202310150437.2 32: 2023-02-22

54: RAPID TYPING KIT FOR PORCINE HALOTHANE GENE AND DETECTION METHOD THEREOF

00: -

The present invention discloses a rapid typing kit for porcine halothane gene and a detection method thereof, and relates to the technical field of biology. A reagent in the present invention includes a primer premix, a probe fluorescent quantitative PCR premix and ddH₂O. The method of the present invention has a large flux, can be used for simultaneously performing gene typing detection on 96 or 384 samples at a time, is suitable for large-scale screening of porcine halothane gene, and is particularly suitable for large and medium-sized commercial porcine farms.



21: 2023/02800. 22: 2023/02/27. 43: 2023/03/24
51: A23F

71: QIANSHAN COUNTY LVHE ORGANIC
RESOURCES DEVELOPMENT CO., LTD.

72: LIN, Shuhong, YANG, Puxiang, LI, Wenjin,
JIANG, Ping, ZHAN, Jiayi, LIANG, Yiming, WEN,
Yanqin, SANG, Wen, SU, Peng

54: PRODUCTION AND UTILIZATION METHOD OF TEA LEAVES, TEA BRANCHES AND TEA STEMS

00: -

Disclosed is a production and utilization method of tea leaves, branches and stems, comprising: collecting production materials of tea leaves, tea branches and tea stems for removal of impurities; classifying the production materials to separate the tea branches, stems and the leaves; rolling the classified tea branches and stems to break the same; crushing the tea leaves in a crusher; spraying liquid nitrogen on the tea leaves during crushing; irradiating and punching a crushed branch and leaf layer with laser; scenting the crushed tea branches, tea stems and leaves; and, spreading and cooling the scented tea branches, stems and leaves; and putting in bags to produce tea bags. Materials such as the tea leaves, branches and stems produced in a tea production process are processed into the tea bags through various processes, which solves reasonable utilization of the remaining tea leaves, branches and stems produced and avoids material waste.

21: 2023/02802. 22: 2023/02/27. 43: 2023/03/24
51: G06K; H04L; G06Q

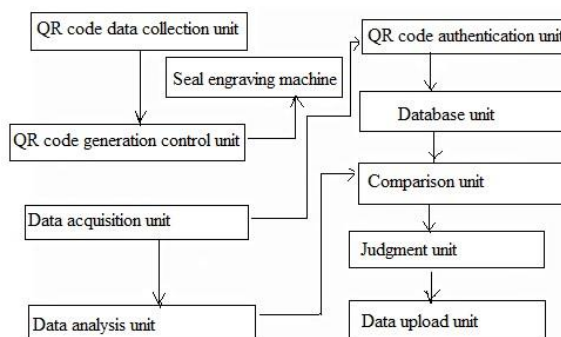
71: XINGZHI COLLEGE ZHEJIANG NORMAL
UNIVERSITY, MERRY WISER (JINHUA)
TECHNOLOGY DEVELOPMENT CO., LTD

72: DUAN, Zhizhuang, HUANG, Ruiyang, HUANG,
Yuyun

54: MULTIFUNCTIONAL ANTI-COUNTERFEITING AUTHENTICATION SYSTEM AND APPLICATION METHOD

00: -

An anti-counterfeiting authentication system includes an internet device and camera, with a quick response (QR) code data collection unit, a QR code generation control unit, a data acquisition unit, a data analysis unit, a QR code authentication unit, a database unit, a comparison unit, a judgment unit and a data upload unit based on an artificial intelligence technology; and an application method of the multifunctional anti-counterfeiting authentication system. By combining a seal with a QR code, the possibility that the seal is reproduced is reduced; by deeply identifying and judging the time of signatures, fingerprints and seals, the authenticity of corresponding materials can be obtained, so that an adverse impact of forged material is reduced; when the judgment unit judges that the detected seal and QR code, signature and fingerprint data are inauthentic, the data can be transmitted to a networked credit system of the government department to deter forgers.



21: 2023/02803. 22: 2023/02/27. 43: 2023/03/02
51: B65B

71: JIANGXI LIANGFU AGRICULTURE CO., LTD.

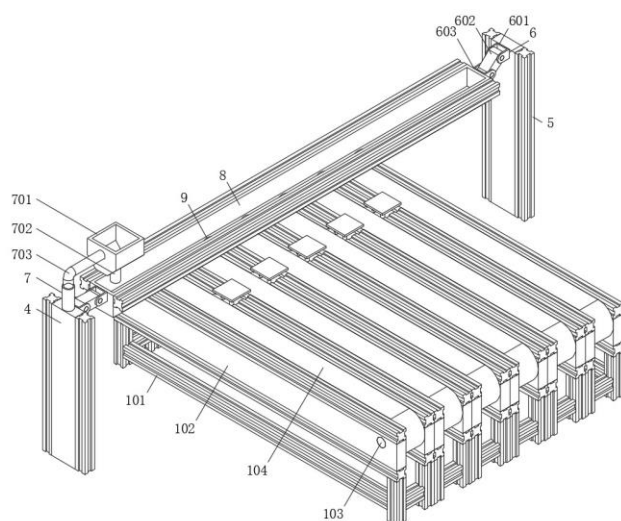
72: GAO, Huaqing, LIN, Shuhong, HAN, Mengmeng,
LU, Liangzhi, ZHAN, Jiayi, XU, Jinlong, LI, Lingzhi,
YU, Shuhong, LIN, Haihong, ZHANG, Hongbo,
XIONG, Yan, YE, Xiaohua, YU, Li

54: NAVEL ORANGE CLASSIFYING AND PACKAGING EQUIPMENT FOR SORTING NAVEL ORANGES

00: -

The present invention discloses a navel orange classifying and packaging equipment, including an orange box conveyor. An inner side of the box conveyor is embedded with a plurality of box bearing components; an inner side of each box bearing component is embedded with a load adjusting

component. The oranges are classified by using a plurality of orange feeding openings with different calibers which flows into a corresponding box; with the continuous increase of an overall weight of the navel orange packaging box, a box bearing plate may squeeze a load spring through a telescopic inner shaft and an upper leaf spring, the load spring is compressed gradually, when a bottom of a box contacts a conveyor, the conveyor corresponding to the box is controlled to run; the conveying belt conveys the box to enter the downstream for sealing, thereby realizing the synchronous classification and packaging of the navel oranges.



21: 2023/02806. 22: 2023/02/27. 43: 2023/03/24
51: A24C

71: NORTHWEST A&F UNIVERSITY, SHAANXI
BRANCH OF CHINA NATIONAL TOBACCO
CORPORATION

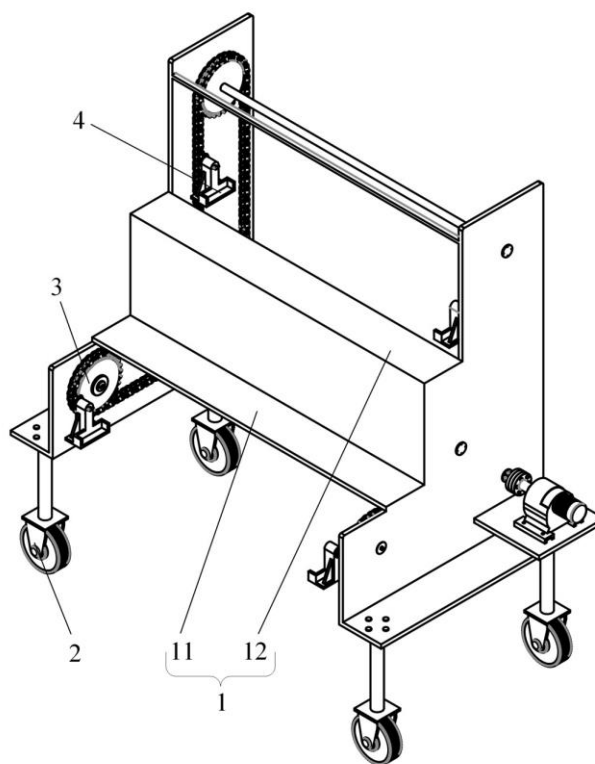
72: LI, Wei, JIAO, Taowei, LI, Longfei, HE, Xin,
XIAO, Yumeng, DU, Xinghua, SANG, Shizhe,
WANG, Baojun, LIU, Benrui, LIU, Qianjin

54: AUTOMATIC LIFTING DEVICE FOR TOBACCO CLIP

00: -

Disclosed is an automatic lifting device for a tobacco clip, comprising a rack, a walking module installed at the bottom of the rack, a lifting module installed on the rack and a clamping module installed on the lifting module which comprises a deceleration motor, a coupling, an end cover, a bearing, a sleeve, a transmission shaft, sprockets, chains and idler sprockets; the clamping module and the chain accessories on the chains of the lifting module are fixed by bolts; and the chains move to drive the

clamping module to complete the automatic lifting work of the tobacco clip. The present invention has simple structure, is suitable for the automatic lifting work of the tobacco clip in a tobacco curing house in the process of tobacco curing, can complete the automatic lifting of the tobacco clip, reduces the production cost, and improves the of tobacco loading in the tobacco curing house.



21: 2023/02807. 22: 2023/02/27. 43: 2023/03/27
51: A61K

71: CHEN, Long

72: CHEN, Long, GAO, Hongqiang, YANG, Fake,
PU, Yongzhu, LI, Jindan, FENG, Chengtao, CHEN,
Dongxue, WANG, Yue, HUANG, Rong, HU, Qiuyuan
33: CN 31: 202310159484.3 32: 2023-02-23

54: METHOD OF USING CIRBP AS A MOLECULAR MARKER FOR DIAGNOSIS AND TREATMENT OF PANCREATIC CANCER

00: -

A method of using CIRBP as a molecular marker for diagnosis and treatment of pancreatic cancer is disclosed. The method includes the following steps: S1: material preparation, S2: cell resuscitation, S3: cell culture, S4: experiment grouping, and S5: RIP to detect P CIRBP regulating TP53. For the method, the nucleoplasm expression of antibody is

significantly inversely related to the tumor size of patients with pancreatic cancer, the paraneoplastic plasma expression of antibody is significantly inversely related to the diabetes history of patients with pancreatic cancer. In other words, the plasmas expression of antibody of the subgroup without a history of diabetes is significantly higher, the total survival of the pancreatic cancer patients with a high nuclear expression of the antibody is significantly better, and the survival of the pancreatic cancer with a high expression of the target gene in the database query is significantly better for inhibiting cancer.

21: 2023/02808. 22: 2023/02/27. 43: 2023/03/24

51: B65B

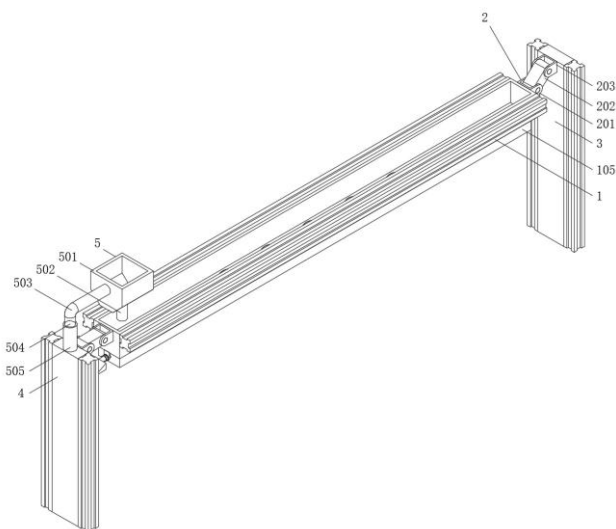
71: JIANGXI LIANGFU AGRICULTURE CO., LTD.

72: LIN, Shuhong, YE, Xiaohua, YU, Li, LU, Liangzhi, ZHAN, Jiayi, GAO, Huaqing, HAN, Mengmeng, YU, Shuhong, ZHANG, Hongbo, XIONG, Yan, LI, Lingzhi, XU, Jinlong

54: EFFICIENT NAVEL ORANGE SCREENING MACHINE

00: -

Disclosed is a navel orange screening machine, two ends of an orange screening box are fixedly connected with an inclination adjusting component respectively; the ends of the inclination adjusting components are connected with a first and a second side stander, a height of the second side stander is lower than the first side stander; an orange receiving and feeding component is arranged above the orange screening box. When oranges are delivered to a feeding hopper by a conveyor, since there is an inevitable height difference between the conveyor and the orange receiving hopper, the oranges exert downward pressure on the hopper, and under the action of the downward pressure, the hopper retracts inside a telescopic outer tube through a telescopic inner shaft, and pulls a telescopic spring to have deformation, so that a certain buffering effect may be achieved at the moment when the oranges collide with the hopper.



21: 2023/02809. 22: 2023/02/27. 43: 2023/03/27

51: G06T

71: INNER MONGOLIA MINZU UNIVERSITY, LANZHOU JIAOTONG UNIVERSITY, NORTHEAST FORESTRY UNIVERSITY

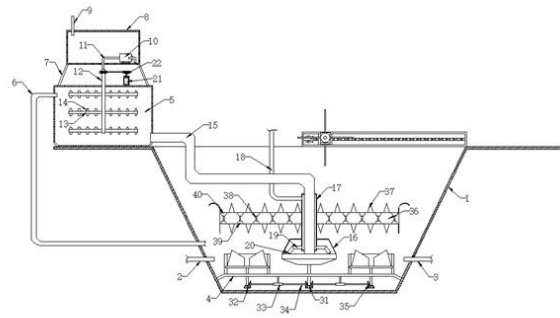
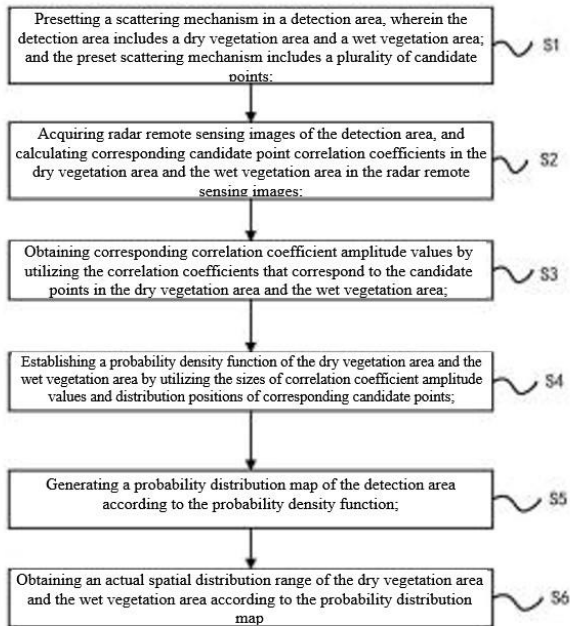
72: WU, Xiaoqiang, JING, Weipeng, WU, Lan, ZHANG, Hongna, WU, Kaijun

33: CN 31: 202210522742.5 32: 2022-05-13

54: GRASSLAND VEGETATION EXTRACTION METHOD BASED ON RADAR REMOTE SENSING IMAGES

00: -

Disclosed is a grassland vegetation extraction method based on radar remote sensing images including the following steps: presetting a scattering mechanism which includes a plurality of candidate points in a detection area, which includes a dry vegetation area and a wet vegetation area; acquiring radar remote sensing images of the detection area, and calculating corresponding candidate point correlation coefficients in the dry and the wet vegetation areas in the radar remote sensing images; obtaining corresponding correlation coefficient amplitude values by utilizing the correlation coefficients that correspond to the candidate points in the dry and the wet vegetation area; establishing a probability density function of the dry and the wet vegetation areas by utilizing sizes of the correlation coefficient amplitude values and distribution positions of corresponding candidate points; generating a probability distribution map of the detection area; obtaining a spatial distribution range of the vegetation areas according to the map.



21: 2023/02811. 22: 2023/02/27. 43: 2023/03/24
51: B03B; B03D

71: BEIJING HUAYU ENGINEERING CO., LTD OF CHINA COAL TECHNOLOGY AND ENGINEERING GROUP

72: HE, Shijie, LI, Zhiyong, XIAO, Min, SHI, Xinhong, ZHENG, Jihong, LIU, Shucheng, ZHAO, Bingbing, LI, Yongkun, LI, Xiaodong, YUE, Yunhai

54: FLOTATION COMPLETE DEVICE

00: -

The present invention belongs to the technical field of mineral separation, particularly relates to a flotation complete device, comprising a flotation cell. The right side wall of the flotation cell is fixedly provided with an ore pulp discharge tube; the upper side wall of the flotation cell is fixedly provided with symmetrical supporting frames; the upper ends of the two supporting frames are jointly and fixedly provided with a mixing bin; the lower end of the mixing bin is fixedly provided with a diversion cylinder; an upper end in the mixing bin is fixedly provided with a mixing mechanism; the left side wall of the mixing bin is fixedly provided with a flotation agent adding tube; the right side wall of the mixing bin is fixedly provided with an ore pulp inlet tube; and an upper end in the diversion cylinder is fixedly provided with a fixing block.

21: 2023/02810. 22: 2023/02/27. 43: 2023/03/24
51: E21B

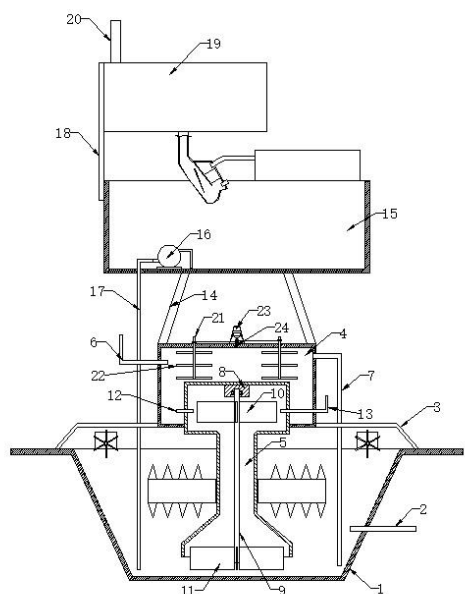
71: BEIJING HUAYU ENGINEERING CO., LTD OF CHINA COAL TECHNOLOGY AND ENGINEERING GROUP

72: ZHENG, Jihong, SHI, Xinhong, HE, Shijie, ZHAO, Bingbing, ZHANG, Huihui, DING, Huaqiong, BAO, Xiaoyan

54: ANNULUS JET SUCTION AGITATING FLOTATION MACHINE

00: -

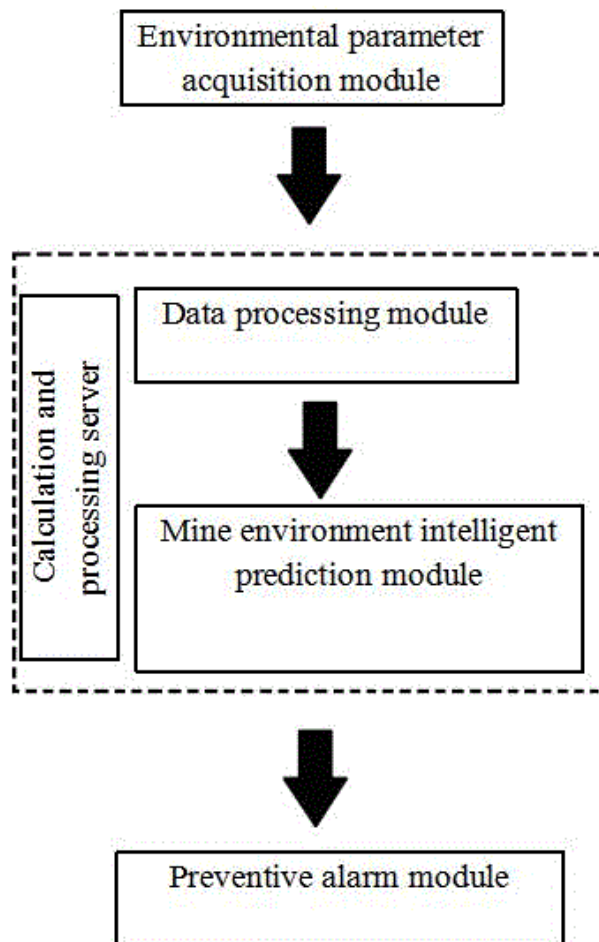
The present invention belongs to the technical field of mineral separation, in particular to an annulus jet suction agitation flotation machine, comprising a flotation cell. A left side wall of the flotation cell is fixedly provided with a pulp feeding tube; and a right side wall of the flotation cell is fixedly provided with a pulp discharge tube. The ejection of the pulp and air jet is used to drive a first agitation device to rotate, and the first agitation device drives a plurality of surrounding second agitation devices to simultaneously rotate through the transmission of a driving mechanism, so as to increase the agitation of the pulp, to generate enough bubbles to better remove harmful substances. During mixing of a flotation agent and the pulp, agitating and dosing can be simultaneously conducted, so that the flotation agent and the pulp are better mixed.



21: 2023/02949. 22: 2023/02/28. 43: 2023/03/30
 51: G06N; G06Q
 71: China University of Geosciences, Beijing
 72: LIU Jianli, YAO Jun, ZHOU Deliang, LI Kexin, LI Zehai, CAO Ying, LIU Xiangfang
 33: CN 31: 2022103509376 32: 2022-04-02
54: MINE ENVIRONMENT INTELLIGENT PREDICTION SYSTEM BASED ON ARTIFICIAL INTELLIGENCE

00: -

The invention provides a mine environment intelligent prediction system based on artificial intelligence, which comprises an environmental parameter acquisition module, a data processing module, a mine environment intelligent prediction module and a preventive alarm module; the environmental parameter acquisition module is used for acquiring environmental parameters in the monitoring area; the data processing module is used for preprocessing the environmental parameters; the mine environment intelligent prediction module is used for predicting the future trend according to the preprocessed environmental parameters; the preventive alarm module gives an alarm according to the predicted result. The invention intelligently predicts the environmental data based on the mine environment intelligent prediction system, and realizes the intelligent prediction and advanced prevention and treatment of the mine environmental change trend.



21: 2023/03017. 22: 2023/02/28. 43: 2023/03/30
 51: B01J
 71: Taiyuan University of Technology
 72: Hongtao WANG
 33: CN 31: 2023100919689 32: 2023-02-02
54: PREPARATION METHOD FOR BISMUTH OXYCHLORIDE NANOSHEET AND BISMUTH OXYCHLORIDE NANOSHEET PREPARED WITH SAME

00: -

The present invention provides a preparation method for a bismuth oxychloride nanosheet and a bismuth oxychloride nanosheet prepared with the same and relates to the technical field of photocatalytic materials. The preparation method includes the following steps: adding bismuth nitrate to absolute methanol with stirring to obtain a solution A; dispersing ammonium chloride in deionized water to obtain a solution B; slowly adding the solution B to the solution A with stirring to obtain a solution C; adding a surfactant to the solution C for uniform

stirring to obtain a solution D; and performing heating reaction on the solution D at 150-160 degrees Centigrade, and centrifuging, washing and drying a resultant to obtain the bismuth oxychloride nanosheet. By regulating a shape of the obtained bismuth oxychloride nanosheet by changing the surfactant, the present invention features cheap and available synthetic raw materials, a simple control method, a mild preparation condition, stable quality of a product, easiness in control of various parameters, high production efficiency, good repeatability and easy realization of mass production.

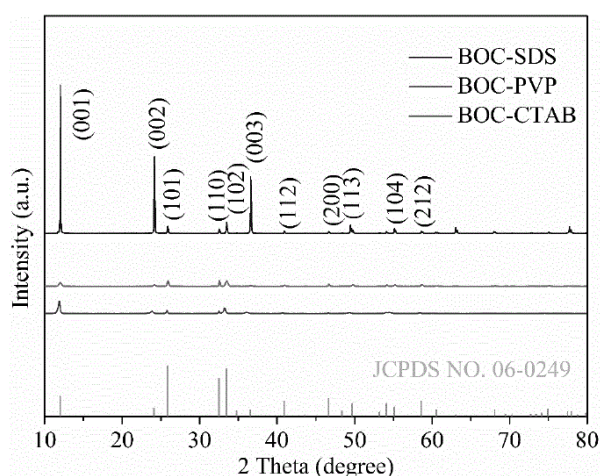


FIG 1

21: 2023/03018. 22: 2023/02/28. 43: 2023/03/30
51: F28D

71: Pang Jiechun
72: Pang Jiechun

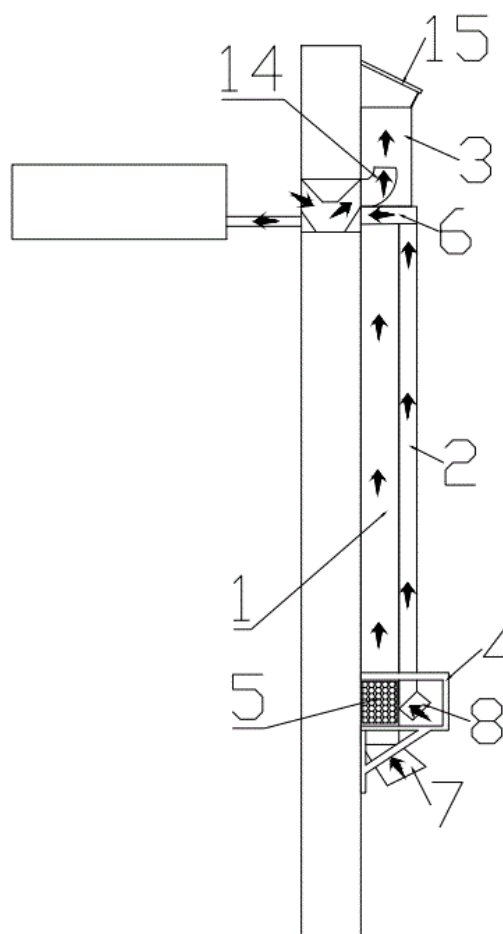
33: CN 31: 2023100480455 32: 2023-01-31

54: FRESH AIR AND CELLULAR HEAT EXCHANGE ENERGY SAVING SYSTEM

00: -

The invention discloses a fresh air and cellular heat exchange energy saving system, which includes a first air duct, a second air duct, an outlet air duct, a fixed frame, a tubular heat exchanger and a cellular heat exchanger. The fixed frame is provided with a first air duct, and the side of the first air duct on the fixed frame is provided with a second air duct. The upper end of the first duct and the upper end of the second duct are combined to form an end pipe, and one end of the end pipe is connected to the tubular heat exchanger, and the upper end of the end pipe is provided with an outlet pipe, and one end of the

outlet pipe is connected to the tubular heat exchanger. A cellular heat exchanger is provided inside the bottom end of the first duct, and a first air inlet is provided at the lower end of the first duct, while a second air inlet is provided at the lower end of the second duct. The tubular heat exchanger includes an outer tube shell and a V-tube, the V-tube is provided inside the outer tube shell, the two ends of the V-tube are flush with the two ends of the outer tube shell, and the upper end of the V-tube is connected to the wall of the outer tube shell. The outer cavity of the V-tube inside the outer shell is formed, and the cavity below the V-tube at both ends of the outer shell is provided with an inlet and an outlet respectively.



21: 2023/03079. 22: 2023/02/28. 43: 2023/03/30
51: G05D

71: Zhang Shiqing

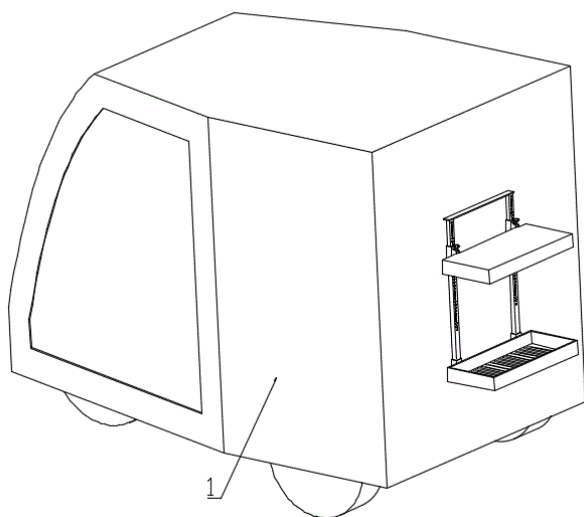
72: Zhang Shiqing, Zhang Zixuan

33: CN 31: 202222739284.9 32: 2022-10-18

54: AN ELECTRIC VEHICLE WITH A DETACHABLE AIR CONDITIONER EXTERNAL UNIT

00: -

An electric vehicle with a detachable air conditioner external unit: comprising an electric tricycle body, the rear of the electric tricycle body is provided with a support of the detachable air conditioner external unit; the support of the detachable air conditioner external unit comprises two symmetrically arranged sliding rods; the sliding rod is provided with limiting blind holes, and the lower supporting frame is fixedly arranged on the lower part of the two symmetrically arranged sliding rods; the upper supporting frame is symmetrically provided with sliding sleeves on both sides of its one side, the sliding sleeve is provided with a nut, and the nut is provided with a butterfly limit bolt; the butterfly limit bolt passes through the sliding sleeve and extends to the inside of the sliding sleeve and is embedded in the limit blind hole. According to the climate conditions, the quick installation and disassembly of the external unit of the air conditioner can be realized, the structure is novel, the design is unique, and it has high practicability, which is worth popularizing.



21: 2023/03122. 22: 2023/02/28. 43: 2023/03/30
51: C12P

71: Yancheng Teachers University

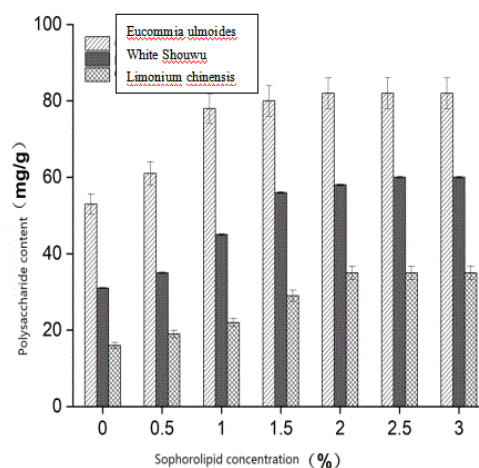
72: Guoqiang CUI, Xiaoyu WANG, Yinbei JI,
Xiangyu JU, Pengjin LU

33: CN 31: 202210526265.X 32: 2022-05-13

54: A METHOD OF EXTRACTING PLANT POLYSACCHARIDES FOR THE USE OF SOPHOROLIPID

00: -

The present invention relates to the use of sophorolipid and a method for the extraction of plant polysaccharides. The present invention uses locust glycolipids for the extraction of plant polysaccharide components. The use of the method provided by the invention enables efficient extraction of polysaccharide components from natural plant raw materials; the introduction of sophorolipid in a cyclic ultrasonic extraction method allows the easy separation of polysaccharides from surfactants by applying an alcoholic precipitation method after extraction of the polysaccharides; the method also avoids the loss of polysaccharide components due to the removal of biological surface activity.



21: 2023/03224. 22: 2023/03/01. 43: 2023/03/30
51: G06F

71: Mrs.Elavarasi M, Dr.K R N Kiran Kumar,
Mr.Nazeer Shaik, Dr.M.Lakshmi Prasad,
Dr.V.Anjana Devi, Mr.Anandbabu Gopatoti,
Dr.Devabalan Pounraj, Dr.Sushma Jaiswal,
Mr.Tarun Jaiswal, Mr.Shashikant Kaushaley

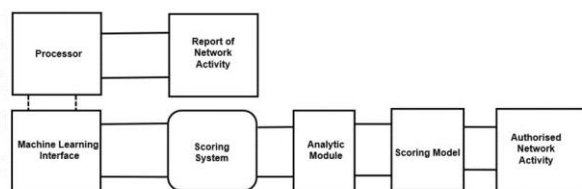
72: Mrs.Elavarasi M, Dr.K R N Kiran Kumar,
Mr.Nazeer Shaik, Dr.M.Lakshmi Prasad,
Dr.V.Anjana Devi, Mr.Anandbabu Gopatoti,
Dr.Devabalan Pounraj, Dr.Sushma Jaiswal,
Mr.Tarun Jaiswal, Mr.Shashikant Kaushaley

33: IN 31: 202341001491 32: 2023-01-07

54: A SYSTEM FOR PROVIDING CYBER SECURITY BY IMPROVED PREDICTIVE POTENTIAL OF MACHINE LEARNING AND METHOD THEREOF

00: -

The present invention discloses a system for providing cyber security by improved predictive potential of Machine Learning and method thereof. In the present invention, a report of network activity having a score, which is calculated based on the reported behaviour and a scoring model, with the score indicating the possibility of a security breach by using a machine learning interface; an analytic module for checking the score to make sure it's not a false positive by doing a probe on one or more hosts in the network where the alert generated and once it's established that the alert is legitimate, the scoring system is updated automatically, and any network activity that falls below a predetermined threshold is flagged as suspicious.



21: 2023/03225. 22: 2023/03/01. 43: 2023/03/30
51: G06N

71: Dr.Saahira Banu Ahamed, Dr.Shermin Shamsudheen, Ms.M.Elavarasi, Dr.Valli Madhavi Koti, Dr.K.Sridharan, Dr.Clara Shanthi.D, Dr.R.Denis, Dr.Sushma Jaiswal, Mr.Anandbabu Gopatoti, Mr.Tarun Jaiswal

72: Dr.Saahira Banu Ahamed, Dr.Shermin Shamsudheen, Ms.M.Elavarasi, Dr.Valli Madhavi Koti, Dr.K.Sridharan, Dr.Clara Shanthi.D, Dr.R.Denis, Dr.Sushma Jaiswal, Mr.Anandbabu Gopatoti, Mr.Tarun Jaiswal

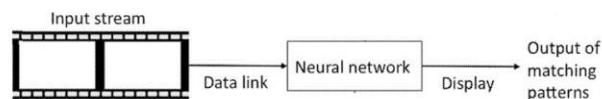
33: IN 31: 202341001893 32: 2023-01-10

54: A DEEP NEURAL NETWORK-BASED INTRUSION DETECTION SYSTEM BY USING MACHINE LEARNING INTERFACES FOR A CLOUD ENVIRONMENT

00: -

The present invention discloses a deep neural network-based intrusion detection system by using machine learning interfaces for a cloud environment. In the present invention, a sensor for semi-supervised machine learning interface connecting to a cloud network node that can learn from both labelled and unlabeled input and event recording that includes both malicious attacks and benign requests. Further, a data flow collector is

programmed to gather data packets that are destined for a computer and generate an input vector for each packet flow with a deep neural network built out of blocks and trained to classify input vectors as either safe or dangerous.



21: 2023/03262. 22: 2023/03/02. 43: 2023/03/30
51: E04B

71: THE SECOND CONSTRUCTION ENGINEERING COMPANY LTD. OF CHINA CONSTRUCTION SECOND ENGINEERING BUREAU

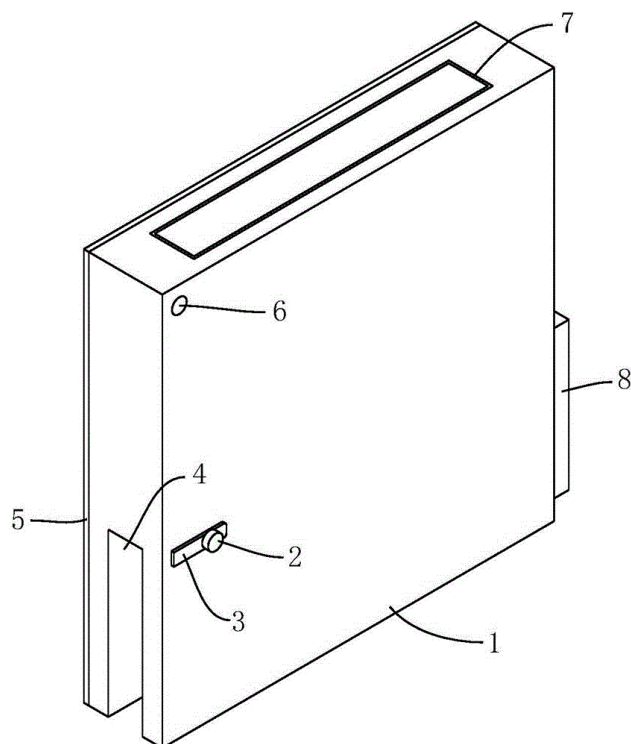
72: ZHANG, Jingyu, JIA, Daotong, LIU, Hanlong, YE, Xinyue, ZHAO, Lianbo, YU, Hao

33: CN 31: 202220883231.1 32: 2022-04-14

54: STEEL WIRE MESH FRAME CONCRETE WALL FOR FABRICATED BUILDING

00: -

The present disclosure discloses a steel wire mesh frame concrete wall for fabricated building, which includes: a wallboard; a steel wire mesh frame, wherein the steel wire net frame is arranged in the wallboard; a splicing groove, which is opened at the side end of the wallboard; a splicing block, which is provided at the side end of the wallboard; a connecting structure, which comprises a reinforcing steel bar movably penetrating through the upper wallboard and the splicing block; and a limiting mechanism, which is arranged on the wallboard and is used for supporting the bottom end of the reinforcing steel bar. The steel wire frame is provided to increase the strength of the wallboard, and the splicing slot is provided to facilitate the connection of the splicing block, so that the two wallboards are firmly spliced together. The steel bars are placed inside the upper grouting hole of the wallboard, and the two ends of the steel bars are inserted into the upper grouting hole and the lower grouting hole respectively, and the two wallboards are fixed together through the pipe of concrete, which can solve the problems of low connection strength of concrete building wall by bolt splicing and low service life of concrete wall of assembled building in the prior art.



21: 2023/03263. 22: 2023/03/02. 43: 2023/03/30
51: B66C

71: THE SECOND CONSTRUCTION
ENGINEERING COMPANY LTD. OF CHINA
CONSTRUCTION SECOND ENGINEERING
BUREAU

72: ZHANG, Chao, LIU, Shuwei, YE, Xinyue,
ZHANG, Jingyu, ZHOU, Haiqiang

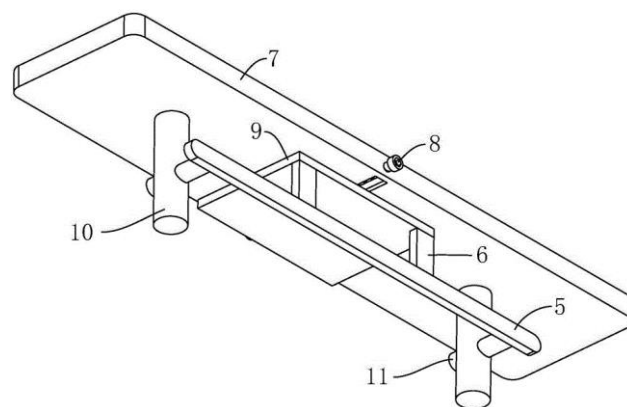
33: CN 31: 202220897864.8 32: 2022-04-18

54: VERTICAL HOISTING DEVICE FOR STEEL WIRE MESH FRAME SANDWICH PREFABRICATED WALLBOARD

00: -

The present invention provides a vertical hoisting device for steel wire mesh frame sandwich prefabricated wallboard, including a mounting plate, a hanging rod, a hanging ring, an insertion limiting mechanism and a linear driving mechanism, the mounting plate being a rectangular flat plate, horizontally arranged transversely along its length. Two hanging ring are symmetrically set on the top of the mounting plate. Two hanging rod are spaced at the bottom of the mounting plate along its length, and the lower end of the hanging rod can be inserted into the top of the composite wallboard. The linear drive mechanism is located inside the mounting plate, and the insert limiting mechanism is located on the front side of the hanging rod, and its top is

fixedly connected to the movable end of the linear drive mechanism. Through the cooperation of the hanging rod and the interlocking limit mechanism, the top of the wallboard is locked, which makes the lifting of the invention safe, easy to disassemble and install, and smooth, and improves the efficiency of lifting the wallboard, thus ensuring the construction progress is accelerated.



21: 2023/03307. 22: 2023/03/03. 43: 2023/03/30
51: A22C

71: Zhejiang International Maritime College

72: Minghai DONG, Chen ZHAO, Jie WU, Zailiang LIU

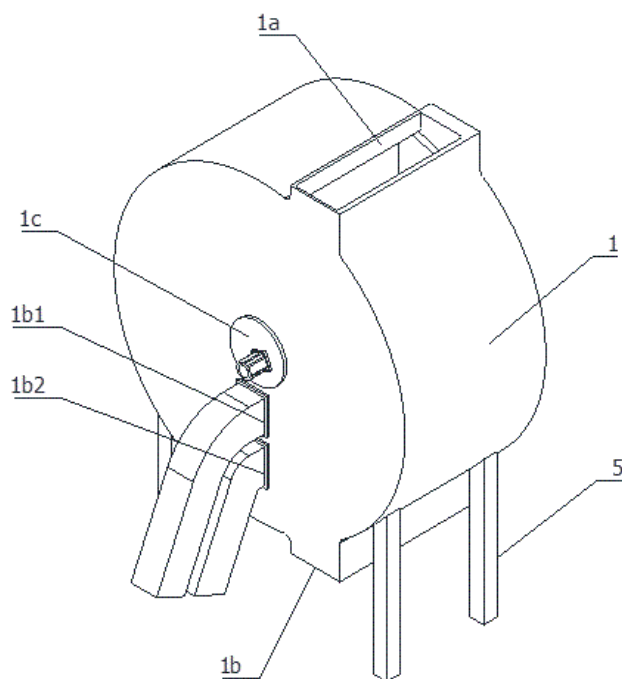
33: CN 31: 2022106961685 32: 2022-06-20

54: AQUATIC PRODUCT CONVEYING DEVICE FOR FISHING VESSEL

00: -

The present invention relates to the technical field of aquatic product transmission, in particular to an aquatic product conveying device for a fishing vessel, which comprises a machine frame; a sorting box is arranged on the machine frame, and the sorting box is provided with a feed port, a first discharge port, a second discharge port, a third discharge port, a driving cavity and a driving mechanism, a plurality of moving frames and a plurality of sorting tanks; the sorting tank is provided with a first unloading port, a second unloading port, a third unloading port, two clapboards and a plurality of roller shafts arranged along a radial direction of the sorting box. According to the application, due to the arrangement of the driving cavity and the plurality of sorting tanks, the occupied area of the whole device is smaller, so that more use space on the fishing vessel can be liberated; and due to the arrangement of the plurality of roll shafts, aquatic products are sorted through different gaps between

the roller shafts, so that aquatic products can be transported conveniently and classified at the same time, and the workload of workers is reduced.



21: 2023/03309. 22: 2023/03/03. 43: 2023/03/30

51: G06T

71: Hangzhou Apogee Tech Co., Ltd.

72: Ming Ge, Jingxue Shen, Jiang Wei, Shuangfei Liu, Bo Hu

54: QUALITY ANALYSIS METHOD AND SYSTEM BASED ON MACHINE VISION IN NEW ENERGY BATTERY MANUFACTURING

00: -

The invention relates to a quality analysis method and system based on machine vision in new energy battery manufacturing. The invention aims to provide a quality analysis method and system based on machine vision in new energy battery manufacturing so as to detect the coating condition of a pole piece on line in real time, thereby ensuring the product quality. According to the technical scheme, the method comprises the following steps: S1, acquiring front and back images of a product; S2, finding out initial approximate position areas of the coating areas on the front and back images of the product through an image pyramid algorithm; S3, performing Gaussian smoothing filtering once in the approximate position area to remove noise signals; s4, calculating edge images in the X direction and the Y direction of the coating area by using a Prewitt

operator; S5, calculating a gradient direction and a derivative of each pixel point by using the edge values in the X direction and the Y direction; S6, according to the gradient direction and the derivative, pixels with small edge response are removed, and a continuous skeleton line with the maximum edge response is left. The method is suitable for the field of product quality detection.

21: 2023/03334. 22: 2023/03/06. 43: 2023/03/30

51: C09K

71: NANTONG UNIVERSITY

72: MIAO, Jianwen, SONG, Guohua, ZHANG, Lingcai

33: CN 31: 202310041645.9 32: 2022-01-13

54: A METHOD OF SYNTHESIZING PHOSPHOR BY HYDROTHERMAL METHOD

00: -

The invention discloses a method for synthesizing phosphor by hydrothermal method. The phosphor is $\text{Sr}_{0.79}\text{Mg}_{0.2}\text{MoO}_4: 0.005\text{Sm}^{3+}, 0.005\text{Na}^{+}$ +phosphor, and the doping amount of Mg^{2+} is $x=0.2$; The doping amount of Sm^{3+} is $y=0.005$; In the synthesis of S phosphor, sodium citrate was added as a chelating agent; PEG20000 is used as surfactant. The $\text{Sr}_{0.79}\text{Mg}_{0.2}\text{MoO}_4: 0.005\text{Sm}^{3+}, 0.005\text{Na}^{+}$ +phosphor prepared by the invention can be excited by the blue light of 405nm, showing red emission, and can be used as the red fluorescent material of LED.

21: 2023/03335. 22: 2023/03/06. 43: 2023/03/30

51: B05B

71: ZHU, Xiumiao

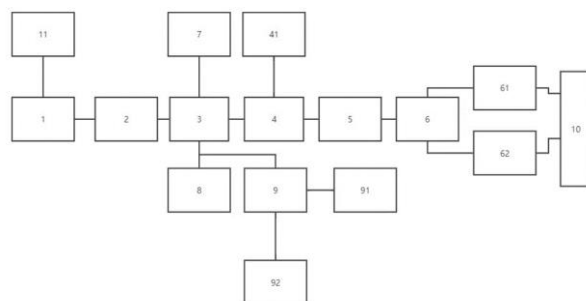
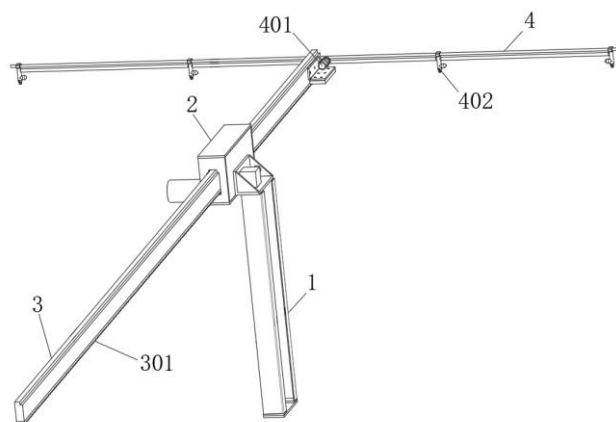
72: ZHU, Xiumiao, ZHU, Jingjing, LI, Ying

54: SPRAYING MACHINE AS WELL AS SPRAY ROD DEVICE AND SPRAYING METHOD THEREOF

00: -

The present invention relates to a spraying machine as well as a spray rod device and a spraying method thereof. The spray rod device includes a support column, an adjusting block, a telescopic rod and a tubular rod. By adjusting the height of the spraying end, the spray rod can adapt to crops of different heights, thus improving the applicability of the spray rod; moreover, by adjusting the height of the spraying end, the spray rod can accurately spray pesticides to different parts of crops according to different spraying requirements; by adjusting the forward and backward positions of the spraying end, the spray rod can spray pesticides to a larger area in a fixed position, thus improving the working range of

the spray rod, and further reducing the moving range of the spraying machine equipped with the spray rod.



21: 2023/03336. 22: 2023/03/06. 43: 2023/03/30

51: G01V

71: Shenzhen Academy of Disaster Prevention and Reduction

72: Hui Jiang, Zhi Liu

54: MONITORING SYSTEM OF SEISMIC INTENSITY INSTRUMENT

00: -

The present invention discloses an electric seismic intensity meter monitoring system including a data acquisition module, a data preprocessing module, a master MCU module, a data detection module, a data analysis module, a communication transmission module, a monitoring control module, a power supply module; the data acquisition module transmits seismic information to the master MCU module; the master MCU module to the data analysis module through the data analysis module; the data analysis module transmits data information through the communication transmission module; the master MCU module controls the monitoring control module. The present invention provides a seismic intensity meter monitoring system that dynamically monitors seismic information status through data analysis and processing.

21: 2023/03337. 22: 2023/03/06. 43: 2023/03/30

51: G06Q

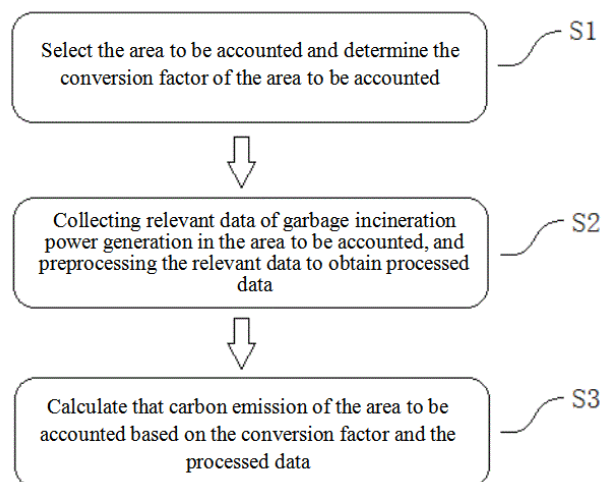
71: Nantong JS Green Energy Co., Ltd

72: ZHANG Xingjia, Yi Zhaohui, LAI Guangdong, GUO Jianfeng

54: METHOD AND SYSTEM FOR MEASURING CARBON EMISSION OF DOMESTIC GARBAGE INCINERATION POWER GENERATION

00: -

The application discloses a carbon emission metering method and a system for domestic garbage incineration power generation, where the method comprises the following steps: selecting an area to be accounted and determining a conversion factor of the area to be accounted; collecting relevant data of garbage incineration power generation in the area to be accounted, and preprocessing the relevant data to obtain processed data; calculate that carbon emission of the area to be accounted based on the conversion factor and the processed data. In this application, the conversion factors of different regions are considered when calculating the carbon emissions of various waste incineration power generation projects in the area to be accounted, and then an accurate calculation model of waste incineration carbon emissions is constructed based on waste-related data, so as to further provide reliable data for the quantification of carbon emissions.



21: 2023/03347. 22: 2023/03/06. 43: 2023/03/30
51: C21B; C21C; C22B; C22C

71: SHANDONG MOLONG PETROLEUM MACHINERY CO., LTD

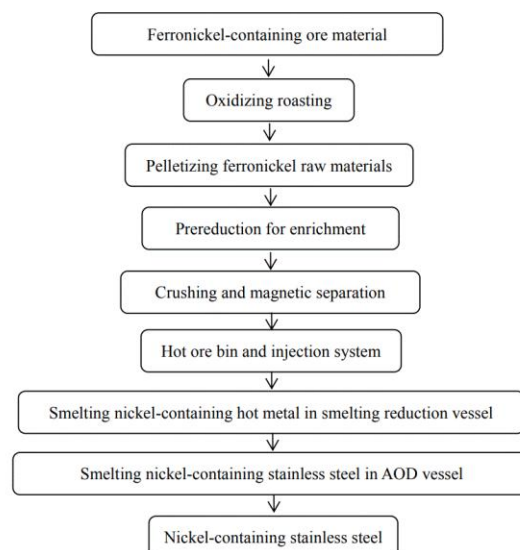
72: ZHANG, Guanqi, ZHANG, Xiaofeng, CHEN, Qingmeng, HAN, Junyi, WANG, Jinxia

33: CN 31: 202110577663.X 32: 2021-05-26

54: SMELTING METHOD OF NICKEL-CONTAINING METAL AND APPLICATION THEREOF

00: -

The present application provides a smelting method of nickel-containing metal, which comprises the following steps: Step 1: mixing a low-grade nickel material with lime and carrying out oxidizing roasting to obtain ferronickel ore; Step 2: pelletizing the ferronickel ore, first reductant, sodium sulfate, water and binder to obtain ferronickel ore pellets, adding the ferronickel ore pellets to a rotary kiln, and then mixing in second reductant for prereduction to obtain high-grade ferronickel raw materials; Step 3: carrying out smelting reduction on the high-grade ferronickel raw materials in an SRV to obtain nickel-containing hot metal. The method for efficiently smelting nickel-containing hot metal provided by the present application, by optimizing the raw material conditions and pretreatment process, significantly improves the grade of ferronickel in the raw materials charged into the vessel, realizes the low-cost, high-quality and continuous smelting of nickel-containing hot metal, and can be directly applied to the smelting of nickel-containing stainless steel in an AOD vessel.



21: 2023/03365. 22: 2023/03/07. 43: 2023/03/27

51: A61K; C12N; A61P

71: THE SECOND HOSPITAL OF NANJING (NANJING HOSPITAL AFFILIATED TO NANJING UNIVERSITY OF TRADITIONAL CHINESE MEDICINE)

72: LI Junwei, LONG Qin, XU Liang, YU Zhihao

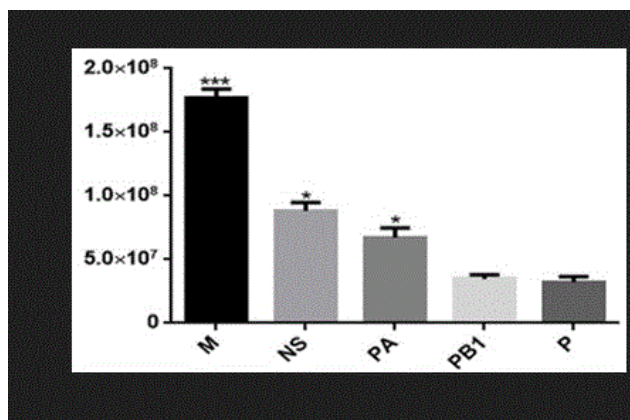
33: CN 31: 2023100442542 32: 2023-01-30

54: APPLICATION OF UNTRANSLATED REGIONS OF A GROUP OF INFLUENZA VIRUS GENES IN PREPARING MRNA VACCINE

00: -

The invention discloses an application of untranslated regions of a group of influenza virus genes in preparing the mRNA vaccine, and belongs to the technical field of influenza virus vaccines. The open reading frame of the influenza virus gene is replaced by the open reading frame of green fluorescent protein EGFP, and a new gene sequence is recombined with the untranslated region for the preparation of mRNA vaccine; the untranslated region is derived from at least one untranslated region of influenza virus genes PB2, PB1, PA, HA, NP, NA, M and NS. Specifically, according to the invention, a new gene sequence is used as a template to design an mRNA vaccine, the protein expression efficiency is compared, and the influence of untranslated regions on the protein expression effect is verified by comparison, so that the stability and protection of the mRNA vaccine are enhanced, and the immune response level is improved. Therefore, the invention is of great significance to the development of therapeutic

vaccines and vaccines for preventing infectious diseases, and has great social significance to the development of aquaculture and public health in China.



21: 2023/03366. 22: 2023/03/07. 43: 2023/03/27
51: C04B

71: JILIN JIANZHU UNIVERSITY

72: WANG Jing, WU Songze, ZHANG Yunlong, QIAN Xuesong, MA Lijun, GAO Chunmei, ZHANG Huzhu, QU Xiaolong, YU Min, ZHANG Ke, WANG Tianren, WANG Liuyang

33: CN 31: 2023100881126 32: 2023-02-09

54: SPRAYED HIGH-PERFORMANCE CONCRETE AND PREPARATION METHOD THEREOF

00: -

Disclosed are a sprayed high-performance concrete and a preparation method thereof, and relate to the technical field of concrete. The raw materials of the sprayed high-performance concrete include: cement, fly ash, silica fume, metakaolin, manufactured sand, water, superplasticizer and steel fiber. Specifically: mixing the cement, the fly ash, the silica fume, the metakaolin and the manufactured sand, adding steel fibers and mixing to obtain a dry mixture of the sprayed high-performance concrete; and mixing the superplasticizer with water, adding it into the dry mixture of the sprayed high-performance concrete to form slurry, and spraying it on the sprayed surface to obtain the sprayed high-performance concrete. The obtained concrete is applied to tunnel lining. The sprayed high-performance concrete prepared by the invention overcomes the defects of low strength, poor toughness and durability of traditional sprayed concrete, and relieves the environmental pollution caused by building construction; the rebound rate is reduced, the thickness of primary sprayed layer is increased, and the performance of sprayed concrete

is improved, thereby effectively improving the engineering quality, reducing the waste of materials and reducing the cost.

21: 2023/03367. 22: 2023/03/07. 43: 2023/03/30
51: C12Q

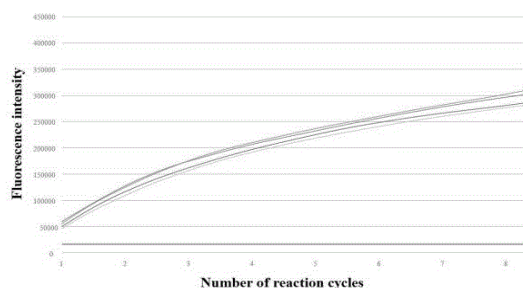
71: Dalian Minzu University

72: ZHENG, Qiuyue, YANG, Aifu, SUN, Yao, CAO, Jijuan, YANG, Chunhua, CHEN, Liang, WANG, Jinling, WANG, Pin, YANG, Jieli

54: METHOD, KIT AND APPLICATION FOR DETECTION OF STAPHYLOCOCCUS AUREUS BASED ON RPA COMBINED WITH CRISPR CAS12A

00: -

Disclosed are a method, a kit and application for detection of Staphylococcus aureus based on RPA combined with CRISPR Cas12a. The kit amplifies a target gene fragment of Staphylococcus aureus by using the RPA technology, uses CRISPR Cas12a to specifically target the target gene fragment of Staphylococcus aureus, and precisely identifies the gene loci of Staphylococcus aureus for rapid detection. Compared with the mature and widely used real-time fluorescent PCR method, the present invention does not require a thermal cycler with a function of temperature rising and decreasing, but is capable of detecting whether the environment and food contain Staphylococcus aureus only by a metal bath device or water bath device. The method has the advantages of high sensitivity, high specificity, rapid and accurate detection and simple operation, thereby further improving the rapid detection method of pathogenic bacteria.



21: 2023/03368. 22: 2023/03/07. 43: 2023/03/30
51: E21F

71: CHINA COAL TECHNOLOGY ENGINEERING GROUP CHONGQING RESEARCH INSTITUTE

72: Kai Shen, Quanbin Ba, Zhigang Zhang, Wei Xiong, Yin Liao, Yanbao Liu, Qianqian Ma, Daihui

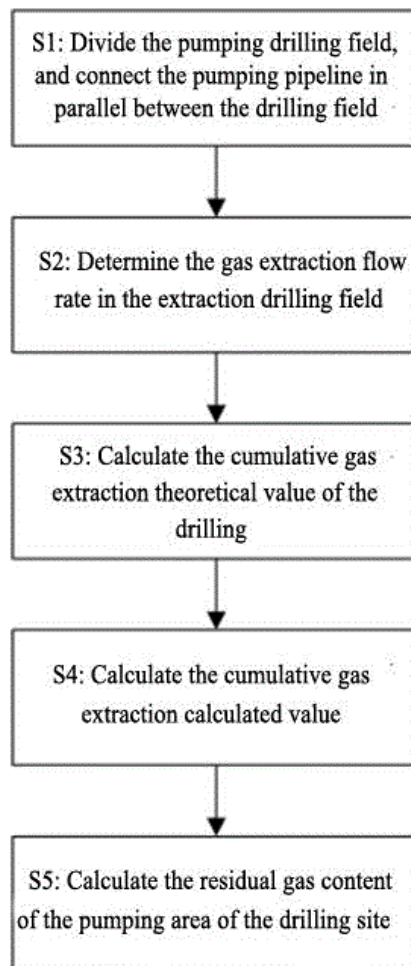
Ma, Houquan Zhou, Rifu Li, Guangsheng Hao, Bing Tang, Kai Ma, Zhaoyi Zhang, Zhengxing Fan, Yongtao Shi, Song Wang, Sen Yang, Jun He, Shiwei Wang, Shihua Li, Yifan Wang

33: CN 31: 202211511504.0 32: 2022-11-29

54: REFINED PRE-EVALUATION METHOD OF EXTRACTION EFFECT IN GAS PRE-PUMPING WORKING FACE

00: -

The invention relates to a fine pre-evaluation method for the pumping effect of a gas pre-pumping working face, belonging to the technical field of gas prevention and control. The method includes the following steps: S1: All the pre-pumping boreholes in the gas pre-pumping working face or the evaluation unit are divided into extraction drilling fields, and the extraction pipelines are connected in parallel between the drilling fields; S2: Determine the initial drainage gas flow rate of the extraction drilling field, and periodically determine the drainage gas flow rate; S3: Calculation of gas extraction accumulative theoretical value for each drilling site; S4: Calculate the gas extraction accumulation ratio and calculated gas extraction accumulation value of each drilling site; S5: Complete the fine pre-evaluation of gas pre-pumping effect on the working face. Based on the time-varying law of drilling gas extraction, the invention can effectively integrate the real-time monitoring data of gas pre-pumping working face or evaluation unit and the periodic measurement data of extraction drilling field, and obtain the extraction standard pre-evaluation results of the extraction area of a single extraction drilling field.



21: 2023/03369. 22: 2023/03/07. 43: 2023/03/30

51: C01B; C10G; C12P

71: Shenyang Aerospace University

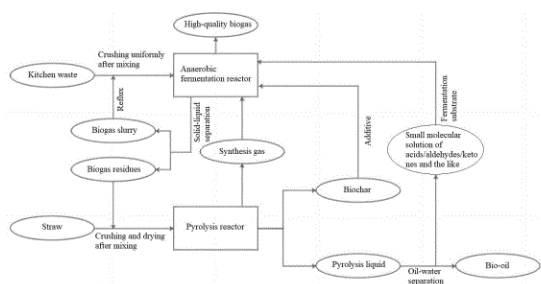
72: ZHANG, Wanli, YU, Jiaqi, XING, Wanli, LI, Rundong, YANG, Tianhua, YU, Lin

54: METHOD FOR CO-PRODUCING BIOGAS-OIL-CARBON BY COUPLING ANAEROBIC FERMENTATION OF KITCHEN WASTE WITH STRAW PYROLYSIS

00: -

Disclosed is a method for co-producing biogas-oil-carbon by coupling anaerobic fermentation of a kitchen waste with straw pyrolysis, including: (1) crushing the kitchen waste, and performing an anaerobic fermentation reaction on the crushed kitchen waste; (2) discharging biogas residues and biogas slurry, performing solid-liquid separation, and returning the biogas slurry; (3) mixing and crushing the biogas residues and straws, drying and then performing a pyrolysis reaction on the obtained mixture to generate synthesis gas, pyrolysis liquid and biochar; (4) introducing the synthesis gas into

an anaerobic fermentation reactor; (5) discharging the pyrolysis liquid and the biochar from a pyrolysis reactor, performing solid-liquid separation, and adding the biochar into the anaerobic fermentation reactor; and (6) performing oil-water separation on the pyrolysis liquid, adding a water phase into the anaerobic fermentation reactor, and collecting an oil phase. and zero waste emission of a system is realized.



21: 2023/03406. 22: 2023/03/08. 43: 2023/03/30
51: C04B

71: CHINA RAILWAY NO.4 ENGINEERING GROUP CO., LTD, ANHUI ENGINEERING MATERIAL TECHNOLOGY CO., LTD OF CTCE GROUP

72: PENG, Jianwei, TANG, Jie, HUANG, Hai, YAO, Jianan, QU, Xinming, LIU, Faquan, ZHANG, Guohui, CHEN, Juan, WANG, Zhiyong

54: MODIFIED LIMESTONE POWDER AND PREPARATION METHOD THEREOF, AND CONCRETE

00: -

The present invention discloses a modified limestone powder and a preparation method thereof, and a concrete. The modified limestone powder is prepared from 91-93 percent (by weight, the same below) of limestone powder, 2 percent of physical modifier and 5-7 percent of chemical modifier, wherein the chemical modifier is a mixture of oxalic acid, phosphorus tailings and a polysilicate aluminum flocculant. Through physical and chemical dual modification on the limestone powder, the sulfate erosion problem of limestone powder concrete in the prior art is solved. The obtained modified limestone powder has the advantages of high compactness, low porosity and excellent sulfate erosion resisting capacity.

21: 2023/03407. 22: 2023/03/08. 43: 2023/03/30
51: C01B; C10G; C12P

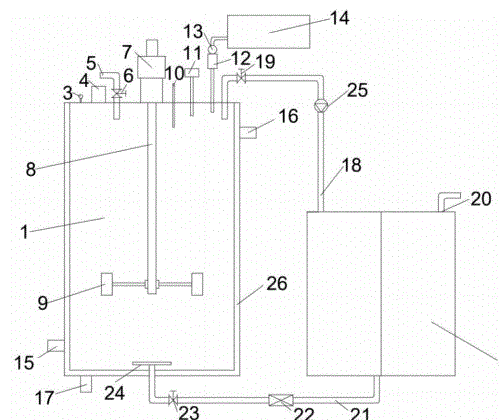
71: Shenyang Aerospace University

72: ZHANG, Wanli, HOU, Siyao, YU, Jiaqi, XING, Wanli, LI, Rundong, YANG, Tianhua

54: ANAEROBIC FERMENTATION TANK FOR CIRCULATING HYDROGEN SUPPLY BY MICRO-NANO BUBBLES

00: -

Provided is an anaerobic fermentation tank for circulating hydrogen supply by micro-nano bubbles. A jacket is provided at a tank body; a stirring shaft is inserted into the tank body, and the bottom end of the stirring shaft is connected to a stirring paddle; the front end of the circulating pipe is inserted into the tank body; the front end of the bubble pipe is inserted into the tank body, and an aeration head is fixed at the front end of the bubble pipe; a chemical dosing box is communicated with the inside of the tank body; the top plate of the tank body is provided with a feed inlet and an air outlet; a first valve is arranged at the air outlet; a second valve and a gas circulating pump are arranged on the circulating pipe; a gas flowmeter and a third valve are arranged on the bubble pipe.



21: 2023/03436. 22: 2023/03/09. 43: 2023/03/27
51: A61L

71: ZHONGNAN HOSPITAL OF WUHAN UNIVERSITY

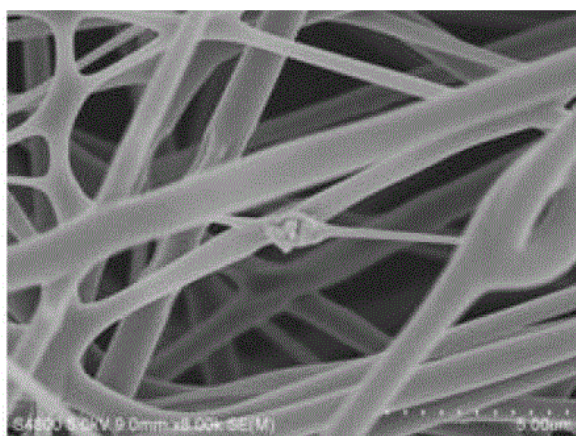
72: CHENG, Bo, WANG, Xinyu, WENG, Xiuhong, ZHAO, Siyu, LIN, Fei, CAI, Zhengwei

54: IMPROVED SINGLE-LAYER SKIN AUXILIARY MATERIAL AND PREPARATION METHOD THEREOF

00: -

The invention belongs to the technical field of medical biomaterials, and in particular to an improved single-layer skin auxiliary material and a preparation method thereof. In the invention, a

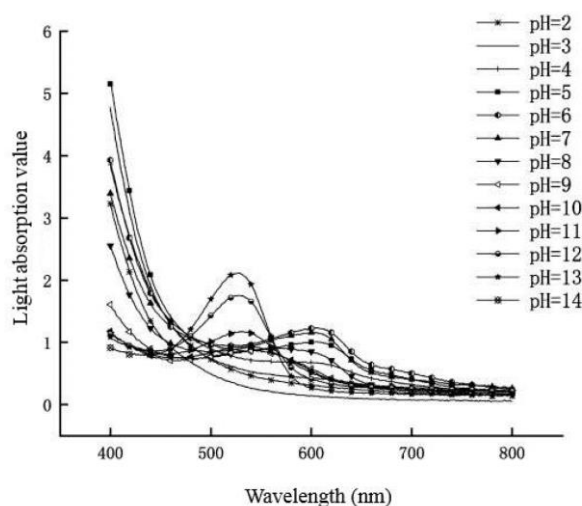
porous reticular single-layer skin auxiliary material containing sodium alginate, collagen, calcium phosphate, lactic acid and growth factors is prepared by an electrostatic spinning method, and the porous reticular single-layer skin auxiliary material has a directional orientation structure, so it is structurally antibacterial; the single-layer skin auxiliary material may well simulate an extracellular matrix structure, promote cell adhesion and migration, is beneficial to the transportation of nutrients and wastes, and promotes the growth and proliferation of cells; at the same time, the single-layer skin auxiliary material also has certain mechanical properties, good biocompatibility and suitable degradation performance, may induce skin cells to proliferate and differentiate, and is beneficial to effectively repairing skin defects. The preparation method of the invention is simple, low in cost and high in preparation efficiency, and has great potential application value.



21: 2023/03464. 22: 2023/03/09. 43: 2023/03/30
51: G01N
71: Hainan Tropical Ocean University
72: HU Yaqin, HUANG Jiayin, HU Zhiheng
54: PURPLE SWEET POTATO PIGMENT TYPE PH TEST PAPER AND PREPARATION METHOD THEREOF

00: -
The invention discloses a purple sweet potato pigment type pH test paper and a preparation method thereof. The method comprises the following steps: mixing raw purple sweet potato powder with acidified ethanol, performing ultrasonic treatment to obtain purple sweet potato pigment solution, dissolving the purple sweet potato pigment solution in chitosan acetic acid solution, then adding 5,6-

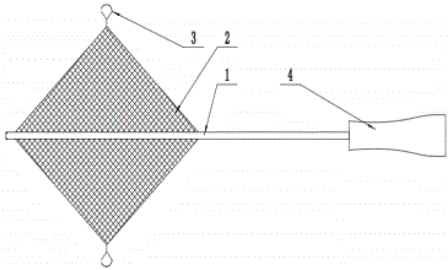
dichlorobenzoxazolinone to obtain a film-forming solution, stirring, film injection and drying. In the invention, the pH test paper is prepared by using the good film-forming property of chitosan and the change of the main configuration of purple sweet potato pigment in different pH solution environments. The common food materials are used as raw materials, the manufacturing process is simple, the requirements for equipment are low, the pH indication range is wide, and the safety is high, so it is very suitable for real-time monitoring of product quality indexes related to pH in the food field.



21: 2023/03466. 22: 2023/03/10. 43: 2023/03/30
51: A61B
71: NANYANG CENTRAL HOSPITAL
72: WAN, Pinwen
33: CN 31: 202211474184.6 32: 2022-11-23
54: LIVER SUSPENSION DEVICE
00: -

Provided is a liver suspension device. The device includes a main needle body, the front end of the main needle body is provided with a suspension net, and the rear end of the same is provided with a handle; the suspension net is fixedly connected with and wrapped around the main needle body, so that the suspension net is capable of entering the abdominal cavity along with the main needle body; when the suspension net along with the main needle body arrives at a site to be operated, the suspension net is capable of being unfolded to support the liver, and a fixing clamp capable of being clamped at the hepatogastric ligament is arranged at the suspension net away from the main needle body.

The liver suspension device of the present invention can improve the suspension effect and reduce the secondary injury to the human body.



21: 2023/03484. 22: 2023/03/10. 43: 2023/03/24
51: E02D; E02B; E01C
71: CHINA HARBOUR ENGINEERING COMPANY LTD.

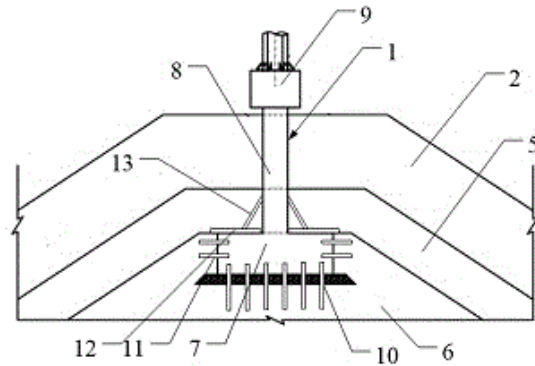
72: XIONG, HONGFENG

33: CN 31: 2022108781418 32: 2022-07-25

54: COMPOSITE STRUCTURE OF NAVIGATION LAMP PILE FOUNDATION AND MAINTENANCE CHANNEL FOR OFFSHORE BREAKWATER

00: -

The present invention discloses a composite structure of navigation lamp pile foundation and maintenance channel for offshore breakwater, comprising: a breakwater base; a breakwater cushion; a surface layer of breakwater; a navigation lamp foundation comprising a square concrete foundation base buried in breakwater base and a circular column, wherein a lower end of circular column is connected to square concrete foundation base, circular column passes through breakwater cushion and the surface layer, and an upper end of circular column is located above surface layer and connected to a navigation lamp pile; a maintenance channel comprising an embankment top path and step structure, wherein embankment top path is paved above surface layer and extends to navigation lamp pile; step structure is arranged at breakwater cushion, and step structure extends to the surface layer and is connected to embankment top path. The composite structure has stable structure, high reliability and easily construction.



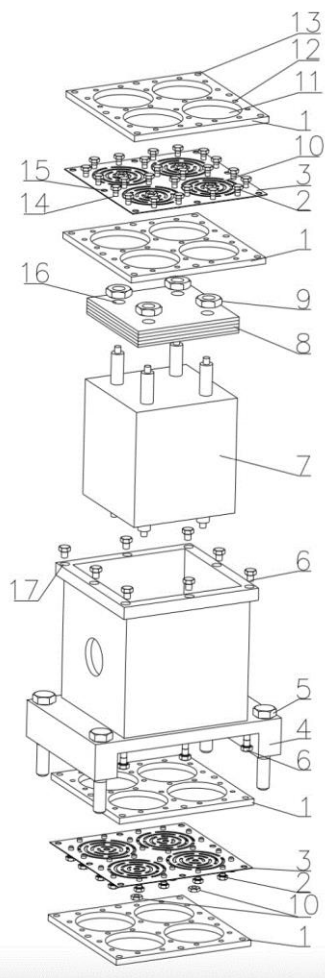
21: 2023/03514. 22: 2023/03/13. 43: 2023/03/30
51: F16F

71: No. 719 Research Institute of China State Shipbuilding Corporation Limited
72: ZHANG, Limei, XIONG, Bo, LIU, Haijian, TAN, Haitao, ZHANG, Miao, ZHANG, Zhenli, YANG, Xuesong, QIANG, Lei, GUO, Hanbei, WANG, Qiangyong

54: DISTRIBUTED DIAPHRAGM VIBRATION ABSORBER

00: -

Disclosed is a distributed diaphragm vibration absorber. Cover plate diaphragm assemblies are formed by diaphragm fasteners passing through inner-circle of diaphragm through-holes and diaphragm threaded holes in upper and lower two cover plates, such that cover plates are firmly connected to a diaphragm, and the diaphragm is sandwiched between the upper and lower two cover plates. A mass sheet is mounted on an upper portion of a mass block. Cover plate fasteners fix the cover plate diaphragm assemblies to an upper portion and a bottom portion of the support by passing through support threaded holes, outer-circle of diaphragm through-holes and cover plate connecting holes. A vibration direction easily excited by the vibration absorber according to the present invention is a normal direction of the diaphragm, and the structure of the distributed diaphragm vibration absorber is compact, and disassembly and assembly are convenient, and the environmental adaptability is high.



21: 2023/03515. 22: 2023/03/13. 43: 2023/03/30

51: F01L

71: No. 719 Research Institute of China State Shipbuilding Corporation Limited

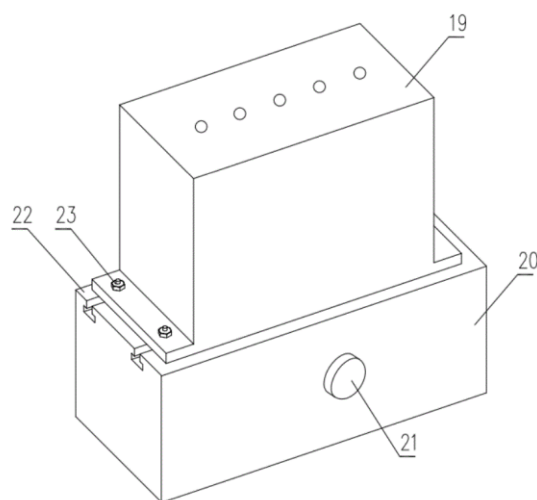
72: MA, Xunjun, NIE, Xiuyi, ZHANG, Lei, ZHOU, Liubin, LEI, Chengyou, LI, Rongqi, LI, Senchen, CUI, Haijian

54: INTEGRATED MOVABLE ELECTROMAGNETIC ACTUATOR

00: -

The application discloses an integrated movable electromagnetic actuator, which can be mainly composed of an upper electromagnetic actuator and a lower magnetic suction device. During the use of the integrated movable electromagnetic actuator, when high-energy permanent magnet material is controlled to be in a loaded state by rotating a switch for magnetic suction device, the suctioning and holding surface at the bottom of the lower magnetic suction device constitutes two pairs of longitudinal magnetic poles to firmly suction and hold a

ferromagnetic material, such as a large steel structure platform inside a ship. When the high-energy permanent magnet material is controlled to be in an unloaded state by rotating the switch for magnetic suction device, there is no magnetic force at the bottom of the lower magnetic suction device, and at this moment the integrated movable electromagnetic actuator can move freely.



21: 2023/03516. 22: 2023/03/13. 43: 2023/03/30

51: B01D; B01J; C02F; C04B

71: XU, Zesheng

72: XU, Zesheng

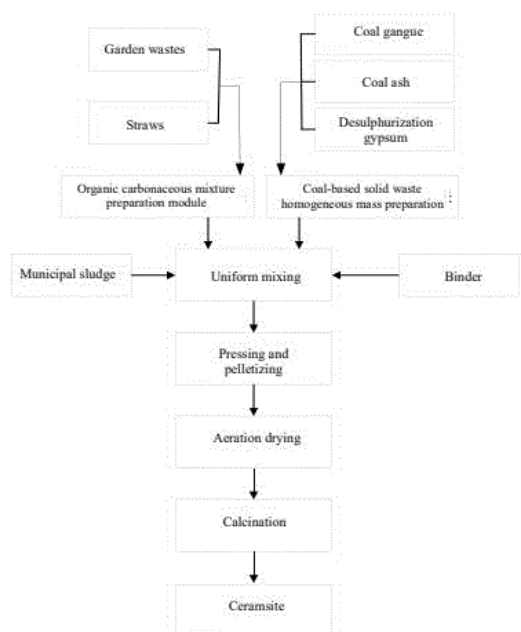
33: CN 31: 2022106237763 32: 2022-06-02

54: CERAMSITE BASED ON INDUSTRIAL, AGRICULTURAL AND MUNICIPAL SOLID WASTES, AND PREPARATION METHOD AND APPLICATION THEREOF

00: -

The present disclosure provides a ceramsite based on industrial, agricultural and municipal solid wastes, and a preparation method and application thereof, and belongs to the technical field of solid waste recycling. Preparation raw materials of the ceramsite based on the industrial, agricultural and municipal solid wastes include: a binder, municipal sludge, an organic carbonaceous mixture (straws and garden wastes) and a coal-based solid waste homogeneous mass (mechanically activated coal ash, coal gangue and desulfurization gypsum). The performance of ceramsite is regulated by utilizing calorific values and reaction gas of above materials, the strength of ceramsite is enhanced by taking minerals as a skeleton; the pore structure of ceramsite is optimized

by utilizing activity, porous structure and the gelling properties of above materials; and adsorption and removal performance of ceramsite for sewage and waste gas is improved by utilizing activity and porosity characteristics of above materials.



21: 2023/03521. 22: 2023/03/13. 43: 2023/03/30
51: G06F

71: China Institute of Water Resources and Hydropower Research

72: Zhigong Peng, Mei Chen, Zheng Wei, Xiaolin Zhang, Shujun Yang, Baozhong Zhang, Jun Xiao, Guiyu Yang, Mei Sun, Shuang Wang, Lu Huang, Jiabing Cai, Yaqi Wang

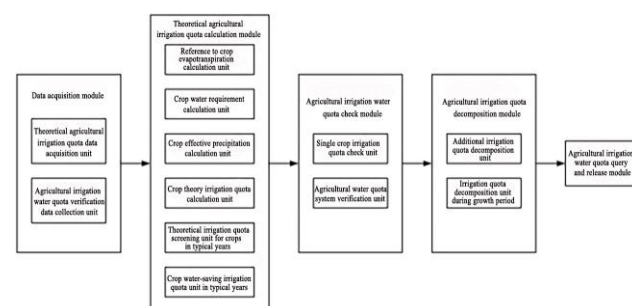
33: CN 31: 202210744896.9 32: 2022-06-28

54: AN AGRICULTURAL IRRIGATION WATER QUOTA CALCULATION SYSTEM

00: -

The invention discloses an agricultural irrigation water quota calculation system. It includes data acquisition module connected by communication, theoretical agricultural irrigation quota calculation module, agricultural irrigation water quota verification module, agricultural irrigation quota decomposition module and agricultural irrigation water quota query and release module. The invention integrates data collection, calculation, decomposition, release and query of agricultural irrigation water quota, and can provide technical support for calculation, analysis and query of crop irrigation water quota in any specified irrigation zone. This provides basic data

support for the implementation of the combined system of total agricultural water use control and quota management.



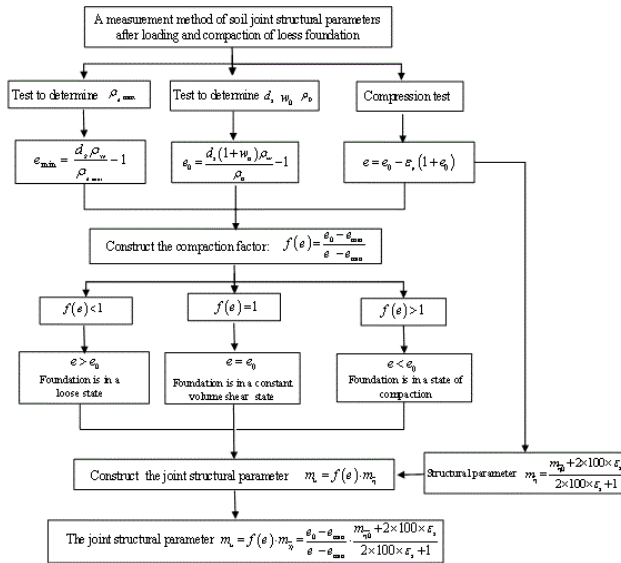
21: 2023/03522. 22: 2023/03/13. 43: 2023/03/30
51: E02D; G01N

71: Railway Operation Company of Shanxi Lu'an Mining (Group) Co.LTD, Xi'an University of Technology, China Railway Xi'an Survey, Design And Research Institute Co. LTD., Of CREC
72: Weihu YU, Haijun LI, Yudong LI, Rongjian LI, Chaoneng BAI, Rongjin LI, Yaojiang LIU, Weishi BAI, Yongqi ZHANG

54: A METHOD FOR MEASURING THE JOINT STRUCTURAL PARAMETERS OF A LOESS FOUNDATION AFTER LOADING AND COMPACTING THE SOIL

00: -

The present invention discloses a method for evaluating the joint structural parameters of a loess foundation after loading and compacting, including: determining the specific gravity, initial density, initial water content and maximum dry density of the foundation soil according to basic tests; determining the one-dimensional compression strain, body stress, generalized shear strain and void ratio of the soil through compression tests; constructing a compacting factor $f(e)$ and establishing the joint structural parameter μ . The joint structural parameter μ established by the present invention can reflect the phenomenon of increased structure of the soil after compacting, and the parameters involved in the joint structural parameter can be obtained by conventional soil test methods.

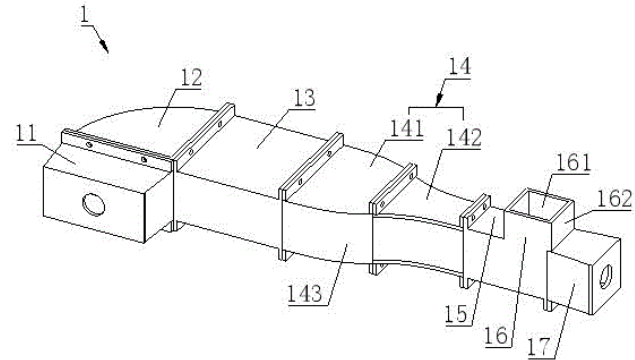


21: 2023/03523. 22: 2023/03/13. 43: 2023/03/30
 51: G01N
 71: Hebei Normal University of Science & Technology, North China University of Science and Technology
 72: Liang Zhang, Shuang Lu, Jiangjie Shen, Shuzhen Li, Shaolong Wang
 33: CN 31: 202210247173.8 32: 2022-03-14
54: SIMULATION TEST SYSTEM FOR WATER ICING FLUID FLOW

00: -

Aiming at solving the technical problem of the large difference in mechanical properties between the ice produced by the way of refrigeration and the ice produced by the water body in different natural states in the prior art, the invention provides a water icing fluid flow simulation test system to provide a stable fluid for icing and the fluid can be frozen in a low temperature environment. The flow system comprises a fluid flow component. A fluid flow component comprises a diffusion section i, a corner section, a stable section i, a contraction section, a stable section ii, a test section and a diffusion section ii, which are successively connected. The fluid flow component is provided with a fluid passage for the fluid to flow through, a plurality of curved flow guide plates are arranged in the corner section, and the test section is provided with a contact part. The system of the invention can be used in the laboratory because of its compact structure and turning. Thus, the system can observe the changing state of water after heat exchange with the air at the contact part in the laboratory under the state of natural flow, which

is convenient for further research on the water icing process.



21: 2023/03524. 22: 2023/03/13. 43: 2023/03/30
 51: E21B

71: Hebei Normal University of Science & Technology, North China University of Science and Technology

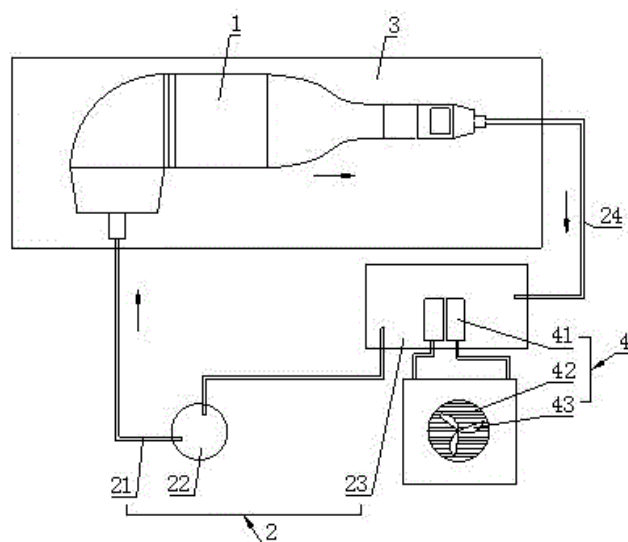
72: Jiangjie Shen, Shuang Lu, Shuzhen Li, Shaolong Wang, Liang Zhang

33: CN 31: 202210247174.2 32: 2022-03-14

54: SIMULATION TEST SYSTEM AND TEST METHOD FOR WATER ICING

00: -

The invention provides a water icing simulation test system and a test method, which comprises a fluid flow assembly and a low temperature test chamber. The fluid flow assembly comprises a test section in which a fluid flows through, the top surface of the test section is provided with a contact part, and the test section is in the low temperature test chamber. The contact part is used to make the fluid in the test section contact with the cold air in the low temperature test chamber to form ice. It can simulate the temperature scene required by the freezing of flowing water, so that people can study the freezing phenomenon of flowing water in the laboratory.



21: 2023/03557. 22: 2023/03/14. 43: 2023/03/30

51: G01C

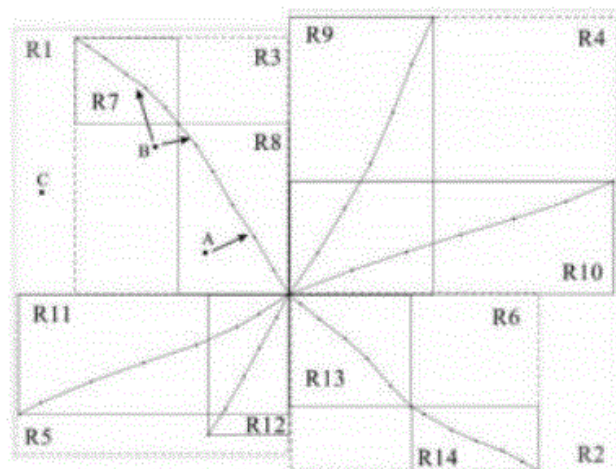
71: Hohai University

72: Xiaoping RUI, Yanjiao SONG

**54: A FAST HMM MAP-MATCHING METHOD
BASED ON R-TREE SPATIAL INDEX AND
TRAJECTORY SEGMENTATION**

00: -

The invention discloses a fast HMM map-matching method based on R-tree spatial index and trajectory segmentation. Firstly, the R-tree spatial index method is used to establish a spatial index for the road network. Then, the GPS trajectory data is segmented based on the position change rate of the trajectory point, and the R-tree index is used to quickly determine the candidate sections of the sub-trajectory. In the sub-trajectory, the key points are selected to replace the entire sub-trajectory to determine the section, and the map matching of each sub-trajectory is completed according to the results. The invention discloses a fast HMM map matching method based on R-tree spatial index and trajectory segmentation, which can reduce the workload of road search and trajectory point traversal at the same time and greatly improve the efficiency of the algorithm.



21: 2023/03558. 22: 2023/03/14. 43: 2023/03/30

51: G01N

71: YELLOW SEA FISHERIES RESEARCH
INSTITUTE

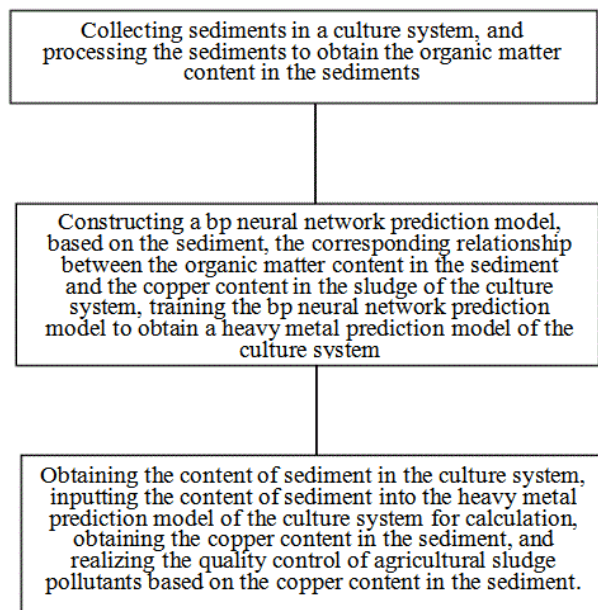
72: YANG Qian, ZHOU Mingying, ZHANG Yan, LIU
Sai, SUN Yao

**54: METHOD FOR EVALUATING SOURCE OF
ORGANIC MATTER BASED ON AQUACULTURE
SYSTEM**

00: -

The invention discloses a method for evaluating source of organic matter based on aquaculture system, which comprises the following steps: collecting sediments in a culture system, and processing the sediments to obtain the organic matter content in the sediments; constructing a bp neural network prediction model, based on the sediment, the corresponding relationship between the organic matter content in the sediment and the copper content in the sludge of the culture system, training the bp neural network prediction model to obtain a heavy metal prediction model of the culture system; obtaining the content of sediment in the culture system, inputting the content of sediment into the heavy metal prediction model of the culture system for calculation, obtaining the copper content in the sediment, and realizing the quality control of agricultural sludge pollutants based on the copper content in the sediment.. Based on the copper content in the sediment, the quality control of agricultural sludge pollutants was realized. According to the invention, the quality of heavy metal copper can be controlled to be in line with the agricultural sludge pollutant control standard by

simply quantifying the manure in the culture pond under the unfavorable detection conditions.



21: 2023/03559. 22: 2023/03/14. 43: 2023/03/30
51: E21D

71: THE SECOND CONSTRUCTION
ENGINEERING COMPANY LTD. OF CHINA
CONSTRUCTION SECOND ENGINEERING
BUREAU

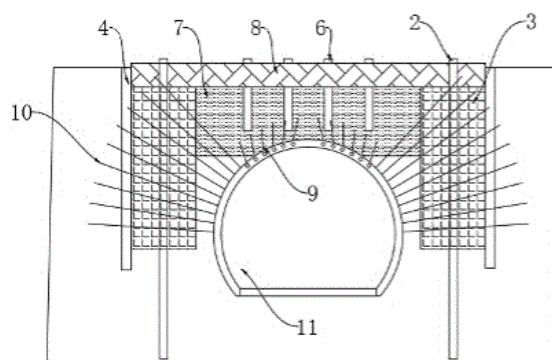
72: ZHANG, Bo, CHEN, Yu, FENG, Lilei, FU, Jun,
CUI, Qi, GUO, Min, SUN, Pengju

54: METHOD FOR REINFORCING TUNNEL IN SOFT AND BROKEN SHALLOW-BURIED UNFAVORABLE GEOLOGICAL CONDITION

00: -

The present invention discloses a method for reinforcing a tunnel in a soft and broken shallow-buried unfavorable geological condition and relates to the technical field of tunnel construction. The method comprises the following steps: (1) pre-reinforcing treatment of a surface layer: hardening a shallow-buried soil layer on the upper side of the tunnel and constructing an underground support frame, forming two reinforced underground diaphragm walls located on both sides of a tunnel trunk underground by means of grouting solidification, and forming a top reinforced stratum on the upper side of the tunnel trunk; and (2) reinforcing treatment in the tunnel trunk: performing layered construction by means of a bench cut method, and performing support while excavating. With respect to construction of a soft and broken

shallow-buried unfavorable geological segment, the surface layer is reinforced to form the underground diaphragm walls and the top reinforced stratum so as to reinforce the loose surface layer effectively, so that the stability is improved. The soil layers around the tunnel trunk are improved to provide a hard acting supporting foundation for subsequent in-tunnel anchoring, thereby ensuring the stability and safety of the integral tunnel surrounding rock. The method features simple and feasible construction.



21: 2023/03560. 22: 2023/03/14. 43: 2023/03/30
51: G01N

71: Marine Science Research Institute of Shandong
Province (National Oceanographic Center, Qingdao)

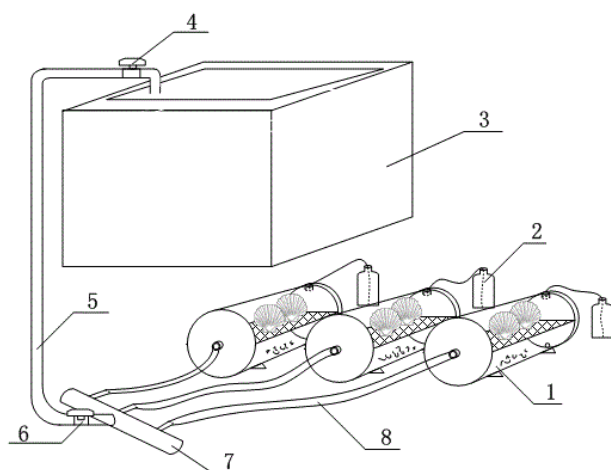
72: SONG Xianli, PANG Shaonan, LEI Xijuan, HOU
Fusheng, WANG Xue

54: EXPERIMENTAL DEVICE FOR AQUATIC PHYSIOLOGY AND ECOLOGY RESEARCH

00: -

The invention belongs to the technical field of aquatic biological physiology and ecology research, and provides an experimental device for aquatic physiology and ecology research, which comprises a plurality of boxes, wherein mesh partition parts are detachably connected in the boxes, and the mesh partition parts are used for dividing the inside of the boxes into a feeding area and a deposition area from top to bottom; the water inlet ends of the boxes are respectively connected with water tanks through flow control and shunting parts, and the water outlet ends of the boxes are respectively communicated with water sample sampling components; the bottom of the side wall of the box is provided with a sediment sampling part which is detachably connected with a sampling tube or a sealing plug. Under the condition of not disturbing the experimental environment, the invention can easily realize the complete collection

of sediments, and can also obtain water samples, detect their index changes, and obtain multiple groups of data in one stop.



21: 2023/03561. 22: 2023/03/14. 43: 2023/03/30
51: A61B; A61G

71: ZHOU Chuixian

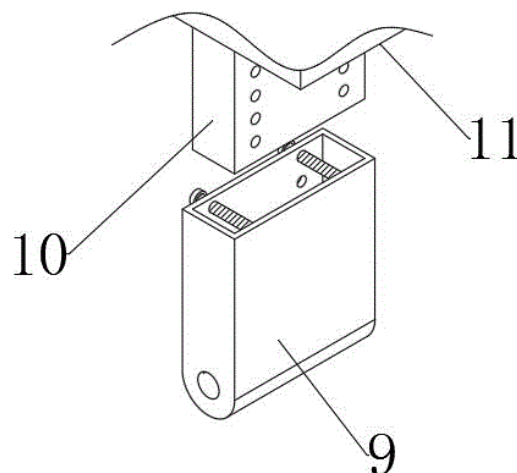
72: ZHOU Chuixian

33: CN 31: 2023202048531 32: 2023-02-09

54: SURGICAL BRACKET DEVICE FOR NEUROSURGERY

00: -

The invention discloses a surgical bracket device for neurosurgery, and relates to the technical field of bracket devices. The technology comprises a pallet, wherein the front end surface of the pallet is provided with a mounting hole for mounting a rotating rod; one end of the rotating rod extends to the outside of the pallet and is fixedly connected with a first knob; the other end of the rotating rod is fixedly connected with a first bevel gear; two ends of the two connecting rods are rotatably connected with the front and rear inner walls of the pallet respectively; the outside of the two connecting rods are fixedly connected with supporting plates; and the upper surface of the pallet is provided with a guide groove for the supporting plates to move. The front end surfaces of the two threaded blocks are hinged with the front end surface of the supporting plates through the adjusting rods, and the angular position of the connecting plates can be adjusted very conveniently by arranging the first knob, the rotating rod, the first bevel gear, the second bevel gear, the threaded rods, the threaded blocks, the supporting plates and the adjusting rods.



21: 2023/03594. 22: 2023/03/15. 43: 2023/03/30
51: F16H

71: Zheng Zhou Research Institute of Mechanical Engineering CO., LTD.

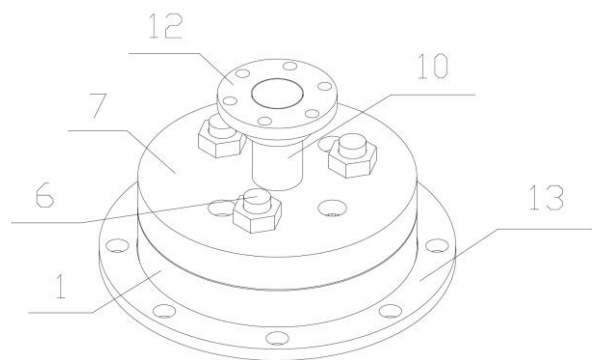
72: Bang Pei, Shidang Yan, Zhongming Liu, Jiadong Zhao

33: CN 31: 2023101134939 32: 2023-02-14

54: EQUAL-LOAD PLANETARY REDUCER

00: -

The invention discloses a equal-load planetary reducer, which comprises a central gear arranged at the center of an internal gear ring, wherein at least three planetary gears are evenly arranged between the central gear and the internal gear ring along the circumferential direction of the internal gear ring, and each planetary gear is meshed with the internal gear ring and the central gear, and the teeth of the central gear, the internal gear ring and each planetary gear are in a V-shaped structure; The sun gear is coaxially connected with the input shaft, the planetary gear is connected with the output shaft through a connecting seat, and the axis of the output shaft coincides with the input shaft. The invention improves the load-equalizing capacity of the planetary reducer, so that it can bear larger torque and adapt to faster running speed.



21: 2023/03608. 22: 2023/03/15. 43: 2023/03/27

51: C12N; C12Q

71: SHIHEZI UNIVERSITY

72: ZHANG Zhiwei, CHEN Yuechan, CAO Dongdong, GAO Lingyu, LIN Tao

33: CN 31: 202011458514.3 32: 2020-12-11

54: TRANSCRIPTION FACTOR C/EBPZ FOR REGULATING ADIPOCYTE FORMATION AND APPLICATION THEREOF

00: -

Provided are a transcription factor C/EBPZ for regulating adipocyte formation and an application of the transcription factor, and in particular, the use of the transcription factor C/EBPZ to regulate chicken adipocyte formation. An expression mode of chicken C/EBPZ in various tissues and an expression rule of C/EBPZ in a chicken adipose tissue growth and development process are disclosed by utilizing an RT-PCR technology. An overexpression vector of the transcription factor is constructed, and the C/EBPZ transcription factor is verified to regulate the differentiation and proliferation of chicken preadipocytes.

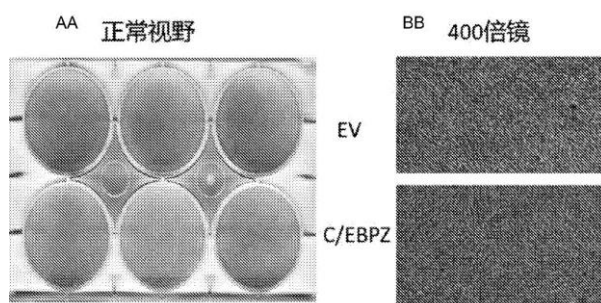


图 6

AA Normal visual field
BB 400 times microscope

21: 2023/03609. 22: 2023/03/15. 43: 2023/03/30

51: G01S

71: BEIJING UNIVERSITY OF AERONAUTICS AND ASTRONAUTICS

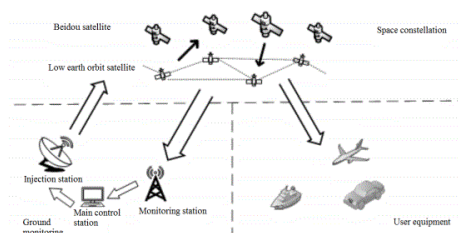
72: WANG, Zhipeng, ZHU, Yanbo, YANG, Ziyi, FANG, Kun

33: CN 31: 202110306891.3 32: 2021-03-23

54: CONSTELLATION CONFIGURATION OPTIMIZATION METHOD FOR ARAIM-APPLICATION-ORIENTED LOW EARTH ORBIT SATELLITE ENHANCEMENT SYSTEM

00: -

A constellation configuration optimization method for an ARAIM-application-oriented low earth orbit satellite enhancement system, the method comprising: 1. traversing all subset solutions and post-fault-mode vertical protection levels, and determining constraint conditions for low earth orbit satellite constellation configuration parameters; 2. determining objective functions of x_1 , x_2 , x_3 , x_4 , eliminating abnormal calculated values of the vertical protection levels, and screening initial populations of the parameters x_1 , x_2 , x_3 , x_4 ; 3. performing fitness calculation on the objective functions of x_1 , x_2 , x_3 , x_4 ; 4. starting from a second-generation population, combining a parent population and child populations, so as to generate new child populations; and 5. performing local optimal selection on the new child populations, screening out maximum values of the objective functions as optimal children, and repeating step 4 until the number of genetic generations is less than the maximum number of genetic generations.



21: 2023/03625. 22: 2023/03/16. 43: 2023/03/30

51: C12Q

71: DERMATOLOGY HOSPITAL, SOUTHERN MEDICAL UNIVERSITY (GUANGDONG PROVINCIAL DERMATOLOGY HOSPITAL, GUANGDONG PROVINCIAL CENTER FOR STI & SKIN DISEASES CONTROL AND PREVENTION, RESEARCH CENTER FOR LEPROSY CONTROL AND PREVENTION, CHINA)

72: LENG, Xinying, LIU, Han, LAI, Jiaxi, CHEN, Huiru, LONG, Haiying, XIE, Dongmei, KE, Wujian

33: CN 31: 2023100810493 32: 2023-02-08

54: FUSION PROTEIN FOR DETECTING NEUROSYPHILIS AND KIT THEREOF

00: -

A fusion protein for detecting neurosyphilis and a kit thereof are provided in this disclosure. It is unexpectedly found in this disclosure that detecting the Nichols Houston strain TP0136 antibody level for diagnosis of neurosyphilis makes up a blank of diagnosis and detection methods of the neurosyphilis. Using molecular biology gene cloning and expression technologies, a syphilis Nichols Houston strain TP0136 recombinant protein is obtained, a luciferase immunoprecipitation method for detecting a Nichols Houston strain TP0136 antibody is established, and a kit is assembled. Such a kit has such unexpected technical effect of high sensitivity and high prediction accuracy, has advantages of large detection throughput, simple operation and easy popularization.

21: 2023/03626. 22: 2023/03/16. 43: 2023/03/30

51: G06K; G06T; G06N

71: Military-Civilian Integration Geological Survey Center of China Geological Survey

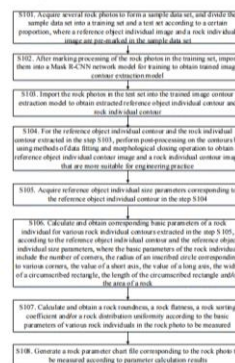
72: HAO, Ming, WU, Qingsong, PANG, Hao, LIU, Huan, XIE, Dan

54: METHOD, APPARATUS, DEVICE AND STORAGE MEDIUM FOR ACQUIRING ROCK PARAMETERS BASED ON MASK R-CNN NETWORK

00: -

Disclosed is a method, apparatus, device and storage medium for acquiring rock parameters based on a Mask R-CNN network. In an early stage, on the basis of establishing a large number of rock photo sample libraries, an image contour extraction model capable of recognizing a rock image intelligently may be obtained through deep learning and sample training based on a Mask R-CNN network. Then, in a later stage, the image contour extraction model is photographed and uploaded directly to perform artificial intelligence recognition on rocks in the rock image. Moreover, parameters of the rocks are calculated according to reference object individual size parameters, and dimensional information about the rocks is extracted. Therefore, manpower and material resources are greatly saved, and unbiased calculation is guaranteed for the

parameters, which improves the accuracy of data and facilitates practical application and promotion.



21: 2023/03627. 22: 2023/03/16. 43: 2023/03/30

51: C12Q; G01N

71: Beijing Changyou Biotechnology Co., Ltd

72: ZHANG Jun, WANG Yanyan, LI Huanhuan,

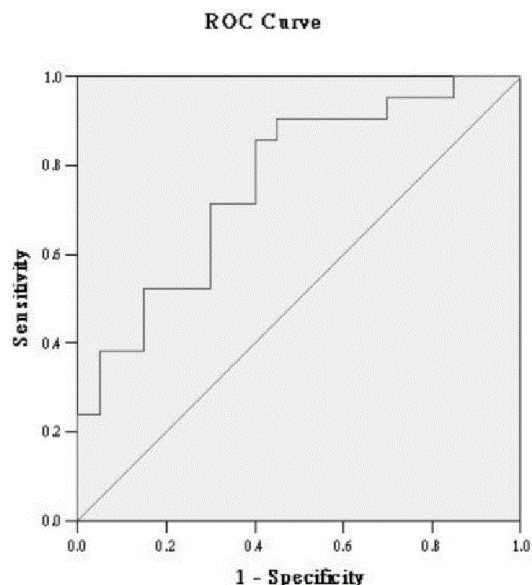
TONG Wei, ZHANG Chunjie, ZHANG Fei

33: CN 31: 2022111976799 32: 2022-09-29

54: AUTISM DIAGNOSIS FLORA MARKER AND AUTISM DIAGNOSIS REAGENT

00: -

The invention provides an autism diagnosis flora marker and an autism diagnosis reagent, belonging to the technical field of biomedicine. The invention confirms that the abundance of the pathway with the identification number of Kegg of intestinal flora is related to autism, and can be used as a diagnosis marker of autism, thus overcoming the problem of lack of an autism diagnosis scheme in the prior art.. According to the invention, it is confirmed by experiments that the abundance of the pathway with the identification number of Kegg of the intestinal flora map01055 is obviously reduced in the population of autistic patients, and ROC curve analysis shows that it has high specificity and sensitivity as a detection variable, so the abundance of the pathway with the identification number of Kegg of the intestinal flora map01055 can be used as a detection marker to be applied to the diagnosis of autistic patients. Taking the abundance of the pathway with the identification number of Kegg of intestinal flora as the detection marker, it is completely noninvasive and has high accuracy.



21: 2023/03628. 22: 2023/03/16. 43: 2023/03/30
51: A61K

71: Beijing Changyou Biotechnology Co., Ltd
72: ZHANG Jun, TONG Wei, ZHANG Chunjie,
WANG Yanyan, LI Huanhuan, ZHAO Dongmei
33: CN 31: 202211378726X 32: 2022-11-04

**54: APPLICATION OF VANCOMYCIN
HYDROCHLORIDE IN PREPARATION OF
REAGENT FOR REDUCING THE LEVEL OF
NEUROTOXIN BETA-METHYLAMINO L-ALANINE**

00: -

The invention provides the application of vancomycin hydrochloride in preparing a reagent for reducing the level of beta-methylamino-L-alanine, belonging to the technical field of biopharmaceuticals, and also provides the application of vancomycin salt in preparing a medicine for treating autism. The medicine is an oral preparation, and the titer of the medicine is more than or equal to 1000 vancomycin hydrochloride units per 1mg calculated as anhydrate. The vancomycin salt can realize the treatment of autism by reducing the concentration of neurotoxin BMAA; it solves the technical problem that there is no specific drug for the core symptoms of autism at present.



21: 2023/03629. 22: 2023/03/16. 43: 2023/03/30
51: C12Q; G01N

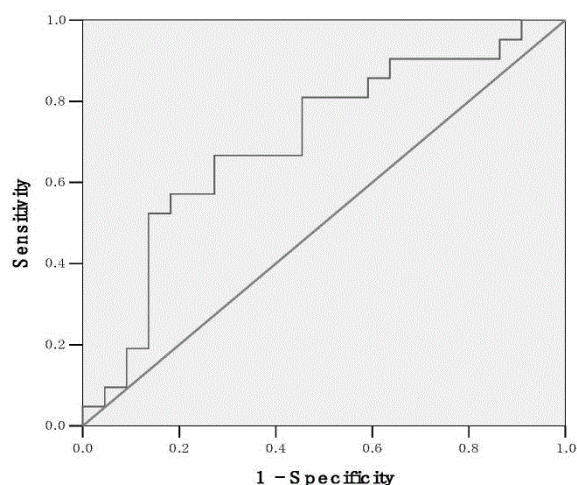
71: Beijing Changyou Biotechnology Co., Ltd
72: ZHANG Jun, ZHANG Chunjie, WANG Yanyan,
LI Huanhuan, TONG Wei, ZHANG Yichi
33: CN 31: 2022113302343 32: 2022-10-27

**54: APPLICATION OF INTESTINAL FLORA
MARKERS AS MARKERS FOR AUTISM RISK
SCREENING AND DETECTION KIT AND
DETECTION SYSTEM**

00: -

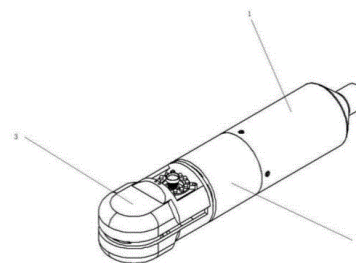
The invention provides an application of intestinal flora markers as markers for autism risk screening, a detection kit and a detection system, and relates to the technical field of biomedicine. The scheme of the invention is the application of intestinal flora markers as markers for autism risk screening, where the intestinal flora markers are genes encoding dTDP-glucose 4,6-dehydratase or isoenzyme. The gene encoding dTDP-glucose 4,6-dehydratase or isoenzyme is discovered for the first time in this invention to be related to autism. The relationship between intestinal flora markers and autism is verified by experiments. Therefore, the gene encoding dTDP-glucose 4,6-dehydratase or isoenzyme can be used as a marker of autism risk screening. It provides a theoretical basis for the study of later autism.

R O C Curve



21: 2023/03631. 22: 2023/03/16. 43: 2023/03/30
 51: G01S; H04N
 71: Kunming University of Science and Technology
 72: XIA, Yonghua, ZHU, Qi, YANG, Minglong,
 WANG, Chong, WU, Xuequn, JIAN, Xiaoting, ZHOU,
 Xiaohong
 33: CN 31: 2022105187875 32: 2022-05-12
**54: SIMPLE-STRUCTURE AND WIDE-SCANNING-
 RANGE DEVICE FOR ACQUIRING THREE-
 DIMENSIONAL DATA OF UNDERGROUND
 CAVITIES**
 00: -

Disclosed is a simple-structure and wide-scanning-range device for acquiring three-dimensional data of underground cavities, the device includes a control module, a power module and an acquisition module, the control module is fixedly connected to the power module through a tooth socket, screws and a motor, and the power module is connected to the acquisition module through the matching of a coupling and a bearing; and after the control module, the power module and the acquisition module are assembled, the device is 9 cm in diameter and 40 - 41 cm in length, and a U-shaped gap is formed between an acquisition module shield and an acquisition module base. The present invention achieves the effects that a problem of connection of camera shooting view angles is solved; the detection range is wider; the power module and the acquisition module are better borne; and the device is higher in precision.



21: 2023/03632. 22: 2023/03/16. 43: 2023/03/30
 51: C22B
 71: KUNMING UNIVERSITY OF SCIENCE AND
 TECHNOLOGY
 72: LI, Xingbin, WEI, Chang, DENG, Zhigan, LI,
 Minting, PENG, Xiaohua, LUO, Xingguo
 33: CN 31: 202210262813.2 32: 2022-03-17
**54: METHOD FOR MINERALIZATION AND
 PRECIPITATION OF IRON FROM LEACHING
 SOLUTION PRODUCED BY
 HYDROMETALLURGY OF ZINC**
 00: -

The present invention relates to a method for mineralization and precipitation of iron from a leaching solution produced during zinc hydrometallurgy process, and belongs to the technical field of chemical metallurgy. According to the present invention, a leaching solution containing zinc sulfate and ferrous sulfate produced by hydrometallurgy of zinc is added to a reactor, and oxygen is introduced after heating to reach A°C, where the oxygen partial pressure is controlled to 0.1-0.8 MPa; next, high temperature steam is further introduced to maintain the temperature of a reaction at B°C; then a pulp containing a zinc oxide is pumped in the reaction process, where the pH value at the end of the reaction is controlled to 0.2-2.0; and after the reaction is completed, solid-liquid separation is conducted to obtain a product of mineralization and precipitation of iron and a zinc sulfate solution after precipitation of iron, where the value of A is 80-100, the value of B is 100-170, and B-A is equal to or less than 70. The method has the characteristics of complete separation of zinc and iron, high content of iron in an iron precipitation product, and good mineralization and precipitation effect of iron.

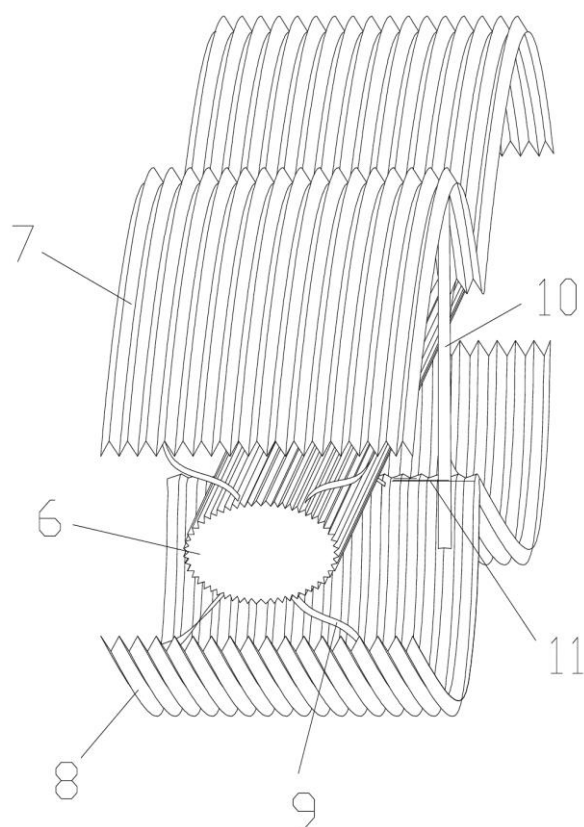
21: 2023/03633. 22: 2023/03/16. 43: 2023/03/30
 51: B64G
 71: Institute of Highland Forest Science, Chinese
 Academy of Forestry

72: CHEN, Hang, ZHANG, Jinwen, LU, Qin, DING, Weifeng, WU, Haixia, HE, Rui, LUO, Ziyang

54: BIONIC DOUBLE-LAYER FOLDING AND UNFOLDING STRUCTURE BASED ON ECLOSION WING SPREADING OF KALLIMA INACHUS

00: -

Disclosed in the present invention is a bionic double-layer folding and unfolding structure based on eclosion wing spreading of kallima inachus. The bionic structure is higher in bionic degree, and the bionic double-layer folding and unfolding structure is also higher in strength. The composite folding structure not only can provide a large area change ratio, but also can improve stability of the composite folding structure, a large number of composite folding structures disperse stress and share deformation, and space environment adaptability is stronger.



21: 2023/03634. 22: 2023/03/16. 43: 2023/03/30
51: A01B

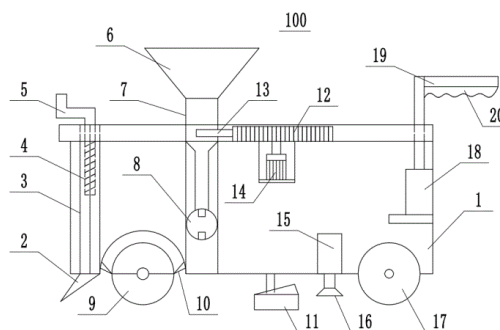
71: Jiamusi Branch of Heilongjiang Academy of Agricultural Sciences

72: YAO, Liangliang, YANG, Xiaohe, DING, Junjie, QIU, Lei, WANG, Zijie, ZHANG, Maoming, GAO, Xuedong, JIN, Xiaochun, LI, Rulai

54: SOYBEAN SEEDER

00: -

Disclosed is a soybean seeder, including a main frame body on which a furrow opener, land wheels, a seed box, soil coverers and a compression roller are arranged successively from front to back, wherein a furrowing lifter configured to drive the furrow opener to lift up and down is connected to the upper end of the furrow opener; a plurality of land wheels are uniformly arranged on both sides of the main frame body; a seed sowing pipe configured to convey seeds in the seed box to the ground is connected to an outlet of the seed box; a plurality of soil coverers are fixed to the lower surface of the main frame body; and the compression roller is rotatably connected to the bottom of the main frame body. Seeds in the seed box are conveyed to the ground only when workers push the main frame body to move.



21: 2023/03635. 22: 2023/03/16. 43: 2023/03/30
51: A01H

71: Institute of Highland Forest Science, Chinese Academy of Forestry

72: MA, Hong, WAN, Youming, LI, Zhenghong

54: TISSUE CULTURE METHOD FOR RAPID PROPAGATION OF LUCULIA PINCEANA

00: -

Provided is a tissue culture method for rapid propagation of *Luculia pinceana*. The method includes the steps of inoculating a stem segment with buds of an annual shoot as an explant in a primary culture medium to induce adventitious buds, cutting the induced adventitious buds into stem segments with axillary buds, inoculating them in an enrichment culture medium to culture cluster buds, cutting the cluster buds, inoculating them in a rooting culture medium to culture rooting seedlings, and performing seedling exercising to obtain

transplanted seedlings of *Luculia pinceana*. The materials can be obtained easily and conveniently, and a great number of high-quality seedlings can be reproduced with fewer materials within a short time. Moreover, a single material source, a uniform genetic background, and no limitation in seasons, regions and the like, ensure high reproducibility of *Luculia pinceana*, and make the survival rate after transplanting exceed 90 percent.

21: 2023/03636. 22: 2023/03/16. 43: 2023/03/30
51: C04B

71: Jilin Jianzhu University

72: ZHANG Yunlong, SUN Huichao, QU Xiaolong, QIAN Xuesong, TIAN Wei, WANG Jing

54: INTELLIGENT HIGH-PERFORMANCE CONCRETE AND PREPARATION METHOD THEREOF

00: -

Disclosed are an intelligent high-performance concrete and a preparation method thereof, and relates to the technical field of concrete. Raw materials of the concrete include: cement, fly ash, silica fume, blast furnace slag powder, manufactured sand, water, superplasticizer, carbon fiber and basalt fiber. The preparation method specifically includes: mixing the cement, fly ash, silica fume, blast furnace slag powder and manufactured sand, adding carbon fiber and basalt fiber in sequence, then adding superplasticizer solution and water to form slurry, pouring into a mold and vibrating, and obtaining the intelligent high-performance concrete after curing. The intelligent high-performance concrete prepared by the invention improves the defects of low strength and poor durability of traditional concrete materials, and strengthens the self-monitoring ability of the structure. It may realize self-cleaning of accumulated snow around, effectively prolonging the service life of the structure, alleviating the damage to the structure caused by deicing salt and mechanical snow removal, and reducing environmental pollution.

21: 2023/03665. 22: 2023/03/17. 43: 2023/03/30
51: C12F

71: Moutai Institute

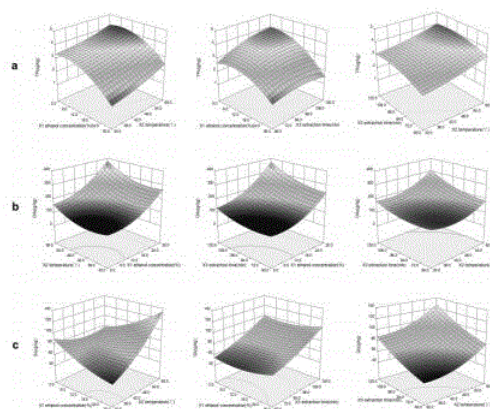
72: ZHENG, Yuxi

54: METHOD FOR EXTRACTING EFFECTIVE SUBSTANCES IN CHINESE BAIJIU

FERMENTATION RESIDUES BY USING SUPERCRITICAL FLUID

00: -

The present invention belongs to the field of food, and particularly relates to a method for extracting effective substances in Chinese Baijiu fermentation residues by using a supercritical fluid. The biological activities (oxidation resistance and cellular compatibility) of prepared extracts are investigated with an aim of obtaining highly active extracts suitable for use in the cosmetic or food industry; and after extraction, fermentation inhibitors are removed, and remaining residues are intended to be used in bioethanol production.



21: 2023/03688. 22: 2023/03/17. 43: 2023/03/30
51: C07D; A61P

71: UNICHEM LABORATORIES LTD

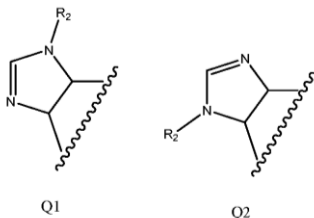
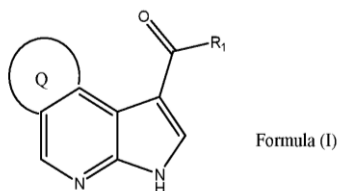
72: SATHE, Dhananjay G., GAWAS, Dnyaneshwar V., YELLOL, Gorakhnath S.

33: IN 31: 202021043852 32: 2020-10-08

54: SUBSTITUTED TRICYCLIC COMPOUNDS

00: -

The invention provides a compound of formula (I) or a pharmaceutically acceptable salt thereof; wherein Q is a group of formula Q1 or Q2; wavy bond represents the points of attachment; wherein R1 is –NRa Rb; R2 is hydrogen or a C1-C10 alkyl group; Ra and Rb independently represent hydrogen or a C1-C10 alkyl group, and use of these compounds as kinase inhibitors and compositions comprising the compounds of the present invention.



~~~~~ (wavy bond)

21: 2023/03689. 22: 2023/03/17. 43: 2023/03/27

51: A61K; C07H

71: GOEL, Pawan Kumar

72: ROY, Animesh, KUMAR, Ajay

33: IN 31: 202111061705 32: 2021-12-30

**54: PROCESS FOR EXTRACTION OF NON TOXIC HIGH PURITY COLCHICOSIDE FROM GLORIOSA SUPERBA AND EXTRACT THEREOF**

00: -

Present invention discloses a novel process for extraction of non-toxic, high purity colchicoside from *Gloriosa superba* and extract thereof. Present invention utilizes a novel nonchromatographic, simple and less timing consuming process. The process disclosed in present invention involve extraction of *G. superba* seeds using methanol, isolation of colchicine using non-polar solvent chloroform, isolation of colchicoside using n-butanol, removal of N-formyl impurity from colchicoside by using acid catalyst optimally hydroxylamine hydrochloride in methanol with traces of water optimally 1% water and further NMR spectroscopic analysis to detect the presence or absence of N-formyl impurity within the extracted pure product. By employing the method of present invention colchicoside of >90% purity is obtained.

21: 2023/03692. 22: 2023/03/20. 43: 2023/03/30

51: B32B

71: Nanjing Tontech Rockwool Co., Ltd.

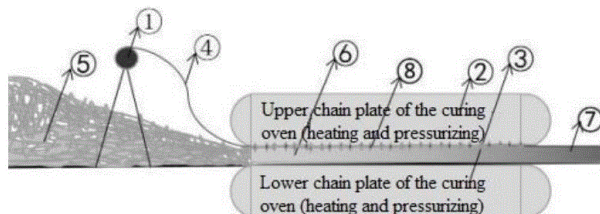
72: MA, Bin, QIAO, Xiaole, JIA, Zhongpeng, ZHAO, Rui, SUN, Xin

33: CN 31: 2022109131987 32: 2022-08-01

**54: METHOD FOR PREPARING COMPOSITE REINFORCED ROCK WOOL BOARD**

00: -

Disclosed is a method for preparing a composite reinforced rock wool board. The method includes: first uniformly applying a resin to the surface of a reinforcing layer; then perforating or puncturing a reinforcing layer with an adhesive to improve the air permeable uniformity thereof; then online laminating the reinforcing layer with the adhesive and a rock wool board matrix by using an online curing and drying process; and performing curing through pressurizing by a curing oven and drying under a ventilation flow to obtain the composite reinforced rock wool board. The present invention features simple process and adjustable sizing and curing processes, and is suitable for industrial continuous production. The interfacial strength and the point load of the prepared composite rock wool board are improved, and the surface evenness of the rock wool board is enhanced, with the deviation of the surface evenness being is lower than 1 mm (inclusive).



21: 2023/03693. 22: 2023/03/20. 43: 2023/03/30

51: A24B

71: Guangdong Tobacco Research Institute, Tobacco Research Institute of Chinese Academy of Agricultural Sciences, Guangdong Tobacco Shaoguan Co., Ltd

72: WANG, Hang, LIU, Lan, WANG, Songfeng, ZHANG, Dandan, YAO, Yuanhua, ZENG, Tao, HUANG, Yuepeng, WANG, Xiaobin, GUO, Hao, WANG, Aihua

33: CN 31: 2022103845324 32: 2022-04-13

**54: BULK CURING PROCESS FOR HOMOGENEOUS COLOR FIXING OF WHOLE FLUE-CURED TOBACCO LEAVES**

00: -

The present invention relates to a bulk curing process for homogeneous color fixing of whole flue-cured tobacco leaves, including: S1, loading tobacco

leaves, firing, and curing the leaves to promote the leaves to turn yellow; S2, when water droplets on an observation window condense and flow downward, performing dehumidification; S3, raising a dry-bulb temperature to make the tobacco leaves further turn yellow, and then performing dehumidification; S4, raising the dry-bulb temperature to make the tobacco leaves turn yellow and dry while dehumidification is performed; S5, raising the dry-bulb temperature to further dry the tobacco leaves; S6, raising the dry-bulb temperature to completely dry the tobacco leaves; S7, raising the dry-bulb temperature to normally dry the stems of the tobacco leaves. The curing quality of tobacco leaves can be improved by utilizing the advantage that the bulk curing barn can be kept wet through keeping or kept dry through discharge.

Holding fresh tobacco leaves with clamps, placing the tobacco leaves in three layers in a curing barn, firing, curing the tobacco leaves, raising a dry-bulb temperature to 30-40°C at a rate of 1°C/1 h, and curing the tobacco leaves at the stable temperature for 8-12 h.

When water droplets on an observation window condense and flow downward, fully opening a cold air door for dehumidification.

Raising the dry-bulb temperature to 40-41°C at a rate of 1°C/4 h, fully opening the cold air door for dehumidification.

Raising the dry-bulb temperature to 42-43°C at a rate of 1°C/4 h, and setting the wet-bulb temperature to 35°C.

Raising the dry-bulb temperature to 44-45°C at a rate of 1°C/4 h, and maintaining the wet-bulb temperature at 35°C.

Continuously raising the dry-bulb temperature to 47-48°C at a rate of 1°C/4 h, and maintaining the wet-bulb temperature at 35.5°C.

Raising the dry-bulb temperature to 54°C at a rate of 1°C/1 h, and setting the wet-bulb temperature to 38°C.

Raising the dry-bulb temperature to 68°C at a rate of 1°C/1 h, and setting the wet-bulb temperature to 41-42°C.

21: 2023/03695. 22: 2023/03/20. 43: 2023/03/30  
51: F21W

71: Hebei Chemical and Pharmaceutical Vocational and Technical College

72: Bo An, Xu Yang

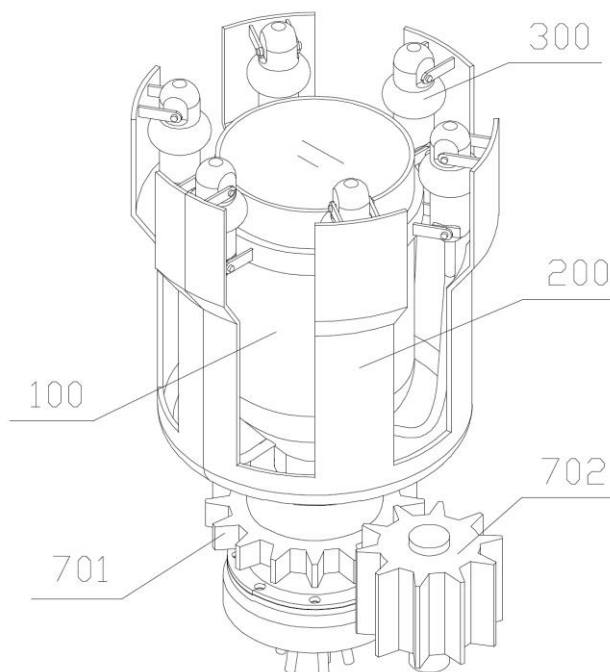
33: CN 31: 2022100433943 32: 2022-01-14

#### **54: SMOKE FOUNTAIN TYPE CUTTING STAGE-LAMP WITH ADJUSTABLE JET FLOW**

00: -

The invention discloses an smoke fountain type cutting stage-lamp with adjustable jet flow, which comprises a stage lamp body and an assembly bracket which is constructed outside the stage lamp body and rotates through a transmission mechanism, wherein a plurality of spray pieces which are uniformly arranged along the circumferential direction of the stage lamp body are mounted on the assembly bracket, and a smoke supply pipe system and a water supply pipe system are both communicated with each spray piece through a distribution mechanism, wherein a spray flux adjusting piece is arranged in each spray piece, and a cutting mechanism is arranged in the stage

lamp body. The invention integrates the smoke effect, the fountain effect and the lighting effect, simplifies the structure of the cutting light, achieves the effect of multiple functions of the stage light, has excellent scene contrast, is convenient to control, has low input cost, has low failure rate and is structurally convenient for subsequent disassembly and maintenance. The invention is suitable for the technical field of stage lamps in stage equipment.



21: 2023/03696. 22: 2023/03/20. 43: 2023/03/30  
51: F21W

71: Hebei Chemical and Pharmaceutical Vocational and Technical College

72: Bo An, Ruobing Zhao

33: CN 31: 2022100422046 32: 2022-01-14

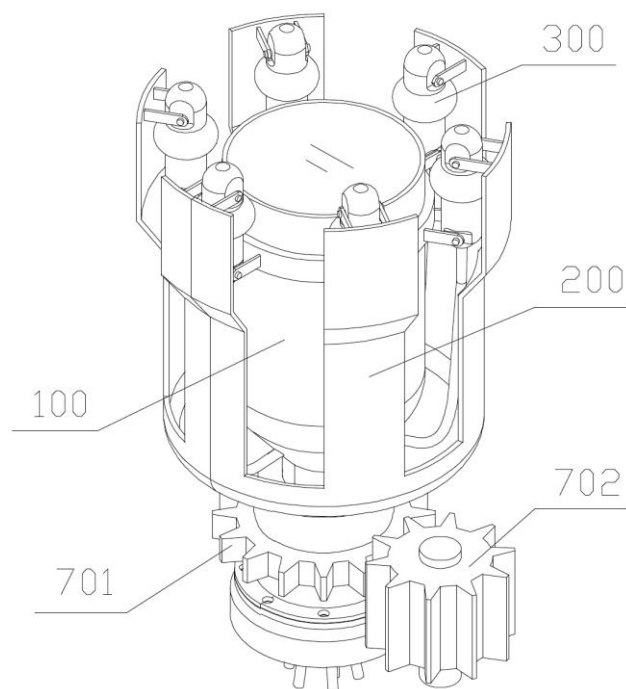
#### **54: INTEGRATED SMOKE FOUNTAIN TYPE STAGE-LAMP**

00: -

The invention discloses an integrated smoke fountain type stage-lamp, which comprises a stage lamp body mounted on a stage track through a base, an assembly bracket is rotatably mounted outside the stage lamp body through a transmission mechanism, a plurality of spray parts uniformly arranged along the circumferential direction of the stage lamp body are mounted on the assembly bracket, and a smoke supply pipe system and a water supply pipe system are all communicated with each spray part through a distribution mechanism.



The invention integrate that smoke effect, the fountain effect and the lighting effect, achieve the effect of multiple functions of the stage lamp, has excellent scene contrast, convenient control, low investment cost, low failure rate, and is structurally convenient for subsequent disassembly and maintenance. The invention is suitable for the technical field of stage lamps in stage equipment.



21: 2023/03697. 22: 2023/03/20. 43: 2023/03/30  
51: B05D

71: Dr.S.V.A.R.Sastry, Dr.Adarsh Kumar Arya,  
Dr.Shravan Kumar, Dr.Rajkamal Kushwaha,  
Mr.Gaurav Singh

72: Dr.S.V.A.R.Sastry, Dr.Adarsh Kumar Arya,  
Dr.Shravan Kumar, Dr.Rajkamal Kushwaha,  
Mr.Gaurav Singh

33: IN 31: 202311005854 32: 2023-01-30

#### **54: A METHOD OF PROCESSING AN ANTI- GRAFFITI NANO-COATING FOR WALLS**

00: -

The present invention describes a method of processing anti-graffiti nano-coating for walls. The method comprising steps of: cleaning and preparing a wall surface, wherein the wall surface is repaired for cracks, holes or other damaged areas; applying a nano-coating of suitable proportion evenly over the repaired and cleaned wall surface; drying and curing to allow the nano-coating to dry for a predefined

amount of time before applying a second coat; inspecting the wall surface for defects or areas requiring touch-up; and maintaining by cleaning the nano-coated wall surface and to remove any graffiti or other marks that may appear.

21: 2023/03700. 22: 2023/03/20. 43: 2023/03/30  
51: H05B

71: Dr.S.V.A.R.Sastry, Dr.Ashish Kapoor, Dr.Anjali Awasthi, Ms.Vaishali Ajay Giri, Ms.Chandrika Sengar

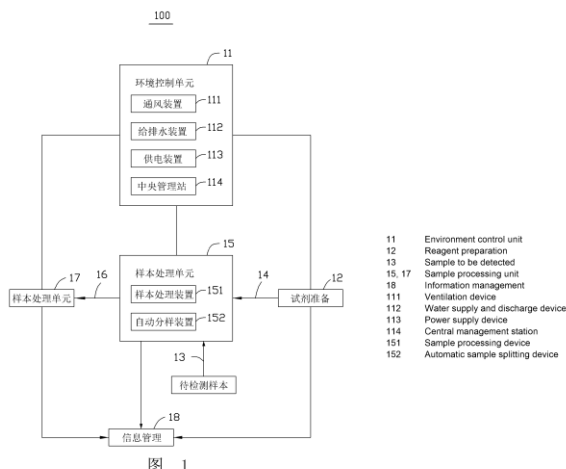
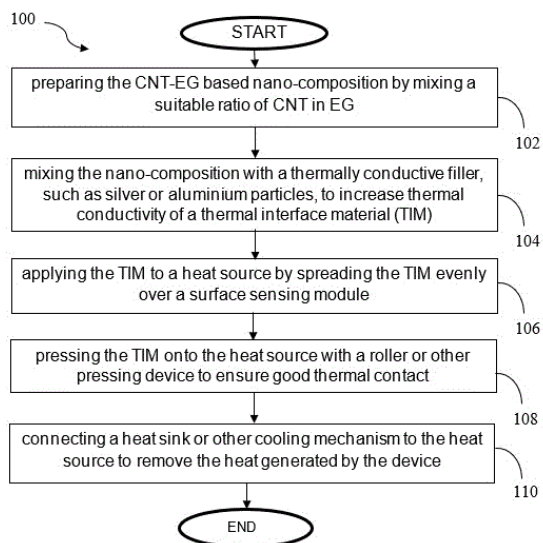
72: Dr.S.V.A.R.Sastry, Dr.Ashish Kapoor, Dr.Anjali Awasthi, Ms.Vaishali Ajay Giri, Ms.Chandrika Sengar

33: IN 31: 202311004328 32: 2023-01-22

#### **54: A CNT-EG BASED NANO-COMPOSITION FOR HEAT CONVECTION IN HIGH ENERGY HEAT DISSIPATING DEVICES**

00: -

The present invention relates to a method of heat convection in high energy heat dissipating devices using carbon nanotubes-ethylene glycol (CNT-EG) based nano-composition. The method comprising steps of: preparing the CNT-EG based nano-composition by mixing a suitable ratio of CNT in EG; mixing the nano-composition with a thermally conductive filler, such as silver or aluminium particles, to increase thermal conductivity of a thermal interface material (TIM); applying the TIM to a heat source by spreading the TIM evenly over a surface; pressing the TIM onto the heat source with a roller or other pressing device to ensure good thermal contact; and connecting a heat sink or other cooling mechanism to the heat source to remove the heat generated by the device.



21: 2023/03702. 22: 2023/03/20. 43: 2023/03/30  
 51: C12M; C12Q  
 71: MGI TECH CO., LTD.  
 72: LIN, Siyuan, LI, Jing, FAN, Qinghua, ZOU, Liangying, PENG, Youxiong, YU, Dejian, JIANG, Hui  
**54: INTEGRATED SMART NUCLEIC ACID DETECTION SYSTEM**

00: -

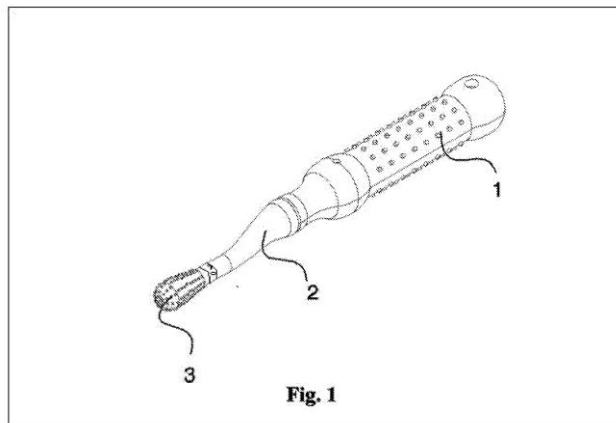
Provided is an integrated smart nucleic acid detection system, comprising: a sample processing unit used for extracting a nucleic acid sample from a sample to be detected; a sample detection unit used for detecting the nucleic acid sample to obtain a detection result; and an information management unit used for obtaining the detection result and outputting same. The integrated smart nucleic acid detection system provided by the present application can achieve quick and automatic nucleic acid detection.

21: 2023/03703. 22: 2023/03/20. 43: 2023/03/30  
 51: A61C; A61H

71: TEWARY, Shivsagar, KHAN, Abduljabbar  
 72: TEWARY, Shivsagar, KHAN, Abduljabbar, JOSHI, Anand G., SANYAL, Pronob, PAWASHE, Karuna, BELGAUMI, Uzma  
 33: IN 31: 202021036090 32: 2020-08-21  
**54: A COMPACT ELECTRO-MECHANICAL DEVICE TO CURTAIL RESIDUAL RIDGE RESORPTION**

00: -

Disclosed is related to the development of a compact and portable Electro-Mechanical device that is incorporated with calibrated electronic circuitry. The said device is capable of providing a calibrated and controllable motion at one of its embodiments and simultaneously dispensing lubricant / medicament from other. The said motion is of the form of vibration but not limited to oscillatory motion, undulated motion, brushing motion. The said vibrations are impelled on the gum overlaying the alveolar bone and produce a massaging action that facilitates the blood flow in those tissues thus curtailing the effect of residual ridge resorption.

**Fig. 1**

21: 2023/03729. 22: 2023/03/22. 43: 2023/03/30

51: G01S

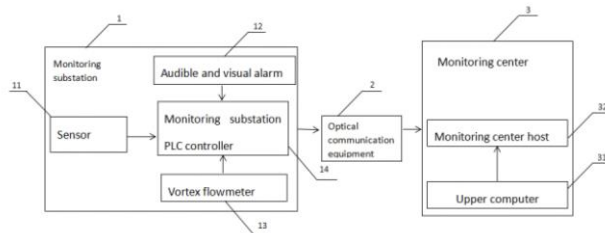
71: TAIYUAN UNIVERSITY OF TECHNOLOGY

72: CUI Chuanbo, ZHOU Yuying, YUAN Yanwei, LI Jiangjiang, JIAO Zhipeng, SONG Zhiqiang

**54: GAS LEAKAGE MANAGEMENT SYSTEM AND POSITIONING METHOD**

00: -

The invention has disclosed a gas leakage management system and positioning method. And the system comprises a monitoring substation, optical communication equipment and a monitoring center; Wherein that monitoring substation is arranged at key nodes of a gas extraction pipe network and is mainly responsible for collecting and continuously monitoring signals such as pressure, flow and the like, and giving an acousto-optic alarm when the pipe leaks; And the monitoring center is provided with optical communication equipment to communicate with the monitoring substation, so as to obtain data from the monitoring substation and locate the leaking point when the leakage occurs. According to the invention, signals of various parameters in the pipe are converted into electrical signals through the sensors arranged in the gas extraction pipe; And the signals are processed by the monitoring substation PLC controller, and the signals are sent by optical communication equipment; The upper computer of the monitoring center processes the data collected by the monitoring substation; When leakage occurs, the upper computer software displays the leaking signal to the user and locates the leaking point; And the user sends a control instruction through the upper computer software to realize remote control of the device.



21: 2023/03730. 22: 2023/03/22. 43: 2023/03/30

51: A23L

71: Baize University

72: XU, Xiaoling, TANG, Weiren, ZHOU, Ye, LIU, Fang, HUANG, Xunwen, LI, Yufeng, HUANG, Jing, QIN, Jiaoling, XIE, Donghai

**54: FORMULA AND PREPARATION METHOD FOR MANGO AND EDIBLE MUSHROOM COMPOUND NUTRITIOUS BEVERAGE**

00: -

The present invention relates to a formula and preparation method for a mango and edible mushroom (*Coprinus comatus* and *Pleurotus ostreatus*) compound nutritious beverage, which is delicious compound nutritious beverage rich in mushroom active Polysaccharides, with functions of assisting in reducing blood fat and decreasing blood sugar, etc., and without sucrose, colourant and essence addition. The formula and preparation method for mango and edible mushroom (*Coprinus comatus* and *Pleurotus ostreatus*) compound nutritious beverage has broad market development prospects.



21: 2023/03731. 22: 2023/03/22. 43: 2023/03/27

51: A01B; A01G

71: SHANGDU SCIENCE AND TECHNOLOGY COMMISSIONER WORKSTATION

72: LI, Ailan, ZHANG, Xiu, DU, Xiaoyun, PENG, Xiaoguang, LI, Junzi, XING, Yingying, JIAO,

Weihong, LI, Delin, WANG, Xubin, YAN, Yun, SUN, Yanfang, Baonandina

#### 54: PLANTING METHOD OF FACILITY VEGETABLES

00: -

The present invention discloses a planting method of facility vegetables, which includes: planting two crops of vegetables in a facility cold shed in the northern cold region of China in one year, and covering a mulch film for planting the vegetables once but using twice. The planting method includes: covering the mulch film in the cold shed in spring for planting a first crop of vegetables, harvesting the first crop of vegetables, and then planting a second crop of vegetables on the original film without removing the original film, wherein the first crop of planted vegetables is cold-preferred vegetable (such as Chinese cabbage), and the second crop of planted vegetables is hole-planted vegetable (such as peppers or cabbages).

21: 2023/03732. 22: 2023/03/22. 43: 2023/03/30  
51: E04G

71: THE SECOND CONSTRUCTION  
ENGINEERING COMPANY LTD. OF CHINA  
CONSTRUCTION SECOND ENGINEERING  
BUREAU

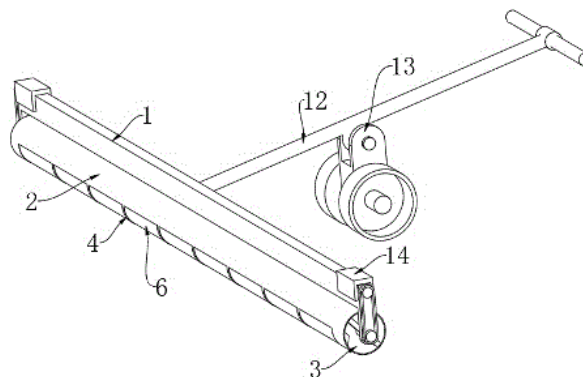
72: QIN, Yunlei, HU, Huahong, FENG, Lilei, CUI, Qi, LV, Meiyang, FU, Jun, TIAN, Yajie, XIN, Zilin, QI, Yongxia, CAO, Shengyuan

#### 54: DEVICE FOR CONTROLLING FLATNESS OF CONCRETE STRUCTURAL SLAB

00: -

The present invention discloses a device for controlling flatness of a concrete structural slab. The device includes a mounting bracket and a planar roller. The planar roller is rotatably mounted on the lower side of the mounting bracket, a driving mechanism is arranged on the mounting bracket, and the planar roller is driven by a driving mechanism to rotate in forward and reverse directions. Openings are reserved at both ends of the planar roller, a plurality of feeding and discharging windows are formed in the surface of the planar roller, several guide vanes are fixedly mounted on the inner wall of the planar roller, and the planar roller is internally provided with a swing arm regulating mechanism and a throttling block. By means of the device provided by the present invention, by arranging the planar roller, a concrete

pouring surface is slicked as the planar roller pushes back and forth. Meanwhile, the rotary planar roller has the function of transversely conveying concrete and can prevent accumulation of slurry effectively to achieve the effect of controlling the flatness of the concrete surface by leveling the concrete surface. Moreover, the pushing resistance is reduced, which brings convenience to manual operation, thereby greatly improving the work efficiency.



21: 2023/03762. 22: 2023/03/23. 43: 2023/03/30  
51: C12N

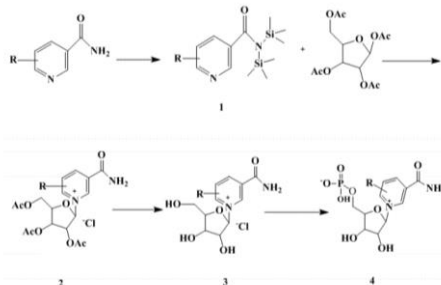
71: Shanghai Shuze Institute of Biotechnology  
72: LOU, Xiuyu

#### 54: METHOD FOR SYNTHESIZING BETA-NICOTINAMIDE MONONUCLEOTIDE

00: -

The present invention discloses a method for synthesizing beta-nicotinamide mononucleotide, and relates to the technical field of drug synthesis. The method mainly includes the following steps: S1, mixing a nicotinamide derivative, hexamethyldisilazane and catalyst I for reaction in a reaction kettle, so as to obtain a silanization-protected nicotinamide derivative; S2, adding tetraacetylribose, solvent, catalyst II and methanol for reaction, so as to generate nicotinamide triacetyl nucleoside; S3, adding methanol and n-propylamine, so as to generate nicotinamide nucleoside; S4, adding trimethyl phosphate and phosphorus oxychloride, so as to generate the beta-nicotinamide mononucleotide; and S5, separating and purifying the beta-nicotinamide mononucleotide. The present invention has the advantages of high yield and production efficiency by controlling a plurality of consecutive steps in one reaction vessel and avoiding steps of separating and purifying intermediates.





21: 2023/03763. 22: 2023/03/23. 43: 2023/03/30

51: A23K

71: Institute of Plant Protection, Henan Academy of Agricultural Sciences

72: LI, Tong, JIANG, Yueli, WU, Yuqing, LI, Jinxiu, GAO, Xinguo, GONG, Zhongjun, MIAO, Jin, DUAN, Yun

#### 54: VITAMIN B COMPLEX AND VITAMIN COMPLEX FOR LEPIDOPTERA FEED

00: -

The present invention belongs to the technical field of feeds, and particular relates to a vitamin B complex and a vitamin complex for a Lepidoptera feed. The vitamin B complex includes niacin, vitamin B5, riboflavin, thiamine hydrochloride, pyridoxine hydrochloride, folic acid, biotin, cobalamin, calcium pantothenate and vitamin B12. In the present invention, the vitamin B complex and the vitamin complex are proper in proportion, which can effectively accelerate the growth of Lepidoptera, thereby shortening the growth and development cycle and improving the reproductive capacity of Lepidoptera.

21: 2023/03764. 22: 2023/03/23. 43: 2023/03/30

51: C08K; B33Y

71: Research Institute of Wood Industry, Chinese Academy of Forestry

72: YAN, Chenglin, LIU, Dong, LI, Xiaoxu, LIU, Zixin, WANG, Qi

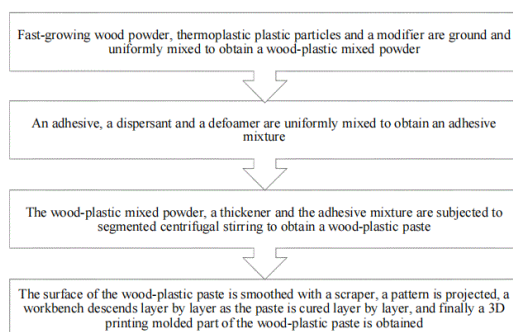
33: CN 31: 2023101278526 32: 2023-02-09

#### 54: PHOTOCURING 3D PRINTING MOLDING-BASED PREPARATION METHOD AND APPLICATION OF WOOD-PLASTIC PASTE

00: -

Provided are a photocuring 3D printing molding-based preparation method and an application of a wood-plastic paste. The wood-plastic paste includes the following components in percentage: 40-70 percent of wood-plastic mixed powder, 30-60 percent of adhesive mixture and 0.2-2 percent of

thickener. After the wood-plastic mixed powder, the thickener and the adhesive mixture are subjected to segmented centrifugal stirring to obtain a 3D printing wood-plastic paste, the surface of the wood-plastic paste to be molded is smoothed with a scraper, then the cross-section shape processed by a computer is projected to the surface of the paste, and a workbench descends layer by layer so as to finally obtain a 3D printing molded part of the wood-plastic paste. 3D printing is performed in a form of paste, the principle is simple and practical, the molding speed is high, and a wood content higher than that of the powder can be achieved.



21: 2023/03765. 22: 2023/03/23. 43: 2023/03/30

51: B65D

71: Kraftpack (Hubei) Industrial Co., Ltd.

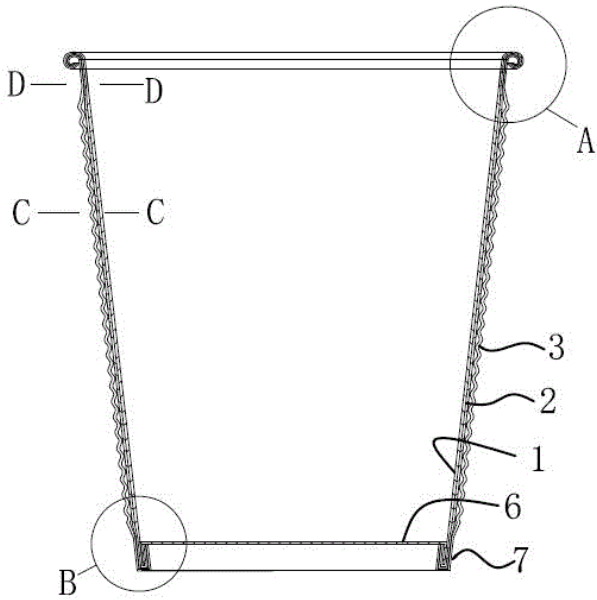
72: Jiaoping Ding

33: CN 31: 202210732384.0 32: 2022-06-27

#### 54: A CORRUGATED PAPER CUP

00: -

The present invention relates to a double-layer corrugated paper cup applicable to unmanned full-automatic manufacturing. The corrugated paper cup comprises a cup body formed by rolling a fan-shaped sheet, the fan-shaped sheet having a first straight edge and a second inclined edge, a first end of the single-layer corrugated paper is staggered with and parallel to a first end of the inner cup paper and a second end of the single-layer corrugated paper is flush with a second end of the inner cup paper, a corrugated cavity region of the fan-shaped sheet is flattened to form a first extruded corrugated cavity region and a thickness of the first extruded corrugated cavity region is smaller than that of a middle part of the fan-shaped sheet and a part of the first extruded corrugated cavity region is rolled outwardly together with the inner cup paper to form a rolled rim.



21: 2023/03766. 22: 2023/03/23. 43: 2023/03/30  
51: G06T

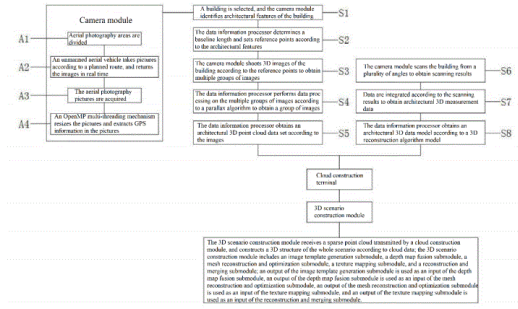
71: Xinyu University  
72: FU, Siyong

33: CN 31: 2022110457179 32: 2022-08-30

## 54: 3D RECONSTRUCTION DEVICE BASED ON A DEPTH CAMERA MODULE

00: -

Disclosed is a 3D reconstruction device based on a depth camera module, including a camera module, a data information processor, a cloud construction terminal and a 3D scenario construction module. 3D reconstruction steps are as follows: a building is selected, and the camera module identifies architectural features of the building; the data information processor determines a baseline length and sets reference points according to the architectural features; the camera module shoots 3D images of the building according to the reference points to obtain multiple groups of images; the data information processor performs data processing on the multiple groups of images according to a parallax algorithm to obtain a group of images; the data information processor obtains an architectural 3D point cloud data set according to the images. The device is suitable for application in the fields of maneuvering reconnaissance and regional monitoring, and the 3D reconstruction is high in definition.



21: 2023/03799. 22: 2023/03/24. 43: 2023/03/30  
51: H01M; H02J

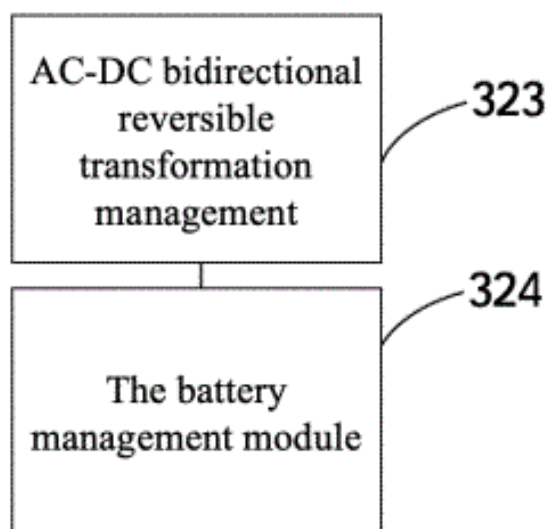
71: University of Mining and Technology, Beijing  
72: Lili FENG, Hansen YANG, Yiming FENG, Jian  
ZHOU

33: CN 31: 202210739665.9 32: 2022-06-28

## 54: THE BATTERY ENERGY STORAGE MANAGEMENT SYSTEM

00: -

This application opens a battery energy storage management system which at least should contain the AC-DC bidirectional reversible transformation module and the battery management module. Between them, the AC-DC bidirectional reversible transformation module is used for the situation when generated power of new energy is greater than the power used in power grids. Under this circumstance, the AC-DC transformation unit will store electric energy exceeding the grid demand into the battery management module; when the power consumed by power grids is greater than the generated power of new energy, the AC-DC reversible unit will be used. Electric energy stored in the battery management module can input into power grids; the battery management module is used for the passive equilibrium mode to restrict charging voltage of energy storage elements and conduct equilibrium processing for energy storage elements. In this way, the use ratio of new energy including wind energy can be improved.



21: 2023/03801. 22: 2023/03/24. 43: 2023/03/30  
51: E02D

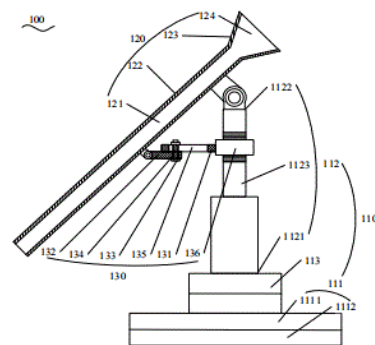
71: China Institute of Water Resources and Hydropower Research

72: SONG, Yifan, WANG, Xiaogang, YAN, Denghua, LU, Yajing, QIN, Tianling, WENG, Baisha, LIU, Tiejun, JIAO, Rui, YAO, Jianan, YANG, Zhenqi, FENG, Yaru

#### **54: ANGLE-ADJUSTABLE AUXILIARY DEVICE FOR SOIL SAMPLING**

00: -

The present invention discloses an angle-adjustable auxiliary device for soil sampling. The device includes a first adjusting assembly, a guide assembly and a second adjusting assembly, where the first adjusting assembly is configured to be fixedly disposed on the ground; the guide assembly has a guide groove configured to allow a soil drilling component to pass through, and is rotationally connected to the first adjusting assembly configured to adjust and fix a vertical height of the guide assembly; and the second adjusting assembly is connected to the guide assembly and the first adjusting assembly, and configured to adjust and fix an included angle between the guide assembly and the first adjusting assembly. The angle-adjustable auxiliary device for soil sampling provided by the present invention can improve adaptability.



21: 2023/03802. 22: 2023/03/24. 43: 2023/03/30  
51: E04D

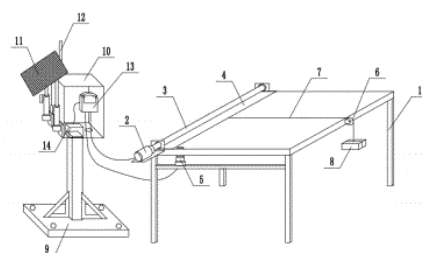
71: China Institute of Water Resources and Hydropower Research

72: SONG, Yifan, YAN, Denghua, LU, Yajing, WANG, Xiaogang, QIN, Tianling, WENG, Baisha, LIU, Tiejun, LIU, Shanshan, JIAO, Rui, YAO, Jianan, YANG, Zhenqi

#### **54: REMOTE-CONTROLLABLE FIELD RAIN-SHADING EXPERIMENTAL DEVICE**

00: -

The present invention discloses a remote-controllable field rain-shading experimental device, which relates to the technical field of awnings, and includes a roller shutter assembly, a pulley, a limiting structure and a solar signal receiving device, wherein the roller shutter assembly includes a driving device, a winding drum and a curtain plate; one end of a traction rope is connected to the curtain plate, and the other end of the traction rope can be fixedly connected to a counterweight block; the limiting structure can limit the curtain plate; and the solar signal receiving device is in signal connection with a remote-end signal transmitting terminal. The remote-controllable field rain-shading experimental device provided by the present invention can achieve the remote control of opening and closing of an awning when a field experiment on artificial simulation of a rainfall is performed.



21: 2023/03803. 22: 2023/03/24. 43: 2023/03/30

51: G06Q

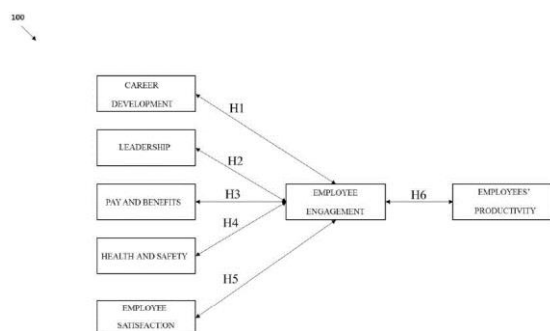
71: Dr. Subhadeep Chakraborty, Mr. Asit Das, Dr. Dipa Banerjee, Dr. Monika Bisht, Pradip Chandra Das, Dr. Jitu Borah, Samaresh Nandy

72: Samaresh Nandy, Dr. Subhadeep Chakraborty, Mr. Asit Das, Dr. Dipa Banerjee, Dr. Monika Bisht, Pradip Chandra Das, Dr. Jitu Borah

**54: A MEDIATING ROLE OF EMPLOYEE ENGAGEMENT IN IMPROVING EMPLOYEE'S PRODUCTIVITY**

00: -

The present invention relates to a method (100) for analysing mediating role of employee engagement in improving employee's productivity. The method (100) comprises a memory unit and a processing unit. The memory unit is configured to store machine language. The processing unit is operationally connected with a memory unit. The processing unit is configured to generate questionnaire surveys about the mediating role of employee engagement in improving employees productivity; convert the questionnaire surveys into primary information data; analyze primary information data; create hypotheses based on the analyze information; generate analyzed results to identify the impact of mediating role of employee engagement in improving employees productivity. The display unit is operationally connected with the processing unit. The display unit is configured to provide a user interface and display the generated result.



21: 2023/03841. 22: 2023/03/27. 43: 2023/03/30

51: A61K

71: THE FIRST PEOPLE'S HOSPITAL OF HANGZHOU LIN'AN DISTRICT

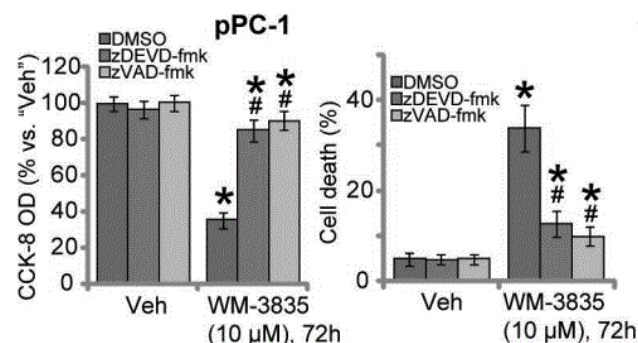
72: MIN Zhichao, XU Lin, ZHAN Hongwei, LIU Qing

33: CN 31: 2022114409920 32: 2022-11-17

**54: APPLICATION OF HBO1 AND ITS INHIBITOR IN PREPARING DRUGS FOR TREATING CASTRATION-RESISTANT PROSTATE CANCER**

00: -

The invention discloses an application of HBO1 and its inhibitor in preparing drugs for treating castration-resistant prostate cancer, and belongs to the technical field of medicine. By studying the inhibitory effects of different concentrations of micromolecule compound WM-3835 on the proliferation, migration and invasion of castrated prostate cancer resistant primary cells, the invention seeks the best WM-3835 drug concentration for inhibiting castration and resisting prostate cancer, and provides basic theoretical support for the development of its therapeutic drugs. It is also confirmed by cell functional experiments, animal experiments and functional recovery experiments that WM-3835 inhibits castration and resists the progress of prostate cancer by targeting HBO1 oncogene, and expounds a new therapeutic strategy of castration and resists prostate cancer from the molecular level; The relationship between HBO1 and the clinical prognosis of prostate cancer is clarified, which provided a new molecular marker for its diagnosis. Therefore, the invention provides a new direction for the treatment of CRPC patients.



21: 2023/03842. 22: 2023/03/27. 43: 2023/03/30

51: A61B

71: Dr. Samrat Bharadwaj, Dr. Mayuri Sarma, Dr. Kaberi Bezbarua, Dr. Sumadhur Roy, Dr. Dhriti Das, Susmita Deka

72: Dr. Samrat Bharadwaj, Dr. Mayuri Sarma, Dr. Kaberi Bezbarua, Dr. Sumadhur Roy, Dr. Dhriti Das, Susmita Deka

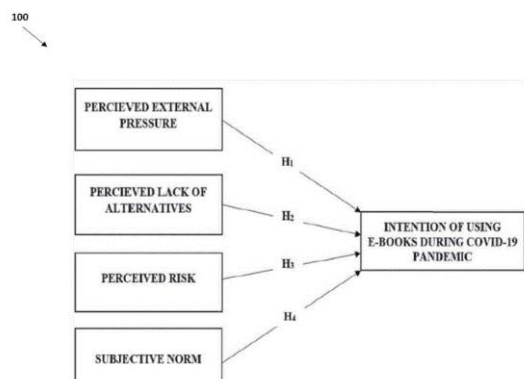
**54: A METHOD FOR ANALYZING ADOPTION INTENTION OF E-BOOK USAGE AMONG STUDENTS DURING COVID-19**

00: -

The present invention relates to a method (100) for analyzing adoption intention of e-book usage among students during covid-19. The method (100) comprises a memory unit and a processor. The



processor is configured to gather information about the intention of e-book usage among students during covid-19; conduct a comprehensive literature review of previous studies on the adoption of e-books in education, as well as on the impact of COVID-19 on education and technology adoption; collect data through online surveys, focus groups, or interviews with students, teachers, and educational institutions to understand their attitudes and behaviors towards e-book adoption during COVID-19; analyze the collected data using statistical analysis techniques such as descriptive statistics, factor analysis, and regression analysis; find and recommendations for adoption intention of e-book usage among students during covid-19; and generate conclusion by summarizing the main findings and highlighting their implications for educational policy and practice.



21: 2023/03843. 22: 2023/03/27. 43: 2023/03/30  
51: G01M

71: Xi'an University of Architecture and Technology, Xi'an University of Technology, China Railway Xi'an Survey, Design and Research Institute Co., Ltd, of CREC

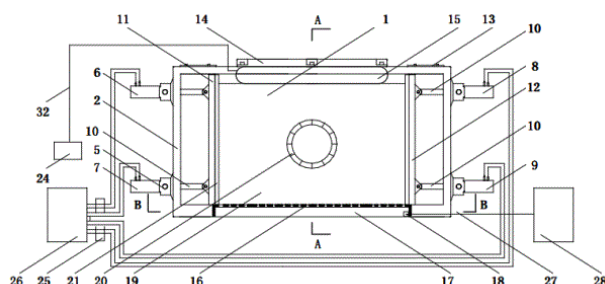
72: Rongjin LI, Weishi BAI, Guoqiang LIN, Rongjian LI, Xin ZOU, Lei WANG, Shibin ZHANG

#### 54: A TEST DEVICE FOR COMPREHENSIVE SIMULATION OF TUNNEL STATE

00: -

The present invention discloses a test device for comprehensive simulation of tunnel state, comprising a model box, a bottom immersion humidification system, a bidirectional loading system and a top loading system. By using the above-mentioned test apparatus to comprehensively simulate the tunnel condition, it is able to simulate the complex and diverse stresses of the tunnel in the natural strata in a more comprehensive manner,

which is more in line with the actual situation and effectively improves the reference value of the simulation test for tunnel research.



21: 2023/03846. 22: 2023/03/27. 43: 2023/03/30  
51: H05B

71: XUZHOU COLLEGE OF INDUSTRIAL TECHNOLOGY

72: ZHOU Tianpei

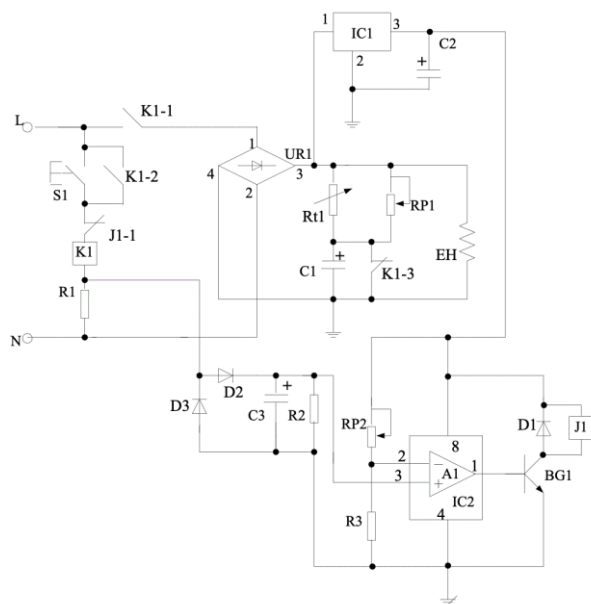
33: CN 31: 2023201882070 32: 2023-02-10

#### 54: RAPID TEMPERATURE-ISING ELECTRIC BLANKET HEATING PROTECTION CIRCUIT

00: -

The present utility model discloses a rapid temperature-ising electric blanket heating protection circuit, comprising: a main switch S1 connected in series with an alternating current relay K1 and a resistor R1 and then connected between L and N terminals of an alternating current power supply, wherein a normally open contact K1-2 of the alternating current relay K1 is connected in parallel to both sides of the main switch S1; wherein the circuit further comprises: a rectifier stack UR1, wherein a pin 1 is connected to the L terminal of the alternating current power supply through a normally open contact K1-1 of the alternating current relay K1, a pin 2 is connected to the N terminal of the alternating current power supply, and a pin 4 is grounded; a thermistor Rt1 connected in parallel to a potentiometer RP1 and then connected between a pin 3 of the rectifier stack UR1 and an anode of a capacitor C1, wherein a cathode of the capacitor C1 is grounded, and a normally closed contact K1-3 of the alternating current relay K1 is connected in parallel to both sides of the capacitor C1; and a heating wire EH connected between the pin 3 of the rectifier stack UR1 and the ground; the present utility model can achieve rapid temperature rising, and maintain a stable state after a certain temperature is

reached, avoiding higher temperature and being suitable for the elderly.



21: 2023/03889. 22: 2023/03/28. 43: 2023/04/11  
51: G01N

71: Xinyu University

72: HUANG, Ping, XU, Shunjian, ZHONG, Wei, XIAO, Zonghu, FU, Haiyan, OU, Hui, LIU, Chen, LUO, Yongping

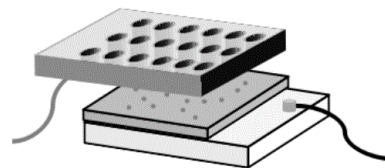
33: CN 31: 2022107850482 32: 2022-07-05

#### **54: FLEXIBLE SELF-POWDERED HUMIDITY SENSOR AND PREPARATION METHOD THEREFOR**

00: -

Disclosed are a flexible self-powered humidity sensor and a preparation method therefor. Preparation of a porous piezoelectric composite membrane and assembly of the self-powered humidity sensor are included. A mixture formed by a piezoelectric polymer and a nanomaterial is subjected to ultrasonic treatment, magnetic stirring and spin-coating to form a membrane, and the membrane is annealed at a high temperature and is subjected to low-temperature quenching to prepare the porous piezoelectric composite membrane. The porous piezoelectric composite membrane and a micro-porous flexible electrode are assembled to form the self-powered humidity sensor of a sandwich structure. The humidity sensor has flexible, porous, hydrophilic and piezoelectric characteristics, and can be self-powered. Voltage response of the sensor and humidity represent a better linear relationship

and sensitivity, and the detection range can achieve full coverage. Moreover, the sensor features simple structure and low cost, and is suitable for large-scale production and application.



21: 2023/03896. 22: 2023/03/28. 43: 2023/04/11  
51: G06T

71: Hangzhou Apogee Tech Co., Ltd.

72: Ming Ge, Jingxue Shen, Jiang Wei

#### **54: QUALITY ANALYSIS METHOD BASED ON MACHINE VISION IN METAL FOIL MANUFACTURING**

00: -

The invention relates to a quality analysis method based on machine vision in metal foil manufacturing. The method is suitable for product quality detection. According to the technical scheme, the quality analysis method based on machine vision in metal foil manufacturing is characterized by comprising the steps: S1, obtaining the front and back images of a product; S2, calculating a maximum fitting linear equation of each metal foil area edge on the front image and the back image of the product; S3, for each pixel in the metal foil area, comparing the pixel with the average gray-scale value of the whole metal area, and marking the pixel with the difference greater than a set threshold value as a defect pixel; S4, calculating the area size of a connected region of each flaw based on the flaw pixels; S5, inputting each detected flaw picture and the corresponding area size into the CNN intelligent classifier to identify the category of each flaw; S6, marking the quality of the metal foil according to the types and the number of the flaws.

S1. Acquire front and back images of a product

S2. Calculate a maximum fitting linear equation of an edge of each metal foil region on the front and back images of the product

S3. Compare each pixel of an image of each metal foil region with an average gray-scale value of the whole metal region, and mark pixels with differences greater than a set threshold value as defect point pixels

S4. Calculate an area size of a connected region of each defect by blob based on the defect point pixels

S5. Input each detected defect picture and the corresponding area size into a CNN intelligent classifier to identify a category of each defect

S6. Equal and mark quality of metal foil according to the categories and the quantity of the defects

21: 2023/03920. 22: 2023/03/29. 43: 2023/04/11

51: G06T

71: Hohai University

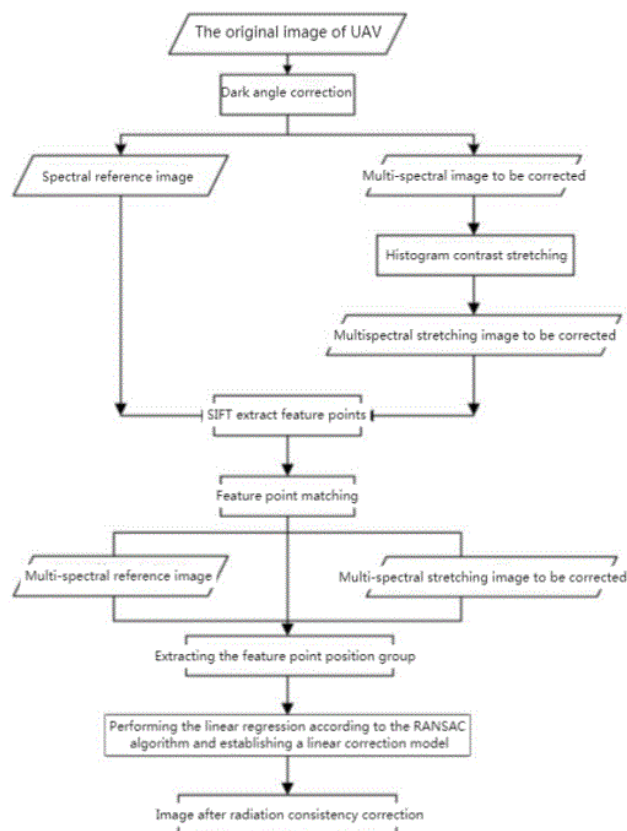
72: Yong LI, Shunzhong XI, Ying GE

**54: RADIOMETRIC CONSISTENCY CORRECTION METHOD FOR THE IMAGES COLLECTED BY THE MULTI-SPECTRAL UAV CAMERA**

00: -

This invention discloses a radiometric consistency correction method for the images collected by the multi-spectral UAV camera, including performing the dark angle correction, performing the histogram contrast stretching on the image, using the SIFT operator to perform feature matching on the reference image and the image after histogram contrast stretching, and obtaining the matching point, performing the linear regression according to the RANSAC algorithm and establishing a linear correction model, applying the linear correction model to perform radiometric consistency correction on the image to be corrected, performing the bilateral filtering on the multi-spectral corrected image to remove noise points. The invention adopts the radiometric consistency correction method for the images collected by the multi-spectral UAV camera with the above structure, which overcomes the disadvantage that the traditional correction method cannot effectively obtain sufficient homonymous points in low-illumination images and

cannot carry out radiation information correction between images.



21: 2023/03921. 22: 2023/03/29. 43: 2023/04/11

51: C07C

71: Xinjiang Institute of Engineering

72: Shi Ruijing, Fan Xiaochao, Fu Tao, Li Xi, Xu Lei

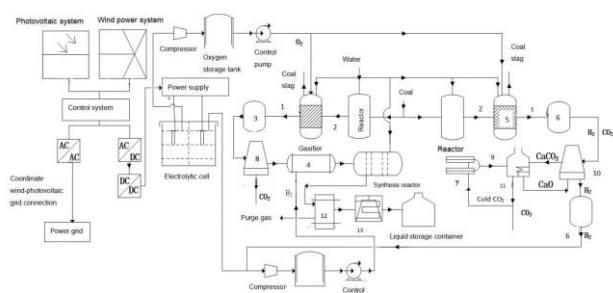
33: CN 31: 2022104361624 32: 2022-04-21

**54: NEW ENERGY COUPLING COAL CHEMICAL INDUSTRY MULTI-ENERGY SYSTEM, EVALUATION METHOD AND COMPUTER-READABLE STORAGE MEDIUM**

00: -

The invention discloses a new energy coupling coal chemical multi-energy system. And it comprises a wind-photovoltaic complementary power generation system, an electrolytic water hydrogen production system, a coal hydrogen production system, a coal chemical methanol production system and a hydrogen-oxygen distribution management system which are connected in sequence; The wind-photovoltaic complementary power generation system provides electric energy for the electrolytic water hydrogen production system; the electrolytic water hydrogen production system is used for

preparing hydrogen and oxygen by electrolytic water and supplying the hydrogen and oxygen to the hydrogen-oxygen distribution management system; the coal hydrogen production system is used for preparing hydrogen and supplying the hydrogen to the hydrogen-oxygen distribution management system; the coal chemical methanol production system is used for preparing methanol; the hydrogen-oxygen distribution management system is used for receiving and distributing oxygen and hydrogen. The invention also discloses an evaluation method and a computer-readable storage medium. And the coordination among various systems will effectively alleviate the shortage of wind and light consumption and reduce the pollution problem of coal chemical industry, bringing a win-win situation for the consumption of new energy and the production of traditional coal chemical industry.



21: 2023/03925. 22: 2023/03/29. 43: 2023/04/11  
51: G06F

71: Wuhu Technology and Innovation Research Institute, AHUT

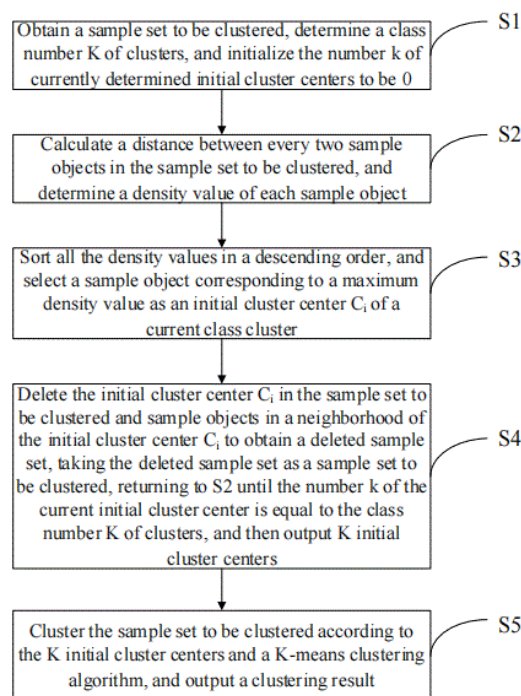
72: WU, Ziheng, YANG, Song, LI, Cong, ZHAO, Yuan, WANG, Wenyan

#### 54: CLUSTER CENTER INITIALIZATION METHOD IN CONSIDERATION OF NEIGHBORHOOD INFORMATION

00: -

Disclosed is a cluster center initialization method in consideration of neighborhood information, including the steps of obtaining a sample set to be clustered, and determining a class number K of clusters; calculating a distance between every two sample objects in the sample set to be clustered, and determining a density value of each sample object; taking a sample object corresponding to a maximum density value as an initial cluster center of a current class cluster; deleting the initial cluster center in the sample set to be clustered and sample objects in a

neighborhood to obtain a deleted sample set as a sample set to be clustered, returning to the step of calculating until the number k of the current cluster center is equal to the class number K of clusters, and outputting K initial cluster centers; and clustering the sample set to be clustered, and outputting a clustering result.



21: 2023/03926. 22: 2023/03/29. 43: 2023/04/11  
51: C08L

71: Institute of Chemical Industry of Forest Products, Chinese Academy of Forestry, Xuzhou Jinglin New Biological Material Technology Research Institute Co., Ltd.

72: Jia Puyou, Hu Yun, Zhou Yonghong, Hu Lihong, Zhang Meng, Feng Guodong, Zhong Dongnan, Sun Zhiwu, Bei Yu

33: CN 31: 2022113248616 32: 2022-10-27

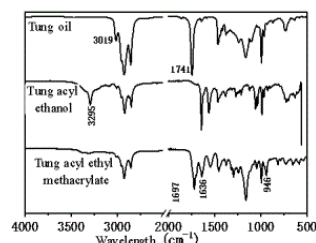
#### 54: TUNG OIL-BASED PLASTICIZER AND PREPARATION METHOD THEREOF

00: -

The invention relates to a tung oil-based plasticizer and a preparation method thereof. The tung oil-based plasticizer is obtained by a terminal double bond-sulfhydryl click chemical reaction between tung oil-based ethyl methacrylate and a series of thiol compounds, and the series of tung oil-based plasticizers can be obtained by adjusting the molar ratio of tung oil-based ethyl methacrylate and the



series of thiol compounds. By introducing sulfur into the plasticizer structure, the positively charged alpha-C atoms adjacent to sulfur can react with PVC as electrophilic centers, which can effectively improve the thermal stability of the plasticizer and inhibit the discoloration of PVC materials.



21: 2023/03927. 22: 2023/03/29. 43: 2023/04/11  
51: G01N

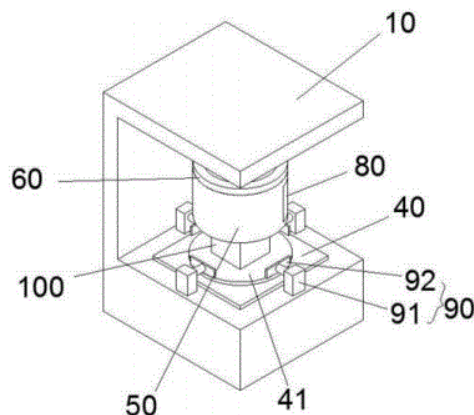
71: Henan University of Urban Construction  
72: LI, Yajie, LAN, Qixun, WANG, Chaoyong, CAI, Jing, ZHANG, Yao, XIE, Fan, CHEN, Yao, CAI, Yujie, ZHOU, Shuke, WANG, Zhe, XU, Huafeng, LIU, Yuxiao

33: CN 31: 2022111346099 32: 2022-09-19

#### 54: CONSTRUCTION MATERIAL COMPRESSIVE STRENGTH DETECTION DEVICE

00: -

The present invention relates to the technical field of construction material compressive strength detection and discloses a construction material compressive strength detection device including a support frame, a press, a pressure measuring unit, a bearing plate, a protective ring, and an anti-slip ring cover, where the bearing plate is fixedly mounted to the support frame, the press is fixedly mounted to the support frame with an output end thereof facing downwards, the pressure measuring unit is mounted to the bottom of the press, the anti-slip ring cover is mounted to the top of the protective ring, an inner wall of the protective ring is circumferentially provided with a plurality of slideways, the bottom of the press is circumferentially provided with a plurality of sliders which are slidably connected in the slideways, and the press extends through the anti-slip ring cover and into the protective ring.



21: 2023/03928. 22: 2023/03/29. 43: 2023/04/11  
51: H02J

71: Xinjiang Institute of Engineering

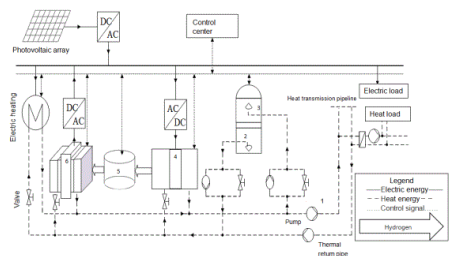
72: Fan Xiaochao, Shi Ruijing, Fu Tao, Li Xi, Xu Lei

33: CN 31: 202210426856X 32: 2022-04-21

#### 54: PHOTO-HYDROGEN FUEL CELL COGENERATION SYSTEM, CAPACITY CONFIGURATION METHOD AND MEDIUM

00: -

The invention discloses a photo-hydrogen fuel cell cogeneration system, a capacity configuration method and a medium. Wherein, the system comprises a control center, a photovoltaic array, a fuel cell, an electrolytic cell, an electric heating device, an inverter, a hydrogen storage tank and a heat storage tank. The capacity cogeneration method is that the microgrid capacity planning aims at the optimal cost, and at the same time, the amount of light discarded, power shortage and heat shortage are included in the objective function in the form of penalty terms to realize stable energy supply. The medium is the medium loaded and executed by the processor to realize the capacity configuration of the photohydrogen fuel cell. The invention can meet the electric energy supply when the photovoltaic power generation is small or there is no light, and at the same time, the economy is better.



21: 2023/03929. 22: 2023/03/29. 43: 2023/04/11  
51: G06F

71: Ankit D. Oza, Nibedita Das, Sanjay Sonar,  
Chintan Patel, Vijayendra A Desai, Richa Sharma,  
Amisha R Patel, Nilam Thakkar, Barkha Wadhvani,  
Jitali Dineshkumar Patel, Reena G. Patel

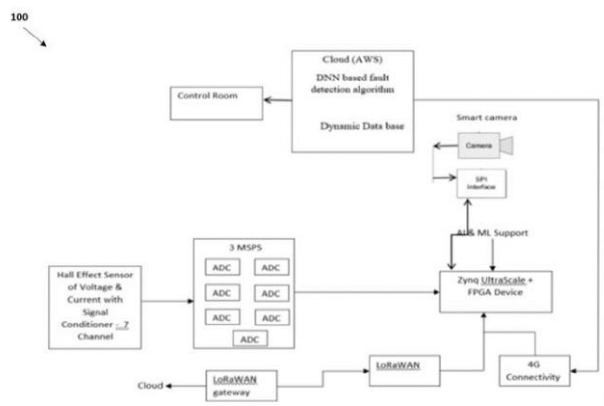
72: Ankit D. Oza, Nibedita Das, Sanjay Sonar,  
Chintan Patel, Vijayendra A Desai, Richa Sharma,  
Amisha R Patel, Nilam Thakkar, Barkha Wadhvani,  
Jitali Dineshkumar Patel, Reena G. Patel

33: IN 31: 202321021502 32: 2023-03-25

## 54: AN IOT BASED SYSTEM FOR DATA ACQUISITION

00: -

The present invention relates to an IoT based system (100) for data acquisition. The system (100) comprises a step-down transformer, a sensor unit, a microcontroller, a communication module, a fault detection and a notification module. The IoT based system (100) for data acquisition includes power quality analyzer which detects the fault automatically on the cloud computing technology. The voltage and current measurements are capable for the inputs of DNN algorithm. The accurate training is given to the DNN with the large number of fault samples. The cloud based DNN algorithm is developed for processing the data. The control room and users will get intimation in the occurrence of fault.



21: 2023/03931, 22: 2023/03/29, 43: 2023/04/11

51: C12N

71: Zhejiang University

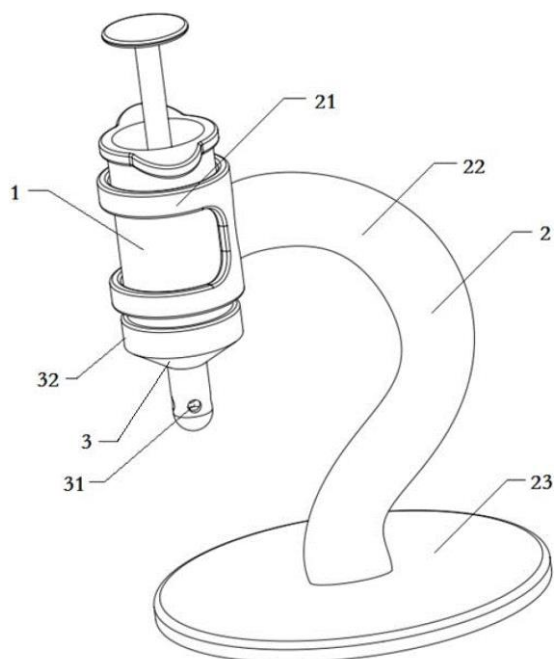
72: Rao Jinpeng, Feng Chun, Jin Min, Jin Fan, Tian Shen, Yu Ya

33: CN 31: 2022226979117 32: 2022-10-13

## 54: FLUSHING DEVICE FOR PREVENTING THE ADHESION AND RESIDUE OF OOCYTE CORONA CUMULUS COMPLEXES AT THE TUBE WALL

00: -

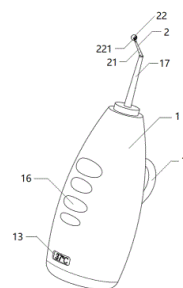
The invention provides a flushing device for preventing the adhesion and residue of oocyte corona cumulus complexes (OCCC) at the tube wall, which belongs to the technical field of instruments for assisted reproduction. Wherein, the flushing device for preventing the adhesion and residue of OCCC at the tube wall comprises a supporting main body and a flushing cylinder. And the flushing cylinder (1) is detachably and vertically supported on the supporting main body (2), the bottom end of the flushing cylinder (1) is provided with an opening, and the flushing cylinder (1) is used for containing flushing liquid; the flushing liquid is configured to be sprayed along the non-axial direction of the flushing cylinder (1). The flushing device for preventing the adhesion and residue of OCCC at the tube wall can facilitate the thorough flushing of the OCCC sample from inner wall of the test tube. The device effectively decreases the unnecessary loss of OCCC samples in embryonic laboratory, and improves the collection efficiency of OCCC. Hence, the device helps raise the successful rate of IVF operation.



21: 2023/03935. 22: 2023/03/29. 43: 2023/04/11  
51: A61B  
71: Zhejiang University  
72: Rao Jinpeng, Feng Chun, Jin Min, Jin Fan, Tian Shen, Yu Ya  
33: CN 31: 2022228102453 32: 2022-10-25  
**54: DEVICE FOR FLUSHING THE INNER WALL OF TEST TUBES DURING OOCYTE RETRIEVAL**  
00: -

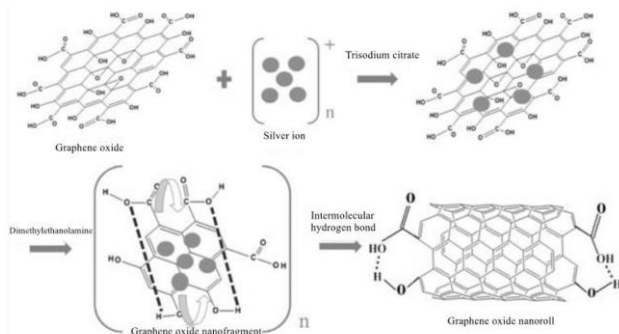
The invention provides a device for flushing the inner wall of test tubes after oocyte retrieval operation in IVF, which comprises a kettle body, a liquid outlet pipe and a nozzle. And the kettle body is provided with a cavity for containing flushing liquid, and a spout is arranged on the kettle body, and the spout is communicated with the cavity for the flushing liquid to flow into or out of the cavity; One end of the liquid outlet pipe is detachably connected and communicated with the spout; The spray head is connected and communicated with the other end of the liquid outlet pipe. And the spray head is biased to one side of the kettle body, so as to allow the flushing liquid to spray out along the non-axial direction of the kettle body. When the kettle body is flushed against the sample test tube by hand, it is not necessary to pour the kettle body to adapt to the flushing of the sample test tube. And the flushing liquid can be directly inserted into the sample test tube to ensure that the washing liquid flushes to the

inner wall of the sample test tube. And the oocytes adhered to the inner wall of the sample test tube are flushed and carried by the washing liquid for re-collection and adoption, thus effectively saving the oocytes that may be left out during the oocytes picking up process, effectively improving the collection effect of the residual oocytes, avoiding waste, and being very portable and efficient to use.



21: 2023/03949. 22: 2023/03/29. 43: 2023/04/11  
51: A01N; C01B; A01P  
71: ANHUI POLYTECHNIC UNIVERSITY  
72: LI, Xiaojuan, YIN, Maoli, NI, Qingqing, XIA, Murun, YANG, Li, XU, Zhenzhen  
33: CN 31: 202210257545.5 32: 2022-03-16  
**54: METHOD FOR PREPARING GRAPHENE OXIDE NANOScroll**  
00: -

The present disclosure relates to the technical field of preparation of graphene oxide nanoscroll, and particularly relates to a method for preparing a graphene oxide nanoscroll. The method comprises the following steps: adding silver nitrate, trisodium citrate and N, N-dimethylethanolamine into the graphene oxide aqueous solution that serves as a solvent and a carrier; stirring at a constant speed at room temperature; performing ultrasonic dispersion and centrifugal cleaning to remove impurities to obtain the graphene oxide nanoscroll. The present disclosure is simple in process, simple in flow, low in pollution and low in impurity content; and the prepared graphene oxide nanoscroll is uniform in diameter and length distribution and firm in structure, has excellent antibacterial, electric conductivity, adsorptivity and catalysis properties, and will have extensive application and development prospect in the fields of medical health and conducting materials, water treatment and air purification, etc.



21: 2023/03950. 22: 2023/03/29. 43: 2023/04/11

51: C01G

71: ANHUI POLYTECHNIC UNIVERSITY

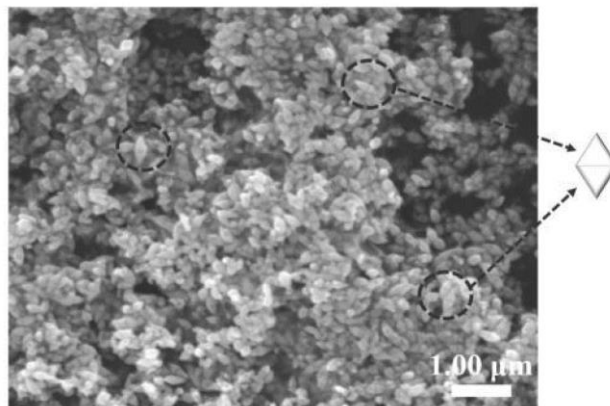
72: LI, Xiaojuan, YIN, Maoli, XIA, Murun, NI, Qingqing, XU, Ping, SUN, Yanyan, XU, Zhenzhen

33: CN 31: 202210257459.4 32: 2022-03-16

#### 54: PREPARATION METHOD, PRODUCT AND APPLICATION OF SYMMETRICAL "PYRAMID" NANO ZINC OXIDE

00: -

The present disclosure discloses a preparation method, a product and an application of symmetrical "pyramid" nano zinc oxide, relating to the technical field of nano zinc oxide preparation. The method of the present disclosure comprises the following steps: adding dropwise a zinc acetate solution into a tragacanth solution for hydrothermal reaction, and then performing ultrasonic treatment and centrifugal cleaning to obtain the symmetrical "pyramid" nano zinc oxide. According to the method of the present disclosure, the food-grade tragacanth is used as a reducing agent without adding any toxic chemicals. The method does not cause damage to the environment, is simple to operate, is green and pollution-free, and the prepared symmetrical "pyramid" nano zinc oxide has a high yield and less impurities. It provides experimental basis and theoretical support for the development of new green and pollution-free nanostructure materials.



21: 2023/03985. 22: 2023/03/30. 43: 2023/04/11

51: G01L

71: Tianjin Sino-German University of Applied Sciences

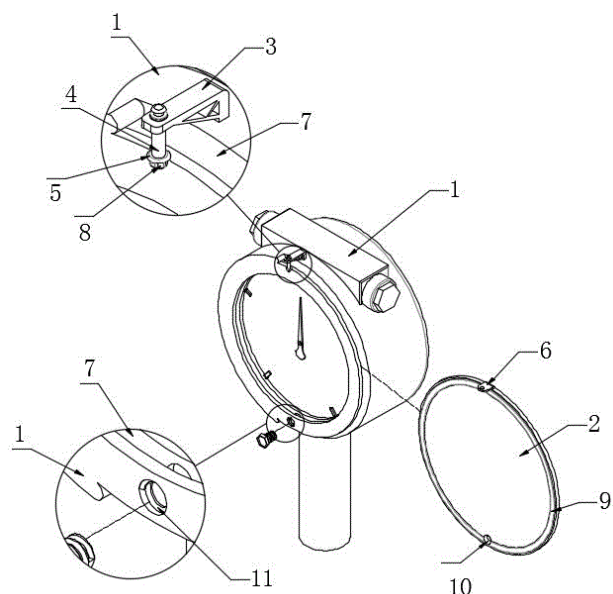
72: Xin Shao

#### 54: A PRESSURE GAUGE OF EXPLOSION-PROOF STRUCTURE AND AUTOMATIC EQUIPMENT

00: -

The invention relates to the technical field of pressure gauge device, in particular to an explosion-proof structure and automatic equipment pressure gauge, including a guard plate, limit hole, gasket, cleaning cotton, positioning plate, positioning hole, pressure gauge body, storage slot, screw hole, supporting frame, positioning rod, limit plate, rubber pad; Its beneficial effect is: the positioning plate rotates the guard plate to move it to the storage slot to realize the shielding of the pressure gauge body dial, loosening the positioning rod to insert its bottom end into the positioning hole to realize the fixing of the guard plate. The guard plate is arranged in front of the pressure gauge body dial to effectively realize the function of protecting the dial, so as to avoid the occurrence of external things collision to the dial. This effectively improves the explosion-proof performance of the pressure gauge body, so that it has a better use effect.





21: 2023/03986. 22: 2023/03/30. 43: 2023/04/11

51: G01F

71: Tianjin Sino-German University of Applied Sciences

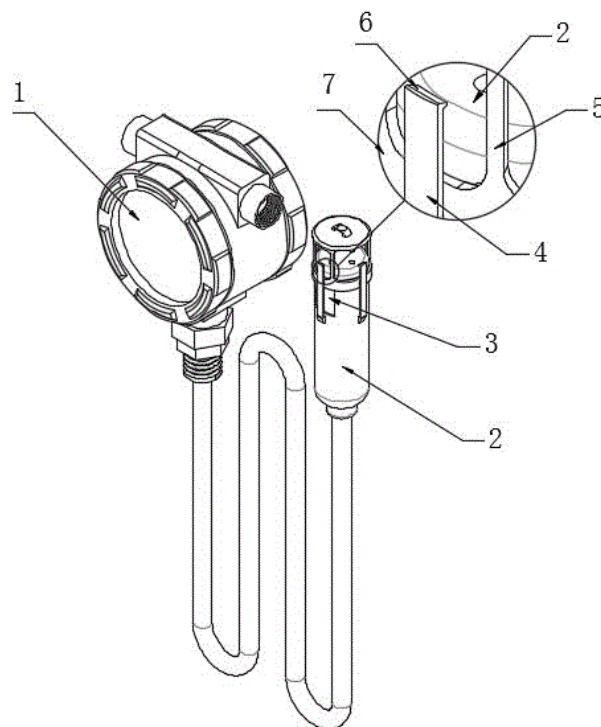
72: Xin Shao

#### **54: A DETECTING STRUCTURE AND A PRESSURE CONDUCTING TYPE LIQUID LEVEL GAUGE**

00: -

The invention relates to the technical field of a liquid level gauge device, in particular to a detecting structure and a pressure guide type liquid level gauge, including a detecting head, a limiting slot, a clamping plate, a positioning block, a positioning block, a ring plate, a connecting plate, a limiting block, a cover plate, a rubber pad, a positioning slot and a pressure guide type liquid level gauge body; Its beneficial effect is that: The cover plate expands outwards by squeezing the clamping plate in the process of moving, and when the inner end face of the cover plate contacts with the end of the detection head, it can be shielded. At this time, the positioning block is stuck at the end of the cover plate to locate it, and the rubber pad on the inner end face of the cover plate effectively increases its sealing property, that is, to protect the pilot hole at the end of the detection head. When the probe head is not in use, it can effectively avoid the adsorption of dust and dirt in the guide hole, so as to effectively improve the cleanliness of the guide hole, ensure the accuracy of liquid level measurement in the subsequent use of

the probe head, and then effectively improve its use effect.



21: 2023/03987. 22: 2023/03/30. 43: 2023/04/11

51: G01F

71: Tianjin Sino-German University of Applied Sciences

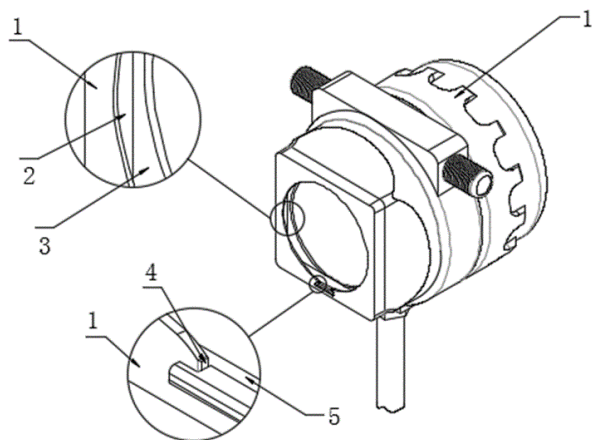
72: Xin Shao

#### **54: A SHELL STRUCTURE AND AN INDUSTRIAL AUTOMATIC FLOWMETER**

00: -

The invention relates to the technical field of a flowmeter device, in particular to a shell structure and an industrial automatic flowmeter, which includes an industrial automatic flowmeter body, a guide groove, a guide rod, a notch, a frame body, a guide hole, an adjusting groove, a limit rod, a ring plate i, a spring, a brush plate, a ring plate ii and a limit hole; Its beneficial effect is: By pushing the handle drive frame to move up and down in the guide slot, the frame brush the dust and impurities adsorbed on the surface of the display screen in the process of moving. The dust and impurities under cleaning flow out of the notch, which can realize the clean surface of the display screen so that the staff can carry out data observation. When the end of the brush plate is worn after a long time of use. The spring holds the brush plate to move outwards

through the telescopic characteristics, so that the bristles on the surface of the brush plate are always held on the surface of the display screen, so as to effectively improve the use effect of the brush plate and increase its service life.



21: 2023/03991. 22: 2023/03/30. 43: 2023/04/11

51: G06F

71: Anhui Vocational College Of Defense Technology

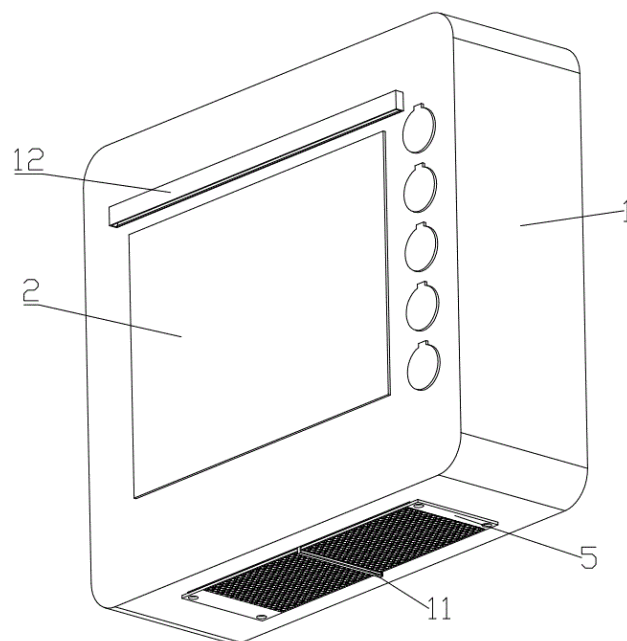
72: Cai Zhengbao

#### **54: AN INFORMATION SECURITY INFORMATION TERMINAL**

00: -

The invention discloses an information security information terminal, which relates to the technical field of information security equipment, including a bottom shell, with a touch screen installed at the front end of the bottom shell, a support frame installed on the inner bottom side of the bottom shell, a cooling fan installed on the upper end of the support frame, a filter screen installed on the bottom side of the bottom shell, a mounting platform installed on the inner bottom side of the bottom shell and located on the side of the support frame, and a drive motor installed on the mounting platform, The output end of the drive motor is connected to a threaded rod, and a guide rod is installed on the inner bottom side of the bottom shell and on one side of the support frame. A chute is provided on the bottom side of the bottom shell at a symmetrical position of the support frame. A cleaning brush is slidably connected to the chute, with one side of the cleaning brush slidably connected to the guide rod, and the other side of the cleaning brush connected

to the threaded rod. The present invention uses a drive motor to drive a threaded rod to push the cleaning brush to slide along the chute and clean the filter screen. The heat dissipation fan draws air from the outer side of the bottom shell into the bottom shell, and discharges it through the air guide slot. The wind blown from the air outlet of the air guide slot sweeps over the surface of the touch screen.



21: 2023/04007. 22: 2023/03/30. 43: 2023/04/11

51: C07D

71: Zhejiang Qianjiang Biochemical Co., Ltd.

72: Lu jianwei, Lu chunfeng, Wu yefei, Chang hong, Zhu jianxin, Shen bo, Zhu jinshan, Si wen, Qian jiangwei, Cheng yutong, Yang jiayan, Yu haiyan

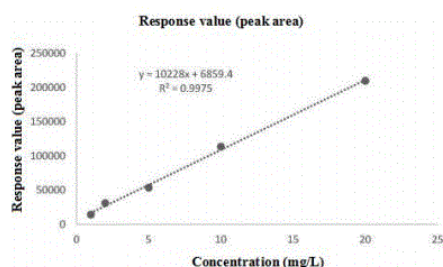
33: CN 31: 2022108299834 32: 2022-07-13

#### **54: PLANT RODLET FOR FORESTRY, PREPARATION METHOD AND APPLICATION METHOD**

00: -

The application discloses a plant rodlet for forestry, a preparation method and an application method, wherein the plant rodlet for forestry comprises the following components in parts by weight: 20-50 parts of emamectin benzoate, 1-5 parts of preservative, 10-15 parts of emulsifying and dispersing agent, 1-2 parts of stabilizer BHT1, 10-30 parts of lubricant and 10-30 parts of corn starch. The prepared plant rodlet for forestry is a solid insect-repellent drug, and Compared with the content of emamectin benzoate in conventional liquid insect-repellent drug is within

10 percent, the content of emamectin benzoate in the plant rodlet of the invention is about 20-50 percent. The content of emamectin benzoate in the insect-repellent agentia is increased, and the insect-repellent effect of the insect-repellent drug is improved; meanwhile, compared with the liquid insect-repellent agentia, the plant rodlet for forestry prepared by the invention improves the convenience of transportation and storage, reduces the operation difficulty, and is environmentally friendly.



21: 2023/04008. 22: 2023/03/30. 43: 2023/04/11  
51: G06F

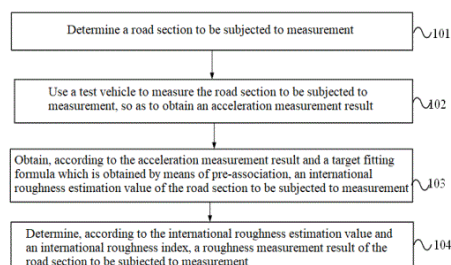
71: CHINA HIGHWAY ENGINEERING CONSULTANTS CORPORATION, CHECC HIGHWAY MAINTENANCE AND TEST TECHNOLOGY CO. LTD., CHECC DATA CO., LTD.  
72: CUI, Yuping, HOU, Yun, DONG, Yuanshuai, ZHANG, Yanhong, TONG, Xinlong, ZHANG, Haoyu, QIAN, Zhenyu, ZHANG, Yunling, YANG, Xuan, SUN, Tiancheng, CUI, Li, HU, Lin, HU, Runting  
33: CN 31: 202210470883.7 32: 2022-04-28

#### 54: ROAD SURFACE ROUGHNESS MEASUREMENT METHOD AND DEVICE, AND ELECTRONIC DEVICE AND MEDIUM

00: -

Provided in the present invention are a road surface roughness measurement method and device, and an electronic device and a medium. The method comprises: determining a road section to be subjected to measurement; measuring said road section by using a test vehicle, so as to obtain an acceleration measurement result; obtaining an international roughness estimation value of said road section according to the acceleration measurement result and a target fitting formula which is obtained by means of pre-association; and determining a roughness measurement result of said road section according to the international roughness estimation value and an international roughness index. By means of the road surface roughness measurement

method provided in the present invention, the device cost of road surface measurement can be reduced, and the accuracy of a measurement result is improved; in addition, the operation is simple and convenient, thereby improving the user experience.



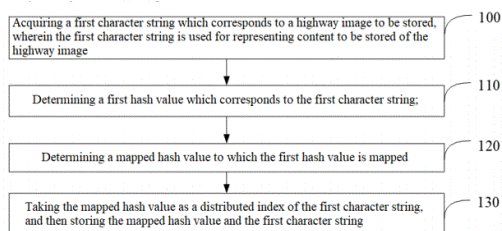
21: 2023/04009. 22: 2023/03/30. 43: 2023/04/11  
51: G06F

71: CHINA HIGHWAY ENGINEERING CONSULTANTS CORPORATION, CHECC HIGHWAY MAINTENANCE AND TEST TECHNOLOGY CO. LTD., CHECC DATA CO., LTD.  
72: CUI, Yuping, ZHANG, Yanhong, HOU, Yun, DONG, Yuanshuai, QIAN, Zhenyu, ZHOU, Jing, TONG, Xinlong, LI, Yuxuan, ZHANG, Yunling, YANG, Xuan, SUN, Tiancheng, SONG, Zhangliang, LI, Wang  
33: CN 31: 202210651900.7 32: 2022-06-09  
**54: DISTRIBUTED HIGHWAY IMAGE STORAGE METHOD AND APPARATUS, AND DISTRIBUTED HIGHWAY IMAGE SEARCH METHOD AND APPARATUS**

00: -

The present invention relates to a distributed highway image storage method and apparatus, and a distributed highway image search method and apparatus. The distributed highway image storage method comprises: acquiring a first character string which corresponds to a highway image to be stored; determining a first hash value which corresponds to the first character string; determining a mapped hash value to which the first hash value is mapped; and taking the mapped hash value as a distributed index of the first character string, and storing the mapped hash value and the first character string. By means of the present invention, hash calculation is executed, so as to acquire corresponding mapped hash values, such that the balanced distributed storage of highway images can be ensured, and therefore a reduction in the image retrieval efficiency caused by unbalanced data storage can be

prevented, thereby effectively improving the storage and search efficiency.



21: 2023/04010. 22: 2023/03/30. 43: 2023/04/11  
51: C22C

71: NORTH CHINA UNIVERSITY OF SCIENCE AND TECHNOLOGY

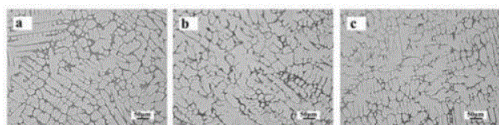
72: LONG, Haiyang, GUI, Yongliang, QIN, Tieyu, ZHANG, Xuefeng, XU, Lianbo, SONG, Chunyan, HAO, Wei

33: CN 31: 202210660075.7 32: 2022-06-13

#### 54: FE-CR-SI ALLOY AND PREPARATION METHOD THEREFOR

00: -

The present invention provides a Fe-Cr-Si alloy, prepared from the following preparation raw materials in parts by weight: 73-75 parts of Fe, 20 parts of Cr, 2 parts of Si, 2-4 parts of Ni, and 1 part of C. A preparation method for the Fe-Cr-Si alloy comprises the following steps: (1) weighing the preparation raw materials in parts by weight, and fully mixing the preparation raw materials; and (2) electric arc melting: putting the fully mixed preparation raw materials into a water-cooled copper crucible in an electric arc furnace, sealing and vacuumizing the electric arc furnace, filling into an argon washing furnace, pumping to a vacuum degree of  $9E-3Pa$ , carrying out electric arc melting at 1580-1620 degrees Celsius for 3-4 min, and carrying out flip melting for 5 times or more to obtain the Fe-Cr-Si alloy. The Fe-Cr-Si alloy prepared by the present invention has excellent corrosion resistance and hardness.



21: 2023/04035. 22: 2023/03/31. 43: 2023/04/11  
51: A01N

71: Kunming Institute of Botany, Chinese Academy of Sciences

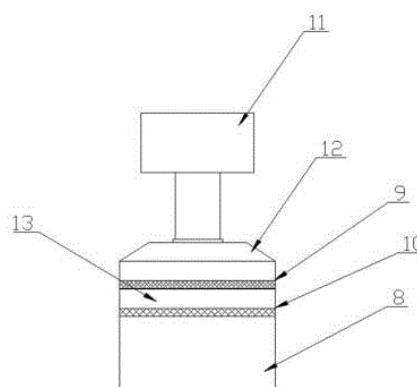
72: HE, Huajie, ZHANG, Xiaoyin, FANG, Yunhua, HU, Xiaojian, YANG, Juan, TAN, Zhigang, YANG, Lan, ZHANG, Ting, LIU, Cheng, GUO, Yongjie, CAI, Jie, YANG, Xiangyun

33: CN 31: 2022112724189 32: 2022-10-18

#### 54: LONG-TERM PRESERVATION METHOD FOR SALICACEAE (SENSU STRICTO) SEEDS

00: -

Disclosed is a long-term preservation method for Salicaceae (sensu stricto) seeds. The long-term preservation method includes: collecting fruits; packaging and transporting the fruits to a seed bank; performing primary drying; cleaning pappus at negative pressure; performing secondary drying; performing vitality detection; putting the seeds in storage; and performing ultra-low temperature preservation. A preservation system for Salicaceae seeds provided by the present invention can still keep a germination rate of 100 percent after preserving the Salicaceae seeds for 2 years, which shows that the preservation method for Salicaceae (sensu stricto) seeds provided by the present invention has a good treatment effect.



21: 2023/04036. 22: 2023/03/31. 43: 2023/04/11  
51: C04B

71: CHONGQING UNIVERSITY

72: HUANG, Yubin, CHEN, Mingwei, ZHANG, Pei, ZHANG, Cheng

#### 54: SULPHOALUMINATE CEMENT MATERIAL WITH RETARDING EFFECT

00: -

A sulphoaluminate cement material with a retarding effect is provided, which falls within the technical field of cement materials. The sulphoaluminate cement material with the retarding effect of the present invention belongs to an inorganic compound-based hydraulic binder, and is a complex



binder formed on the basis of particular cement (sulphoaluminate cement) by selecting appropriate admixtures (sodium chloride, montmorillonite, silica fume, fly ash, sawdust and quartz sand). After mechanical stirring and mixing, a plain concrete structure or reinforced concrete structure can be rush-repaired and reinforced, and a concrete structure without structural steel bars can also be formed by pouring.

21: 2023/04083. 22: 2023/04/03. 43: 2023/04/11  
51: C22C

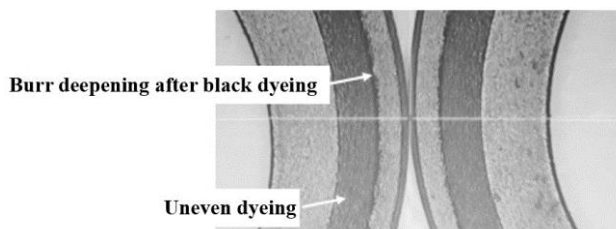
71: NINGBO XINGAODA ADVANCED METALLIC MATERIALS CO., LTD

72: Bin Feng, Dongchao Yang, Yi Zhang, Min Huang, Dong Yuan, Guanbing He, Jianwei Zhang  
33: CN 31: 202210821874.8 32: 2022-07-12

#### **54: HIGH-PERFORMANCE BISMUTH BRASS ALLOY MATERIAL FOR MOBILE PHONE LENSES**

00: -

The disclosure provides a high-performance bismuth brass alloy material for mobile phone lenses. In this solution, material components and proportion relationship are optimized, and aluminum and tin are added to improve a precipitation state of bismuth, prompting bismuth to be spheroidized and dotted at a grain boundary. A cutting performance is improved by combining with magnesium, etc., and corrosion resistance is also improved by refining grains with boron and rare earth elements. A casting quenching process helps to reduce segregation phenomenon and strengthen diffuse distribution, and uniform distribution of bismuth phase in the microstructure is improved through hot extrusion, cold drawing deformation and annealing treatment, which helps to improve the cutting performance and mechanical properties, reduce surface roughness of a finished material, and avoid phenomena of burrs and uneven dyeing after black dyeing treatment, thus having high working accuracy and being suitable for use in the field of mobile phone lenses.



21: 2023/04084. 22: 2023/04/03. 43: 2023/04/11  
51: D07B

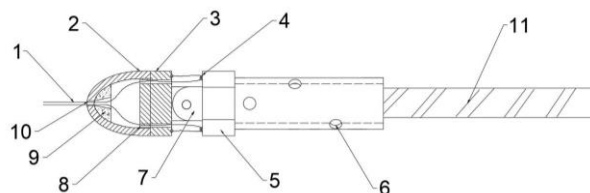
71: Zhengzhou Engineering Co., LTD of China Railway Seventh Group

72: YANG, Haitao, LIU, Zhanlei, LI, Dongyuan, MA, Shuqiang, GU, Tiejun, ZHANG, Yaping, GUO, Shuanzheng, MAO, Danfeng, LU, Ping, ZHANG, Tao, WANG, Haigang, JIANG, Yang, YANG, Zhi  
33: CN 31: 202320559591.0 32: 2023-03-21

#### **54: GUIDE DEVICE FOR THREADING STEEL STRANDS**

00: -

The present invention provides a guide device for threading steel strands, comprising: a guide head, wherein a front end of the guide head is a smooth guide end, and a hinging seat extends from a rear end; a wiring element, wherein the front end of the wiring element is correspondingly hinged on the hinging seat through a hinging plate, a rear end has a wiring hole extending along an axial direction, and the steel strand is correspondingly fixed in the wiring hole; and pull wires, which are correspondingly connected to the guide head. The guide device comprises two parts: the guide head and the wiring element which are hinged with each other; under the traction of the pull wires, the guide head can be inclined according to the direction of the hole in the bellows, so that the guide device penetrates through the bent part of the hole in the bellows more easily, thereby reducing the difficulty of threading.



21: 2023/04085. 22: 2023/04/03. 43: 2023/04/11  
51: D07B

71: Zhengzhou Engineering Co., LTD of China Railway Seventh Group

72: LU, Ping, CHEN, Xiangyang, WANG, Junpeng, MA, Shuqiang, ZHANG, Guoyue, SHI, Hongqian,

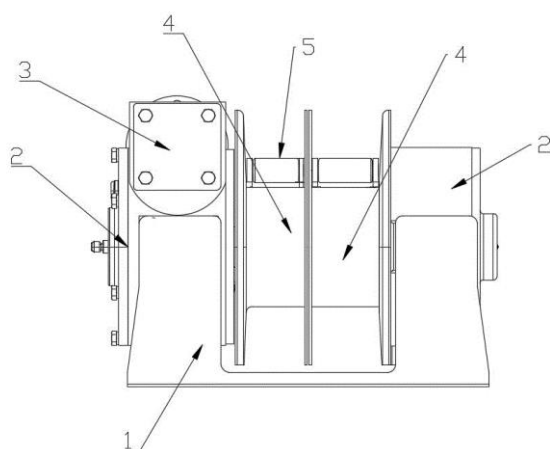
SUN, Yaxing, CHEN, Huifang, YANG, Yuxi,  
WANG, Qing

33: CN 31: 202320560548.6 32: 2023-03-21

#### **54: AUXILIARY DEVICE FOR THREADING STEEL STRANDS**

00: -

The present invention provides an auxiliary device for threading steel strands, comprising a base and driving elements. A winding station for installation of reels is arranged in the middle of the base; the two reels are arranged in parallel on the winding station; spindles of the two reels respectively extend from both sides of the base; the two driving elements are respectively arranged on both sides of the base, and are correspondingly connected to the spindles of the two reels; a guide device is correspondingly connected with the steel strand, one end of two pull wires is respectively wound on the two reels, and the other ends of the two pull wires are respectively connected to both sides of the guide device. The two reels are arranged; the two reels respectively pull the guide device of the steel strand through the two pull wires; in a bellows turning, the guide device suffers the resistance of a bellows; and at this time, a guide end of the guide device is inclined by pulling one side of the guide device, so as to improve the smoothness of the guide device for passing through the bellows turning, and avoid bumping against the inner wall of the bellows.



21: 2023/04086. 22: 2023/04/03. 43: 2023/04/11  
51: B32B; C08J; C08L

71: Guangdong Lihong Innovative Materials Co., Ltd.  
72: LIN, Wenmao, SUN, Lijia

#### **54: DRINKING WATER PACKAGING FILM AND PREPARATION METHOD THEREOF**

00: -

Disclosed is a drinking water packaging film composed of five resin layers, with a structural expression of A/B/E/C/D and an interlayer weight ratio of 2:3:1:3:1, where A represents a printing heat-resisting layer, B and C represent functional core layers, D represents a low-temperature heat-sealing layer, and E represents a glue layer. The drinking water packaging film is prepared by melting and extruding resin through five extruders and then casting, processing and molding through a T-shaped die head. Five resin layers are respectively processed using polyethylene and then are prepared through a five-layer co-extrusion, casting and processing method. Low-molecular polymers and peculiar smell on the surface of the film as a single material are removed after water-curing treatment and secondary cleaning, so that the film meets requirements for peculiar smell sensitivity. The cost advantage is comprehensively considered for the interlayer ratio design of five-layer co-extrusion film.



21: 2023/04087. 22: 2023/04/03. 43: 2023/04/11  
51: B07B

71: Kunming Institute of Botany, Chinese Academy of Sciences

72: CAI, Jie, HE, Huajie, ZHANG, Xiaoyin, FANG, Yunhua, HU, Xiaojian, TAN, Zhigang, QIN, Shaofa, LIU, Cheng, ZHANG, Ting, YANG, Xiangyun

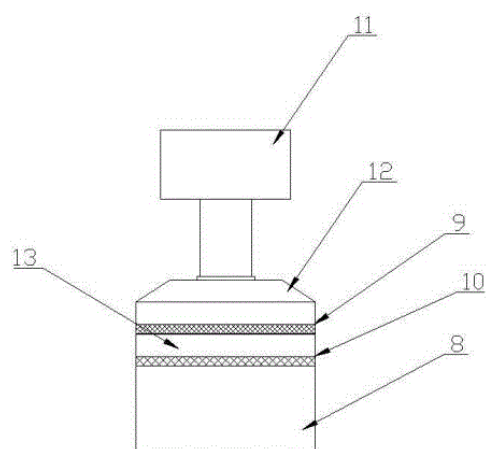
33: CN 31: 2022111073829 32: 2022-09-13

#### **54: CLEANING METHOD FOR EFFECTIVELY IMPROVING VIGOR OF SALICACEAE (SENSU STRICTO) SEEDS**

00: -

Disclosed is a cleaning method for effectively improving vigor of Salicaceae (sensu stricto) seeds. The cleaning method includes: drying capsules until cracked, performing observation with a microscopic examination, separating seeds with pappus, separating pappus by negative pressure suction,

performing fine cleaning, and screening qualified seeds with the microscopic examination. According to the Salicaceae seeds with the pappus, the pappus is separated from the seeds by negative pressure suction before preservation, and volume can be reduced by 90 percent, which avoids the seeds with the pappus from occupying a lot of space, thus saving a seed storage space; and further, the seeds can be protected against being damaged and affecting vigor by negative pressure suction, and a subsequent germination rate of the cleaned Salicaceae seeds can be increased from 38-88 percent to 100 percent.



**HYPOTHECATIONS**

No records available

**JUDGMENTS**

No records available

**OFFICE PRACTISE NOTICES****RECTIFICATION OF THE PATENT REGISTER IN TERMS OF SECTION 52 OF THE PATENTS ACT 57 OF 1978**

Notice is hereby given that the Registrar has ordered rectification of the patent register, in respect of South African Patent Application No. **2019/06201**, in the name of **OY HALTON GROUP LTD**, by deleting the following entries:

- (a) 2021-03-01 – Application accepted on 26/02/2021
- (b) 2021-05-27 – Patent granted on 26-05-2021
- (c) 2021-05-27 Patent advertised on 26-05-2021
- (d) Acceptance withdrawn on 06/01/2023



**ADVERTISEMENT OF AN AMENDMENT APPLICATION MADE BY ASTELLAS PHARMA INC. DURING PENDING PROCEEDINGS BEFORE THE COURT OF THE COMMISSIONER OF PATENTS**

Medpro Pharmaceutica (Pty) Limited instituted patent revocation proceedings against Astellas Pharma Inc. ("the patentee") of 2-5-1, Nihonbashi-Honcho Chuo-ku, Tokyo 103-8411, Japan in respect of South African Patent No. 2005/03510 entitled "*Remedy for Overactive Bladder comprising Acetic Acid Anilide Derivative as the Active Ingredient*" ("the patent").

The patentee has applied to the Court of the Commissioner of Patents to amend the patent in terms of Section 51(9) of the Patents Act No. 57 of 1978

The application for amendment is open for inspection at the Patent Office, Block F Entfufukweni, 77 Meintjies Street, Sunnyside, Pretoria. Copies can also be obtained on request from the Patent Attorneys for the patentee whose address is set out below.

Any interested person wishing to oppose the application for amendment may join in the amendment proceedings by filing a Notice of Intention to oppose the application for amendment within two months from the date hereof. The further proceedings are to be governed by the provisions of Rule 6 of the Uniform Rules of Court.

Address for Service in the Republic:

Adams & Adams Attorneys, Lynwood Bridge, 4 Daventry Street, Lynnwood Manor, Pretoria, Reference: PL2330ZA00 A Apostolidis. Email: Alexis.Apostolidis@adams.africa.

## 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 2023/03/27 -

F2023/00402 - GIDEON HITCHCOCK Class 07. BBQ TRAY SUPPORTING LEGS

A2023/00401 - SEBOTA SAMUEL NSWIKWINI Class 02. PULL UP GANG

- APPLIED ON 2023/03/29 -

F2023/00403 - SABRE SHUBANE TECHNOLOGIES (PROPRIETARY) LIMITED Class 25. SEPARATION SHEET FOR A SUPPORT BAG

- APPLIED ON 2023/03/30 -

A2023/00404 - SCHRÉDER S.A. Class 26. LUMINAIRE HOUSING

- APPLIED ON 2023/03/31 -

A2023/00406 - NICOVENTURES TRADING LIMITED Class 09. SEALING MEMBER

A2023/00407 - NICOVENTURES TRADING LIMITED Class 09. SEALING MEMBER

A2023/00409 - Beaute Prestige International Class 9. BOTTLES

F2023/00438 - FREDERICK CHARLES HITZEROTH Class 09. FOLDABLE AND COLLAPSIBLE BEVERAGE CARRIER

A2023/00405 - NICOVENTURES TRADING LIMITED Class 09. SEALING MEMBER

A2023/00411 - FREDERICK CHARLES HITZEROTH Class 09. FOLDABLE AND COLLAPSIBLE MULTIPLE BEVERAGE CARRIE

A2023/00408 - NICOVENTURES TRADING LIMITED Class 09. SEALING MEMBER

F2023/00410 - ELIAS JOHANNESBURG ALBERTUS THIRION LERM Class 30. SEED FEEDER

- APPLIED ON 2023/04/03 -

A2023/00412 - GARRISON TECHNOLOGY (PTY) LTD Class 22. A CHEEK REST FOR A FIREARM

F2023/00413 - Emulous (Pty) Ltd Class 24. DENTAL SCOPE

- APPLIED ON 2023/04/04 -

F2023/00414 - GARRISON TECHNOLOGY (PTY) LTD Class 22. A CHEEK REST FOR A FIREARM

F2023/00418 - STYLE IN STAINLESS CC T/A STEELCRAFT Class 07. BARBEQUE GRID

F2023/00417 - JIANGMEN BONANZA METALWARE CO., LTD. Class 07. COOKING POT HANDLE

A2023/00415 - Thabang Tsolonku Class 02. BERLIN TEGA

A2023/00416 - STYLE IN STAINLESS CC T/A STEELCRAFT Class 07. BARBEQUE GRID

- APPLIED ON 2023/04/05 -

A2023/00430 - Hyundai Motor Company, Kia Corporation Class 12. AUTOMOBILES

F2023/00429 - LOUW, Roelof Johannes Class 09. SHOPPING BAG HANDLE

- APPLIED ON 2023/04/06 -

A2023/00460 - Mpentu Khumalo Class 24. MRS

A2023/00432 - GOLDER, DANIEL DEREK Class 23. WATER HEATER

F2023/00431 - TRU MODE (PTY) LTD Class 24. RESPIRATORY DEVICE

A2023/00436 - WINSTON PRODUCTS, LLC Class 23. NOZZLE

A2023/00435 - WINSTON PRODUCTS, LLC Class 23. NOZZLE

F2023/00433 - GOLDER, DANIEL DEREK Class 23. WATER HEATER

A2023/00434 - Weichai Lovol Intelligent Agricultural Technology Co., Ltd. Class 15. HARVESTERS

- APPLIED ON 2023/04/11 -

F2023/00448 - PRINSLOO, Wessel Frans, TOPFLOOR CONCRETE PROPRIETARY LIMITED Class 25.  
CONSTRUCTION MEMBERS

F2023/00437 - AVAX SA 407 CC Class 25. GLAZING BAR

F2023/00440 - PIJO PLASTICS (PTY) LTD Class 07. TRAY FOR HOUSEHOLD GOODS

F2023/00449 - PRINSLOO, Wessel Frans, TOPFLOOR CONCRETE PROPRIETARY LIMITED Class 25.  
CONSTRUCTION MEMBERS

A2023/00439 - PIJO PLASTICS (PTY) LTD Class 07. TRAY FOR HOUSEHOLD GOODS

A2023/00452 - WeCo (Guangdong) Energy Storage Technology Co., Ltd. Class 13. BATTERY CABINET

A2023/00446 - WeCo (Guangdong) Energy Storage Technology Co., Ltd. Class 13. INVERTER

F2023/00444 - PIJO PLASTICS (PTY) LTD Class 07. TRAY FOR HOUSEHOLD GOODS

A2023/00450 - PRINSLOO, Wessel Frans, TOPFLOOR CONCRETE PROPRIETARY LIMITED Class 25.  
CONSTRUCTION MEMBERS

A2023/00455 - WeCo (Guangdong) Energy Storage Technology Co., Ltd. Class 13. BATTERY CABINET



F2023/00447 - Timmdek (Pty) Ltd Class 25. DECK BOARD

F2023/00453 - APL Cartons (Pty) Ltd Class 09. CONTAINERS

A2023/00454 - WeCo (Guangdong) Energy Storage Technology Co., Ltd. Class 13. BATTERY CABINET

A2023/00441 - PIJO PLASTICS (PTY) LTD Class 07. TRAY FOR HOUSEHOLD GOODS

F2023/00442 - PIJO PLASTICS (PTY) LTD Class 07. TRAY FOR HOUSEHOLD GOODS

A2023/00451 - PRINSLOO, Wessel Frans, TOPFLOOR CONCRETE PROPRIETARY LIMITED Class 25. CONSTRUCTION MEMBERS

A2023/00443 - PIJO PLASTICS (PTY) LTD Class 07. TRAY FOR HOUSEHOLD GOODS

A2023/00445 - DETON ENGINEERING (PROPRIETARY) LIMITED Class 9. BOX

- APPLIED ON 2023/04/12 -

A2023/00461 - NOTSHE, Nandipha Class 6. PILLOWCASE

A2023/00456 - HONDA MOTOR CO., LTD. Class 13. ELECTRIC POWER UNIT

A2023/00459 - LESEDI JOEL Class 99. FOOTWEAR

A2023/00458 - Colgate-Palmolive Company Class 4. ORAL CARE IMPLEMENTS

A2023/00457 - Colgate-Palmolive Company Class 4. ORAL CARE IMPLEMENTS

F2023/00462 - NOTSHE, Nandipha Class 6. PILLOWCASE

- APPLIED ON 2023/04/13 -

F2023/00464 - BESTER, Alida Class 09. CONTAINER

A2023/00463 - BESTER, Alida Class 09. CONTAINER

- APPLIED ON 2023/04/14 -

A2023/00474 - Dr. Ing. h.c. F. Porsche Aktiengesellschaft Class 12. FENDERS

A2023/00476 - Dr. Ing. h.c. F. Porsche Aktiengesellschaft Class 12. SPOILERS

A2023/00469 - Dr. Ing. h.c. F. Porsche Aktiengesellschaft Class 12. SPOILERS

A2023/00477 - Dr. Ing. h.c. F. Porsche Aktiengesellschaft Class 12. SPOILERS

A2023/00471 - Dr. Ing. h.c. F. Porsche Aktiengesellschaft Class 12. SPOILERS

A2023/00470 - Dr. Ing. h.c. F. Porsche Aktiengesellschaft Class 12. FRONT PANELS

A2023/00465 - DEAN WESTMORE DESIGN CC Class 06. FURNITURE LEG

A2023/00473 - Dr. Ing. h.c. F. Porsche Aktiengesellschaft Class 12. FENDERS

A2023/00475 - Dr. Ing. h.c. F. Porsche Aktiengesellschaft Class 12. BODY PANELS

A2023/00466 - TSIANE, Tieho Sabata Class 14. GLOVE-BASED CONTROLLERS

A2023/00467 - Dr. Ing. h.c. F. Porsche Aktiengesellschaft Class 12. AUTOMOBILES

A2023/00468 - Dr. Ing. h.c. F. Porsche Aktiengesellschaft Class 12. AUTOMOBILES

A2023/00472 - Dr. Ing. h.c. F. Porsche Aktiengesellschaft Class 12. SPOILERS

- APPLIED ON 2023/04/17 -

F2023/00483 - Papini Trading (Pty) Ltd Class 8. CURTAIN RUNNERS

A2023/00482 - BUG BITE THING EUROPE APS Class 24. TWEEZERS FOR REMOVING TICKS

F2023/00481 - Hendrik Johannes van der Watt Class 13. ELECTRIC CLOVER

A2023/00479 - SUNREEF VENTURE S.A. Class 12. YACHT

A2023/00480 - SUNREEF VENTURE S.A. Class 12. YACHT

F2023/00478 - B&HHLER AG Class 15.

- APPLIED ON 2023/04/18 -

F2023/00484 - YORK, Natasha Class 25. SUPPORT STRUCTURE

F2023/00486 - YORK, Natasha Class 25. SUPPORT STRUCTURE

F2023/00485 - YORK, Natasha Class 25. SUPPORT STRUCTURE

F2023/00487 - YORK, Natasha Class 25. SUPPORT STRUCTURE

- APPLIED ON 2023/04/19 -

A2023/00497 - ROCK SOLID INDUSTRIES INTERNATIONAL (PTY) LTD Class 12. FRONT GLASS

A2023/00494 - MAGPUL INDUSTRIES CORP. Class 22. RIFLE STOCK

A2023/00492 - MAGPUL INDUSTRIES CORP. Class 22. RIFLE STOCK

A2023/00496 - ROCK SOLID INDUSTRIES INTERNATIONAL (PTY) LTD Class 12. GLASS SLIDER

A2023/00502 - ROCK SOLID INDUSTRIES INTERNATIONAL (PTY) LTD Class 12. SIDE GLASS

A2023/00501 - GlaxoSmithKline Consumer Healthcare (UK) IP Limited Class 9. BOTTLES

A2023/00489 - MAGPUL INDUSTRIES CORP. Class 22. RIFLE STOCK

A2023/00500 - GlaxoSmithKline Consumer Healthcare (UK) IP Limited Class 9. BOTTLES

A2023/00498 - GlaxoSmithKline Consumer Healthcare (UK) IP Limited Class 9. BOTTLES

A2023/00491 - MAGPUL INDUSTRIES CORP. Class 22. RIFLE STOCK

A2023/00488 - Ashandra Singh Class 07. BATTERY BACKUP UPS SYSTEM

A2023/00490 - MAGPUL INDUSTRIES CORP. Class 22. RIFLE STOCK

A2023/00493 - MAGPUL INDUSTRIES CORP. Class 22. RIFLE STOCK

A2023/00495 - MAGPUL INDUSTRIES CORP. Class 22. RIFLE STOCK

A2023/00499 - GlaxoSmithKline Consumer Healthcare (UK) IP Limited Class 9. BOTTLES

- APPLIED ON 2023/04/20 -

A2023/00503 - SUPERCART SOUTH AFRICA (PTY) LTD Class 12. TROLLEY ARRANGEMENT

- APPLIED ON 2023/04/21 -

A2023/00506 - YETI Coolers, LLC Class 09. BOTTLE

A2023/00504 - Global Specialised Vehicles (Pty) Ltd Class 12. VEHICLES

A2023/00505 - CAPBRAN HOLDINGS, LLC Class 7. BLENDER BASE

#### **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)**

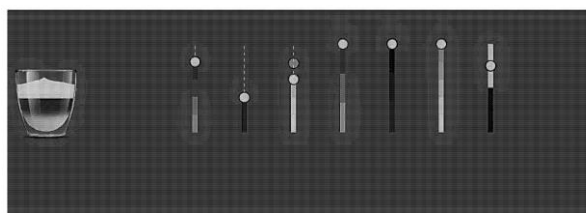
Country. **(31)** Number and. **(32)** Date of convention application. **(54)** Articles to which design is to be applied. **(57)** Brief statement of features.

**N.B.:** Date of registration (DR) is either Date of lodgement (22) or Date of convention of application (32) whichever is the earlier.

**Registrar of Designs**

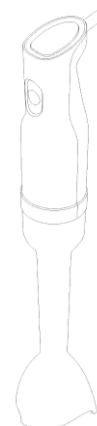
21: A2021/00892 22: 2021-07-27 23:  
43: 2023-04-14  
52: Class 14 24: Part A  
71: KONINKLIJKE PHILIPS N.V.  
33: EU 31: 008414361-0001 32: 2021-01-27  
**54: USER INTERFACE**

57: The article of the design consists substantially of a user interface. The features of the design for which protection is claimed reside in the shape and/or configuration of the user interface substantially as shown in the accompanying representations.



21: A2021/00937 22: 2021-08-03 23:  
43: 2023-04-14  
52: Class 31 24: Part A  
71: KONINKLIJKE PHILIPS N.V.  
33: EU 31: 008427587-0002 32: 2021-02-08  
**54: BLENDER**

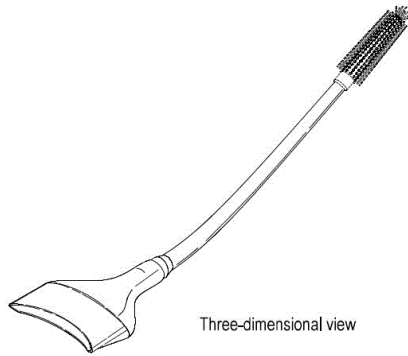
57: The article of the design consists substantially of a blender. The features of the design for which protection is claimed reside in the shape and/or configuration of the blender substantially as shown in the accompanying representations.



21: A2021/01492 22: 2021-11-30 23:  
43: 2021-11-30  
52: Class 28 24: Part A  
71: ALLEN, Kerry Anne Hanbury  
**54: EYELASH GUARD**

57: The design is applied to an eyelash guard, comprising an elongate curved handle having an optional lash or brow brush on one end. The other end of the handle is fitted with a guard body comprising a curved edge that in use may be positioned to cover and protect eyelash extensions, artificial eyelashes and natural eyelashes from the fall and/or build-up of eyeshadow and/or eye makeup residue occurring in the application thereof. Regarding the handle, the length and curve of the handle ensure that the handle and/or a user's hand does not press against the user's face, when in use, which may smudge the user's foundation. In addition, the length and curve of the handle ensure that the guard can be used interchangeably on either eye with the same hand (i.e. the user's dominant hand) without the hand touching the user's nose, lips, or cheek when crossing the face to apply makeup to the eye on the opposite side to the dominant hand.



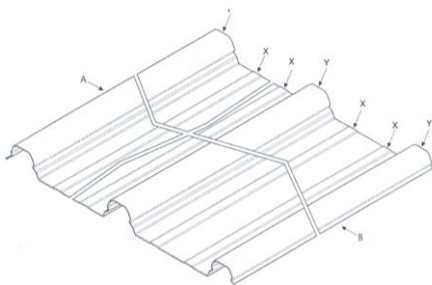


21: A2022/00227 22: 2022-03-02 23:  
43: 2023-03-15  
52: Class 25 24: Part A

71: JCP ROOFING (PTY) LTD

**54: ROOF SHEET**

57: The features for which protection is claimed reside in the shape or configuration of a roof sheet which includes longitudinally extending ribs "X" and formations "A" and "B" on opposed longitudinal edges of the sheet, substantially as shown in the accompanying drawings. The number of ridges "Y" is variable.

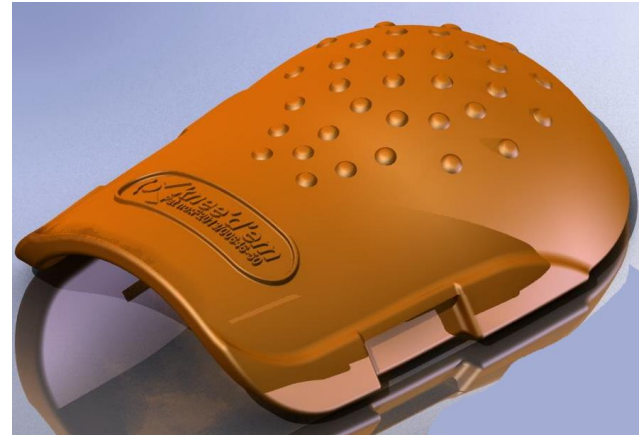


21: A2022/00248 22: 2022-03-11 23:  
43: 2023-03-15  
52: Class 02 24: Part A

71: KILLASSY, Timothy Joseph

**54: KNEE GUARD**

57: The features of this design for which protection are claimed include the shape and/or configuration and/or ornamentation and/or pattern of a knee guard substantially as illustrated in the accompanying representations.



21: A2022/00250 22: 2022-03-11 23:  
43: 2023-03-23

52: Class 02 24: Part A

71: KILLASSY, Timothy Joseph

**54: KNEE GUARD**

57: The features of this design for which protection are claimed include the shape and/or configuration and/or ornamentation and/or pattern of a knee guard substantially as illustrated in the accompanying representations.



21: A2022/00273 22: 2022-03-18 23:  
43: 2023-03-15

52: Class 23 24: Part A

71: BATTLEMAX (PTY) LTD

**54: COVER FOR A CENTRIFUGAL PUMP**

57: The novelty of the design resides in the shape or configuration of a cover for a centrifugal pump substantially as shown in the accompanying drawing. The features shown in broken lines do not form part of the design.

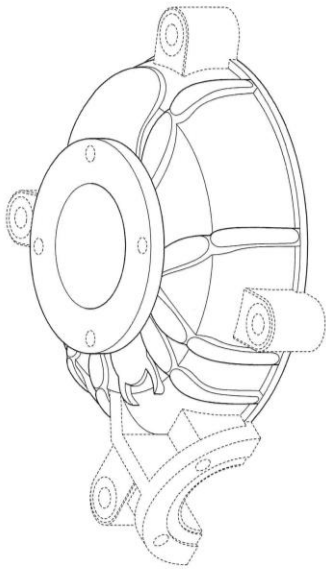


FIGURE 1

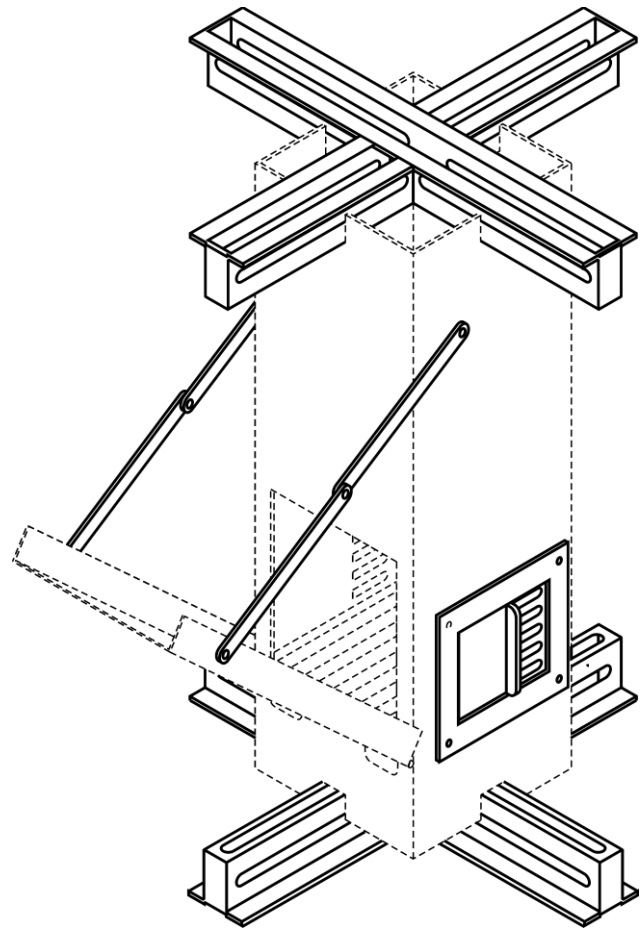
21: A2022/00281 22: 2022-03-23 23:  
43: 2022-10-07

52: Class 07 24: Part A

71: SNYMAN, Mornay

#### 54: STOVE

57: The design is in respect of a stove that can be manually operated after being stoked with a combustible material. Four identically shaped elongate feet, removably mounted to a flue, extend respectively from bottom and top sections of the flue such that a first two feet bisect each other crosswise at the bottom section and a further two feet bisect each other crosswise at the top section. A slidably openable window with substantially rectangular outline is provided on three lateral sides of the flue. The design includes two elongate arms connecting opposing lateral sides of the flue to opposing flanks of a feed chute, each arm having a pivot disposed between a first connection end on the flue and a second connection end on the feed chute.



21: A2022/00288 22: 2022-03-24 23:  
43: 2023-03-15

52: Class 23 24: Part A

71: HANS GROHE SE

33: EU 31: 008707889-0002 32: 2021-09-27

#### 54: FAUCET

57: The novelty of the design resides in the shape or configuration of a faucet substantially as shown in the accompanying representation.



71: HANS GROHE SE

33: EU 31: 008707889-0010 32: 2021-09-27

**54: FAUCET**

57: The novelty of the design resides in the shape or configuration of a faucet substantially as shown in the accompanying representation.



21: A2022/00290 22: 2022-03-24 23:

43: 2023-03-15

52: Class 23 24: Part A

71: HANS GROHE SE

33: EU 31: 008707889-0005 32: 2021-09-27

**54: FAUCET**

57: The novelty of the design resides in the shape or configuration of a faucet substantially as shown in the accompanying representation.



21: A2022/00292 22: 2022-03-24 23:

43: 2023-03-15

52: Class 23 24: Part A

71: HANS GROHE SE

33: EU 31: 008707889-0013 32: 2021-09-27

**54: FAUCET**

57: The novelty of the design resides in the shape or configuration of a faucet substantially as shown in the accompanying representation.



21: A2022/00291 22: 2022-03-24 23:

43: 2023-03-15

52: Class 23 24: Part A

21: A2022/00293 22: 2022-03-24 23:

43: 2023-03-15

52: Class 23 24: Part A

71: HANS GROHE SE

33: EU 31: 008707889-0015 32: 2021-09-27

**54: FAUCET**

57: The novelty of the design resides in the shape or configuration of a faucet substantially as shown in the accompanying representation.



21: A2022/00294 22: 2022-03-24 23:

43: 2023-03-15

52: Class 23 24: Part A

71: HANS GROHE SE

33: EU 31: 008707889-0016 32: 2021-09-27

**54: FAUCET**

57: The novelty of the design resides in the shape or configuration of a faucet substantially as shown in the accompanying representation.



21: A2022/00295 22: 2022-03-24 23:

43: 2023-03-15

52: Class 23 24: Part A

71: HANS GROHE SE

33: EU 31: 008707889-0017 32: 2021-09-27

**54: FAUCET**

57: The novelty of the design resides in the shape or configuration of a faucet substantially as shown in the accompanying representation.



21: A2022/00300 22: 2022-03-24 23:

43: 2023-03-15

52: Class 23 24: Part A

71: HANS GROHE SE

33: EU 31: 008707889-0025 32: 2021-09-27

**54: FAUCET**

57: The novelty of the design resides in the shape or configuration of a faucet substantially as shown in the accompanying representation.





21: A2022/00301 22: 2022-03-24 23:  
43: 2023-03-15

52: Class 23 24: Part A

71: HANS GROHE SE

33: EU 31: 008707889-0028 32: 2021-09-27

**54: FAUCET**

57: The novelty of the design resides in the shape or configuration of a faucet substantially as shown in the accompanying representation.



21: A2022/00302 22: 2022-03-24 23:  
43: 2023-03-15

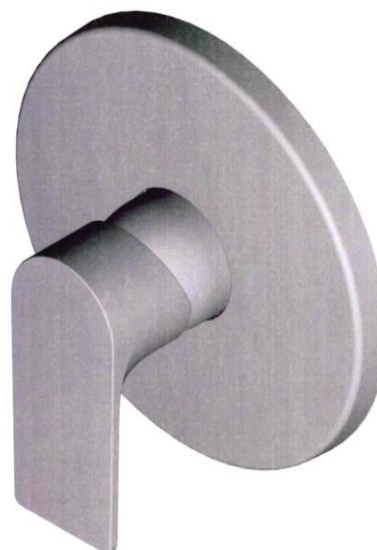
52: Class 23 24: Part A

71: HANS GROHE SE

33: EU 31: 008707889-0030 32: 2021-09-27

**54: FAUCET**

57: The novelty of the design resides in the shape or configuration of a faucet substantially as shown in the accompanying representation.



21: A2022/00309 22: 2022-03-25 23:  
43: 2023-03-15

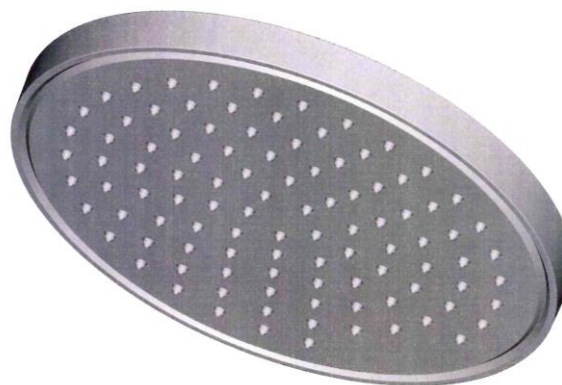
52: Class 23 24: Part A

71: HANS GROHE SE

33: EU 31: 008706097-0001 32: 2021-09-29

**54: SANITARY SHOWER**

57: The novelty of the design resides in the shape or configuration of a sanitary shower substantially as shown in the accompanying representation.



21: A2022/00310 22: 2022-03-25 23:  
43: 2023-03-15

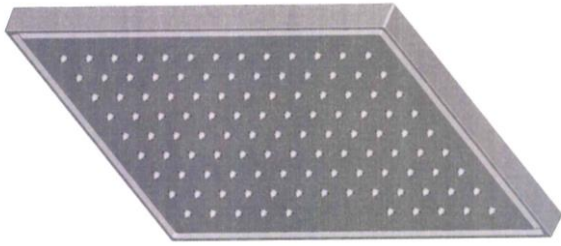
52: Class 23 24: Part A

71: HANS GROHE SE

33: EU 31: 008706097-0003 32: 2021-09-29

**54: SANITARY SHOWER**

57: The novelty of the design resides in the shape or configuration of a sanitary shower substantially as shown in the accompanying representation.



21: A2022/00319 22: 2022-03-28 23:  
43: 2023-03-15

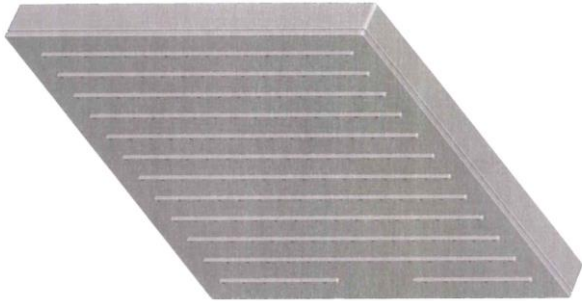
52: Class 23 24: Part A

71: HANS GROHE SE

33: EU 31: 008714109-0001 32: 2021-10-04

**54: SANITARY SHOWER**

57: The novelty of the design resides in the shape or configuration of a sanitary shower substantially as shown in the accompanying representation.



21: A2022/00320 22: 2022-03-28 23:  
43: 2023-03-15

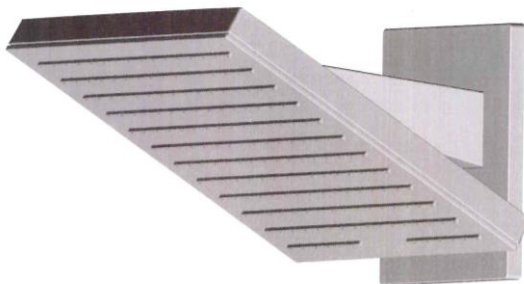
52: Class 23 24: Part A

71: HANS GROHE SE

33: EU 31: 008714109-0003 32: 2021-10-04

**54: SANITARY SHOWER**

57: The novelty of the design resides in the shape or configuration of a sanitary shower substantially as shown in the accompanying representation.



21: A2022/00321 22: 2022-03-28 23:  
43: 2023-03-15

52: Class 23 24: Part A

71: HANS GROHE SE

33: EU 31: 008714109-0004 32: 2021-10-04

**54: HAND SHOWER**

57: The novelty of the design resides in the shape or configuration of a hand shower substantially as shown in the accompanying representation.



21: A2022/00344 22: 2022-04-01 23:

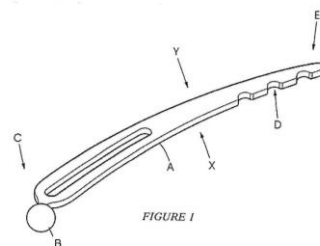
43: 2023-03-15

52: Class 28 24: Part A

71: Gladwin, Thea, Gladwin, Sacha Dean, Gladwin, Ricky Lee

**54: HAIR CLIP**

57: The features for which protection is claimed reside in the shape or configuration of a hair clip which includes an elongate body "A" with a concave side "X" and a convex side "Y", a protrusion "B" at a first end "C" of the body, and grooves "D" towards a second end "E" of the body, substantially as shown in the accompanying drawings. The number of grooves "D" is variable. As shown in Figure 2 the protrusion "B" and the concave side "X" are on one side of a central line "L" and the convex side "Y" is on an opposing side of the central line "L".



21: A2022/00419 22: 2022-04-20 23:  
43: 2023-02-07  
52: Class 12. 24: Part A  
71: FORD GLOBAL TECHNOLOGIES, LLC  
**54: Motor Vehicle**

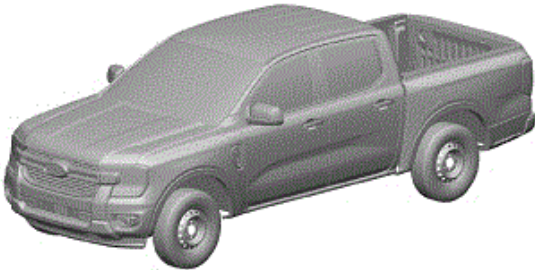
57: The design relates to a motor vehicle. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.



**FRONT PERSPECTIVE VIEW**

21: A2022/00421 22: 2022-04-20 23:  
43: 2023-02-07  
52: Class 21. 24: Part A  
71: FORD GLOBAL TECHNOLOGIES, LLC  
**54: Toy Vehicle**

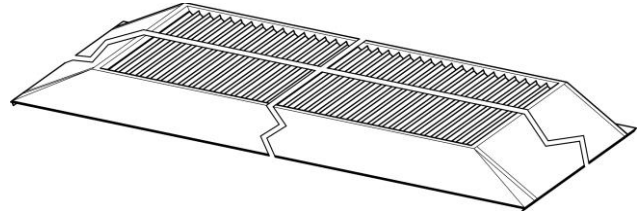
57: The design relates to a toy vehicle. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.



**FRONT PERSPECTIVE VIEW**

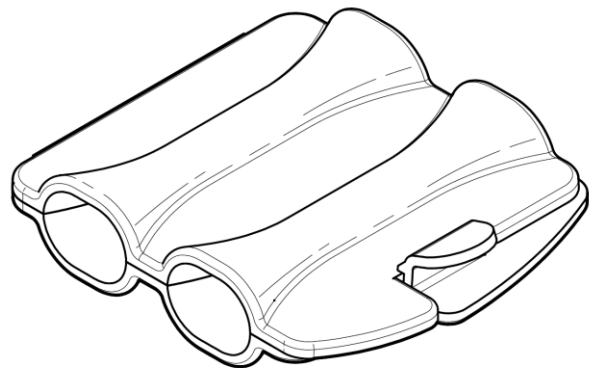
21: A2022/00465 22: 2022-04-29 23:  
43: 2023-02-01  
52: Class 25 24: Part A  
71: FURISCORE (PTY) LTD  
**54: VENTILATOR**

57: The design is applied to a ventilator. The features of the design for which protection is claimed are those of the shape and/or configuration and/or pattern of the ventilator, substantially as illustrated in the accompanying representation.



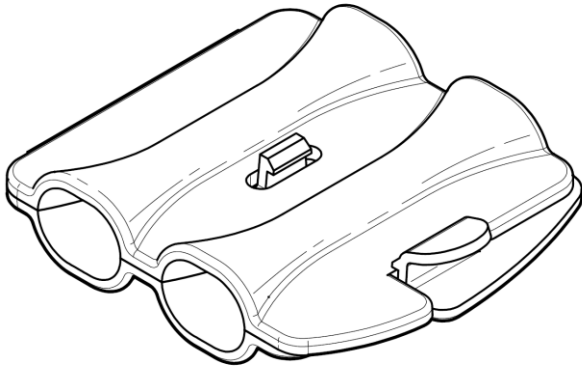
21: A2022/00613 22: 2022-06-02 23:  
43: 2023-01-19  
52: Class 24 24: Part A  
71: HOLLIDAY, Daniel Mark  
**54: ACCESSORY FOR AN INTRAVENOUS INFUSION SET**

57: The design relates to an accessory for an intravenous infusion set. The features of the design for which protection is claimed reside in the shape and/or configuration of the accessory, substantially as shown in the accompanying representations.



21: A2022/00614 22: 2022-06-02 23:  
43: 2023-01-19  
52: Class 24 24: Part A  
71: HOLLIDAY, Daniel Mark  
**54: ACCESSORY FOR AN INTRAVENOUS INFUSION SET**

57: The design relates to an accessory for an intravenous infusion set. The features of the design for which protection is claimed reside in the shape and/or configuration of the accessory, substantially as shown in the accompanying representations.



21: A2022/00615 22: 2022-06-02 23:

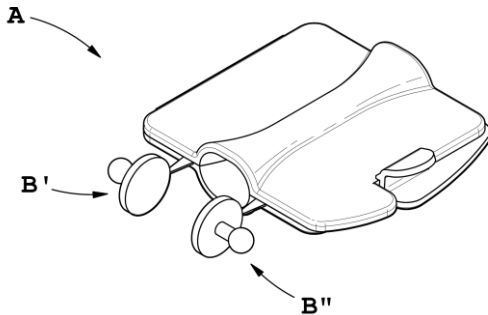
43: 2023-01-19

52: Class 24 24: Part A

71: HOLLIDAY, Daniel Mark

**54: ACCESSORY FOR AN INTRAVENOUS INFUSION SET**

57: The design relates to an accessory A for an intravenous infusion set. The features of the design for which protection is claimed reside in the shape and/or configuration of the accessory A, substantially as shown in the accompanying representations.



21: A2022/00616 22: 2022-06-02 23:

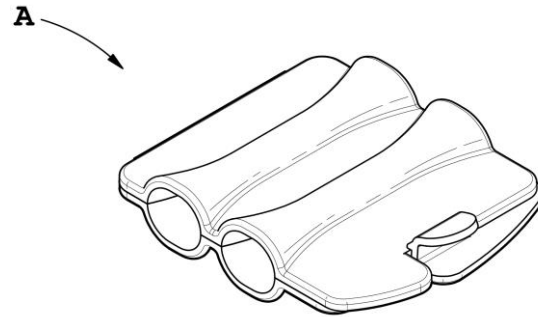
43: 2023-01-19

52: Class 24 24: Part A

71: HOLLIDAY, Daniel Mark

**54: ACCESSORY FOR AN INTRAVENOUS INFUSION SET**

57: The design relates to an accessory A for an intravenous infusion set. The features of the design for which protection is claimed reside in the shape and/or configuration of the accessory A, substantially as shown in the accompanying representations.



21: A2022/00617 22: 2022-06-02 23:

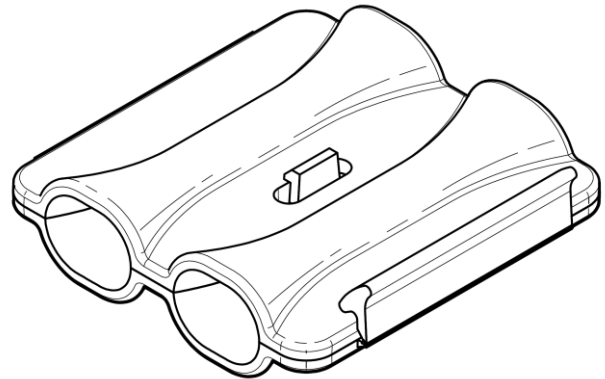
43: 2023-01-19

52: Class 24 24: Part A

71: HOLLIDAY, Daniel Mark

**54: ACCESSORY FOR AN INTRAVENOUS INFUSION SET**

57: The design relates to an accessory for an intravenous infusion set. The features of the design for which protection is claimed reside in the shape and/or configuration of the accessory, substantially as shown in the accompanying representations.



21: A2022/00618 22: 2022-06-02 23:

43: 2023-01-19

52: Class 24 24: Part A

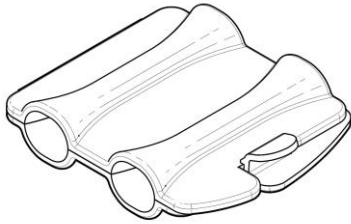
71: HOLLIDAY, Daniel Mark

**54: ACCESSORY FOR AN INTRAVENOUS INFUSION SET**

57: The design relates to an accessory A for an intravenous infusion set. The features of the design for which protection is claimed reside in the shape and/or configuration of the accessory A, substantially as shown in the accompanying representations.



A



21: A2022/00629 22: 2022-06-07 23:  
43: 2023-02-01  
52: Class 9 24: Part A  
71: GCS German Capsule Solution GmbH  
33: EM 31: 008791818-0001 32: 2021-12-08

**54: CAPSULE**

57: The drawing shows a bottom perspective view of a capsule showing the overall appearance thereof.



21: A2022/00631 22: 2022-06-07 23:  
43: 2023-02-07  
52: Class 9 24: Part A  
71: GCS German Capsule Solution GmbH  
33: EM 31: 008791818-0002 32: 2021-12-08

**54: CAPSULE**

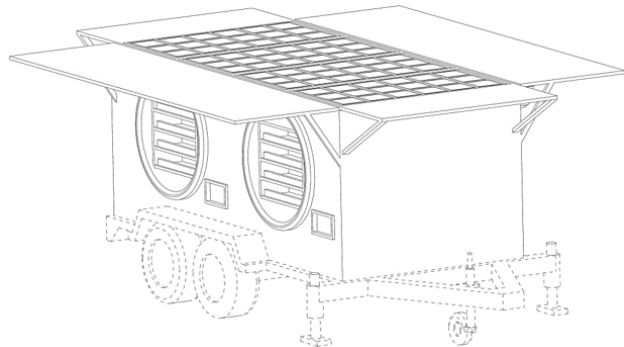
57: The drawing shows a bottom perspective view of a capsule showing the overall appearance thereof.



21: A2022/00645 22: 2022-06-10 23:  
43: 2023-02-07  
52: Class 15 24: Part A  
71: DAYN AMADE INVENTIONS LTD  
33: GB 31: 6203645 32: 2022-04-20

**54: DRY FREEZER INTERACTIVE TRAILER**

57: The design is applied to a dry freezer interactive trailer. The features of the design for which protection is claimed are those of the shape and/or configuration and/or pattern of the dry freezer interactive trailer, substantially as illustrated in the accompanying representation. Features shown in broken lines do not form part of the design and are disclaimed.



21: A2022/00652 22: 2022-06-14 23:  
43: 2021-12-15  
52: Class 12 24: Part A  
71: Bayerische Motoren Werke Aktiengesellschaft  
33: DE 31: 402021101149.8 32: 2021-12-15

**54: MOTOR VEHICLES**

57: The design is for a motor vehicle comprising a front with a pair of almost square kidney grilles with vertical slats which are flanked by a pair of

pentagonal headlights extending rearwardly along each side. A lower portion of the front is recessed and accommodates a rectangular grille and a pair of slim air-intake openings. Sides of a bonnet are recessed. A longitudinal swage line runs along each side below each window and a more prominent longitudinal swage line extends along a lower portion of the side doors. A curved overhang or rear fin protrudes over a rear window. A rear includes a pair of L-shaped taillight clusters with ends extending around the rear along each side.



Figure 1  
Three-dimensional view

21: A2022/00746 22: 2022-06-27 23:  
43: 2023-02-01  
52: Class 12. 24: Part A  
71: FERRARI S.P.A.  
33: IB 31: DM/219317 32: 2021-12-28  
**54: Car**

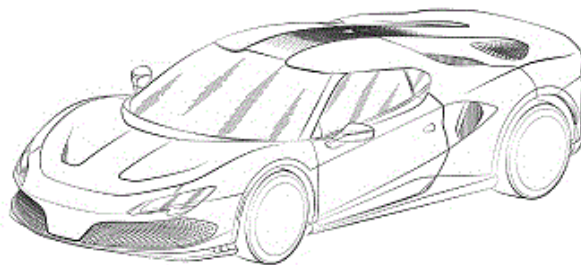
57: The design relates to a car. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.



**FRONT PERSPECTIVE VIEW**

21: A2022/00747 22: 2022-06-27 23:  
43: 2023-02-01  
52: Class 21. 24: Part A  
71: FERRARI S.P.A.  
33: IB 31: DM/219316 32: 2021-12-28  
**54: Toy Car**

57: The design relates to a toy car. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.



**FRONT PERSPECTIVE VIEW**

21: A2022/00750 22: 2022-06-29 23:  
43: 2023-02-21  
52: Class 12 24: Part A  
71: ABUSONS (PTY) LIMITED t/a UNICA PLASTIC  
MOULDERS  
**54: WHEEL**

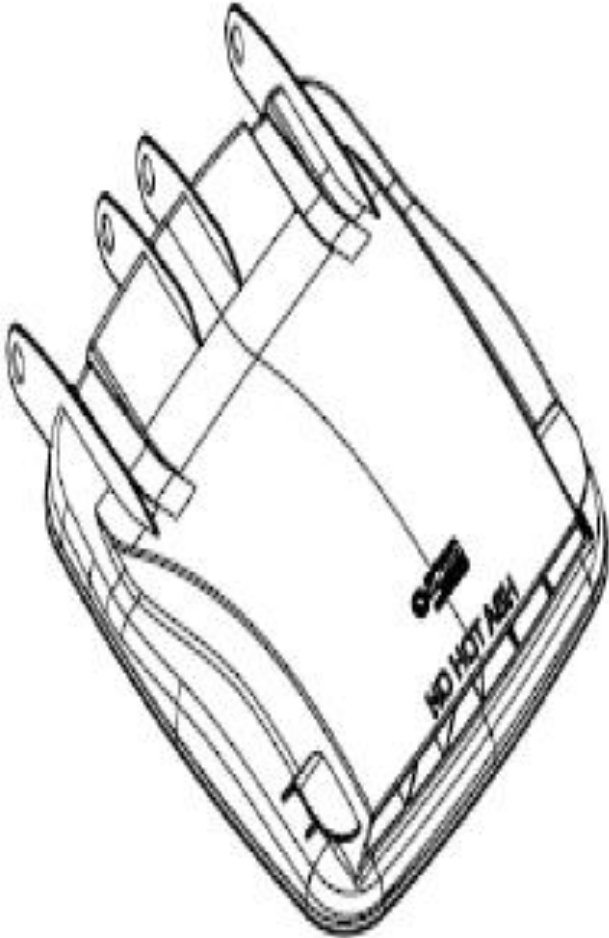
57: The features of the design for which protection is claimed reside in the shape and/or configuration of a wheel, typically of the type used on a wheelie bin, as depicted the drawings



21: A2022/00753 22: 2022-06-29 23:  
43: 2023-01-19  
52: Class 09 24: Part A  
71: ABUSONS (PTY) LIMITED t/a UNICA PLASTIC  
MOULDERS

**54: LID FOR A CONTAINER**

57: The features of the design for which protection is claimed reside in the shape and/or configuration of a lid for a container, typically of the type used on a wheelie bin, as depicted the drawings



21: A2022/00784 22: 2022-07-01 23:  
43: 2023-02-07  
52: Class 14 24: Part A  
71: Reflex Instruments Asia Pacific Pty Ltd  
33: AU 31: 202210722 32: 2022-02-08

**54: HANDHELD SCANNERS**

57: The design is for a handheld scanner. The handheld scanner comprises an elongated body having a flattened base from which side walls extend upwardly, while bulging slightly outwardly. A top of the handheld scanner is supported by the side walls and is arched, so as to conform to the hand of a user. The handheld scanner includes a round tapered operative front end, and a rounded operative rear end.

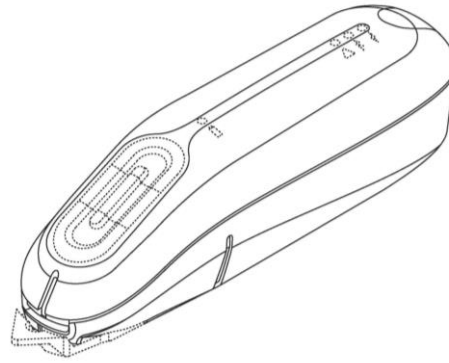


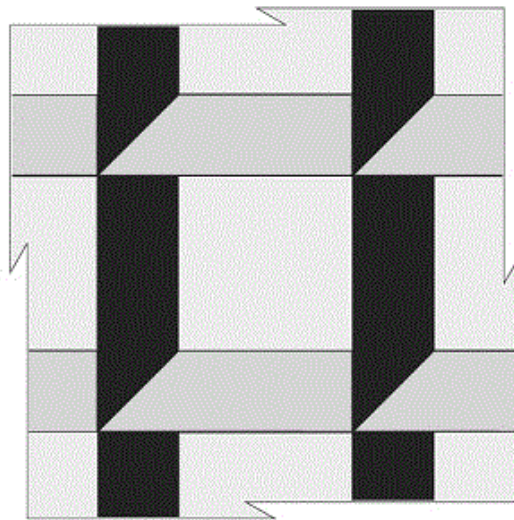
Figure 1

Three-dimensional view of a handheld scanner

21: A2022/00806 22: 2022-07-13 23:  
43: 2023-02-07  
52: Class 5. 24: Part A  
71: TARDIEU, SIBONGILE KAREN CANDIDA

**54: Sheet Material**

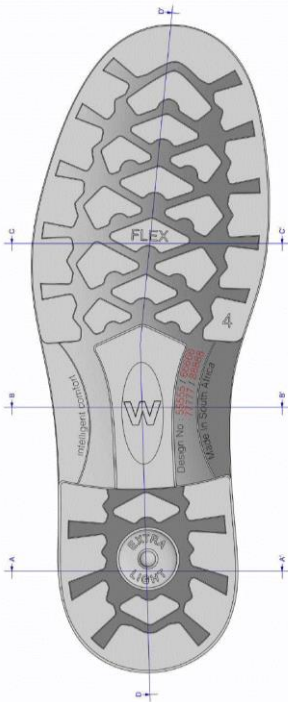
57: The design relates to a piece of sheet material. The features of the design are those of pattern and/or ornamentation.

**PLAN VIEW**

21: A2022/00815 22: 2022-07-15 23:  
43: 2022-07-15  
52: Class 2 24: Part A  
71: Palm Footwear Manufacturers (Pty) Ltd  
**54: Soles for Footwear**



57: The design is for a sole for footwear as depicted in the representations. The sole comprises a bulbous main portion spaced from a heel portion, located at a different elevation, by a waisted stem portion. The main portion is recessed and defines a plurality of radially extending recesses which project into a periphery of the main portion. The main portion defines a plurality of irregular shaped bulbous portions which stand proud of the recessed main portion. The heel portion is recessed and defines a plurality of radially extending recesses which project into a periphery of the heel portion. The heel portion defines a pair of oppositely oriented substantially similar irregular shaped bulbous portions which stand proud of the recessed heel portion, said pair of bulbous portions being spaced by a circular projection which also stands proud of the recessed heel portion.



21: A2022/00820 22: 2022-07-20 23:  
43: 2022-07-20

52: Class 12 24: Part A

71: Hyundai Motor Company, Kia Corporation

#### **54: AUTOMOBILES**

57: The design is for an automobile in the form of a SUV. A centrally located grille is provided above a front bumper. The grill has an array of rectangular shaped formations which increase in width and length from the bottom row to the top row. A horizontal air inlet opening is provided in the front

bumper. A headlight cluster is provided on each side of the grille and is surrounded by a light bar. A set of three spaced apart LED lights is provided above each of the head light clusters. A taillight cluster is provided on outer corners of a rear of the automobile. A horizontally extending rear light extends between the taillight clusters. A lower rear bumper accommodates a horizontally extending recessed panel. Transversely spaced apart roof rails are provided. A spoiler protrudes rearwardly from an upper edge of the hatch.



Figure 1

Three-dimensional view

21: A2022/00821 22: 2022-07-20 23:

43: 2022-07-20

52: Class 12 24: Part A

71: Hyundai Motor Company, Kia Corporation

#### **54: AUTOMOBILES**

57: The design is for an automobile. A centrally located grille is provided above a front bumper. The grille has an array of rectangular shaped formations which increase in width and length from the bottom row to the top row. An air inlet opening is provided in the front bumper. A headlight cluster is provided on each side of the grille and is surrounded by a light bar. A set of LED lights is provided above each of the head light clusters. A taillight cluster is provided on outer corners of a rear of the automobile. A horizontally extending rear light extends between the taillight clusters. Transversely spaced apart roof rails and a sunroof are provided. A pair of tail pipes extend from one side below the lower rear bumper. Simulated front and rear skid plates are provided below the front and rear bumpers respectively.





Figure 1  
Three-dimensional view

21: A2022/00822 22: 2022-07-20 23:

43: 2022-01-20

52: Class 7 24: Part A

71: Société des Produits Nestlé S.A

33: CH 31: 146547 32: 2022-01-20

#### **54: BEVERAGE DISPENSERS**

57: The design is for a beverage dispenser comprising an ovoid body with a smoothly curved wall extending from a front surface to a curved base. The front surface includes a protruding convexly curved circular element with rearwardly extending curved side walls, including a round operating button and a round light. A nozzle protrudes for a bottom of the element. A U-shaped member curves downwardly from the circular element. A top surface includes a U-shaped element, defining a capsule-shaped recess, and an oblong element housing a round operating button. A rectangular support with oblong sides and curved edges is received within a lower portion of the body, extending forwardly and downwardly below the front surface. A front of the support includes an oblong drip tray holder and attaches to a concavely curved drip tray. A central contouring line extends from the top surface to the base. A pair of triangular legs extend from the base.

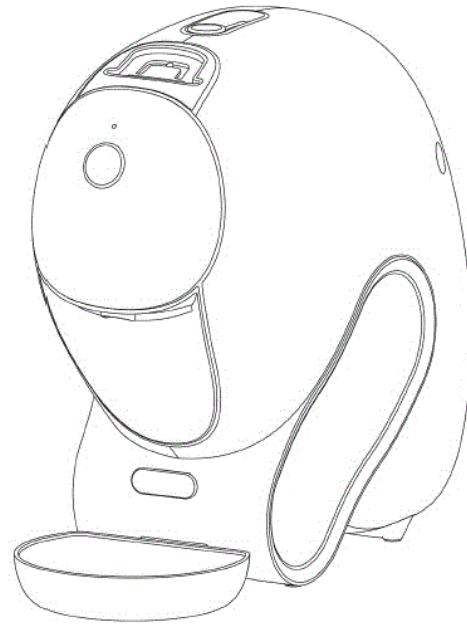


Figure 1  
Three-dimensional view

21: A2022/00823 22: 2022-07-21 23:

43: 2023-02-07

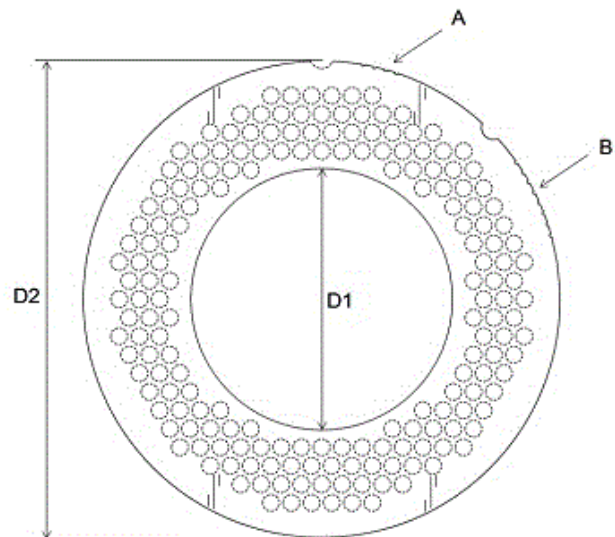
52: Class 31. 24: Part A

71: COZZINI LLC

33: US 31: 29/833,179 32: 2022-04-01

#### **54: Emulsion Plate**

57: The design relates to an emulsion plate. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.



**FRONT VIEW**

21: A2022/00845 22: 2022-07-28 23:

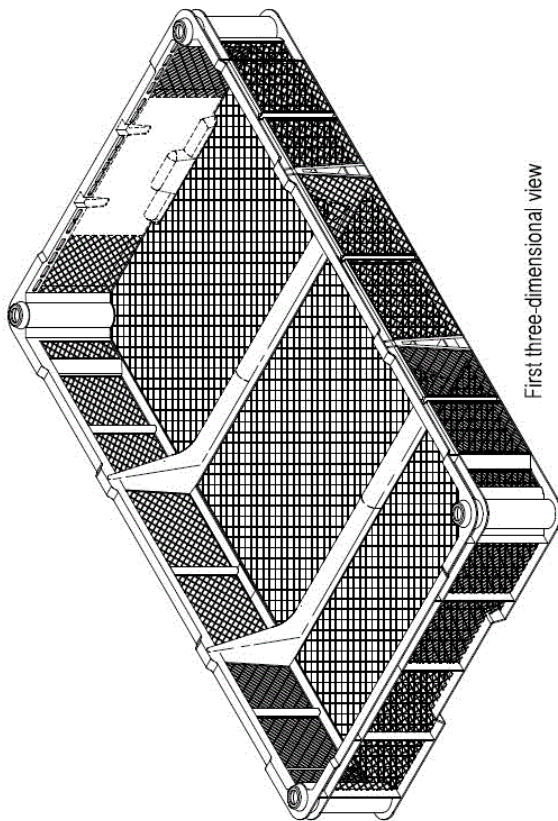
43: 2022-07-28

52: Class 9 24: Part A

71: MPact Plastic Containers Proprietary Limited

**54: Trays**

57: The design relates to a tray as shown in the accompanying representations. The tray is open-topped and has a shallow, generally rectangular shape. The tray has a solid rim, while longer side and shorter end walls of the tray and a base wall of the tray have an open mesh configuration. Corners of the tray have generally cylindrical formations extending between the base and the side walls. The tray includes a pair of spaced solid rib formations which each extend along inner sides of the side walls and across an inner side of the base wall.



21: A2022/00847 22: 2022-07-28 23:

43: 2023-02-21

52: Class 10. 24: Part A

71: OMEGA SA (OMEGA AG) (OMEGA LTD.)

33: IB 31: WIPO114880 32: 2022-03-21

**54: Wristwatch**

57: The design relates to a wristwatch. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.

**ENLARGED VIEW**

21: A2022/00848 22: 2022-07-28 23:

43: 2023-02-07

52: Class 10. 24: Part A

71: OMEGA SA (OMEGA AG) (OMEGA LTD.)

33: IB 31: WIPO114880 32: 2022-03-21

**54: Wristwatch**

57: The design relates to a wristwatch. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.

**ENLARGED VIEW**

21: A2022/00849 22: 2022-07-28 23:

43: 2023-02-07

52: Class 10. 24: Part A

71: OMEGA SA (OMEGA AG) (OMEGA LTD.)

33: IB 31: WIPO114880 32: 2022-03-21

**54: Wristwatch**

57: The design relates to a wristwatch. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.



ENLARGED VIEW

21: A2022/00850 22: 2022-07-28 23:

43: 2023-02-07

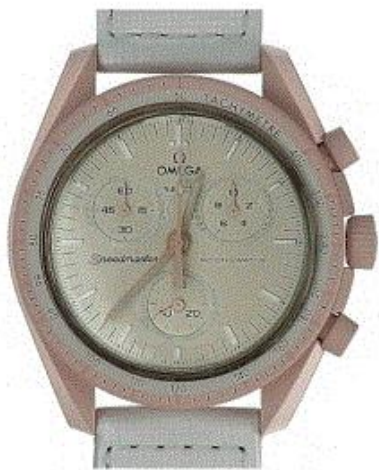
52: Class 10. 24: Part A

71: OMEGA SA (OMEGA AG) (OMEGA LTD.)

33: IB 31: WIPO114880 32: 2022-03-21

**54: Wristwatch**

57: The design relates to a wristwatch. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation



ENLARGED VIEW

21: A2022/00851 22: 2022-07-28 23:

43: 2023-02-07

52: Class 10. 24: Part A

71: OMEGA SA (OMEGA AG) (OMEGA LTD.)

33: IB 31: WIPO114880 32: 2022-03-21

**54: Wristwatch**

57: The design relates to a wristwatch. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation



ENLARGED VIEW

21: A2022/00852 22: 2022-07-28 23:

43: 2023-02-21

52: Class 10. 24: Part A

71: OMEGA SA (OMEGA AG) (OMEGA LTD.)

33: IB 31: WIPO114880 32: 2022-03-21

**54: Wristwatch**

57: The design relates to a wristwatch. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.



ENLARGED VIEW



21: A2022/00853 22: 2022-07-28 23:  
43: 2023-02-21  
52: Class 10. 24: Part A  
71: OMEGA SA (OMEGA AG) (OMEGA LTD.)  
33: IB 31: WIPO114880 32: 2022-03-21

**54: Wristwatch**

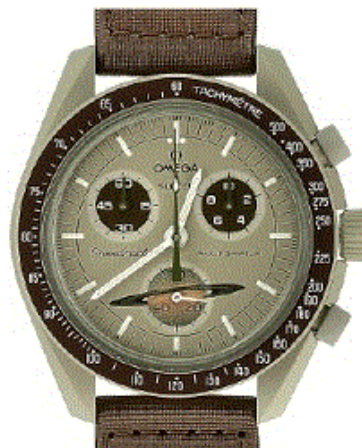
57: The design relates to a wristwatch. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.

**ENLARGED VIEW**

21: A2022/00854 22: 2022-07-28 23:  
43: 2023-02-21  
52: Class 10. 24: Part A  
71: OMEGA SA (OMEGA AG) (OMEGA LTD.)  
33: IB 31: WIPO114880 32: 2022-03-21

**54: Wristwatch**

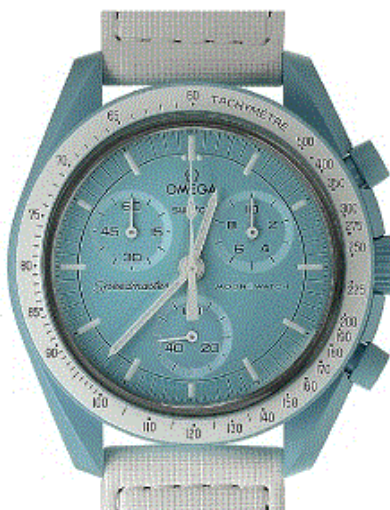
57: The design relates to a wristwatch. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.

**ENLARGED VIEW**

21: A2022/00855 22: 2022-07-28 23:  
43: 2023-02-21  
52: Class 10. 24: Part A  
71: OMEGA SA (OMEGA AG) (OMEGA LTD.)  
33: IB 31: WIPO114880 32: 2022-03-21

**54: Wristwatch**

57: The design relates to a wristwatch. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.

**ENLARGED VIEW**

21: A2022/00856 22: 2022-07-28 23:  
43: 2023-02-21  
52: Class 10. 24: Part A  
71: OMEGA SA (OMEGA AG) (OMEGA LTD.)  
33: IB 31: WIPO114880 32: 2022-03-21



**54: Wristwatch**

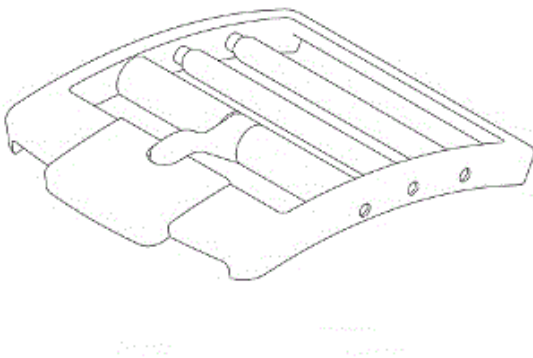
57: The design relates to a wristwatch. The features of the design are those of shape and/or configuration and/or pattern and/or ornamentation.

**ENLARGED VIEW**

21: A2022/00862 22: 2022-07-29 23:  
43: 2023-02-14  
52: Class 10. 24: Part A  
71: MONTRES TUDOR SA  
33: CH 31: 146616 32: 2022-02-24

**54: Clasp for a Watch Bracelet**

57: The design relates to a clasp for a watch bracelet. The features of the design are those of shape and/or configuration and/or ornamentation.

**FRONT RIGHT PERSPECTIVE VIEW**

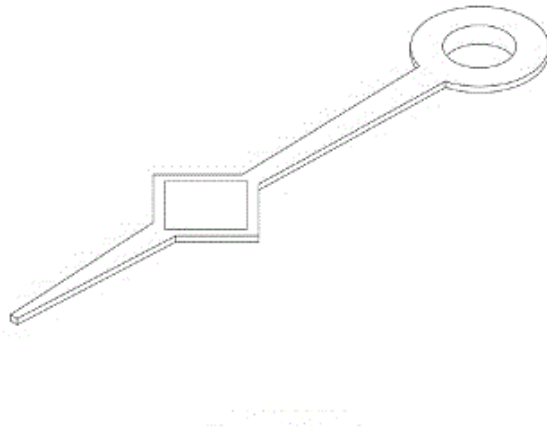
21: A2022/00863 22: 2022-07-29 23:  
43: 2023-02-14  
52: Class 10. 24: Part A

71: MONTRES TUDOR SA

33: CH 31: 146615 32: 2022-02-24

**54: Clock Hand**

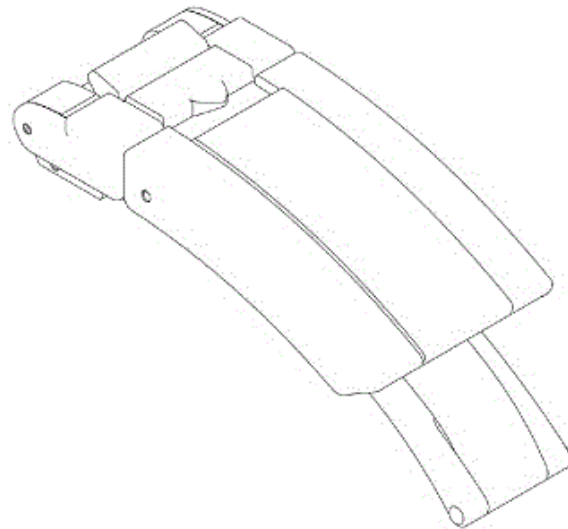
57: The design relates to a clock hand. The features of the design are those of shape and/or configuration and/or ornamentation.

**PERSPECTIVE VIEW**

21: A2022/00864 22: 2022-07-29 23:  
43: 2023-02-14  
52: Class 10. 24: Part A  
71: MONTRES TUDOR SA  
33: CH 31: 146626 32: 2022-02-28

**54: Clasp for Watch Bracelets**

57: The design relates to a clasp for watch bracelets. The features of the design are those of shape and/or configuration and/or ornamentation.

**FRONT LEFT PERSPECTIVE VIEW**

21: A2022/00865 22: 2022-07-29 23:

43: 2023-02-14

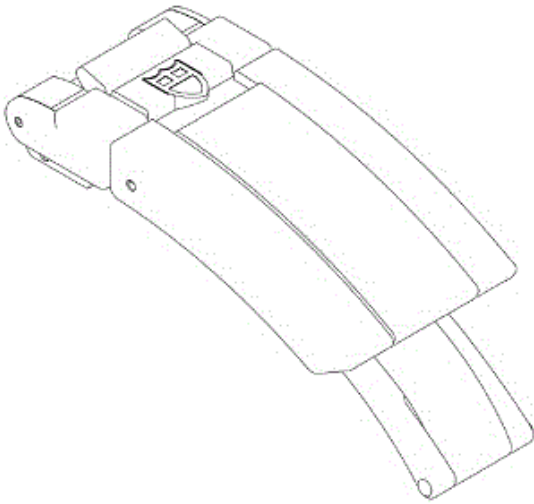
52: Class 10. 24: Part A

71: MONTRES TUDOR SA

33: CH 31: 146626 32: 2022-02-28

**54: Clasp for Watch Bracelets**

57: The design relates to a clasp for watch bracelets. The features of the design are those of shape and/or configuration and/or ornamentation.



**FRONT LEFT PERSPECTIVE VIEW**

21: A2022/00867 22: 2022-07-29 23:

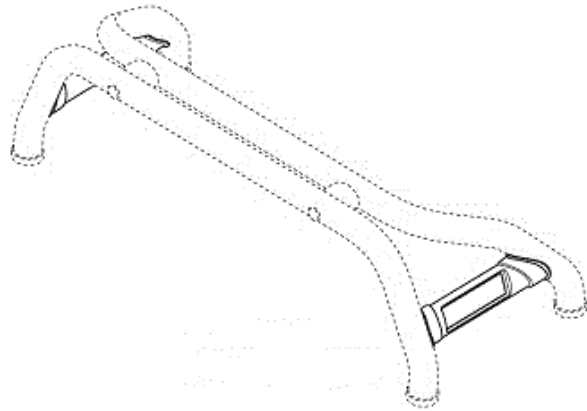
43: 2023-02-07

52: Class 12. 24: Part A

71: ARTAV STAINLESS STEEL CC

**54: Sports Bar for a Vehicle**

57: The design relates to a sports bar for a vehicle. The features of the design are those of shape and/or configuration and/or ornamentation.



**TOP PERSPECTIVE VIEW**

21: A2022/00868 22: 2022-07-29 23:

43: 2023-02-07

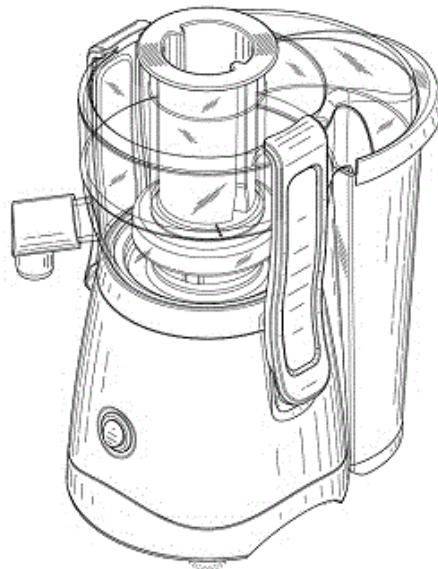
52: Class 31. 24: Part A

71: CAPBRAN HOLDINGS, LLC

33: US 31: 29/833,096 32: 2022-03-31

**54: Electric Juicer**

57: The design relates to an electric juicer. The features of the design are those of shape and/or configuration and/or ornamentation.



**TOP, FRONT AND RIGHT-SIDE PERSPECTIVE VIEW**

21: A2022/00893 22: 2022-08-03 23:

43: 2023-03-03

52: Class 28 24: Part A

71: Triple A Finance GmbH & Co. KG

33: WO 31: DM/219,018 32: 2022-02-08

**54: ANTI-WRINKLE APPLIANCE**

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: A2022/00942 22: 2022-08-17 23:  
43: 2023-03-03  
52: Class 25 24: Part A  
71: Juro Trading PTY LTD

**54: KIOSK**

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: A2022/00946 22: 2022-08-17 23:  
43: 2023-03-03  
52: Class 25 24: Part A  
71: Juro Trading PTY LTD

**54: KIOSK ROOF**

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: A2022/00948 22: 2022-08-17 23:  
43: 2023-03-03  
52: Class 25 24: Part A  
71: Juro Trading PTY LTD

**54: KIOSK**

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: A2022/00950 22: 2022-08-17 23:  
43: 2023-03-03  
52: Class 25 24: Part A  
71: Juro Trading PTY LTD

**54: KIOSK ROOF**

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).



52: Class 12 24: Part A  
71: Juro Trading PTY LTD  
**54: VENDING TROLLEY**

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: A2022/00961 22: 2022-08-17 23:  
43: 2023-03-09

52: Class 30 24: Part A  
71: PETITE FRENCH & CO (PTY) LTD

**54: TRANSPORT CONTAINER FOR AN ANIMAL**

57: The design is applied to a transport container for an animal. 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 transport container for an animal, substantially as illustrated in Figures 1 to 9 of the accompanying representations. The handles (F), straps (G), fasteners (H), removable internal mat (I), sliding fasteners (J) and label (K) illustrated in Figures 1 to 9 do not form part of the design and are disclaimed.

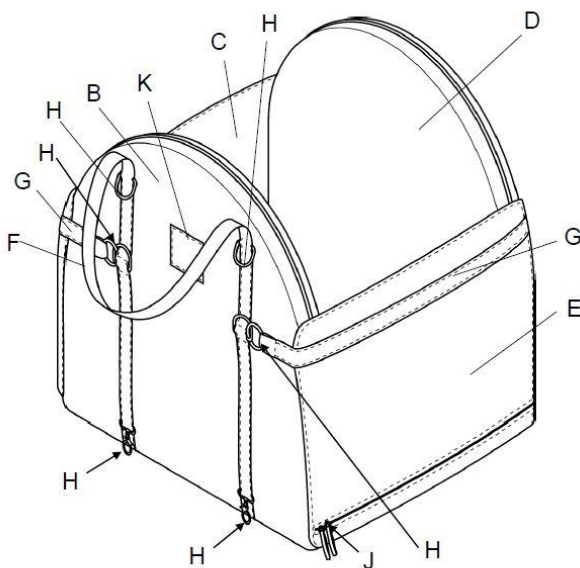


FIG. 1 THREE-DIMENSIONAL VIEW – CLOSED CONDITION

21: A2022/00992 22: 2022-08-26 23:  
43: 2023-03-03

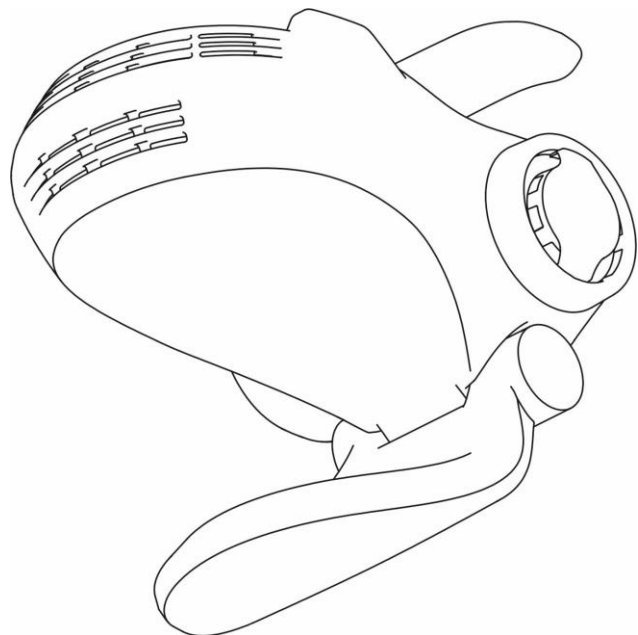
21: A2022/00995 22: 2022-08-26 23:  
43: 2023-03-09

52: Class 24 24: Part A  
71: BTL INDUSTRIES

33: EU 31: 008876213-0004 32: 2022-03-04

**54: MEDICAL DEVICE**

57: The design is applied to a medical 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 medical device, substantially as illustrated in the accompanying representation.





21: A2022/00996 22: 2022-08-26 23:

43: 2023-03-09

52: Class 24 24: Part A

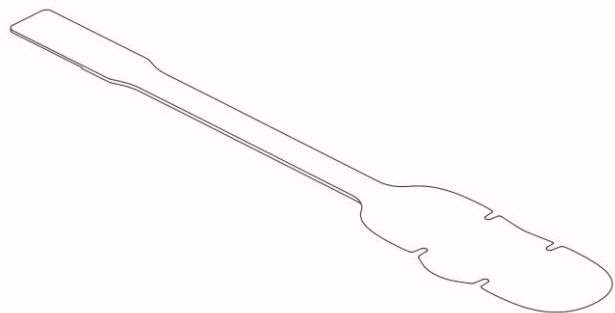
71: BTL INDUSTRIES

33: EU 31: 009031669-0002 32: 2022-05-19

#### **54: MEDICAL ELECTRODE**

57: The design is applied to a medical electrode.

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 medical electrode, substantially as illustrated in the accompanying representation.



21: A2022/00997 22: 2022-08-26 23:

43: 2023-03-09

52: Class 24 24: Part A

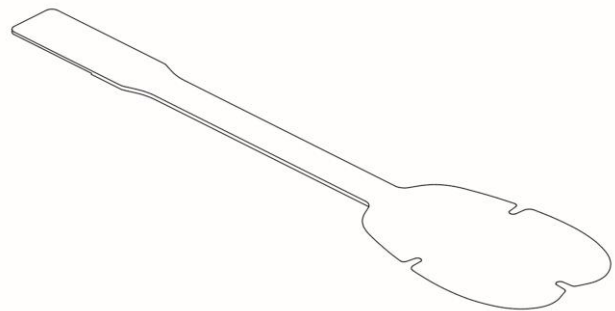
71: BTL INDUSTRIES

33: EU 31: 009031669-0005 32: 2022-05-19

#### **54: MEDICAL ELECTRODE**

57: The design is applied to a medical electrode.

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 medical electrode, substantially as illustrated in the accompanying representation.



21: A2022/01012 22: 2022-08-29 23:

43: 2023-03-03

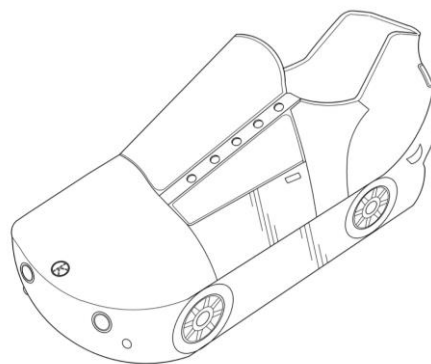
52: Class 02 24: Part A

71: NGCOBO, Armstrong Sthembiso

#### **54: SNEAKERS**

57: The design is for a sneaker resembling a motor vehicle. The sneaker comprises of an upper and a

sole. The sole incorporates a depiction of two wheels on both the left-hand side and the right-hand side of the sole. Taillights and floodlights are represented at the rear and the front of the sole respectively. The sole includes a portrayal of headlights at the front of the sneaker. A tongue, which represents a windscreen of a motor vehicle, as well as eyelets and laces form part of the upper. A rendering of a vehicle door with a door window is located at the centre of the left-hand side and right-hand side of the upper. A brand badge is centred at both the front and the rear of the upper.



Three-dimensional view of a sneaker resembling a motor vehicle

21: A2022/01105 22: 2022-09-19 23:

43: 2023-04-13

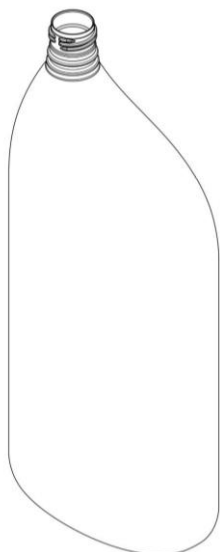
52: Class 09 24: Part A

71: ALPLA Werke Alwin Lehner GmbH & Co. KG

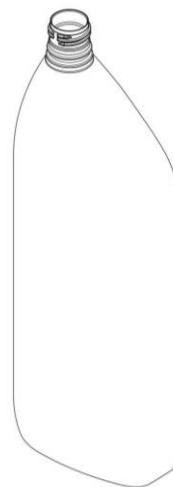
33: CH 31: 146770 32: 2022-05-06

#### **54: BOTTLE**

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).



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: A2022/01107 22: 2022-09-19 23:

43: 2023-04-13

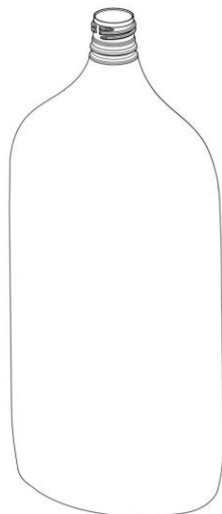
52: Class 09 24: Part A

71: ALPLA Werke Alwin Lehner GmbH & Co. KG

33: CH 31: 146770 32: 2022-05-06

**54: BOTTLE**

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: A2022/01111 22: 2022-09-19 23:

43: 2023-04-13

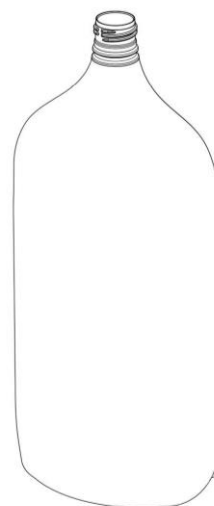
52: Class 09 24: Part A

71: ALPLA Werke Alwin Lehner GmbH & Co. KG

33: CH 31: 146770 32: 2022-05-06

**54: BOTTLE**

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: A2022/01109 22: 2022-09-19 23:

43: 2023-04-13

52: Class 09 24: Part A

71: ALPLA Werke Alwin Lehner GmbH & Co. KG

33: CH 31: 146770 32: 2022-05-06

**54: BOTTLE**

21: A2022/01113 22: 2022-09-19 23:

43: 2023-04-13

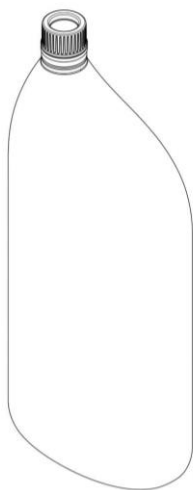
52: Class 09 24: Part A

71: ALPLA Werke Alwin Lehner GmbH & Co. KG

33: CH 31: 146770 32: 2022-05-06

**54: BOTTLE**

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).



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21: A2022/01115 22: 2022-09-19 23:

43: 2023-04-13

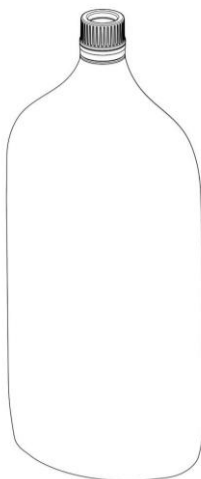
52: Class 09 24: Part A

71: ALPLA Werke Alwin Lehner GmbH & Co. KG

33: CH 31: 146770 32: 2022-05-06

**54: BOTTLE**

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).



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21: A2022/01117 22: 2022-09-19 23:

43: 2023-04-13

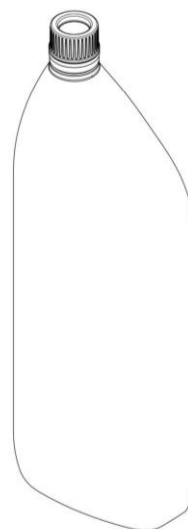
52: Class 09 24: Part A

71: ALPLA Werke Alwin Lehner GmbH & Co. KG

33: CH 31: 146770 32: 2022-05-06

**54: BOTTLE**

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).



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21: A2022/01119 22: 2022-09-19 23:

43: 2023-04-13

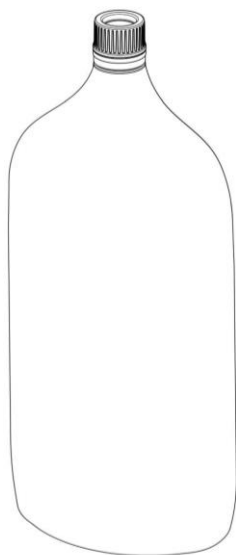
52: Class 09 24: Part A

71: ALPLA Werke Alwin Lehner GmbH & Co. KG

33: CH 31: 146770 32: 2022-05-06

**54: BOTTLE**

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: A2023/00248 22: 2023-02-22 23:  
43: 2023-04-04

52: Class 27 24: Part A

71: Mevol (HK) Limited

33: CN 31: 202230631630.4 32: 2022-09-23

**54: ELECTRONIC CIGARETTE**

57: The design relates to a electronic cigarette. The features of the design are those of shape and/or pattern and/or configuration and/or ornamentation.



21: F2020/00897 22: 2020-06-25 23:

43: 2023-02-14

52: Class 05 24: Part F

71: TESSARA (PTY) LTD

**54: MULTILAYER LAMINATED SHEET**

57: Protection is claimed for the features of shape and/or configuration of a multilayer laminate sheet, substantially as shown in the accompanying representations.





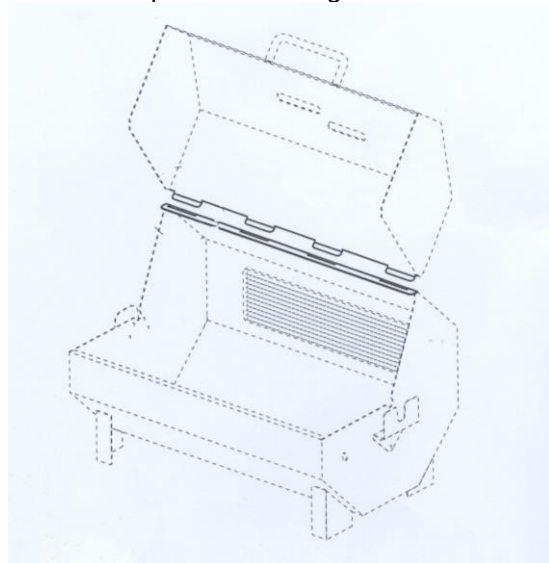
21: F2022/00222 22: 2022-03-01 23:  
43: 2023-03-15

52: Class 07 24: Part F

71: RAUBENHEIMER, Pieter Jacobus Adriaan

#### **54: A HINGE ARRANGEMENT FOR A GRILL**

57: The novelty of the design resides in the shape or configuration of a hinge arrangement for a grill having a base and a lid substantially as illustrated in the accompanying drawing. The parts illustrated in dotted outline are for illustrative purposes only and do not form part of the design.



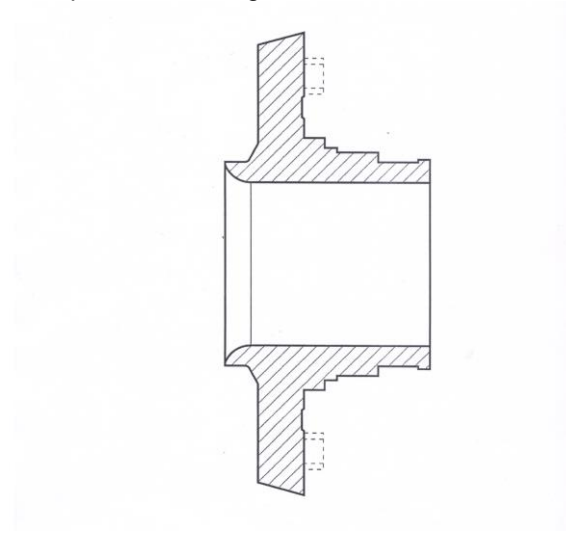
21: F2022/00224 22: 2022-03-01 23:  
43: 2023-03-15

52: Class 23 24: Part F

71: BATTLEMAX (PTY) LTD

#### **54: THROAT BUSH**

57: The novelty of the design resides in the shape or configuration of a centrifugal slurry pump throat bush substantially as shown in the accompanying drawings. The features shown in broken lines do not form part of the design.



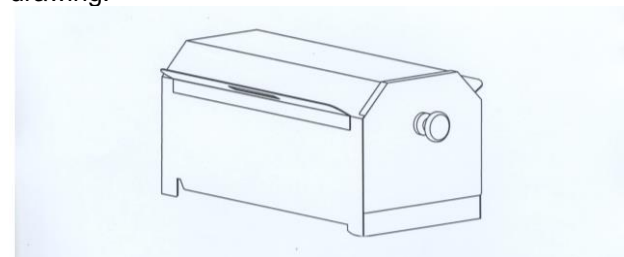
21: F2022/00225 22: 2022-03-01 23:  
43: 2023-03-15

52: Class 07 24: Part F

71: RAUBENHEIMER, Pieter Jacobus Adriaan

#### **54: OVEN ACCESSORY FOR A GRILL**

57: The novelty of the design resides in the shape or configuration of an oven accessory for a grill substantially as illustrated in the accompanying drawing.



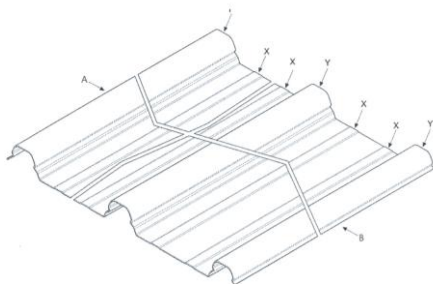
21: F2022/00226 22: 2022-03-02 23:  
43: 2023-03-15

52: Class 25 24: Part F

71: JCP ROOFING (PTY) LTD

#### **54: ROOF SHEET**

57: The features for which protection is claimed reside in the shape or configuration of a roof sheet which includes longitudinally extending ribs "X" and formations "A" and "B" on opposed longitudinal edges of the sheet, substantially as shown in the accompanying drawings. The number of ridges "Y" is variable.

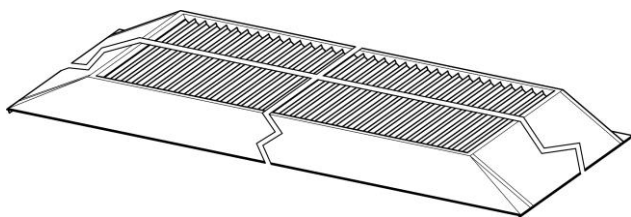


21: F2022/00466 22: 2022-04-29 23:  
43: 2023-02-01

52: Class 25 24: Part F  
71: FURISORE (PTY) LTD

**54: VENTILATOR**

57: The design is applied to a ventilator. The features of the design for which protection is claimed are those of the shape and/or configuration and/or pattern of the ventilator, substantially as illustrated in the accompanying representation.



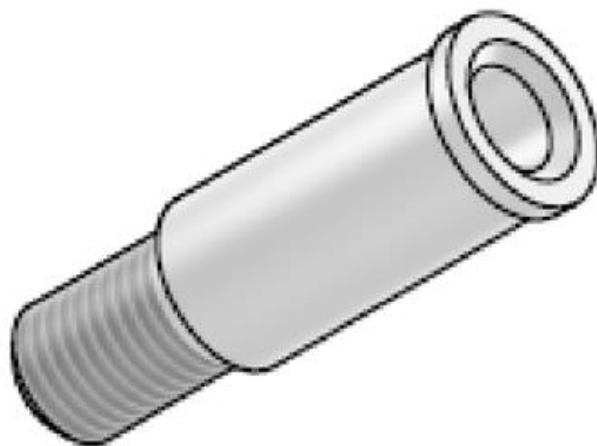
21: F2022/00469 22: 2022-05-03 23:  
43: 2023-02-08

52: Class 12 24: Part F  
71: AUSTRALIAN CONVEYOR COMPONENTS  
PTY LTD

33: AU 31: 202116756 32: 2021-11-03

**54: BOSS FOR A SCRAPER OF A CONVEYOR  
BELT CLEANING APPARATUS**

57: The design is applied to a boss for a scraper of a conveyor belt cleaning apparatus. The features of the design for which protection is claimed are those of the shape and/or configuration and/or pattern of the boss for a scraper of a conveyor belt cleaning apparatus, substantially as illustrated in the accompanying representation. Shading is provided to indicate the surface character but does not form part of the design and is disclaimed.

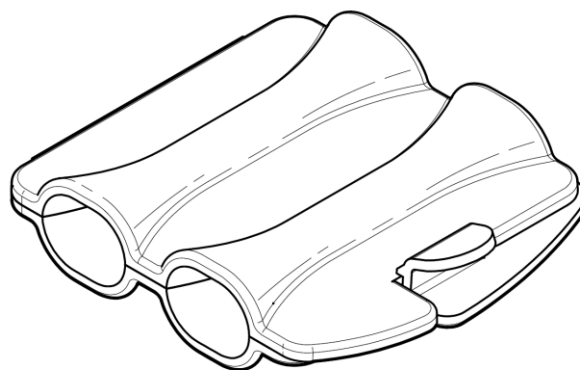


21: F2022/00619 22: 2022-06-02 23:  
43: 2023-01-19

52: Class 24 24: Part F  
71: HOLLIDAY, Daniel Mark

**54: ACCESSORY FOR AN INTRAVENOUS  
INFUSION SET**

57: The design relates to an accessory for an intravenous infusion set. The features of the design for which protection is claimed reside in the shape and/or configuration of the accessory, substantially as shown in the accompanying representations.

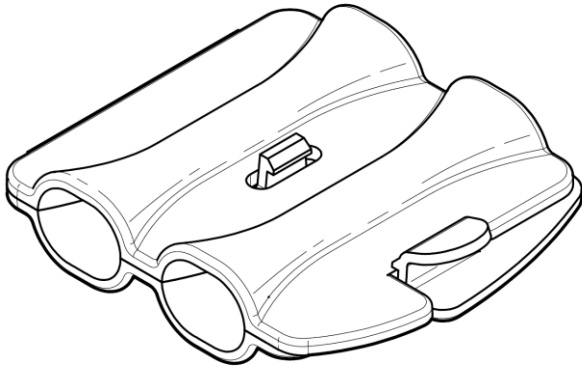


21: F2022/00620 22: 2022-06-02 23:  
43: 2023-01-19

52: Class 24 24: Part F  
71: HOLLIDAY, Daniel Mark

**54: ACCESSORY FOR AN INTRAVENOUS  
INFUSION SET**

57: The design relates to an accessory for an intravenous infusion set. The features of the design for which protection is claimed reside in the shape and/or configuration of the accessory, substantially as shown in the accompanying representations.



21: F2022/00621 22: 2022-06-02 23:

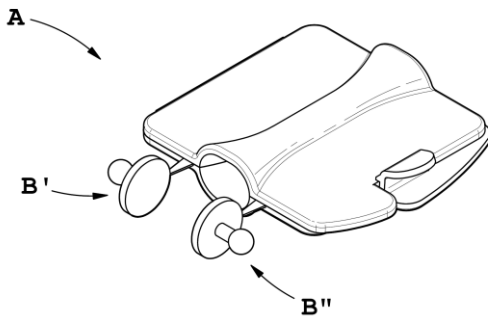
43: 2023-01-19

52: Class 24 24: Part F

71: HOLLIDAY, Daniel Mark

**54: ACCESSORY FOR AN INTRAVENOUS INFUSION SET**

57: The design relates to an accessory A for an intravenous infusion set. The features of the design for which protection is claimed reside in the shape and/or configuration of the accessory A, substantially as shown in the accompanying representations.



21: F2022/00622 22: 2022-06-02 23:

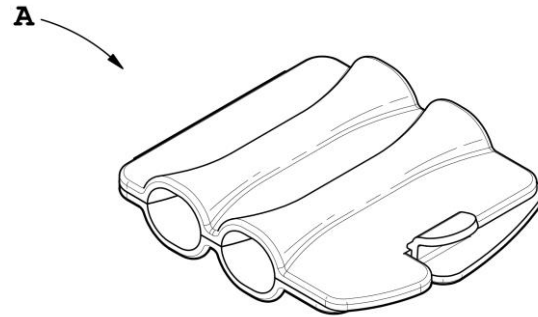
43: 2023-01-19

52: Class 24 24: Part F

71: HOLLIDAY, Daniel Mark

**54: ACCESSORY FOR AN INTRAVENOUS INFUSION SET**

57: The design relates to an accessory A for an intravenous infusion set. The features of the design for which protection is claimed reside in the shape and/or configuration of the accessory A, substantially as shown in the accompanying representations.



21: F2022/00623 22: 2022-06-02 23:

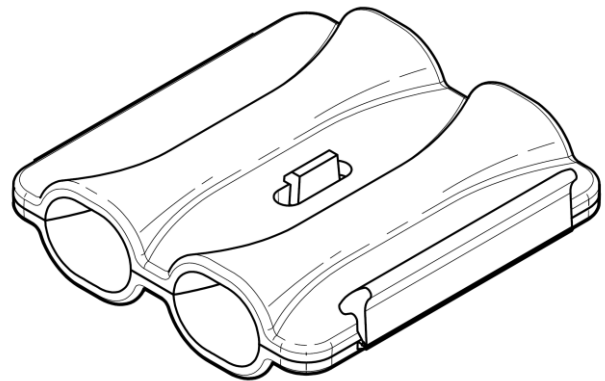
43: 2023-01-19

52: Class 24 24: Part F

71: HOLLIDAY, Daniel Mark

**54: ACCESSORY FOR AN INTRAVENOUS INFUSION SET**

57: The design relates to an accessory for an intravenous infusion set. The features of the design for which protection is claimed reside in the shape and/or configuration of the accessory, substantially as shown in the accompanying representations.



21: F2022/00630 22: 2022-06-07 23:

43: 2023-02-01

52: Class 9 24: Part F

71: GCS German Capsule Solution GmbH

33: EM 31: 008791818-0001 32: 2021-12-08

**54: CAPSULE**

57: The drawing shows a bottom perspective view of a capsule showing the overall appearance thereof.



21: F2022/00632 22: 2022-06-07 23:  
43: 2023-02-01  
52: Class 9 24: Part F  
71: GCS German Capsule Solution GmbH  
33: EM 31: 008791818-0002 32: 2021-12-08

**54: CAPSULE**

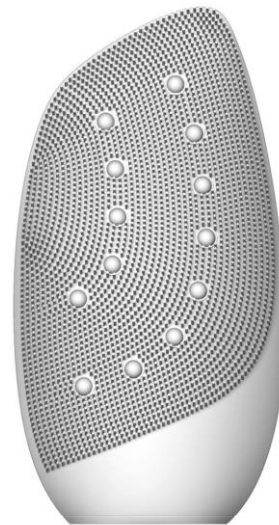
57: The drawing shows a bottom perspective view of a capsule showing the overall appearance thereof.



21: F2022/00759 22: 2022-06-30 23:  
43: 2023-01-12  
52: Class 28 24: Part F  
71: Triple A Finance GmbH & Co. KG  
33: WO 31: WIPO111814 32: 2021-12-30

**54: ANTI-WRINKLE APPLIANCES**

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).

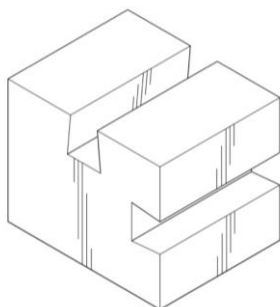


21: F2022/00838 22: 2022-07-27 23:  
43: 2023-02-07  
52: Class 22 24: Part F  
71: Obaro Handel (Pty) Ltd

**54: PORTABLE GUN RESTS**

57: The design is for a portable device used for providing a gun rest, more specifically a stable shooting support for aiming a rifle. The device comprises of a body in the form of a cube, of which two of the adjacent sides each include a straight groove, perpendicular to opposing peripheral edges of the body, of which the grooves are the full-length between the opposing peripheral edges and parallel to each other. The grooves are tapered towards an outer surface of the body, thereby defining a trapezium shaped groove. In use, a front portion of a rifle's stock is inserted into one of the grooves, which tapering allows for a snug fit of the rifle's stock therein and thereby preventing the rifle from being dislodged from the groove as a result of recoil.





Three-dimensional view of a portable gun rest in one orientation

21: F2022/00894 22: 2022-08-03 23:  
43: 2023-03-03  
52: Class 28 24: Part F  
71: Triple A Finance GmbH & Co. KG  
33: WO 31: DM/219,018 32: 2022-02-08

**54: ANTI-WRINKLE APPLIANCE**

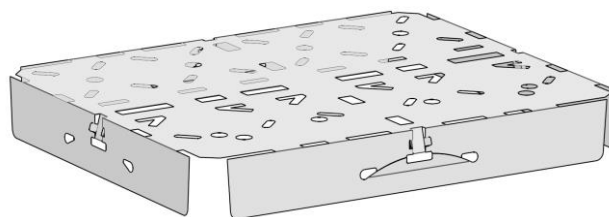
57: The features of the design for which protection is claimed include the shape and/or configuration and/or pattern of an article substantially as shown in the accompanying representation(s).



21: F2022/00898 22: 2022-08-04 23:  
43: 2023-03-03  
52: Class 09 24: Part F  
71: APL CARTONS (PTY) LTD

**54: PALLET TOP CAP**

57: The design is for a pallet top cap which includes a rectangular top wall and four flaps that extend downwards from edges of the top wall, but not in corner regions of the top wall, so that the top cap is corner-less. A securing tab is provided that holds each of the flaps in a perpendicular position relative to the top wall.



21: F2022/00899 22: 2022-08-05 23:

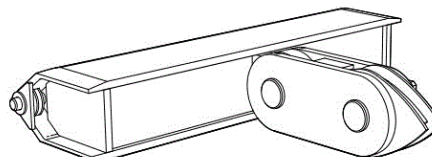
43: 2023-03-03

52: Class 12 24: Part F

71: CURRY, Simon Lodewikus, FRIESENECKER, Roland

**54: MECHANISM FOR A CONVEYOR BELT**

57: The design relates to a mechanism for a conveyor belt system. The features of the design for which protection is claimed reside in the shape and/or configuration of the mechanism substantially as illustrated in the accompanying representations.



FRONT PERSPECTIVE VIEW

21: F2022/00945 22: 2022-08-17 23:

43: 2023-03-03

52: Class 25 24: Part F

71: Juro Trading PTY LTD

**54: KIOSK**

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: F2022/00947 22: 2022-08-17 23:

43: 2023-03-03

52: Class 25 24: Part F

71: Juro Trading PTY LTD

**54: KIOSK ROOF**

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: F2022/00949 22: 2022-08-17 23:  
43: 2023-03-03  
52: Class 25 24: Part F  
71: Juro Trading PTY LTD

**54: KIOSK**

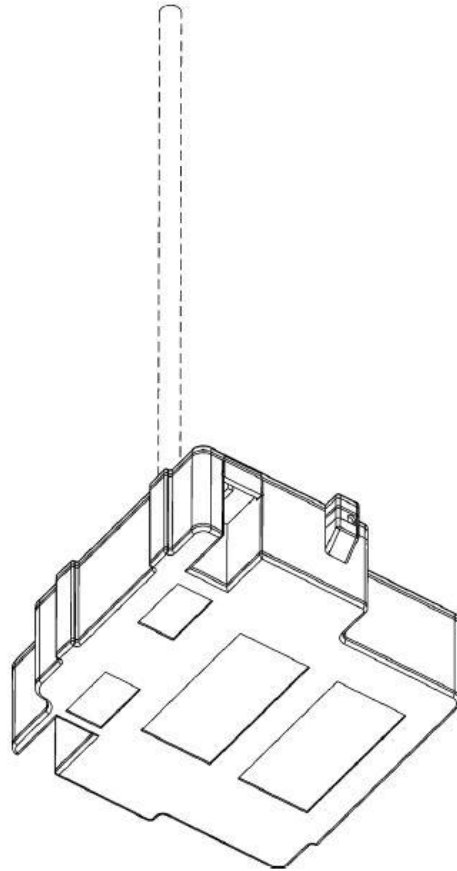
57: The features of the design for which protection is claimed include the shape and/or configuration and/or pattern of an article substantially as shown in the accompanying representation(s).



21: F2022/00962 22: 2022-08-18 23:  
43: 2023-03-09  
52: Class 10 24: Part F  
71: POWEROPTIMAL (PTY) LTD

**54: ENCLOSURE FOR A THERMOSTAT**

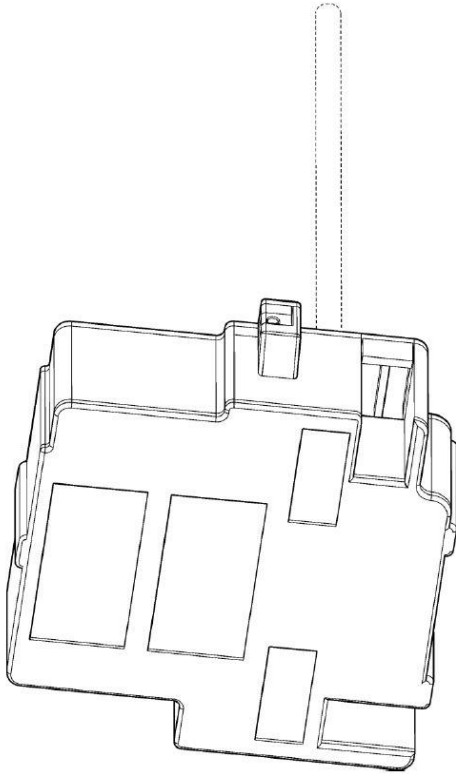
57: The design is applied to an enclosure for a thermostat. The features of the design for which protection is claimed are those of the shape and/or configuration of the enclosure for a thermostat, substantially as illustrated in the accompanying representation. Features shown in broken lines do not form part of the design and are disclaimed.



21: F2022/00963 22: 2022-08-18 23:  
43: 2023-03-09  
52: Class 10 24: Part F  
71: POWEROPTIMAL (PTY) LTD

**54: ENCLOSURE FOR A THERMOSTAT**

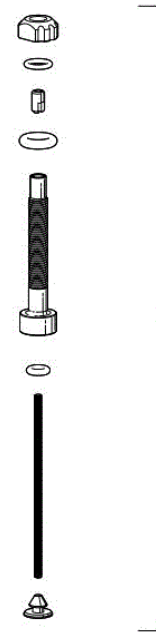
57: The design is applied to an enclosure for a thermostat. The features of the design for which protection is claimed are those of the shape and/or configuration of the enclosure for a thermostat, substantially as illustrated in the accompanying representation. Features shown in broken lines do not form part of the design and are disclaimed.



21: F2022/00969 22: 2022-08-19 23:  
43: 2023-03-09  
52: Class 12 24: Part F  
71: JUTERBOCK, Udo

**54: NOVEL VALVE**

57: The design relates to a valve for a tyre. The features of the design for which protection is claimed reside in the shape and/or configuration of the valve substantially as illustrated in the accompanying representations.

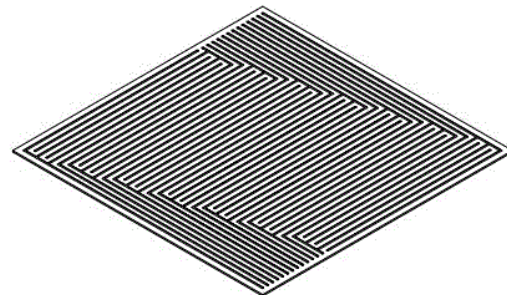


EXPLODED PERSPECTIVE VIEW  
ARTICLE IN A TYPICAL ASSEMBLY SET

21: F2022/00989 22: 2022-08-26 23:  
43: 2023-03-09  
52: Class 13 24: Part F  
71: North-West University

**54: BIPOLAR PLATE**

57: The features of the design for which protection is claimed include the shape and/or pattern and/or configuration of a bipolar plate having a flow field disposed on an operative side of the plate substantially as illustrated in the accompanying representations. The underside, marked A, of the bipolar plate may include a flow field which is a replica or similar flow field (shown in broken lines in one of the figures) to that of the flow field on the topside or may have no flow field. The underside of the bipolar plate as well as the thickness of the plate do not form part of the design and may be adapted.



TOP PERSPECTIVE VIEW

21: F2022/00990 22: 2022-08-26 23:

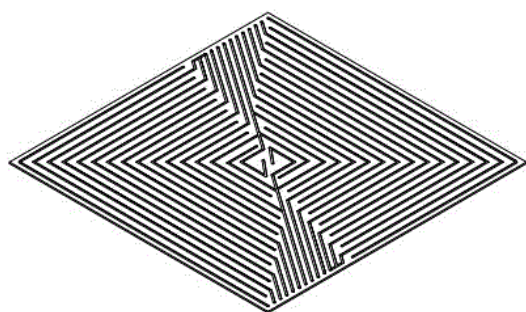
43: 2023-03-09

52: Class 13 24: Part F

71: North-West University

#### **54: BIPOLAR PLATE**

57: The features of the design for which protection is claimed include the shape and/or pattern and/or configuration of a bipolar plate having a flow field disposed on an operative side of the plate substantially as illustrated in the accompanying representations. The underside, marked A, of the bipolar plate may include a flow field which is a replica or similar flow field (shown in broken lines in one of the figures) to that of the flow field on the topside or may have no flow field. The underside of the bipolar plate as well as the thickness of the plate do not form part of the design and may be adapted.



TOP PERSPECTIVE VIEW

21: F2022/00993 22: 2022-08-26 23:

43: 2023-03-03

52: Class 12 24: Part F

71: Juro Trading PTY LTD

#### **54: VENDING TROLLEY**

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: F2022/01106 22: 2022-09-19 23:

43: 2023-04-13

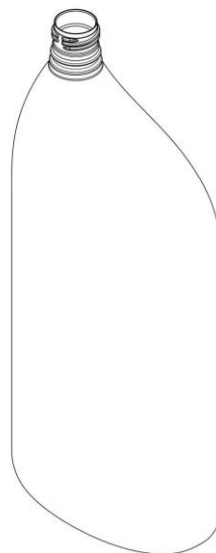
52: Class 09 24: Part F

71: ALPLA Werke Alwin Lehner GmbH & Co. KG

33: CH 31: 146770 32: 2022-05-06

#### **54: BOTTLE**

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: F2022/01110 22: 2022-09-19 23:

43: 2023-04-13

52: Class 09 24: Part F

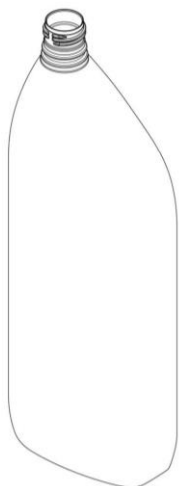
71: ALPLA Werke Alwin Lehner GmbH & Co. KG

33: CH 31: 146770 32: 2022-05-06

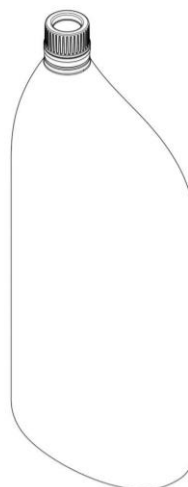
#### **54: BOTTLE**

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).





and/or pattern of an article substantially as shown in the accompanying representation(s).



21: F2022/01112 22: 2022-09-19 23:  
43: 2023-04-13

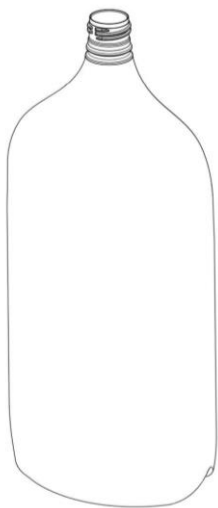
52: Class 09 24: Part F

71: ALPLA Werke Alwin Lehner GmbH & Co. KG

33: CH 31: 146770 32: 2022-05-06

**54: BOTTLE**

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: F2022/01116 22: 2022-09-19 23:  
43: 2023-04-13

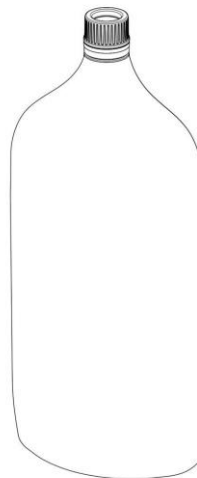
52: Class 09 24: Part F

71: ALPLA Werke Alwin Lehner GmbH & Co. KG

33: CH 31: 146770 32: 2022-05-06

**54: BOTTLE**

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: F2022/01114 22: 2022-09-19 23:  
43: 2023-04-13

52: Class 09 24: Part F

71: ALPLA Werke Alwin Lehner GmbH & Co. KG

33: CH 31: 146770 32: 2022-05-06

**54: BOTTLE**

57: The features of the design for which protection is claimed include the shape and/or configuration

21: F2022/01118 22: 2022-09-19 23:  
43: 2023-04-13

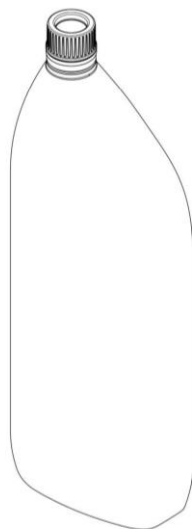
52: Class 09 24: Part F

71: ALPLA Werke Alwin Lehner GmbH & Co. KG

33: CH 31: 146770 32: 2022-05-07

**54: BOTTLE**

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).

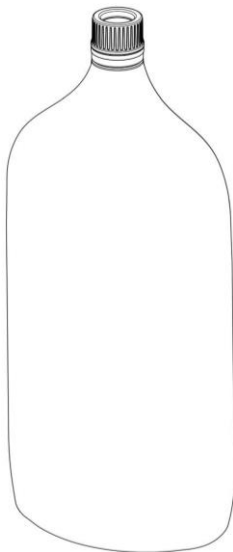


21: F2022/01120 22: 2022-09-19 23:  
43: 2023-04-13

52: Class 09 24: Part F  
71: ALPLA Werke Alwin Lehner GmbH & Co. KG  
33: CH 31: 146770 32: 2022-05-06

**54: BOTTLE**

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: F2023/00290 22: 2023-02-28 23:  
43: 2023-04-04

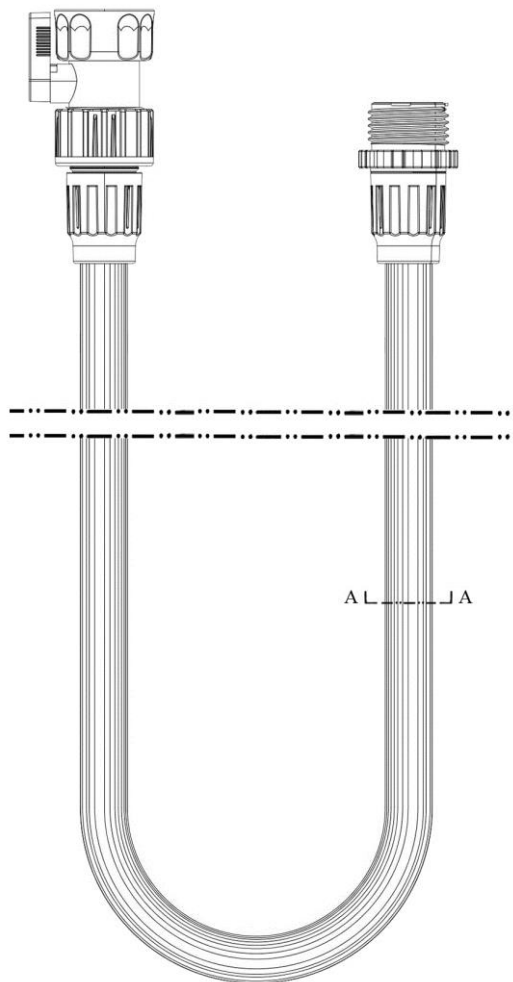
52: Class 23 24: Part F

71: Yangjiang New Sports Technology Products Co., Ltd., Shenzhen Kareeme Sports Products Manufacturing Co., Ltd.

33: CN 31: 2022305821151 32: 2022-09-02

**54: WATER HOSE**

57: The design relates to a Water Hose. The features of the design are those of shape and/or configuration.



**HYPOTHECATIONS**

No records available

**JUDGMENTS**

No records available

**OFFICE PRACTISE NOTICES**

No records available

## 4. COPYRIGHT



## COPYRIGHT IN CINEMATOGRAPH FILMS

## NOTICES OF ACCEPTANCE

**(Applications filed in terms of Act No. 62 of 1977)**

Any person, who has grounds for objection to the registration of the copyright in any of the following cinematographs films, may within the prescribed time, lodge Notice of Opposition on Form RF 5 contained in the Second Schedule to the Registration of Copyright in Cinematograph Films Regulations, 1980. The prescribed time is one month after the date of advertisement. This period may on application be extended by the Registrar.

The numerical denote the following: **(21)** Official application number. **(22)** Date of application. **(43)** Date of acceptance. **(24)** Date(s) and place(s) at which cinematograph films was made. **(25)** Date and place of first publication. **(71)** Name (s) of all applicant (s). **(75)** Name of author. **(76)** Name of producer **(77)** Name of director **(54)** Title of cinematograph film. **(78)** Name(s) of principal players or narrator. **(26)** Places at which cinematograph film may be viewed and conditions. **(55)** Specimen lodged/Not lodged. **(56)** Preview requested/Not requested. **(57)** Abstract (Storyline). **(58)** Category.

No records available

## HYPOTHECATIONS

No records available

## JUDGMENTS

No records available

## OFFICE PRACTISE NOTICES

No records available

## 5. CORRECTION NOTICES

## TRADE MARK CORRECTION NOTICES

No records available

## PATENT CORRECTION NOTICES

The patent restoration under patent application no: **2017/04924** was advertised in the **March 2023 patent journal** with an incorrect lapsed date and the restoration should have appeared as the one below and the opposition period will still run from the originally published journal which is the **29 March 2023**.

Notice is hereby given that **EASYSODA FINLAND Oy**, whose address for service is **SPOOR & FISHER, CENTURION, PRETORIA** has applied to the registrar for the restoration of Patent No: **2017/04924** entitled **A CAP AND A METHOD FOR MAKING A BEVERAGE**, dated **07/12/2015**, which lapsed on **28/4/2021** owing to the non-payment of the prescribed renewal fee.

Any person may oppose the restoration of the patent by lodging form P19 within two months of the date of this advertisement

The patent restoration under patent application no: **2015/08822** was advertised in the March 2023 patent journal with an incorrect lapsed date and the restoration should have appeared as the one below and the opposition period will still run from the originally published journal which is the **29 March 2023**.

Notice is hereby given that **INTERDIGITAL VC HOLDINGS, INC**, whose address for service is **SPOOR & FISHER, CENTURION, PRETORIA** has applied to the registrar for the restoration of Patent No: **2015/08822** entitled **METHOD FOR ENCODING AND METHOD FOR DECODING A COLOUR TRANSFORM AND CORRESPONDING DEVICES**, dated **10/07/2014**, which lapsed on **27/11/2020** owing to the non-payment of the prescribed renewal fee.

Any person may oppose the restoration of the patent by lodging form P19 within two months of the date of this advertisement

The patent under application no: **2022/10722** was advertised in the March 2023 journal containing an error which an inventor appeared as an Applicant and this publication should have appeared as the one below and the publication date will remain the **29/03/2023**.

21: 2022/10722. 22: 2022/09/28. 43: 2023/03/16

51: H02J

71: Electric Power Research Institute of Guangxi Power Grid Co., Ltd

72: XIAO, Jing; WU, Xiaorui; GONG, Wenlan; WU, Ning; CHEN, Shaonan; YIN, Liquan; MO, Yuhong; HAN, Shuai; CHEN, Weidong; GAO, Like; ZHUO, Haoze; ZHANG, Longfei; LIANG, Shuiying; GUO, Min; GUO, Xiaoxuan

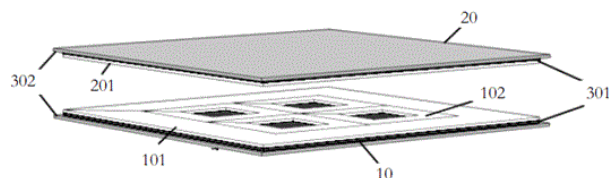
33: CN 31: 202110951828.5 32: 2021-08-19

#### **54: ANTI-OFFSET COUPLING MECHANISM FOR WIRELESS CHARGING**

00: -

The invention belongs to the technical field of wireless power transmission, and particularly relates to an anti-offset coupling mechanism for wireless charging which comprising a transmitting end mechanism and a receiving end mechanism; wherein the transmitting end mechanism comprises an energy transmitting coil and a transmitting end resonance compensation network; the transmitting end resonance compensation network comprises a transmitting end compensation coil; the receiving end mechanism comprises an energy receiving coil and a receiving end resonance compensation network which comprises a receiving end compensation coil; in the present invention compensation inductance is integrated into the energy transmission coil without interfering with each other; even if relative positions of the energy transmitting coil and the energy receiving coil have a certain

degree of deviation and are not perfectly aligned, the function of the energy transmitting coil transmitting energy to the energy receiving coil can also be well realized, and the anti-offset capability of the coupling mechanism is improved, and system characteristics basically remain unchanged within a certain offset range; and the compensation inductance and the energy transmission coil are decoupled from each other, so that the problem of the mutual interferences is solved and constant current output of topology is promised.



The notice of acceptance of South African Patent Application No. **2019/06201**, in the name of **OY HALTON GROUP LTD**, was erroneously published in the Patent Journal of 26 May 2021. Therefore its publication in the Patent Journal of 26 May 2021 is **null and void**.

### DESIGNS CORRECTION NOTICES

No records available

### COPYRIGHT CORRECTION NOTICES

No records available



## PATENTS

## Advertisement List for April 2023

Number of Advertised Patents: 805

| Application Number | Patent Title                                                                                                                                                                    | Filing Date |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 2007/10975         | METHODS AND COMPOSITIONS FOR THE TREATMENT OF PERSISTENT INFECTIONS AND CANCER BY INHIBITING THE PROGRAMMED CELL DEATH 1 (PD-1) PATHWAY                                         | 2007/12/18  |
| 2008/02500         | MODIFIED ANTIGEN BINDING MOLECULES WITH ALTERED CELL SIGNALING ACTIVITY                                                                                                         | 2008/03/18  |
| 2011/08275         | RESPIRATORY DELIVERY OF ACTIVE AGENTS                                                                                                                                           | 2011/11/10  |
| 2013/01611         | ROCK BOLT                                                                                                                                                                       | 2013/03/04  |
| 2015/00247         | MONOCLONAL ANTIBODIES FOR USE IN DIAGNOSIS AND THERAPY OF CANCERS AND AUTOIMMUNE DISEASE                                                                                        | 2015/01/14  |
| 2015/06602         | SALTS FORMS OF (S)-QUINUCIDIN-3-YL (2-(2-(4-FLUOROPHENYL)THIAZOL-4-YL)PROPAN-2-YL)CARBAMATE                                                                                     | 2015/09/07  |
| 2016/05027         | BENZODIAZEPINE DERIVATIVES, COMPOSITIONS, AND METHODS FOR TREATING COGNITIVE IMPAIRMENT                                                                                         | 2016/07/19  |
| 2016/05859         | APPARATUS FOR HEATING SMOKABLE MATERIAL                                                                                                                                         | 2016/08/23  |
| 2016/08744         | SODIUM (2R, 5S, 13AR) -7, 9-DIOXO-10- ( (2,4,6-TRIFLUOROBENZYL) CARBAMOYL) -2, 3, 4, 5, 7, 9, 13, 13A-OCTAHYDRO-2, 5-METHANOPYRIDO [1,2-b:4,5-pyrazino [2,1-b] oxazepin-8-olate | 2016/12/19  |
| 2017/01663         | ANTI-IL-25 ANTIBODIES AND USES THEREOF                                                                                                                                          | 2017/03/08  |
| 2017/06734         | METHODS AND COMPOSITIONS FOR PRODUCING BRACHYTIC CORN PLANTS                                                                                                                    | 2017/10/06  |
| 2018/04275         | ORAL PHARMACEUTICAL COMPOSITION COMPRISING TASTE-MASKED N-ACETYL CYSTEINE                                                                                                       | 2018/06/26  |
| 2018/05078         | METHOD AND SYSTEM FOR EFFICIENT TRANSFER OF CRYPTOCURRENCY ASSOCIATED                                                                                                           | 2018/07/27  |

| Application Number | Patent Title                                                                                                        | Filing Date |
|--------------------|---------------------------------------------------------------------------------------------------------------------|-------------|
|                    | WITH A PAYROLL ON A BLOCKCHAIN THAT LEADS TO AN AUTOMATED PAYROLL METHOD AND SYSTEM BASED ON SMART CONTRACTS        |             |
| 2018/05903         | GLIDE MODULATOR SYSTEM AND METHOD FOR A RAM AIR PARACHUTE                                                           | 2018/09/03  |
| 2018/06401         | SEALING ARRANGEMENT FOR ADJUSTABLE ELEMENTS OF A PUMP                                                               | 2018/09/26  |
| 2018/06597         | ILT7 BINDING MOLECULES AND METHODS OF USING THE SAME                                                                | 2018/10/04  |
| 2018/06767         | RECOMBINANT INTRAVENOUS IMMUNOGLOBULIN (RIVIG) COMPOSITIONS AND METHODS FOR THEIR PRODUCTION AND USE                | 2018/10/11  |
| 2018/06807         | METHOD FOR THE TREATMENT OR PREVENTION OF OSTEOARTHRITIS                                                            | 2018/10/12  |
| 2018/07089         | IMPLEMENTING LOGIC GATE FUNCTIONALITY USING A BLOCKCHAIN                                                            | 2018/10/24  |
| 2018/07221         | COLPOSCOPES AND MAMMOSCOPES HAVING CURVED ENDS AND FLAT ENDS, ASSOCIATED METHODS, AND SPECULUM-FREE IMAGING METHODS | 2018/10/29  |
| 2018/07767         | ANGIOTENSIN-1-RECEPTOR ANTAGONISTS                                                                                  | 2018/11/19  |
| 2018/07770         | SOLID CLEANSING COMPOSITIONS WITH TAURINE AND METHODS THEREOF                                                       | 2018/11/19  |
| 2018/07771         | ORAL CARE COMPOSITIONS                                                                                              | 2018/11/19  |
| 2018/08628         | HYBRID DC CIRCUIT BREAKER                                                                                           | 2018/12/20  |
| 2019/00019         | PHARMACEUTICAL COMBINATIONS                                                                                         | 2019/01/02  |
| 2019/00121         | OPTICALLY ACTIVE PYRANOCHROMENYL PHENOL DERIVATIVE AND PHARMACEUTICAL COMPOSITION COMPRISING SAME                   | 2019/01/08  |
| 2019/00150         | INHIBITORS OF THE MENIN-MLL INTERACTION                                                                             | 2019/01/09  |
| 2019/00181         | MULTISPECIFIC ANTIGEN BINDING PROTEINS AND METHODS OF USE THEREOF                                                   | 2019/01/10  |
| 2019/00474         | COMPOSITION AND METHOD FOR TREATING AND REMEDIATING AQUEOUS WASTE STREAMS                                           | 2019/01/23  |
| 2019/00507         | SOLUBLE FIBROBLAST GROWTH FACTOR RECEPTOR 3 (SFGFR3) POLYPEPTIDES AND USES                                          | 2019/01/24  |

| Application Number | Patent Title                                                                           | Filing Date |
|--------------------|----------------------------------------------------------------------------------------|-------------|
|                    | THEREOF                                                                                |             |
| 2019/00697         | BEVERAGE DISPENSING ASSEMBLY AND BEVERAGE CONTAINER                                    | 2019/02/01  |
| 2019/00790         | SOLID HERBICIDAL CONCENTRATE COMPOSITIONS                                              | 2019/02/07  |
| 2019/00791         | A BIOPESTICIDE                                                                         | 2019/02/07  |
| 2019/00858         | METHODS OF TREATING CANCER PATIENTS WITH FARNESYL TRANSFERASE INHIBITORS               | 2019/02/11  |
| 2019/00931         | GERMANIUM-68 SOURCE MATERIAL AND CALIBRATION DEVICES THAT INCLUDE SUCH SOURCE MATERIAL | 2019/02/13  |
| 2019/00939         | COMBINATION TREATMENT FOR HEMATOLOGICAL CANCERS                                        | 2019/02/13  |
| 2019/01227         | SELECTIVE CATALYTIC REDUCTION ARTICLES AND SYSTEMS                                     | 2019/02/26  |
| 2019/01364         | ENDOSCOPIC DEVICE                                                                      | 2019/03/05  |
| 2019/03603         | FLOW-GUIDING ROD, BUSHING AND CONVERTER TRANSFORMER SYSTEM                             | 2019/06/05  |
| 2019/03936         | POLYMORPHS                                                                             | 2019/06/18  |
| 2019/03946         | A METHOD FOR PREPARING A GROWTH FACTORS CONTAINING PLATELET RELEASATE                  | 2019/06/18  |
| 2019/04243         | AZIRIDINE SPINOSYN DERIVATIVES AND METHODS OF MAKING                                   | 2019/06/27  |
| 2019/04385         | COMPOSITION                                                                            | 2019/07/03  |
| 2019/04388         | PREHEATING OF MATERIAL IN AN ADDITIVE MANUFACTURING APPARATUS                          | 2019/07/03  |
| 2019/04458         | POTASSIUM CHANNEL MODULATORS                                                           | 2019/07/08  |
| 2019/04531         | MILL LINER INSTALLATION                                                                | 2019/07/10  |
| 2019/04614         | PHARMACEUTICAL COMBINATION COMPRISING A T-TYPE CALCIUM CHANNEL BLOCKER                 | 2019/07/15  |
| 2019/04654         | BENZIMIDAZOLE DERIVATIVES, PREPARATION METHODS AND USES THEREOF                        | 2019/07/16  |
| 2019/04670         | DISPENSER FOR SHEET PRODUCTS AND OPERATING METHOD                                      | 2019/07/15  |
| 2019/04851         | LOW-VOLTAGE CIRCUIT BREAKER DEVICE                                                     | 2019/07/24  |
| 2019/04852         | LOW-VOLTAGE CIRCUIT BREAKER DEVICE                                                     | 2019/07/24  |
| 2019/05078         | PROTEIN KINASE INHIBITORS FOR PROMOTING LIVER REGENERATION OR REDUCING OR              | 2019/07/31  |

| Application Number | Patent Title                                                                                            | Filing Date |
|--------------------|---------------------------------------------------------------------------------------------------------|-------------|
|                    | PREVENTING HEPATOCYTE DEATH                                                                             |             |
| 2019/05158         | A ROBOT                                                                                                 | 2019/08/05  |
| 2019/05306         | AEROSOL&#191;GENERATING SYSTEM WITH CASE                                                                | 2019/08/12  |
| 2019/05527         | AUTOMATIC BOW SIGHT                                                                                     | 2019/08/21  |
| 2019/05536         | METHODS FOR PROVIDING SINGLE-STRANDED RNA                                                               | 2019/08/22  |
| 2019/05781         | ROCK BOLT WITH ELONGATION MEASUREMENT MEANS                                                             | 2019/09/02  |
| 2019/06113         | PROCESS AND APPARATUS FOR ROASTING OF GOLD BEARING SULFIDE CONCENTRATE                                  | 2019/09/16  |
| 2019/06130         | PYRROLIDINONES AND A PROCESS TO PREPARE THEM                                                            | 2019/09/17  |
| 2019/06139         | COMPOSITION AND METHOD FOR STABILIZING NUCLEIC ACIDS IN BIOLOGICAL SAMPLES                              | 2019/09/17  |
| 2019/06377         | INDAZOLE INHIBITORS OF THE WNT SIGNAL PATHWAY AND THERAPEUTIC USES THEREOF                              | 2019/09/27  |
| 2019/06431         | A DEVICE FOR SLOW RELEASE OF FLUIDS IN A UNIFORM MANNER                                                 | 2019/09/30  |
| 2019/06437         | A MODULAR CONVEYANCE SYSTEM                                                                             | 2019/09/30  |
| 2019/06556         | GRINDING MILL, PULP LIFTER AND OUTER PULP LIFTER ELEMENT                                                | 2019/10/04  |
| 2019/06647         | DECODING AUDIO BITSTREAMS WITH ENHANCED SPECTRAL BAND REPLICATION METADATA IN AT LEAST ONE FILL ELEMENT | 2019/10/09  |
| 2019/06683         | PEPTIDE VACCINE FOR PREVENTION AND IMMUNOTHERAPY OF DEMENTIA OF THE ALZHEIMER&#39;S TYPE                | 2019/10/10  |
| 2019/06730         | ANTI-TREM2 ANTIBODIES AND METHODS OF USE THEREOF                                                        | 2019/10/11  |
| 2019/06731         | ANTI-SORTILIN ANTIBODIES AND METHODS OF USE THEREOF                                                     | 2019/10/11  |
| 2019/06762         | THERAPEUTIC OR PROPHYLACTIC AGENT FOR PERIPHERAL NEUROPATHIES                                           | 2019/10/14  |
| 2019/06836         | SHORT PENDANT ARM LINKERS FOR NUCLEOTIDES IN SEQUENCING APPLICATIONS                                    | 2019/10/16  |
| 2019/07390         | HYDROGELS AS RHEOLOGY MODIFIERS AND METHODS OF MAKING THE SAME                                          | 2019/11/07  |
| 2019/07405         | ZINC OXIDE-BASED SORBENTS USING ALKALI METAL HYDROXIDES AND PROCESSES FOR PREPARING AND USING SAME      | 2019/11/07  |
| 2019/07461         | ALPHAVIRUS NEOANTIGEN                                                                                   | 2019/11/11  |

| Application Number | Patent Title                                                                                                          | Filing Date |
|--------------------|-----------------------------------------------------------------------------------------------------------------------|-------------|
|                    | VECTORS                                                                                                               |             |
| 2019/07486         | HELMET                                                                                                                | 2019/11/12  |
| 2019/07487         | COMPOSITIONS AND TREATMENT PROCEDURES FOR THE TREATMENT OF PATHOGENIC INFECTIONS                                      | 2019/11/12  |
| 2019/07491         | ADHESIVE                                                                                                              | 2019/11/12  |
| 2019/07524         | ANTI TRBC1 ANTIGEN BINDING DOMAINS                                                                                    | 2019/11/13  |
| 2019/07570         | CARTRIDGE ASSEMBLY                                                                                                    | 2019/11/15  |
| 2019/07687         | SALT OF AN AMINOPYRIDINE DERIVATIVE COMPOUND, A CRYSTALLINE FORM THEREOF, AND A PROCESS FOR PREPARING THE SAME        | 2019/11/20  |
| 2019/07710         | 4-AMINO-6-(HETEROCYCLIC)PICOLINATES AND 6-AMINO-2-(HETEROCYCLIC)PYRIMIDINE-4-CARBOXYLATES AND THEIR USE AS HERBICIDES | 2019/11/21  |
| 2019/07981         | MORPHIC FORMS OF G1T38 AND METHODS OF MANUFACTURE THEREOF                                                             | 2019/11/29  |
| 2019/08071         | PHARMACOKINETIC ENHANCEMENTS OF BIFUNCTIONAL CHELATES AND USES THEREOF                                                | 2019/12/04  |
| 2019/08072         | IGF-1R MONOCLONAL ANTIBODIES AND USES THEREOF                                                                         | 2019/12/04  |
| 2019/08075         | METHOD FOR THE PREPARATION OF AMMONIA SYNTHESIS GAS                                                                   | 2019/12/04  |
| 2019/08115         | METHOD FOR IMPROVING EFFICIENCY OF AN AMMONIA SYNTHESIS GAS PLANT                                                     | 2019/12/05  |
| 2019/08175         | PROCESS FOR THE CO-PRODUCTION OF METHANOL AND AMMONIA                                                                 | 2019/12/09  |
| 2019/08177         | CO-EXPRESSION OF HUMAN CHAPERONE PROTEINS IN PLANTA FOR INCREASED EXPRESSION OF HETEROLOGOUS POLYPEPTIDES OF INTEREST | 2019/12/09  |
| 2019/08181         | STRUCTURE AND METHOD TO USE ACTIVE SURFACE OF A SENSOR                                                                | 2019/12/09  |
| 2019/08183         | METHOD FOR THE PREPARATION OF SYNTHESIS GAS                                                                           | 2019/12/09  |
| 2019/08216         | PROCESS FOR THE CO-PRODUCTION OF METHANOL AND AMMONIA IN PARALLEL                                                     | 2019/12/10  |
| 2019/08325         | METHODS OF IDENTIFYING NOVEL DOSING REGIMENS                                                                          | 2019/12/12  |



| Application Number | Patent Title                                                                                                                                                                      | Filing Date |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 2019/08359         | REVERSIBLE LIFT SPRING FOR RAISING AND LOWERING A MEDICAL BED FIFTH WHEEL                                                                                                         | 2019/12/13  |
| 2019/08403         | FUNCTIONALIZED SUBSTRATE                                                                                                                                                          | 2019/12/17  |
| 2019/08409         | METHOD FOR THE PREPARATION OF SYNTHESIS GAS                                                                                                                                       | 2019/12/17  |
| 2019/08491         | ORAL CARE CLEANING SYSTEM UTILIZING ENTRAINED FLUID                                                                                                                               | 2019/12/19  |
| 2019/08605         | COMPOSITIONS AND METHODS OF USE OF 2-(4-CHLOROPHENYL)-N-((2-(2,6-DOXOPIPERIDIN-3-YL)-1-OXOISOINDOLIN-5-YL) METHYL) - 2,2-DIFLUOROACETAMIDE                                        | 2019/12/23  |
| 2020/00904         | MPO INHIBITORS FOR USE IN MEDICINE                                                                                                                                                | 2020/02/12  |
| 2020/00926         | A PIPE FITTING AND METHOD OF JOINING PIPES                                                                                                                                        | 2020/02/13  |
| 2020/01028         | THIN OPTICAL SECURITY ELEMENT AND METHOD OF DESIGNING IT                                                                                                                          | 2020/02/18  |
| 2020/01080         | PRIORITIZED RANDOM ACCESS PROCEDURE                                                                                                                                               | 2020/02/20  |
| 2020/01105         | OPTICAL SECURITY ELEMENT                                                                                                                                                          | 2020/02/21  |
| 2020/01219         | BCMA MONOCLONAL ANTIBODY-DRUG CONJUGATE                                                                                                                                           | 2020/02/26  |
| 2020/01248         | NOVEL INTERMEDIATES USEFUL FOR THE SYNTHESIS OF AMINOPYRIMIDINE DERIVATIVES, PROCESS FOR PREPARING THE SAME, AND PROCESS FOR PREPARING AMINOPYRIMIDINE DERIVATIVES USING THE SAME | 2020/02/27  |
| 2020/01250         | IMPROVED PROCESS FOR PREPARING AMINOPYRIMIDINE DERIVATIVES                                                                                                                        | 2020/02/27  |
| 2020/01300         | NOVEL COMPOSITION                                                                                                                                                                 | 2020/02/28  |
| 2020/01302         | BUS ARRANGEMENT FOR A TUBULAR ELECTRIC HEATING ELEMENT ASSEMBLY                                                                                                                   | 2020/02/28  |
| 2020/01600         | METHOD FOR THE SAFE INDUCTION OF IMMUNITY AGAINST RSV                                                                                                                             | 2020/03/13  |
| 2020/01722         | NOVEL COMPOSITION                                                                                                                                                                 | 2020/03/18  |
| 2020/02172         | PDE9 INHIBITOR AND USE THEREOF                                                                                                                                                    | 2020/05/04  |
| 2020/02623         | COMPUTER-IMPLEMENTED SYSTEM AND METHOD FOR PROPAGATION AND COMMUNICATION OF DATA IN A NETWORK SUCH AS A BLOCKCHAIN NETWORK                                                        | 2020/05/11  |
| 2020/02690         | RAKING RAIL PANEL AND BRACKET SYSTEM AND METHOD                                                                                                                                   | 2020/05/12  |

| Application Number | Patent Title                                                                                                            | Filing Date |
|--------------------|-------------------------------------------------------------------------------------------------------------------------|-------------|
| 2020/02837         | METHODS FOR BEAM DETERMINATION AFTER BEAM PAIR LINK INDICATION                                                          | 2020/05/15  |
| 2020/03132         | QUICK-ACTING INSULIN FORMULATION INCLUDING A SUBSTITUTED ANIONIC COMPOUND                                               | 2020/05/27  |
| 2020/03198         | PARTICULATE CARBON MATERIAL PRODUCIBLE FROM RENEWABLE RAW MATERIALS AND METHOD FOR ITS PRODUCTION                       | 2020/05/29  |
| 2020/03727         | DRONE TRAFFIC MANAGEMENT SYSTEM AND METHOD                                                                              | 2020/06/19  |
| 2020/04208         | CODING OF A CELLULOSE PRODUCT                                                                                           | 2020/07/09  |
| 2020/04210         | MOLDED BODY WHICH HAS ELASTANE INCORPORATED INTO CELLULOSE, AND PRODUCTION METHOD                                       | 2020/07/09  |
| 2020/04935         | METHODS FOR ALTERING BODY COMPOSITION                                                                                   | 2020/08/11  |
| 2020/05741         | METHODS FOR IMPROVING CELL VIABILITY IN A PRODUCTION BIOREACTOR                                                         | 2020/09/16  |
| 2020/06065         | COMPUTER IMPLEMENTED METHOD AND SYSTEM FOR TRANSFERRING ACCESS TO A DIGITAL ASSET                                       | 2020/09/30  |
| 2020/06569         | METHODS OF TREATING FUNGAL INFECTIONS                                                                                   | 2020/10/22  |
| 2020/06604         | METHOD FOR SELECTION OF HIGH M6P RECOMBINANT PROTEINS                                                                   | 2020/10/23  |
| 2020/06646         | PUMP ASSEMBLY                                                                                                           | 2020/10/26  |
| 2020/06730         | METHODS OF OVERMOLDING SOFTER MATERIAL WITH HARDER MATERIAL AND MOISTURE TIGHT CONTAINER ASSEMBLIES MADE BY THE METHODS | 2020/10/28  |
| 2020/06737         | ANTI-SIRPA ANTIBODIES AND METHODS OF USE THEREOF                                                                        | 2020/10/28  |
| 2020/06899         | RESEALABLE COVER FOR A BEVERAGE CONTAINER                                                                               | 2020/11/05  |
| 2020/06904         | ANTI-IL-4R ANTIBODY AND USE THEREOF                                                                                     | 2020/11/05  |
| 2020/06988         | COMPOSITION FOR SUPPORTING ANIMAL WITH CANCER                                                                           | 2020/11/10  |
| 2020/06989         | A PROCESS FOR START-UP OF THE HYDRODESULFURIZATION SECTION OF A NATURAL GAS FIRED REFORMER                              | 2020/11/10  |
| 2020/07039         | EVAPORATOR FOR AMBIENT WATER BODIES, AND RELATED                                                                        | 2020/11/11  |

| Application Number | Patent Title                                                                                  | Filing Date |
|--------------------|-----------------------------------------------------------------------------------------------|-------------|
|                    | SYSTEM AND METHOD                                                                             |             |
| 2020/07046         | EVAPORATOR FOR AMBIENT WATER BODIES, AND RELATED SYSTEM AND METHOD                            | 2020/11/11  |
| 2020/07047         | IMPELLER FOR AMBIENT WATER EVAPORATORS, AND RELATED SYSTEM AND METHOD                         | 2020/11/11  |
| 2020/07234         | HEAD SUPPORT ASSEMBLY AND SUPPORT UNIT                                                        | 2020/11/19  |
| 2020/07259         | BISPECIFIC ANTIBODY AGAINST RABIES VIRUS, AND APPLICATION THEREOF                             | 2020/11/20  |
| 2020/07287         | LUMINESCENT DIAMOND MATERIAL AND METHOD OF PRODUCING THE SAME                                 | 2020/11/23  |
| 2020/07447         | SYSTEM AND METHOD FOR MONITORING PROCESS WATER TREATED WITH A BIOCIDES USING AN OXYGEN SENSOR | 2020/11/30  |
| 2020/07621         | SYSTEM AND METHOD FOR ANALYSING A SURFACE THAT IS SUBJECT TO WEAR                             | 2020/12/07  |
| 2020/07683         | METHOD FOR ENCODING/DECODING TEXTURE OF POINTS OF A POINT CLOUD                               | 2020/12/09  |
| 2020/07838         | POLYMERASES, COMPOSITIONS, AND METHODS OF USE                                                 | 2020/12/15  |
| 2020/07841         | SEQUENCING METHODS USING NUCLEOTIDES WITH A 3'-AOM BLOCKING GROUP                             | 2020/12/15  |
| 2020/07842         | EXOCYCLIC AMINE-SUBSTITUTED COUMARIN COMPOUNDS AND THEIR USES AS FLUORESCENT LABELS           | 2020/12/15  |
| 2020/07958         | SCORPION VENOM BENZOQUINONE DERIVATIVES AND USES THEREOF                                      | 2020/12/18  |
| 2020/08011         | POLYETHER DERIVATIVES, USES, AND METHODS OF MAKING THE SAME                                   | 2020/12/22  |
| 2020/08045         | RNA-GUIDED NUCLEASES AND ACTIVE FRAGMENTS AND VARIANTS THEREOF AND METHODS OF USE             | 2020/12/22  |
| 2020/08062         | PHARMACEUTICALLY ACCEPTABLE SALTS OF SEPIAPTERIN                                              | 2020/12/23  |
| 2021/00071         | GENERAL AMYLOID INTERACTION MOTIF (GAIM)                                                      | 2021/01/05  |
| 2021/00217         | HEAT SHIELD FOR FOOTWEAR                                                                      | 2021/01/13  |
| 2021/00373         | THERAPEUTICALLY ACTIVE COMPOUNDS AND THEIR METHODS OF USE                                     | 2021/01/19  |

| Application Number | Patent Title                                                                                                                             | Filing Date |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 2021/00507         | EXPLOSIVE MATRIX MIXER AND DISPENSER                                                                                                     | 2021/01/25  |
| 2021/01246         | CD200R AGONIST ANTIBODIES AND USES THEREOF                                                                                               | 2021/02/24  |
| 2021/01314         | A HAIR EXTENSION STRIP                                                                                                                   | 2021/02/26  |
| 2021/01391         | LOW FREE 2-MERCAPTOETHANOL ESTER AND USES THEREOF                                                                                        | 2021/03/01  |
| 2021/01615         | AFRICAN SWINE FEVER VIRUS VACCINE                                                                                                        | 2021/03/10  |
| 2021/01715         | A SYSTEM AND METHOD FOR TRANSFORMING A CONTRACT INTO A DIGITAL CONTRACT                                                                  | 2021/03/15  |
| 2021/02613         | SYSTEM FOR FORECASTING WEAR AND A WEAR SENSOR                                                                                            | 2021/04/20  |
| 2021/02871         | PHARMACEUTICAL FORMULATION                                                                                                               | 2021/04/29  |
| 2021/02905         | ANTI-GALECTIN-9 ANTIBODIES AND USES THEREOF                                                                                              | 2021/04/30  |
| 2021/03442         | A HERBAL MEDICINE COMPOSITIONS FOR TREATMENT OF DENGUE AND THEIR PRODUCTION                                                              | 2021/05/20  |
| 2021/03704         | SYSTEM AND METHOD FOR MONITORING AGRICULTURAL HARVESTING CONTAINERS                                                                      | 2021/05/31  |
| 2021/03806         | DRILLING RIG MOUNTING SYSTEM                                                                                                             | 2021/06/03  |
| 2021/04251         | REMOTE LPWAN GATEWAY WITH BACKHAUL OVER A HIGH-LATENCY COMMUNICATION SYSTEM                                                              | 2021/06/21  |
| 2021/04592         | AEROSOL-GENERATING ARTICLE COMPRISING A HOLLOW TUBULAR SUPPORT ELEMENT                                                                   | 2021/07/01  |
| 2021/04655         | METHOD FOR PRODUCING A TEREPHTHALATE POLYESTER FROM A MONOMERIC MIXTURE COMPRISING A DIESTER                                             | 2021/07/05  |
| 2021/04703         | METHOD FOR PRODUCING A POLYESTER TEREPHTHALATE INCORPORATING A DEPOLYMERIZATION METHOD                                                   | 2021/07/06  |
| 2021/04821         | APPARATUS AND METHOD FOR ROASTING COFFEE BEANS                                                                                           | 2021/07/09  |
| 2021/04994         | COMPLEX OF GADOLINIUM AND A CHELATING LIGAND DERIVED FROM A DIASTEREOISOMERICALLY ENRICHED PCTA AND PREPARATION AND PURIFICATION PROCESS | 2021/07/15  |
| 2021/05372         | DESICCANT MANUFACTURING ARRANGEMENT                                                                                                      | 2021/07/29  |
| 2021/05478         | COMPOSITIONS FOR REPLACING CHEMICAL SURFACTANTS                                                                                          | 2021/08/02  |
| 2021/05623         | METHOD, DEVICE AND COMPUTER                                                                                                              | 2021/08/10  |

| Application Number | Patent Title                                                                                                                                        | Filing Date |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
|                    | READABLE MEDIUM FOR PAGING IN NEW RADIO SYSTEMS                                                                                                     |             |
| 2021/05637         | GUN BARREL MOUNTING AND GUN                                                                                                                         | 2021/08/10  |
| 2021/05654         | METHOD OF PRODUCING A BINDER-TOXIN FUSION PROTEIN IN A PLANT CELL OR A WHOLE PLANT                                                                  | 2021/08/05  |
| 2021/05838         | FLUID DRAINAGE DEVICE                                                                                                                               | 2021/08/16  |
| 2021/05848         | APPLICATOR FOR ORAL ADMINISTRATION OF A SWALLOWABLE OBJECT TO A PATIENT                                                                             | 2021/08/16  |
| 2021/05940         | DRUG DELIVERY SYSTEM                                                                                                                                | 2021/08/18  |
| 2021/05964         | COMPUTING SYSTEM PROVIDING BLOCKCHAIN-FACILITATED SEMANTIC INTEROPERABILITY BETWEEN MULTIPLE DISPARATE SYSTEMS OF RECORD (SORs) AND RELATED METHODS | 2021/08/19  |
| 2021/05976         | PHARMACEUTICAL DOSAGE FORM FOR APPLICATION TO MUCOUS MEMBRANES AND METHODS FOR PRODUCING SAME                                                       | 2021/08/19  |
| 2021/05981         | A LOW FREQUENCY OZONE GENERATOR                                                                                                                     | 2021/08/19  |
| 2021/06110         | METHOD AND SYSTEM FOR MINING                                                                                                                        | 2021/08/24  |
| 2021/06244         | IMAGE SIGNAL REPRESENTING A SCENE                                                                                                                   | 2021/08/27  |
| 2021/06250         | THERAPEUTIC USES OF DULAGLUTIDE                                                                                                                     | 2021/08/27  |
| 2021/06260         | MICROENCAPSULATED ACETAMIDE HERBICIDES                                                                                                              | 2021/08/27  |
| 2021/06277         | VACUUM EXPLOSION EXPERIMENT DEVICE                                                                                                                  | 2021/08/30  |
| 2021/06472         | BENZOTHIADIAZEPINE COMPOUNDS AND THEIR USE AS BILE ACID MODULATORS                                                                                  | 2021/09/03  |
| 2021/06663         | GAS-SOLID CONTACTING DEVICE                                                                                                                         | 2021/09/09  |
| 2021/06718         | NOVEL SELECTION MARKER-COMPRISING CELL LINE AND USES THEREOF FOR PROTEIN PRODUCTION                                                                 | 2021/09/10  |
| 2021/06722         | SYSTEM AND METHOD FOR COLLECTING AND PRE-TREATING PROCESS GASES GENERATED BY AN ELECTROLYSIS CELL                                                   | 2021/09/10  |
| 2021/06802         | SECURITY MARKERS                                                                                                                                    | 2021/09/14  |
| 2021/06929         | DISCONNECTOR DEVICE WITH PASSIVE RADIO DEVICE, GRID PROTECTION SYSTEM HAVING THE DISCONNECTOR DEVICE, AND METHOD FOR INDICATING A STATE             | 2021/09/17  |



| Application Number | Patent Title                                                                                                                                                                                                                                       | Filing Date |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 2021/06939         | OF THE DISCONNECTOR DEVICE<br>MONITORING SYSTEM FOR<br>REMOTELY MONITORING A STATE<br>OF POLE-MOUNTED EQUIPMENT IN<br>A POWER DISTRIBUTION OR<br>TRANSMISSION GRID, GRID<br>EQUIPMENT HAVING THE<br>MONITORING SYSTEM, AND<br>CORRESPONDING METHOD | 2021/09/17  |
| 2021/06991         | AN ENCODER, A DECODER AND<br>CORRESPONDING METHODS<br>USING IBC DEDICATED BUFFER<br>AND DEFAULT VALUE REFRESHING<br>FOR LUMA AND CHROMA<br>COMPONENT                                                                                               | 2021/09/20  |
| 2021/07002         | SYSTEMS, DEVICES, AND<br>METHODS FOR DRIVING A WHEEL<br>OF A BICYCLE                                                                                                                                                                               | 2021/09/20  |
| 2021/07027         | STABLE WRAPPER FOR AEROSOL<br>GENERATING ARTICLE                                                                                                                                                                                                   | 2021/09/21  |
| 2021/07200         | STABLE WRAPPER FOR AEROSOL<br>GENERATING ARTICLE                                                                                                                                                                                                   | 2021/09/23  |
| 2021/07340         | TANGENTIAL VIRAL FILTRATION                                                                                                                                                                                                                        | 2021/09/29  |
| 2021/07377         | TUNNEL HAVING INTEGRATED<br>LATERAL REINFORCEMENTS                                                                                                                                                                                                 | 2021/09/30  |
| 2021/07392         | CATALYTIC CONVERSION<br>PROCESS AND SYSTEM WITH<br>INCREASED PROPYLENE<br>PRODUCTION                                                                                                                                                               | 2021/09/30  |
| 2021/07429         | STIFFENER FOR CONSTRUCTION<br>ELEMENTS                                                                                                                                                                                                             | 2021/10/01  |
| 2021/07443         | APPARATUS AND METHOD FOR<br>INSTALLATION OF SUPPORT<br>POSTS FOR A VEHICLE RESTRAINT<br>SYSTEM                                                                                                                                                     | 2021/10/04  |
| 2021/07549         | LID FOR CONTAINERS,<br>PARTICULARLY BEVERAGE<br>CONTAINERS                                                                                                                                                                                         | 2021/10/07  |
| 2021/07695         | ANTI-PROLIFERATIVE AGENTS FOR<br>TREATING PAH                                                                                                                                                                                                      | 2021/10/12  |
| 2021/08163         | REMOTE EQUIPMENT MONITORING<br>SYSTEM                                                                                                                                                                                                              | 2021/10/22  |
| 2021/08443         | PROTEIN TYROSINE<br>PHOSPHATASE INHIBITORS                                                                                                                                                                                                         | 2021/10/29  |
| 2021/08526         | PIECE OF FURNITURE FOR SITTING<br>OR LYING ON                                                                                                                                                                                                      | 2021/11/02  |
| 2021/08576         | SYSTEMS AND METHODS FOR<br>HANDLING TELESCOPIC FQDNS                                                                                                                                                                                               | 2021/11/03  |
| 2021/08581         | FULLY AUTOMATIC COFFEE<br>MACHINE                                                                                                                                                                                                                  | 2021/11/03  |
| 2021/08582         | SYSTEM, METHOD AND<br>APPARATUS FOR RESTRICTING                                                                                                                                                                                                    | 2021/11/03  |

| Application Number | Patent Title                                                                                               | Filing Date |
|--------------------|------------------------------------------------------------------------------------------------------------|-------------|
|                    | USE OF A NETWORK DEVICE THROUGH AUTOMATED POLICY ENFORCEMENT                                               |             |
| 2021/08584         | METHOD FOR PREDICTING EFFECTIVENESS OF TREATMENT OF HEMOGLOBINOPATHY                                       | 2021/11/03  |
| 2021/08753         | HOLLOW-POINT CONDENSING-COMPACTION TOOL                                                                    | 2021/11/08  |
| 2021/08754         | DEVICE, SYSTEM AND METHOD FOR LUBRICATING A RAILWAY SWITCH                                                 | 2021/11/08  |
| 2021/08808         | COMPOSITION COMPRISING CYSTEINE, A PARTICULAR FATTY ACID TRIGLYCERIDE AND AN ADDITIONAL REDUCING AGENT     | 2021/11/09  |
| 2021/08822         | SYSTEM AND PROCESS FOR DETERMINING IN-LINE THE CHARACTERISTICS OF SPENT BALLS AND PIECES OF SAME           | 2021/11/09  |
| 2021/08834         | NITRILE-CONTAINING ANTIVIRAL COMPOUNDS                                                                     | 2021/11/09  |
| 2021/08836         | ANTI-EphA4 ANTIBODY                                                                                        | 2021/11/09  |
| 2021/09012         | ONLINE PAYMENT SYSTEM                                                                                      | 2021/11/12  |
| 2021/09045         | BACKWARD-COMPATIBLE INTEGRATION OF HARMONIC TRANSPOSER FOR HIGH FREQUENCY RECONSTRUCTION OF AUDIO SIGNALS  | 2021/11/15  |
| 2021/09046         | BACKWARD-COMPATIBLE INTEGRATION OF HARMONIC TRANSPOSER FOR HIGH FREQUENCY RECONSTRUCTION OF AUDIO SIGNALS  | 2021/11/15  |
| 2021/09173         | MODIFIED ANTI-PD-L1 ANTIBODIES AND METHODS AND USES FOR TREATING A NEURODEGENERATIVE DISEASE               | 2021/11/17  |
| 2021/09180         | MODULAR NET SYSTEM                                                                                         | 2021/11/17  |
| 2021/09184         | SIALYLATED GLYCOPROTEINS                                                                                   | 2021/11/17  |
| 2021/09307         | METHODS RELATING TO TUBERCULOSIS                                                                           | 2021/11/19  |
| 2021/09423         | WEARABLE HUMAN-MACHINE INTERFACE AND METHOD WHICH CAN BE CARRIED OUT USING SAME                            | 2021/11/23  |
| 2021/09495         | METHOD AND APPARATUS FOR RANDOM ACCESS                                                                     | 2021/11/24  |
| 2021/09580         | [[(1R,2S,5R)-2-ISOPROPYL-5-METHYL-CYCLOHEXANECARBONYL)-AMINO]-ACETIC ACID ISOPROPYL ESTER FOR TREATMENT OF | 2021/11/25  |

| Application Number | Patent Title                                                                                                                                                       | Filing Date |
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|                    | CHRONIC COUGH                                                                                                                                                      |             |
| 2021/09637         | HANDLING OF MULTIPLE AUTHENTICATION PROCEDURES IN 5G                                                                                                               | 2021/11/26  |
| 2021/09713         | CONTAINER HAVING A SELF-SUPPORTING COVER FOR AN OUTLET                                                                                                             | 2021/11/29  |
| 2021/09754         | SYSTEM AND METHOD FOR CADAVER PERFUSION                                                                                                                            | 2021/11/30  |
| 2021/09796         | SYSTEM AND METHOD FOR PREPARING METHANOL THEREWITH                                                                                                                 | 2021/11/30  |
| 2021/10055         | SOLID DISPERSION AND PREPARATION METHOD THEREFOR                                                                                                                   | 2021/12/06  |
| 2021/10585         | POTASSIUM SALT CRYSTAL FORM B OF PHOSPHODIESTERASE TYPE 5 INHIBITOR, AND PREPARATION METHOD AND USE THEREFOR                                                       | 2021/12/17  |
| 2021/10737         | PLANT FOR FILLING AND CLOSING CANS UNDER HYGIENIC CONDITIONS                                                                                                       | 2021/12/21  |
| 2021/10738         | METHOD FOR OPERATING A MOBILE RADIO                                                                                                                                | 2021/12/21  |
| 2021/10882         | MEMBRANE INSPECTION METHOD BASED ON MAGNETIC FIELD SENSING                                                                                                         | 2021/12/23  |
| 2021/10883         | MEMBRANE WITH MAGNETIC PROPERTIES FOR VERIFICATION OF MEMBRANE STRUCTURAL INTEGRITY                                                                                | 2021/12/23  |
| 2021/10895         | AGRICULTURAL TOOL UNIT FOR RAPID CONVERSION OF A COMBINATION SEED DRILL HAVING A TRAILED OR FINE-GRAIN SEED DISPENSER TO AN ON-DEMAND SUPPLY SYSTEM AND VICE VERSA | 2021/12/23  |
| 2022/00283         | METHOD FOR PRODUCING A METASTABLE CRYSTAL MODIFICATION OF N-(AMINOIMINOMETHYL)-2-AMINOETHANOIC ACID (IV)                                                           | 2022/01/05  |
| 2022/00451         | NOVEL ANTIBODIES SPECIFIC FOR CTHRC1 AND USE THEREOF                                                                                                               | 2022/01/10  |
| 2022/00652         | COMPOSITIONS, KITS, METHODS AND USES FOR PREVENTING MICROBIAL GROWTH                                                                                               | 2022/01/13  |
| 2022/00730         | PALLET                                                                                                                                                             | 2022/01/14  |
| 2022/00836         | HARDWARE ACCELERATION FOR FUNCTION PROCESSING                                                                                                                      | 2022/01/18  |
| 2022/00837         | DATA PRESERVATION USING MEMORY APERTURE FLUSH                                                                                                                      | 2022/01/18  |

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|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
|                    | ORDER                                                                                                                                                                                            |             |
| 2022/00839         | THERMAL TRANSFER DEVICE AND STORAGE SYSTEMS INCLUDING SAME                                                                                                                                       | 2022/01/18  |
| 2022/01174         | APPLICATION OF PROGESTIN IN PREPARATION OF DRUG INHIBITING CYTOKINE STORM                                                                                                                        | 2022/01/25  |
| 2022/01430         | CLINKER                                                                                                                                                                                          | 2022/01/31  |
| 2022/01905         | SYSTEM AND METHOD FOR MATERIAL DENSITY DISTRIBUTION SURVEY BASED ON COSMIC MUON DETECTION                                                                                                        | 2022/02/14  |
| 2022/01936         | A LIFTING APPARATUS                                                                                                                                                                              | 2022/02/15  |
| 2022/01948         | DEFERRING CACHE STATE UPDATES IN A NON-SPECULATIVE CACHE MEMORY IN A PROCESSOR-BASED SYSTEM IN RESPONSE TO A SPECULATIVE DATA REQUEST UNTIL THE SPECULATIVE DATA REQUEST BECOMES NON-SPECULATIVE | 2022/02/15  |
| 2022/01949         | INDEXING AND REPLAYING TIME-TRAVEL TRACES USING DIFFGRAMS                                                                                                                                        | 2022/02/15  |
| 2022/02165         | MICRO CHILLER-BASED HEATING, VENTILATION AND AIR CONDITIONING SYSTEM                                                                                                                             | 2022/02/21  |
| 2022/02208         | METHOD OF INACTIVATING A VIRUS USING A GLUTARALDEHYDE COMPOSITION WITH POLYMER                                                                                                                   | 2022/02/22  |
| 2022/02618         | CARD AND METHOD FOR PRODUCING THE CARD                                                                                                                                                           | 2022/03/03  |
| 2022/02718         | BOOM EXTENSION DEVICE FOR DOCKSIDE CONTAINER CRANE, AND EXTENSION METHOD FOR SAME                                                                                                                | 2022/03/07  |
| 2022/02912         | 2-AZASPIRO[3.4]OCTANE DERIVATIVES AS M4 AGONISTS                                                                                                                                                 | 2022/03/10  |
| 2022/03142         | RECIRCULATING WATER SYSTEM COMPOSITION                                                                                                                                                           | 2022/03/16  |
| 2022/03763         | IMPROVEMENTS IN OR RELATING TO ASSESSMENT OF MINING DEPOSITS                                                                                                                                     | 2022/04/01  |
| 2022/04429         | BALLISTIC CALCULATOR HUB                                                                                                                                                                         | 2022/04/20  |
| 2022/04475         | A METHOD OF MANUFACTURING A BLOWN FILM WITH A PROFILE OF A CHARACTERISTIC PROPERTY OF THE FILM BEING DETERMINED                                                                                  | 2022/04/21  |
| 2022/04517         | INTEGRATED PROCESS TO UPGRADE LOW GRADE CALCAREOUS PHOSPHATE ORE WITH LOW CO <sub>2</sub> EMISSIONS AND                                                                                          | 2022/04/22  |

| Application Number | Patent Title                                                                                                                                                                    | Filing Date |
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| 2022/04520         | LOW PHOSPHOGYPSUM WASTE PROCESS FOR RECOVERING PRECIOUS METAL                                                                                                                   | 2022/04/22  |
| 2022/04808         | SYSTEM AND METHOD FOR PAYMENT TERMINAL OPTIMIZATION                                                                                                                             | 2022/04/29  |
| 2022/04885         | RV SEQUENCE FOR ENHANCED MULTI-SEGMENT PUSCH                                                                                                                                    | 2022/05/04  |
| 2022/05208         | USE OF CAS9 PROTEIN FROM THE BACTERIUM PASTEURELLA PNEUMOTROPICA                                                                                                                | 2022/05/11  |
| 2022/05297         | METHOD FOR MEASURING THE OPTICAL QUALITY OF A GIVEN REGION OF A GLAZING UNIT, ASSOCIATED MEASURING DEVICE                                                                       | 2022/05/12  |
| 2022/05403         | COOLING UNIT SUITABLE FOR SOLAR PANELS USED IN TRANSPORT REFRIGERATION                                                                                                          | 2022/05/17  |
| 2022/05411         | MODULAR KITCHEN SYSTEM                                                                                                                                                          | 2022/05/17  |
| 2022/05515         | ANTI-C5 ANTIBODY COMBINATIONS AND USES THEREOF                                                                                                                                  | 2022/05/19  |
| 2022/05516         | FOOD INK                                                                                                                                                                        | 2022/05/19  |
| 2022/05519         | A VENDING KIOSK AND A VENDING SYSTEM                                                                                                                                            | 2022/05/19  |
| 2022/05539         | METHODS AND SYSTEMS FOR PRODUCING SKIN GRAFTS                                                                                                                                   | 2022/05/19  |
| 2022/05562         | A METHOD FOR MANUFACTURING A ROCK BOLT                                                                                                                                          | 2022/05/20  |
| 2022/05563         | ROCK BOLT                                                                                                                                                                       | 2022/05/20  |
| 2022/05740         | PRE-COATED STEEL SHEET COMPRISING AN ADDITIONAL COATING FOR INCREASING THE MECHANICAL STRENGTH OF THE WELD METAL ZONE OF A WELDED STEEL PART PREPARED FROM SAID PRECOATED SHEET | 2022/05/24  |
| 2022/05923         | PHARMACEUTICAL COMPOSITION COMPRISING MITOTANE ADMINISTERED ORALLY FOR TREATMENT OF ADRENOCORTICAL CARCINOMA AND CUSHING'S SYNDROME                                             | 2022/05/27  |
| 2022/05931         | ALUMINA BISMUTH CATALYST SUPPORT AND METHOD FOR ITS PRODUCTION                                                                                                                  | 2022/05/27  |
| 2022/05946         | HELIOSTAT WITH TRIPOD STAND AND TOP-MOUNTED OPTICAL MEMBER                                                                                                                      | 2022/05/27  |
| 2022/06045         | METHOD OF CHANGING A PROPERTY OF A POLAR LIQUID                                                                                                                                 | 2022/05/31  |
| 2022/06069         | METHOD FOR THE CONVERSION OF THERMAL ENERGY INTO                                                                                                                                | 2022/05/31  |



| Application Number | Patent Title                                                                                                                            | Filing Date |
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|                    | ELECTRICAL ENERGY BASED ON AN ANTICLOCKWISE THERMALLY REGENERATED CYCLE COMBINED WITH THERMAL ACCELERATION, AND THE APPLICATION OF SAME |             |
| 2022/06107         | METHODS FOR DETERMINING MINIMUM SCHEDULING OFFSET APPLICATION DELAY                                                                     | 2022/06/01  |
| 2022/06108         | NOVEL MODIFIED POLYPEPTIDE WITH ATTENUATED ACTIVITY OF CITRATE SYNTHASE AND METHOD FOR PRODUCING L-AMINO ACID USING THE SAME            | 2022/06/01  |
| 2022/06109         | NOVEL BRANCHED-CHAIN AMINO ACID AMINOTRANSFERASE VARIANT AND METHOD FOR PRODUCING LEUCINE USING THE SAME                                | 2022/06/01  |
| 2022/06166         | COLD-ROLLED AND ANNEALED STEEL SHEET AND MANUFACTURING METHOD                                                                           | 2022/06/02  |
| 2022/06167         | MAGNETIC NERVE STIMULATOR                                                                                                               | 2022/06/02  |
| 2022/06374         | BEVERAGE WITH COLLAGEN AND ADDITIONAL ADDITIVES                                                                                         | 2022/06/08  |
| 2022/06492         | STRUCTURE FOR SUPPORTING MARINE INSTALLATIONS AND PROCEDURE FOR THE EXECUTION THEREOF                                                   | 2022/06/10  |
| 2022/06543         | METHOD AND APPARATUS FOR CONFIGURING ALARM RULE OF IOT DEVICE, DEVICE, AND STORAGE MEDIUM                                               | 2022/06/13  |
| 2022/06811         | METHOD FOR STABILIZING COLORIMETRIC ASSAY FOR USE WITH PLUCKED HUMAN HAIR                                                               | 2022/06/20  |
| 2022/06880         | A FILLABLE AEROSOL CONTAINER                                                                                                            | 2022/06/21  |
| 2022/06885         | ANTI-PD-1-ANTI-VEGFA BISPECIFIC ANTIBODY, PHARMACEUTICAL COMPOSITION AND USE THEREOF                                                    | 2022/06/21  |
| 2022/06887         | EDIBLE FILM FOR IMPROVING ESSENTIAL OIL RELEASE EFFICIENCY, AND PREPARATION METHOD THEREFOR                                             | 2022/06/21  |
| 2022/06934         | SUPPLY OF MULTI-LAYER EXTENDED REALITY IMAGES TO A USER                                                                                 | 2022/06/22  |
| 2022/06953         | SYSTEM AND METHOD FOR DETECTING A DEFECT IN A RAILWAY TRACK RAIL                                                                        | 2022/06/22  |
| 2022/06967         | A water supply control device                                                                                                           | 2022/06/23  |
| 2022/07020         | BARBEQUE SYSTEM                                                                                                                         | 2022/06/24  |
| 2022/07059         | MULTIPLE-BATTERY SWITCHING                                                                                                              | 2022/06/24  |

| Application Number | Patent Title                                                                                                                                                                          | Filing Date |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
|                    | CONTROL CIRCUIT, APPARATUS AND SYSTEM, AND CONTROL METHOD                                                                                                                             |             |
| 2022/07112         | POLYETHYLENE COMPOSITION FOR FILAMENTS OR FIBERS                                                                                                                                      | 2022/06/27  |
| 2022/07115         | VIRAL VACCINE COMPOSITIONS AND METHODS OF PREPARATIONS THEREOF                                                                                                                        | 2022/06/27  |
| 2022/07186         | ESTIMATING INTRA-FIELD PROPERTIES WITHIN A FIELD USING HYPERSPECTRAL REMOTE SENSING                                                                                                   | 2022/06/29  |
| 2022/07207         | MINE SUPPORT BLOCK                                                                                                                                                                    | 2022/06/29  |
| 2022/07276         | MOTOR SPLITTING OR ASSEMBLING APPARATUS, MOTOR SPLITTING METHOD, AND MOTOR ASSEMBLING METHOD                                                                                          | 2022/06/30  |
| 2022/07279         | COMPOSITION RICH IN POLYPHENOLS AND FLAVONOIDS FOR USE AS A BIOSTIMULANT AND ANTIMICROBIAL FOR USE IN AGRICULTURE                                                                     | 2022/06/30  |
| 2022/07383         | BENZODIAZEPINE DERIVATIVES AS GABA A GAMMA1 PAMS                                                                                                                                      | 2022/07/04  |
| 2022/07434         | RECYCLABLE, SEALABLE CONTAINER                                                                                                                                                        | 2022/07/05  |
| 2022/07442         | PERFECTED METHOD FOR THE ANALYSIS OF A LIQUID WITH SUSPENDED BODIES                                                                                                                   | 2022/07/05  |
| 2022/07450         | KRAS MUTANT PROTEIN INHIBITORS                                                                                                                                                        | 2022/07/05  |
| 2022/07461         | An Optical Fibre Monitoring Device                                                                                                                                                    | 2022/07/06  |
| 2022/07479         | HELIOSTAT FRAME AND HELIOSTAT THEREOF, AND HELIOSTAT FIELD                                                                                                                            | 2022/07/06  |
| 2022/07497         | CYLINDER LOCK AND KEY THEREOF                                                                                                                                                         | 2022/07/06  |
| 2022/07498         | NOVEL HETEROCYCLIC COMPOUNDS USEFUL AS AURORA A SELECTIVE INHIBITORS                                                                                                                  | 2022/07/06  |
| 2022/07505         | WATER-IN-OIL COATING COMPOSITION                                                                                                                                                      | 2022/07/06  |
| 2022/07575         | A TRAINING SYSTEM                                                                                                                                                                     | 2022/07/08  |
| 2022/07578         | TELEHANDLER WITH CONVERTIBLE PROPULSION                                                                                                                                               | 2022/07/08  |
| 2022/07589         | SOLID FORMS OF 2-((4-((S)-2-(5-CHLOROPYRIDIN-2-YL)-2-METHYLBENZO[D] [1,3]DIOXOL-4-YL)PIPERIDIN-1-YL)METHYL)-1-(((S)-OXETAN-2-YL)METHYL)-1H-BENZO[D] IMIDAZOLE-6-CARBOXYLIC ACID, 1,3- | 2022/07/08  |

| Application Number | Patent Title                                                                                             | Filing Date |
|--------------------|----------------------------------------------------------------------------------------------------------|-------------|
|                    | DIHYDROXY-2-(HYDROXYMETHYL)PROPAN-2-AMINE SALT                                                           |             |
| 2022/07607         | USING DAPHNIA FOR BIOREMEDIATION                                                                         | 2022/07/08  |
| 2022/07669         | LIPID COMPOSITION AND USE THEREOF FOR DELIVERY OF A THERAPEUTICALLY ACTIVE AGENT TO ENDOTHELIUM          | 2022/07/11  |
| 2022/07671         | HIGH STRENGTH COLD ROLLED AND GALVANNEALED STEEL SHEET AND MANUFACTURING PROCESS THEREOF                 | 2022/07/11  |
| 2022/07672         | A HYDRAULIC PLASMA STONE BLASTER PROBE                                                                   | 2022/07/11  |
| 2022/07728         | COMPOSITIONS COMPRISING AMINO ACIDS FOR USE IN THE PREVENTION AND TREATMENT OF CHEMOTHERAPY SIDE EFFECTS | 2022/07/12  |
| 2022/07791         | BACTERIAL CONSORTIUM COMPRISING AT LEAST ONE BACILLUS AND LACTOBACILLUS STRAIN FOR GLUTEN DEGRADATION    | 2022/07/13  |
| 2022/07792         | METHOD FOR THE FERMENTATIVE PRODUCTION OF GUANIDINOACETIC ACID                                           | 2022/07/13  |
| 2022/07793         | NOVEL AMINO ARYL DERIVATIVE USEFUL AS DIACYLGLYCEROL ACYLTRANSFERASE 2 INHIBITOR AND USE THEREOF         | 2022/07/13  |
| 2022/07823         | LEAD- AND ANTIMONY-FREE BRASS ALLOY                                                                      | 2022/07/14  |
| 2022/07824         | LEAD-FREE BRASS ALLOY AND USE THEREOF                                                                    | 2022/07/14  |
| 2022/07907         | SYSTEM AND METHOD FOR COMBINING A PLURALITY OF DOWNLINK SIGNALS REPRESENTATIVE OF A COMMUNICATION SIGNAL | 2022/07/15  |
| 2022/07908         | SYSTEM AND METHOD FOR MANAGING CHANNEL BANDWIDTH OF A COMMUNICATION SIGNAL                               | 2022/07/15  |
| 2022/07967         | POURING DEVICE                                                                                           | 2022/07/18  |
| 2022/07968         | DISPENSING DEVICE                                                                                        | 2022/07/18  |
| 2022/07991         | NOVEL PROCESSES FOR THE PREPARATION OF RAPID MELT GRANULES                                               | 2022/07/18  |
| 2022/07992         | PHARMACEUTICAL COMPOSITION OF EXTENDED-RELEASE ORAL SUSPENSION AND PROCESS FOR PREPARATION THEREOF       | 2022/07/18  |

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|--------------------|-----------------------------------------------------------------------------------------------------------------------------------|-------------|
| 2022/08042         | MULTIPLE-COMPARTMENT DEVICE COMPRISING AT LEAST ONE INTERNAL FRANGIBLE SEAL CONTAINING A KERATIN FIBERS DYEING COMPOSITION        | 2022/07/19  |
| 2022/08207         | FUMIGANT COMPOSITION                                                                                                              | 2022/07/22  |
| 2022/08239         | HIDDEN RAIL DAMPER                                                                                                                | 2022/07/22  |
| 2022/08250         | A STABLE REUSABLE GRAPHITE CRUCIBLE FOR UPSCALING OF UNSUPPORTED METAL OXIDES ELECTROCATALYSTS VIA A MODIFIED ADAMS FUSION METHOD | 2022/07/25  |
| 2022/08266         | EXPANDABLE ENVIRONMENTAL CONTROL UNIT                                                                                             | 2022/07/25  |
| 2022/08279         | CHARGING SYSTEM FOR SWAPPING STATION OR ENERGY STORAGE STATION                                                                    | 2022/07/25  |
| 2022/08333         | PELARGONIC ACID-BASED HERBICIDE COMPOSITIONS                                                                                      | 2022/07/26  |
| 2022/08396         | METHOD AND APPARATUS FOR DYNAMIC GROUP MANAGEMENT                                                                                 | 2022/07/27  |
| 2022/08397         | PREPARATION AND USE OF CANNABIS NANO-FORMULATION                                                                                  | 2022/07/27  |
| 2022/08398         | AN APPARATUS AND METHOD FOR CORAL HUSBANDRY                                                                                       | 2022/07/27  |
| 2022/08401         | RESIN POT COMPONENT FOR AN INSPECTABLE BARRIER CABLE GLAND                                                                        | 2022/07/27  |
| 2022/08419         | MAGNETIC REED SWITCH ASSEMBLY AND METHOD                                                                                          | 2022/07/27  |
| 2022/08437         | HARVESTER TANK ASSEMBLY AND FILTRATION ARRANGEMENTS THEREFOR                                                                      | 2022/07/28  |
| 2022/08465         | A SYSTEM AND METHOD FOR APPLYING A FRAGRANCE OR MALODOR CONTROL AGENT TO A PLASTIC WEB                                            | 2022/07/28  |
| 2022/08468         | USE OF KETAMINE IN THE TREATMENT OF CACHEXIA                                                                                      | 2022/07/28  |
| 2022/08510         | GEARCASE SYSTEM FOR MOTOR AND WHEEL SET ASSEMBLY                                                                                  | 2022/07/29  |
| 2022/08544         | A MULTI-FACTOR AUTHENTICATION METHOD AND SYSTEM                                                                                   | 2022/08/01  |
| 2022/08545         | A METHOD AND SYSTEM OF AUTHORIZING A PAYMENT TRANSACTION                                                                          | 2022/08/01  |
| 2022/08546         | A CANTILEVER ROLLER                                                                                                               | 2022/08/01  |
| 2022/08547         | PROCESS FOR DETECTING FRAUDULENT BEHAVIOURS IN ACTIVITIES CONDUCTED BY                                                            | 2022/08/01  |

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|                    | USERS OF CONTENT MANAGEMENT SYSTEMS                                                                                                                                                      |             |
| 2022/08612         | A SHATTERPROOF AND HEAT RESISTANT HOLDER                                                                                                                                                 | 2022/07/29  |
| 2022/08615         | ROTARY PISTON FILLER ARRANGEMENT                                                                                                                                                         | 2022/08/02  |
| 2022/08616         | A DEVICE FOR POSITIONING AND SECURING BLAST EQUIPMENT IN A BLAST HOLE                                                                                                                    | 2022/08/02  |
| 2022/08647         | POLYURETHANE MULTI-PART KIT SYSTEM                                                                                                                                                       | 2022/08/02  |
| 2022/08649         | PROTECTIVE REFORMER DEVICE FOR THE PROTECTION OF AN ANODE SECTION OF A FUEL CELL STACK                                                                                                   | 2022/08/02  |
| 2022/08650         | PROCESS FOR SITE-SPECIFIC MODIFICATION OF AN ANTIBODY                                                                                                                                    | 2022/08/02  |
| 2022/08681         | RANDOM ACCESS FOR LOW-COMPLEXITY USER EQUIPMENT                                                                                                                                          | 2022/08/03  |
| 2022/08735         | LOCKS                                                                                                                                                                                    | 2022/08/04  |
| 2022/08742         | STORAGE SYSTEM CONFIGURED FOR USE WITH AN ENERGY MANAGEMENT SYSTEM                                                                                                                       | 2022/08/04  |
| 2022/08768         | DIFFERENTIAL PRESSURE CONTROL VALVE                                                                                                                                                      | 2022/08/05  |
| 2022/08804         | A METHOD OF MEASURING THE PH OF A SAMPLE                                                                                                                                                 | 2022/08/05  |
| 2022/08807         | ANTI-TIGIT ANTIBODIES AND USAGE METHOD                                                                                                                                                   | 2022/08/05  |
| 2022/08850         | METHOD OF PRODUCING A SUPPORT FOR POLYURETHANE-BASED IMITATION LEATHER FREE OF DIMETHYLFORMAMIDE (DMFA) OR OTHER SOLVENTS OR WATER, AND RELATED METHOD OF PRODUCING AN IMITATION LEATHER | 2022/08/08  |
| 2022/08928         | PALLET TOP CAP                                                                                                                                                                           | 2022/08/10  |
| 2022/08941         | COSMETIC COMPOSITIONS CONTAINING A SUGAR ALCOHOL, A SACCHARIDE COMPOUND AND PECTIN AND METHODS OF USE                                                                                    | 2022/08/10  |
| 2022/09052         | EXTRACTION APPARATUS AND EXTRACTION METHOD FOR A FERMENTATION MEDIUM                                                                                                                     | 2022/08/12  |
| 2022/09053         | IMPROVED EXTERNAL FIXATION STRUT                                                                                                                                                         | 2022/08/12  |
| 2022/09054         | WHEELCHAIR WHEEL                                                                                                                                                                         | 2022/08/12  |
| 2022/09062         | FLUID CONTROL IN MICROFLUIDIC DEVICES                                                                                                                                                    | 2022/08/12  |
| 2022/09115         | CYPRINID FEED WITH IMMUNE-ENHANCING EFFECT AND METHOD                                                                                                                                    | 2022/08/15  |



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|                    | OF RECYCLING POND CULTURE                                                                           |             |
| 2022/09195         | DISPOSABLE SYSTEM AND METHOD FOR PREPARING A COMPRESSED HYDROGEL                                    | 2022/08/16  |
| 2022/09227         | A SOLAR-POWERED POOL SANITIZER                                                                      | 2022/08/17  |
| 2022/09228         | VIBRATORY CONVEYOR FOR BULK MATERIAL                                                                | 2022/08/17  |
| 2022/09284         | APPARATUS AND METHOD FOR AUTOMATIC ULTRASOUND SEGMENTATION FOR VISUALIZATION AND MEASUREMENT        | 2022/08/18  |
| 2022/09285         | A SYNTHETIC COMPOSITE AS BONE GRAFT AND THE METHOD THEREOF                                          | 2022/08/18  |
| 2022/09398         | PIGMENT COMPRISING RAPHANUS SATIVUS EXTRACT AND MONTMORILLONITE                                     | 2022/08/22  |
| 2022/09432         | A UNIT FOR CAUSING ANGULAR MOMENTUM ABOUT AN AXIS                                                   | 2022/08/23  |
| 2022/09475         | SEALING ARRANGEMENT FOR A FORM FILL SEAL MACHINE                                                    | 2022/08/24  |
| 2022/09493         | RAPID DENGUE VIRUS DETECTION SYSTEM                                                                 | 2022/08/24  |
| 2022/09614         | INTERFEROMETRIC GAIN LASER DEVICE                                                                   | 2022/08/29  |
| 2022/09617         | CRYSTALLINE HYDRATE OF A JAK INHIBITOR COMPOUND                                                     | 2022/08/29  |
| 2022/09650         | A HYBRID MANHOLE COVER                                                                              | 2022/08/30  |
| 2022/09668         | ADJUSTABLE SPICE MILL                                                                               | 2022/08/30  |
| 2022/09670         | METHOD FOR DETERMINING MITOCHONDRIAL EVENTS                                                         | 2022/08/30  |
| 2022/09683         | AN ENCODER, A DECODER AND CORRESPONDING METHODS SIMPLIFYING SIGNALLING SLICE HEADER SYNTAX ELEMENTS | 2022/08/30  |
| 2022/09717         | CONVOLUTE CARDBOARD TUBE, APPARATUS AND METHOD FOR MANUFACTURING THE SAME                           | 2022/08/31  |
| 2022/09720         | FRANCIS TURBINE                                                                                     | 2022/08/31  |
| 2022/09741         | DIHYDRONAPHTHYRIDINONE COMPOUND, AND PREPARATION METHOD THEREFOR AND MEDICAL USE THEREOF            | 2022/08/31  |
| 2022/09764         | SYSTEM FOR ISSUING, VALIDATING AND STORING CERTIFICATES IN PUBLIC-PERMISSIONED BLOCKCHAIN NETWORKS  | 2022/09/01  |
| 2022/09765         | A PROTECTIVE HOUSING                                                                                | 2022/09/01  |
| 2022/09816         | DEVICE FOR INSPECTING A PIPE,                                                                       | 2022/09/02  |

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|                    | IN PARTICULAR WITH REGARD TO CLANDESTINE TAPPING                                                                                                                    |             |
| 2022/09893         | APPARATUS AND METHOD FOR RENDERING A SOUND SCENE COMPRISING DISCRETIZED CURVED SURFACES                                                                             | 2022/09/05  |
| 2022/09914         | SYSTEM AND METHOD FOR FACILITATING CIGARETTE SALES AND CIGARETTE TRACKING                                                                                           | 2022/09/06  |
| 2022/09928         | PANEL AND METHOD FOR PRODUCING A PANEL                                                                                                                              | 2022/09/06  |
| 2022/10030         | ANTI-CD137 CONSTRUCTS, MULTISPECIFIC ANTIBODY AND USES THEREOF                                                                                                      | 2022/09/08  |
| 2022/10031         | APPARATUS FOR IMPROVED TRANSFECTION AND/OR INTRACELLULAR DELIVERY EFFICIENCY OF AN AGENT INTO A EUKARYOTIC CELL AND/OR PROTEIN EXPRESSION AND METHOD OF USE THEREOF | 2022/09/08  |
| 2022/10033         | APPARATUS FOR IMPROVED TRANSFECTION EFFICIENCY AND/OR PROTEIN EXPRESSION AND METHOD OF USE THEREOF                                                                  | 2022/09/08  |
| 2022/10101         | A RETRACTABLE COMPARTMENT                                                                                                                                           | 2022/09/12  |
| 2022/10224         | CHELATOR COMPOSITIONS FOR RADIOMETALS AND METHODS OF USING SAME                                                                                                     | 2022/09/14  |
| 2022/10280         | BUTTER FAT SPREAD                                                                                                                                                   | 2022/09/16  |
| 2022/10281         | PROCESS FOR THE PRODUCTION OF BUTTER FAT SPREAD                                                                                                                     | 2022/09/16  |
| 2022/10321         | PESTICIDE COMPOSITION FOR CROP CARE AND PROTECTION                                                                                                                  | 2022/09/16  |
| 2022/10353         | SOLAR POWER GENERATION METHOD AND DEVICE                                                                                                                            | 2022/09/19  |
| 2022/10354         | MULTIFUNCTIONAL DEVICE FOR PHOTOVOLTAIC POWER GENERATION                                                                                                            | 2022/09/19  |
| 2022/10371         | BACKPACK VENTILATOR FOR PREVENTING RESPIRATORY INFECTIOUS DISEASES                                                                                                  | 2022/09/19  |
| 2022/10402         | HEIGHT ADJUSTABLE COMPACT SHELF                                                                                                                                     | 2022/09/20  |
| 2022/10403         | COMPACT SHELF WITH INDUCTION LIGHTING DEVICE                                                                                                                        | 2022/09/20  |
| 2022/10405         | LIFTING COMPACT SHELF                                                                                                                                               | 2022/09/20  |
| 2022/10414         | SAMPLE TREATMENT METHOD OF IN-SITU IN VITRO CULTURED CELLS FOR TEM OBSERVATION                                                                                      | 2022/09/20  |
| 2022/10415         | MULTIFUNCTIONAL COMPACT SHELF                                                                                                                                       | 2022/09/20  |

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| 2022/10416         | IMPACT WEAR PANEL AND METHOD OF CONSTRUCTION THEREOF                                                             | 2022/09/20  |
| 2022/10417         | FOLDABLE COMPACT SHELF                                                                                           | 2022/09/20  |
| 2022/10491         | METHOD FOR PRODUCING A MULTILAYER COMPOSITE FILM, MULTILAYER COMPOSITE FILM, AND USE THEREOF                     | 2022/09/21  |
| 2022/10547         | SUPPORT STATUS INDICATOR AND GROUND MOVEMENT EARLY WARNING DEVICE                                                | 2022/09/22  |
| 2022/10570         | ALL-IN-ONE GRINDING MACHINE FOR ELECTRONICALLY CONTROLLED MACHINING                                              | 2022/09/23  |
| 2022/10625         | MANUFACTURING ARRANGEMENT AND METHOD FOR A FUEL CELL STACK                                                       | 2022/09/26  |
| 2022/10648         | PARTIALLY PROTONATED ALKANOLAMINE COMPOSITION, AND USE IN A MILL                                                 | 2022/09/26  |
| 2022/10688         | EXPANDING FLOOR/ACCORDION DRONE DOCKING STATION                                                                  | 2022/09/27  |
| 2022/10744         | LIVELINESS DETECTION USING A DEVICE COMPRISING AN ILLUMINATION SOURCE                                            | 2022/09/28  |
| 2022/10782         | LIPID NANOPARTICLE COMPOSITION                                                                                   | 2022/09/29  |
| 2022/10852         | METHODS AND NODES FOR EFFICIENT MAC CE DESIGN FOR INDICATING MAPPING BETWEEN PATHLOSS REFERENCE AND MULTIPLE SRI | 2022/09/30  |
| 2022/10878         | REACTOR SECONDARY SIDE PASSIVE RESIDUAL HEAT REMOVAL SYSTEM                                                      | 2022/10/03  |
| 2022/11165         | COST BATCH METHOD AND SYSTEM AS WELL AS COUNTING SYSTEM FOR REINFORCEMENT PROCESSING PLANTS                      | 2022/10/12  |
| 2022/11453         | A PAPER DISC BASED METHOD FOR DETERMINING THE DRUG SUSCEPTIBILITY OF MYCOBACTERIUM TUBERCULOSIS                  | 2022/10/19  |
| 2022/11589         | USE OF DOPAMINE D3 PARTIAL AGONISTS FOR TREATING CENTRAL NERVOUS SYSTEM DISORDERS                                | 2022/10/24  |
| 2022/11736         | SYSTEMS AND PROCESSES FOR PEER-TO-PEER FINANCIAL INSTRUMENT TRANSACTIONS                                         | 2022/10/27  |
| 2022/11833         | REDUCING OR INHIBITING OCULAR DAMAGE BY HYALURONIDASE                                                            | 2022/10/31  |

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|                    | ADMINISTRATION                                                                                          |             |
| 2022/11922         | DRIVER SAFETY SYSTEM                                                                                    | 2022/11/02  |
| 2022/12205         | METHOD FOR PREPARING 2-METHYLTETRAHYDROFURAN BY USING WASTE BIOMASS                                     | 2022/11/09  |
| 2022/12343         | SYSTEM AND METHOD OF AUTOMATED KNOW-YOUR-TRANSACTION CHECKING IN DIGITAL ASSET TRANSACTIONS             | 2022/11/11  |
| 2022/12487         | UNDERGROUND MUSHROOM PLANTING GREENHOUSE                                                                | 2022/11/16  |
| 2022/12530         | DEEP ULTRAVIOLET LIGHT-EMITTING DIODE                                                                   | 2022/11/16  |
| 2022/12672         | PENILE IMPLANT DEVICE AND METHOD                                                                        | 2022/11/21  |
| 2022/12697         | PROCESS FOR THE PREPARATION SALTS OF TRIAZOLE COMPOUNDS                                                 | 2022/11/22  |
| 2022/12702         | PHARMACEUTICAL FORMULATIONS AND THEIR PREPARATIONS FOR TREATMENT OF CANCER                              | 2022/11/22  |
| 2022/12770         | BIOCEMENTATION MIXTURE FOR DUST CONTROL AND RELATED APPLICATIONS                                        | 2022/11/23  |
| 2022/12795         | PAPER PASTING MECHANISM OF PAPER PASTING MACHINE OF INFUSION APPARATUS                                  | 2022/11/24  |
| 2022/12846         | CUTTING APPARATUS FOR DOUGH PRODUCTS                                                                    | 2022/11/25  |
| 2022/12915         | EFFICIENT AND SAFE PLANT LIGHTING CIRCUIT                                                               | 2022/11/28  |
| 2022/12937         | KEY ACTION DETECTION SYSTEM OF PHYSICAL EDUCATION VIDEO BASED ON DEEP LEARNING                          | 2022/11/29  |
| 2022/13091         | ANTISTATIC POWDER COATING AND PREPARATION METHOD THEREFOR                                               | 2022/12/02  |
| 2022/13184         | LLC RESONANT CONVERTER AND CONTROL METHOD THEREOF                                                       | 2022/12/06  |
| 2022/13185         | DEVICE FOR TESTING ANCHORING PERFORMANCE OF GROUTING MATERIAL FOR FULL-LENGTH ANCHORING OF ANCHOR CABLE | 2022/12/06  |
| 2022/13190         | AUTOMATIC FILING DEVICE FOR ARCHIVES                                                                    | 2022/12/06  |
| 2022/13192         | SYSTEM AND METHOD FOR LIFESTYLE INTERVENTION OF OBESE CHILDREN                                          | 2022/12/06  |
| 2022/13199         | APPLICATION OF NATURAL MONOTERPENE COMPOUND SABINENE IN PREPARATION OF HERBICIDE                        | 2022/12/06  |

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| 2022/13234         | BENTONITE SAND FIXATION METHOD                                                                                          | 2022/12/07  |
| 2022/13238         | 3D PRINTING AND POST-PROCESSING METHOD OF WOOD-BASED FIBER BIOMASS MATERIAL                                             | 2022/12/07  |
| 2022/13243         | NOVEL SHOCK ISOLATOR FOR NAVAL EQUIPMENT                                                                                | 2022/12/07  |
| 2022/13244         | NOVEL SOLID-LIQUID ANTI-SHOCK ISOLATOR FOR WARSHIP EQUIPMENT                                                            | 2022/12/07  |
| 2022/13245         | VERNIER CALIPER CONVENIENT FOR FOLDING AND STORING FOR PHYSICS TEACHING                                                 | 2022/12/07  |
| 2022/13250         | PREPARATION METHOD OF GLUCOSYL/AMINO ACID COMPOSITE CARBON SPHERES AND THE APPLICATION                                  | 2022/12/07  |
| 2022/13251         | HEALTH MANAGEMENT SYSTEM BASED ON RTFMRI-NF TECHNOLOGY                                                                  | 2022/12/07  |
| 2022/13282         | LIGHT EMISSION DEVICE                                                                                                   | 2022/12/07  |
| 2022/13290         | A SYSTEM BASED ON ARTIFICIAL INTELLIGENCE RECOGNITION FOR LANGUAGE MAINTENANCE                                          | 2022/12/08  |
| 2022/13395         | IRON-RICH MICROBIAL COMPLEX AGENT FOR FEED AND PREPARATION AND APPLICATION THEREOF                                      | 2022/12/12  |
| 2022/13397         | SIZE-FRACTIONATED THICKENING DEWATERING DEVICE FOR MINE TAILINGS                                                        | 2022/12/12  |
| 2022/13398         | METHOD FOR PREDICTING VEGETATION TYPES IN HIGH-ALTITUDE PERMAFROST REGIONS                                              | 2022/12/12  |
| 2022/13399         | A MULTI-SOURCE REMOTE SENSING DATA CLASSIFICATION METHOD BASED ON THE CLASSIFICATION SAMPLE POINTS EXTRACTED BY THE UAV | 2022/12/12  |
| 2022/13400         | A METHOD FOR EXTRACTING VEGETATION INFORMATION FROM AERIAL PHOTOGRAPHS OF SYNERGISTIC REMOTE SENSING IMAGES             | 2022/12/12  |
| 2022/13447         | MICRO-BUBBLE FLOTATION METHOD FOR FINE OXIDIZED MINERALS                                                                | 2022/12/13  |
| 2022/13449         | RAPID REGENERATION METHOD OF WASTE TERNARY LITHIUM ION BATTERY CATHODE MATERIAL                                         | 2022/12/13  |
| 2022/13450         | MORTISE AND TENON CONFIGURATION OF SECTIONAL                                                                            | 2022/12/13  |



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|                    | BLADES OF LARGE WIND TURBINES AND CONNECTION THEREOF                                                                                                           |             |
| 2022/13451         | BACK-SUPPORTING BENT-LEG TYPE MULTIFUNCTIONAL HOME FITNESS EXERCISE EQUIPMENT                                                                                  | 2022/12/13  |
| 2022/13453         | SEMEN BRASSICAE EXTRACT AND A PREPARATION METHOD AND APPLICATION THEREOF                                                                                       | 2022/12/13  |
| 2022/13454         | A CF-BASED NMF ELECTRICITY SALES PACKAGE RECOMMENDATION METHOD                                                                                                 | 2022/12/13  |
| 2022/13638         | MECHANICAL ARM PRESET PERFORMANCE CONTROL METHOD BASED ON SEGMENTED THRESHOLD EVENT TRIGGERING                                                                 | 2022/12/19  |
| 2022/13640         | DOCTOR-PATIENT COMMUNICATION ASSISTANT PLATFORM AND INTERACTIVE METHOD THEREOF                                                                                 | 2022/12/19  |
| 2022/13646         | INTELLIGENT CONTROL FULL-AUTOMATIC MULTIPURPOSE MACHINE FOR CULTURE FEEDING                                                                                    | 2022/12/19  |
| 2022/13652         | BIN PACKING METHOD AND BIN PACKING CONTROL SYSTEM                                                                                                              | 2022/12/19  |
| 2022/13654         | APPLICATION OF 5-HYDROXYTRYPTOPHAN IN PREPARING HEALTH PRODUCTS OR MEDICINES FOR IMPROVING FEMALE PHYSIOLOGICAL CYCLE DISORDER CAUSED BY HIGH ALTITUDE HYPOXIA | 2022/12/19  |
| 2022/13655         | SUPPORT METHOD FOR GOB-SIDE ENTRY IN DEEP COAL SEAM                                                                                                            | 2022/12/19  |
| 2022/13658         | COMPOSITION FOR PREVENTING AND TREATING FEMALE PHYSIOLOGICAL CYCLE DISORDER CAUSED BY HIGH ALTITUDE HYPOXIA AND APPLICATION                                    | 2022/12/19  |
| 2022/13677         | WASTE-COMPACTING CONTAINER WITH DISINFECTION SYSTEM                                                                                                            | 2022/12/19  |
| 2022/13679         | NETWORKED LAMP AND LAMP NETWORKING SYSTEM                                                                                                                      | 2022/12/19  |
| 2022/13718         | A BIFUNCTIONAL CATALYST FOR ELECTROCHEMICAL REACTION OF SULFUR ELECTRODE AND ITS PREPARATION METHOD                                                            | 2022/12/20  |
| 2022/13719         | AN ANCHORING SYSTEM WITH ITS TUNNELING EQUIPMENT AND TUNNELING ANCHORAGE METHOD                                                                                | 2022/12/20  |
| 2022/13723         | EXPRESSION, PURIFICATION, CRYSTAL STRUCTURE AND APPLICATION OF PROTEIN                                                                                         | 2022/12/20  |

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|                    | ESTERASE EST3563 CAPABLE OF DEGRADING PHTHALATES                                                                 |             |
| 2022/13724         | PROTEIN CRYSTAL IN THE CARBOXYL TERMINAL REGION OF NBREM1.1, PREPARATION METHOD AND APPLICATION THEREOF          | 2022/12/20  |
| 2022/13731         | DRYING DEVICE FOR PULVERIZED PARTICLES OF GRAPHENE MATERIALS                                                     | 2022/12/20  |
| 2022/13732         | INTELLIGENT GLAZE SPRAYING DEVICE FOR SANITARY CERAMICS                                                          | 2022/12/20  |
| 2022/13733         | ACCURATE TRAINING PATH PLANNING SYSTEM FOR RURAL VOCATIONAL EDUCATION                                            | 2022/12/20  |
| 2022/13735         | RT-PCR DETECTION METHOD FOR IDENTIFYING SEROTYPE 29 BLUETONGUE VIRUS                                             | 2022/12/20  |
| 2022/13736         | A CONSTRUCTION METHOD OF ROTARY SINKING PRECAST PILE                                                             | 2022/12/20  |
| 2022/13737         | AN EPC PROJECT COST MANAGEMENT SYSTEM BASED ON BIM AND ITS APPLICATION                                           | 2022/12/20  |
| 2022/13738         | TRAINING DEVICE FOR DRIBBLING AND SHOOTING FOR BASKETBALL TEACHING                                               | 2022/12/20  |
| 2022/13739         | A METHOD FOR THE PREPARATION OF LAMB FECAL MICROBIOTA SOLUTION                                                   | 2022/12/20  |
| 2022/13740         | COMPOUND CONTROL HYDRAULIC PUMP AND COMPOUND HYDRAULIC CONTROL SYSTEM                                            | 2022/12/20  |
| 2022/13741         | A METHOD FOR THE DETECTION OF BOVINE INFECTIOUS RHINOTRACHEITIS VIRUS                                            | 2022/12/20  |
| 2022/13745         | A SYSTEM ESTIMATION AND BALANCING OF BATTERY STATE OF CHARGE                                                     | 2022/12/20  |
| 2022/13746         | AN IOT BASED SYSTEM FOR DATA ACQUISITION                                                                         | 2022/12/20  |
| 2022/13747         | DOUBLE REAL-TIME FLUORESCENCE QUANTITATIVE PCR DETECTION METHOD AND KIT FOR IDENTIFYING BRUCELLA VACCINE STRAINS | 2022/12/20  |
| 2022/13748         | AN AUXILIARY POSITIONING DEVICE FOR ELECTRON BEAM IRRADIATION IN RADIOTHERAPY                                    | 2022/12/20  |
| 2022/13749         | EXPRESSION, PURIFICATION, CRYSTAL STRUCTURE AND APPLICATION OF SP PROTEIN ENCODED BY RSV                         | 2022/12/20  |
| 2022/13752         | VARIABLE DISPLACEMENT PUMP                                                                                       | 2022/12/20  |

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|                    | AND HYDRAULIC CONTROL SYSTEM USING VARIABLE DISPLACEMENT PUMP                                                                             |             |
| 2022/13839         | A DEVICE FOR PAINTING EXTERIOR WALLS OF A HOSPITAL CONSTRUCTION                                                                           | 2022/12/21  |
| 2023/00021         | AUTONOMOUS TRACKING AND SHOOTING DEVICE OF UNDERWATER VEHICLES                                                                            | 2023/01/03  |
| 2023/00108         | CRAWLER SLOPE CONE DRILLING MACHINE                                                                                                       | 2023/01/03  |
| 2023/00153         | CONSTRUCTION PROCESS FOR JOINTS OF DRY PREFABRICATED INDUSTRIALIZED CONCRETE MAIN AND SECONDARY BEAMS                                     | 2023/01/03  |
| 2023/00155         | LAYOUT METHOD OF APPROACH CHANNEL                                                                                                         | 2023/01/03  |
| 2023/00156         | CONSTRUCTION DEVICE OF PIPE                                                                                                               | 2023/01/03  |
| 2023/00157         | ISLAND BREAKWATER                                                                                                                         | 2023/01/03  |
| 2023/00176         | METHOD FOR CONTROLLING FILAMENTOUS SLUDGE BULKING BASED ON QUORUM SENSING                                                                 | 2023/01/03  |
| 2023/00177         | METHOD FOR IMPROVING IN-VIVO GENE TRANSFORMATION EFFICIENCY OF COTTON                                                                     | 2023/01/03  |
| 2023/00184         | ROADWAY FLOOR HEAVE MEASURING DEVICE                                                                                                      | 2023/01/04  |
| 2023/00231         | PROCESS FOR EXTRACTING ANTI-OSTEOPOROSIS AND LIPID-LOWERING SUBSTANCE FROM CAJANUS CAJAN(L.) MILLISP.                                     | 2023/01/05  |
| 2023/00278         | MANUFACTURING METHOD OF NOVEL DIGITAL FENCE IMPLANT GUIDE PLATE                                                                           | 2023/01/06  |
| 2023/00284         | PREPARATION METHOD FOR STEEL SLAG MICROBEADS                                                                                              | 2023/01/06  |
| 2023/00416         | LASER RANGING SYSTEM BASED ON OPTICAL FEEDBACK SEMICONDUCTOR LASER DYNAMICS                                                               | 2023/01/10  |
| 2023/00417         | METHOD FOR ESTIMATING JOINT FORCES                                                                                                        | 2023/01/10  |
| 2023/00418         | METHOD FOR CONTROLLING OXIDATION OF MUTTON FAT                                                                                            | 2023/01/10  |
| 2023/00473         | NICKEL-BASED SINGLE CRYSTAL SUPERALLOY WITH HIGH CONCENTRATION RE/RU AND HIGH TEMPERATURE BEARING CAPACITY AND PREPARATION METHOD THEREOF | 2023/01/11  |
| 2023/00511         | METHOD FOR DETECTING RESPONSE EFFECT OF                                                                                                   | 2023/01/12  |

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|                    | ASPARAGUS OFFICINALIS L. DECOMPOSED STRAWS                                                                                |             |
| 2023/00527         | METHOD FOR TRACING SOURCES OF PHOSPHATE IN WATER BASED ON OXY-GEN ISOTOPES AND HYDROCHEMICAL CHARACTERISTICS OF PHOSPHATE | 2023/01/12  |
| 2023/00567         | METHOD FOR CULTIVATING BLETILLA STRIATA                                                                                   | 2023/01/13  |
| 2023/00579         | SNO <sub>2</sub> @ BIOCHAR PHOTOCATALYST AND PREPARATION METHOD AND APPLICATION THEREOF                                   | 2023/01/13  |
| 2023/00580         | A LIFTING DEVICE FOR THE RESCUE WORK OF LIFEBOAT ON OFFSHORE HOISTING PLATFORM                                            | 2023/01/13  |
| 2023/00581         | AN EFFICIENT CRUSHING DEVICE FOR EXTRACTING SC ELEMENT FROM RED MUD                                                       | 2023/01/13  |
| 2023/00584         | TROUSERS FOR LOWER LIMB REHABILITATION OF CHILD WITH CEREBRAL PALSY                                                       | 2023/01/13  |
| 2023/00634         | DEVICE AND METHOD FOR DETECTING STRENGTH OF COAL GANGUE CONCRETE                                                          | 2023/01/16  |
| 2023/00647         | WEDGE SLOPE PROTECTION GRASS-PLANTING BRICK AND MANUFACTURING MOLD THEREOF                                                | 2023/01/16  |
| 2023/00649         | INTEGRATED BIOMASS TREATMENT EQUIPMENT                                                                                    | 2023/01/16  |
| 2023/00681         | TREATMENT DEVICE FOR SLUDGE                                                                                               | 2023/01/16  |
| 2023/00801         | ANTISTATIC ADDITIVE                                                                                                       | 2023/01/18  |
| 2023/00802         | METHOD FOR RAPID DETECTION OF T-2 TOXIN IN FOOD BASED ON DNA HYDROGEL                                                     | 2023/01/18  |
| 2023/00803         | METHOD FOR DETERMINATION OF OFL IN MILK BY AL <sup>3+</sup> AND ATP SYNERGISTIC SENSITIZATION FLUORESCENCE                | 2023/01/18  |
| 2023/00934         | PLASMA MODIFICATION METHOD AND SYSTEM FOR FABRICS, NON-WOVEN AND POROUS FILMS                                             | 2023/01/20  |
| 2023/01012         | METHOD FOR IMPROVING SUCCESS RATE OF PLANTING FORAGE GRASS IN EROSION GULLY IN BLACK SOIL REGION                          | 2023/01/24  |
| 2023/01200         | DEVICE FOR MEASURING SAND COLLECTION AMOUNT IN 16 WIND AZIMUTHS                                                           | 2023/01/30  |
| 2023/01201         | DISPLAY DEVICE WITH PROTECTION FUNCTION                                                                                   | 2023/01/30  |

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| 2023/01202         | ROTATING PLACING DEVICE FOR SHEEP                                                                                                | 2023/01/30  |
| 2023/01209         | WALL-ARRANGED GIANT RING-SHAPED DIRECT-CURRENT PULVERIZED COAL BURNER                                                            | 2023/01/30  |
| 2023/01210         | METHOD FOR GENERATING AN ADJUSTMENT ENERGY-EFFICIENT TRACK                                                                       | 2023/01/30  |
| 2023/01211         | METHOD FOR GENERATING AN ADJUSTMENT ENERGY-EFFICIENT TRACK                                                                       | 2023/01/30  |
| 2023/01214         | METHOD FOR EVALUATING TRACEABILITY VALIDITY AND INTERCHANGEABILITY OF PROTEIN IN IMMUNOASSAY                                     | 2023/01/30  |
| 2023/01329         | PREPARATION METHOD OF NOVEL CONIP CLUSTER DISPERSION MODIFIED PHOTOCATALYST                                                      | 2023/02/02  |
| 2023/01332         | MODEL EXPERIMENTAL SYSTEM FOR RADIATION DAMAGE OF SEMICONDUCTOR DEVICES                                                          | 2023/02/02  |
| 2023/01333         | SELF-ASSEMBLED ARTIFICIAL BLOOD VESSEL                                                                                           | 2023/02/02  |
| 2023/01334         | THREE-DIMENSIONAL ACCURATE PESTICIDE SPRAYING DEVICE                                                                             | 2023/02/02  |
| 2023/01335         | METHOD AND SYSTEM FOR CONSTRUCTING CONSTITUTIVE MODEL OF STEEL FIBER RECYCLED AGGREGATE CONCRETE                                 | 2023/02/02  |
| 2023/01336         | METHOD FOR BREEDING VIRUS-FREE CONTAINER SEEDLINGS OF CITRUS                                                                     | 2023/02/02  |
| 2023/01339         | ONLINE DIAGNOSIS SYSTEM AND METHOD FOR PROPERTIES OF PLASMA BEAMS                                                                | 2023/02/02  |
| 2023/01340         | ROAD CONCRETE STRENGTH DETECTION AND CONTROL DEVICE                                                                              | 2023/02/02  |
| 2023/01341         | A HEAT-RESISTANT DISSOLVABLE FRACTURING BALL                                                                                     | 2023/02/02  |
| 2023/01342         | A FRICTION COEFFICIENT MEASUREMENT DEVICE FOR ZINC-BASED ALLOY BONE IMPLANTS                                                     | 2023/02/02  |
| 2023/01343         | TRANSPLANTING AND DOMESTICATION METHOD FOR ANEMONE AMURENSIS                                                                     | 2023/02/02  |
| 2023/01344         | LIQUID FIRE EXTINGUISHING AGENT FOR SODIUM HYDROSULFITE FIRE SUPPRESSION AND CORRESPONDING SLOW RELEASE TYPE SODIUM HYDROSULFITE | 2023/02/02  |



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| 2023/01345         | ELECTROCHROMIC LENS FOR AUTOMOBILE                                                                             | 2023/02/02  |
| 2023/01346         | PREPARATION METHOD FOR NANO BIOMASS CARBON COMPOSITE PHOTOCATALYST                                             | 2023/02/02  |
| 2023/01347         | AN ISOMETRIC ADJUSTING DEVICE FOR MECHANICAL PROCESSING                                                        | 2023/02/02  |
| 2023/01354         | HIGHLY STABLE PEROVSKITE QUANTUM DOTS AND PREPARATION METHOD THEREOF                                           | 2023/02/02  |
| 2023/01355         | A NOVEL IOT&#173; BASED DIGITAL VERMICOMPOSTING MICRONUTRIENT QUALITY PREDICTION DEVICE                        | 2023/02/02  |
| 2023/01356         | A LONG-TERM METHOD FOR REPAIRING DEFECTIVE FARMLAND SOIL BY USING EXOGENOUS MATERIALS                          | 2023/02/02  |
| 2023/01357         | CULTURE SUBSTRATE FOR RHODODENDRON LAPPONICUM, AND PREPARATION METHOD AND USE THEREOF                          | 2023/02/02  |
| 2023/01358         | MULTILAYERED TI/REXALN COATINGS ON HSS/TUNGSTEN CARBIDE CUTTING TOOL INSERTS BY PVD CO-SPUTTERING              | 2023/02/02  |
| 2023/01364         | (2,4,4-TRIMETHYLPENTYL)SILANE OLIGOMER, PREPARATION METHOD THEREFOR AND USE THEREOF                            | 2023/02/02  |
| 2023/01365         | TESTING DEVICE FOR VORTEX-INDUCED VIBRATION RESPONSE OF RISER AND METHOD OF APPLICATION                        | 2023/02/02  |
| 2023/01379         | A HIGHLY MOISTURE-PROOF ENVIRONMENT-FRIENDLY MULTI-ELEMENT COMPOSITE FLOOR AND ITS PRODUCTION PROCESS          | 2023/02/02  |
| 2023/01393         | GREENING PLANTING STRUCTURE DESIGN METHOD USING POLYMER DRAINAGE PROFILED SHEET TO DRAIN SALT                  | 2023/02/03  |
| 2023/01394         | CLASSROOM BEHAVIOR RECOGNITION METHOD AND SYSTEM BASED ON IMAGE ANALYSIS, COMPUTER TERMINAL AND MEDIUM         | 2023/02/03  |
| 2023/01395         | DATA PROCESSING METHOD AND SYSTEM FOR INTELLIGENT AGRICULTURE BASED ON INTERNET OF THINGS, TERMINAL AND MEDIUM | 2023/02/03  |
| 2023/01396         | HUMIDITY ADJUSTABLE HEAT                                                                                       | 2023/02/03  |

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|                    | PUMP DRYING DEVICE                                                                                  |             |
| 2023/01397         | MOVABLE CONSTRUCTION WASTE PROCESSING EQUIPMENT                                                     | 2023/02/03  |
| 2023/01398         | METHOD FOR PRODUCING SILICON CARBIDE MICROPOWDER FOR SILICON NITRIDE BONDED SILICON CARBIDE PRODUCT | 2023/02/03  |
| 2023/01399         | WRIST STRAP TYPE HEALTH MONITOR BASED ON CLOUD PLATFORM                                             | 2023/02/03  |
| 2023/01400         | IMMERSIVE PSYCHOLOGICAL MASSAGE INSTRUMENT                                                          | 2023/02/03  |
| 2023/01401         | CRISPY FRAGRANT PASTE AND ITS PROCESSING METHOD                                                     | 2023/02/03  |
| 2023/01402         | CRISPY FRAGRANT PASTE SUITABLE FOR FRENCH FRIES AND ITS PROCESSING METHOD                           | 2023/02/03  |
| 2023/01403         | A SYSTEM FOR CIGARETTE SMOKER IDENTIFICATION AT PUBLIC PLACES USING MACHINE LEARNING AND IOT        | 2023/02/03  |
| 2023/01404         | A SYSTEM FOR SECURE FIRMWARE UPGRADE                                                                | 2023/02/03  |
| 2023/01405         | A SYSTEM FOR OPTIMIZATION OF PARTIAL PRODUCTS IN MODIFIED BOOTH MULTIPLIER                          | 2023/02/03  |
| 2023/01420         | RICE CULTIVATION METHOD WITH HIGH WATER AND FERTILIZER UTILIZATION RATIO                            | 2023/02/03  |
| 2023/01421         | METHOD FOR PREPARING CATHODE CATALYST WITH HIGH CATALYTIC ACTIVITY FOR FUEL CELL                    | 2023/02/03  |
| 2023/01422         | ASSEMBLE STRUCTURE OF INTELLIGENT DATA ACQUISITION CONTROLLER                                       | 2023/02/03  |
| 2023/01423         | ANALYSIS DISPLAY RACK FOR INTELLIGENT MATHEMATIC AND APPLIED MATHEMATIC PROBLEM                     | 2023/02/03  |
| 2023/01424         | NANO SIL CONTENT MONITORING DEVICE                                                                  | 2023/02/03  |
| 2023/01425         | COMBINED SOLAR CELL CAPABLE OF IMPROVING SOLAR ENERGY UTILIZATION RATIO                             | 2023/02/03  |
| 2023/01426         | IRRIGATION DEVICE FOR PLANTING ALHAGI SPARSIFOLIA SHAP                                              | 2023/02/03  |
| 2023/01427         | COMBINE URBAN DISASTER SIMULATION EXPERIMENT DEVICE                                                 | 2023/02/03  |
| 2023/01428         | ELECTROCHROMIC GLASS AND PREPARATION METHOD THEREOF                                                 | 2023/02/03  |
| 2023/01435         | ENDOSCOPIC SUTURE GRASPER                                                                           | 2023/02/03  |

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| 2023/01472         | FOR ACHILLES TENDON REPAIR METHOD FOR CULTIVATING SALT-TOLERANT PLANTS OF XUXIANG KIWIFRUIT                                                                   | 2023/02/06  |
| 2023/01473         | SUPPORT SYSTEM FOR CROSS-VALIDATION METHODS OF ACADEMIC JOURNAL PAPERS                                                                                        | 2023/02/06  |
| 2023/01475         | AN APPLE PEELING DEVICE WITH PEEL COLLECTION STRUCTURE                                                                                                        | 2023/02/06  |
| 2023/01478         | EVALUATION METHOD CONCERNING GREEN CARBON SEQUESTRATION IN COMPREHENSIVE LOW-CARBON TRANSFORMATION OF MINE SHAFTS AND GROUND IN RESOURCE-DEPLETED MINING AREA | 2023/02/06  |
| 2023/01479         | A HIGHLY EFFICIENT PRUNING DEVICE FOR XANTHOCERAS SORBIFOLIA                                                                                                  | 2023/02/06  |
| 2023/01482         | AGRICULTURAL AND SIDELINE PRODUCT DRYING DEVICE AND A CONTROL METHOD                                                                                          | 2023/02/06  |
| 2023/01483         | MYCOBACTERIUM TUBERCULOSIS SPECIFIC IFN-GAMMA/IL-2/TNF-ALPHA TRIPLE-COLOR FLUOROSPOT ASSAY KIT AND ITS APPLICATION                                            | 2023/02/06  |
| 2023/01494         | A TEST METHOD FOR DETERMINING THE FATIGUE CRACK INITIATION LIFE                                                                                               | 2023/02/06  |
| 2023/01514         | MULTIFUNCTIONAL SKIN EXAMINING DEVICE                                                                                                                         | 2023/02/07  |
| 2023/01515         | CATHETER BALLOON PUNCTURING DEVICE                                                                                                                            | 2023/02/07  |
| 2023/01516         | A TRADITIONAL CHINESE MEDICINE PRODUCT AND PREPARATION METHOD THAT CAN IMPROVE IMMUNITY AND KILL CORONAVIRUS                                                  | 2023/02/07  |
| 2023/01517         | INTELLIGENT LIGHTING DEVICE FOR BUILDINGS THAT IS EASY TO INSTALL                                                                                             | 2023/02/07  |
| 2023/01520         | SELENIUM-ENRICHED FOLIAR FERTILIZER AND APPLICATION THEREOF                                                                                                   | 2023/02/07  |
| 2023/01521         | IN VITRO CULTURE METHOD FOR IMMATURE EMBRYO OF TOMATO                                                                                                         | 2023/02/07  |
| 2023/01523         | A KIND OF DRENCHING DEVICE FOR REMEDIATION OF HEAVY METAL CONTAMINATED SOIL                                                                                   | 2023/02/07  |
| 2023/01524         | BRIDGE CRACK MEASURING                                                                                                                                        | 2023/02/07  |

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|                    | DEVICE FOR BRIDGE ENGINEERING                                                                                   |             |
| 2023/01525         | CONTAINER SEEDLING CULTIVATION METHOD AND DEVICE FOR PAULOWNIAS                                                 | 2023/02/07  |
| 2023/01570         | CONNECTING DEVICE FOR BEARS OF MULTI-STAGE GEAR MECHANISM                                                       | 2023/02/08  |
| 2023/01572         | AN AUTOMATED LATHE FOR SHAFT MACHINING                                                                          | 2023/02/08  |
| 2023/01628         | APPLICATION OF PD-1SIRNA COMBINED WITH CHLOROQUINE IN PREPARING A MEDICINE FOR TREATING RECTAL CANCER           | 2023/02/09  |
| 2023/01653         | POTATO AND OAT INSTANT NOODLES AND MAKING METHOD THEREFOR                                                       | 2023/02/10  |
| 2023/01654         | BASE FERTILIZER AND FERTILIZER FOR IMPROVING THE QUALITY OF UPPER TOBACCO LEAVES AND APPLICATION METHOD THEREOF | 2023/02/10  |
| 2023/01655         | A DEVICE FOR FOREST ENVIRONMENT MONITORING                                                                      | 2023/02/10  |
| 2023/01656         | MICRO RIBONUCLEIC ACID (MIRNA) DETECTION KIT BASED ON PROBE-ANCHORED DUPLEX AND USE THEREOF                     | 2023/02/10  |
| 2023/01657         | NEW METHOD FOR PRODUCING P-MENTHANE HYDROPEROXIDE BY MULTIPLE BUBBLE COLUMN REACTORS IN SERIES                  | 2023/02/10  |
| 2023/01658         | METHOD FOR MEASURING WEIGHT LOSS OF SLICED CIGARETTES DURING STORAGE                                            | 2023/02/10  |
| 2023/01659         | STROPHARIA RUGOSOANNULATA FRUITING INDUCER WITHOUT SOIL COVERING AND PREPARATION METHOD THEREOF                 | 2023/02/10  |
| 2023/01660         | A COORDINATED AND OPTIMIZED OPERATING METHOD AND SYSTEM FOR REGIONAL ENERGY INTERNET                            | 2023/02/10  |
| 2023/01661         | POWDER FOR COMPRESSOR END COVER AND PREPARATION METHOD THEREOF                                                  | 2023/02/10  |
| 2023/01663         | A MULTIFUNCTIONAL INTELLIGENT NAVIGATION CRUTCH                                                                 | 2023/02/10  |
| 2023/01664         | CRISPR CAS12A-BASED METHOD AND KIT FOR DETECTING FUSARIUM CULMORUM AND APPLICATION OF THE SAME                  | 2023/02/10  |
| 2023/01665         | CONSTRUCTION METHOD OF JACKING-UP AND LOWERING OF                                                               | 2023/02/10  |

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|                    | STEEL BOX BEAM                                                                                                          |             |
| 2023/01667         | DEEP EUTECTIC SOLVENT AND METHOD FOR REGENERATING WASTE LITHIUM BATTERY CATHODE MATERIAL BY SAME                        | 2023/02/10  |
| 2023/01668         | METHOD FOR DISTINGUISHING BIOLOGICAL SOIL CRUST RESPIRATION FROM UNDERLYING SOIL BASAL RESPIRATION                      | 2023/02/10  |
| 2023/01669         | NITROGEN AND PHOSPHORUS CO-DOPED GRAPHENE QUANTUM DOTS AND PREPARATION METHOD THEREFOR                                  | 2023/02/10  |
| 2023/01670         | POSITIONING METHOD FOR SMALL PACKAGE OF TRADITIONAL CHINESE MEDICINE BASED ON BINOCULAR VISION                          | 2023/02/10  |
| 2023/01674         | AN ANIONIC ASPHALT EMULSIFIER FOR SPRAYING QUICK-SETTING RUBBER ASPHALT WATERPROOF PAINT AND PREPARATION METHOD THEREOF | 2023/02/10  |
| 2023/01675         | SMOKE DETECTION METHOD AND APPARATUS BASED ON COMPUTER VISION                                                           | 2023/02/10  |
| 2023/01676         | A SHIELD CUTTER HEAD REPLACEMENT CONSTRUCTION STRUCTURE BY ENTERING HOLLOW PILE FROM GROUND                             | 2023/02/10  |
| 2023/01677         | A THREE-DIMENSIONAL MONITORING DEVICE FOR SOIL MASS AND WATER LEVEL IN SIPHON DRAINAGE EXPERIMENT                       | 2023/02/10  |
| 2023/01678         | A CONTROL STRUCTURE TO PREVENT HEAD DOWN AT THE START OF THE SHIELD TUNNELING MACHINE                                   | 2023/02/10  |
| 2023/01679         | A CONSTRUCTION METHOD FOR FINAL DEMOLISHING THE STATION REINFORCEMENT COLUMN                                            | 2023/02/10  |
| 2023/01707         | METHOD FOR MULTI-OBJECT COOPERATIVE REGULATION AND CONTROL IN WIRE AND ARC ADDITIVE MANUFACTURING                       | 2023/02/13  |
| 2023/01708         | METHOD FOR INCREASING YIELD OF BETA-CAROTENE PRODUCED BY FERMENTATION OF BLAKESLEA TRISPOREA                            | 2023/02/13  |
| 2023/01709         | REACTION TESTER FOR LIME SAND PILE                                                                                      | 2023/02/13  |
| 2023/01710         | HIGH-STRENGTH LONG-SERVICE-LIFE SOLID LUBRICATING COATING FOR MAIN FUEL PUMP OF AERO-                                   | 2023/02/13  |



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|                    | ENGINE                                                                                                                    |             |
| 2023/01711         | FUNGUS BAG REMOVING AND SOIL COVERING CULTIVATION TECHNOLOGY FOR DICTYOPHORA RUBROVALVATA IN GUIZHOU                      | 2023/02/13  |
| 2023/01713         | A STORAGE AND RELEASE SYSTEM FOR SAND-DUST WEATHER FORECAST SERVICE PRODUCTS                                              | 2023/02/13  |
| 2023/01714         | A LOW-COST METHOD FOR PREPARING HIGH ENTROPY ALLOY COATINGS                                                               | 2023/02/13  |
| 2023/01715         | A POWDER AND TECHNICAL METHOD USED FOR LASER MELTING DEPOSITION OF FERRITIC STAINLESS STEEL                               | 2023/02/13  |
| 2023/01716         | A DRIVERLESS BRAKE SYSTEM FOR AUTOMOBILES                                                                                 | 2023/02/13  |
| 2023/01717         | A COMMUNITY SMART HEALTH ALARM DEVICE                                                                                     | 2023/02/13  |
| 2023/01718         | PRODUCTION PROCESS FOR SIZING FLAME-RETARDANT WARP YARNS BY USING WATER-SOLUBLE POLYESTER SIZE                            | 2023/02/13  |
| 2023/01719         | METHOD FOR CULTIVATING NEW BREED OF 48 - 58 S THREE-WAY CROSSBRED SEMI-FINE WOOL SHEEP                                    | 2023/02/13  |
| 2023/01720         | APPLICATION OF PYRIDINE-QUINOLIZIDINE ALKALOIDS IN PREPARING DRUGS FOR PREVENTING AND TREATING NEURODEGENERATIVE DISEASES | 2023/02/13  |
| 2023/01724         | HIGH-TEMPERATURE RESISTANT IRON TAILINGS RECYCLED AGGREGATE CONCRETE AND PREPARATION METHOD THEREOF                       | 2023/02/13  |
| 2023/01725         | DETECTION METHOD AND APPLICATION OF MYCOPLASMA SUI, MYCOPLASMA PARVUM AND CANDIDATUS MYCOPLASMA HAEMOSUIS                 | 2023/02/13  |
| 2023/01726         | A MECHANOCHEMICAL REMEDIATION METHOD FOR HEAVY METAL-POPS CONTAMINATED SOIL                                               | 2023/02/13  |
| 2023/01728         | A KIND OF HARVESTING AND ACIDIFICATION INTEGRATED LAYER HARVESTING BOAT                                                   | 2023/02/13  |
| 2023/01729         | QUADRIVALENT INFLUENZA VIRUS SUBUNIT VACCINE AND PREPARATION METHOD THEREOF                                               | 2023/02/13  |
| 2023/01735         | A SUBSPACE-BASED MODE                                                                                                     | 2023/02/13  |

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|                    | RECOGNITION METHOD FOR DYNAMIC STABILITY OSCILLATIONS IN POWER SYSTEMS                                                         |             |
| 2023/01736         | AN EMERGENCY VEHICLE FRIENDLY SMART TRAFFIC SIGNAL                                                                             | 2023/02/13  |
| 2023/01737         | UNFOLDING AND FIXING DEVICE FOR PANCREATIC TUMOR OPERATION                                                                     | 2023/02/13  |
| 2023/01738         | AN OFFLINE SMART IRRIGATION SYSTEM ENABLED WITH MACHINE LEARNING AND RASPBERRY-PI                                              | 2023/02/13  |
| 2023/01739         | A CRYPTO WALLET FOR FARMERS                                                                                                    | 2023/02/13  |
| 2023/01740         | SOLAR REFLECTOR FOR HOME FOR VITAMIN D ENHANCEMENT                                                                             | 2023/02/13  |
| 2023/01741         | A CORNER FITTING ROTARY CONNECTING NODE FOR MODULAR CONSTRUCTION                                                               | 2023/02/13  |
| 2023/01742         | A POWER AND METHOD FOR PREPARING A SELF-LUBRICATING BABBITT ALLOY/GRAPHITE COATING ON THE SURFACE OF LOW-CARBON STEEL          | 2023/02/13  |
| 2023/01743         | A METHOD FOR PREPARING A WEAR-CORROSION-EROSION-RESISTANT MODIFICATION HASTELLOY C-276 COATING                                 | 2023/02/13  |
| 2023/01744         | A POWDER AND METHOD FOR LASER CLADDING CORROSION-RESISTANT HIGH ENTROPY ALLOY COATING ON THE SURFACE OF STAINLESS STEEL        | 2023/02/13  |
| 2023/01793         | ETHYL METHYL 10-UNDECYLAMINOPROPIONATE, AS WELL AS PREPARATION METHOD THEREFOR AND APPLICATION THEREOF IN REPELLING MOSQUITOES | 2023/02/14  |
| 2023/01811         | PREPARATION METHOD AND APPLICATION OF METAL IN-DOPED ZNO QUANTUM DOT SENSOR                                                    | 2023/02/15  |
| 2023/01815         | INTELLIGENT DEVICE FOR REAL-TIME MONITORING DRILLING PARAMETERS OF DRILLING RIG                                                | 2023/02/15  |
| 2023/01879         | PREPARATION METHOD AND APPLICATION OF NANO-MODIFIED GRAPHENE-BASED THIN-FILM SENSOR                                            | 2023/02/16  |
| 2023/01889         | DOUBLE-LAYER FLAME RETARDANT FABRIC WITH WATER-REPELLENT SURFACE LAYER AND WATER-ABSORBENT INNER LAYER                         | 2023/02/16  |
| 2023/01890         | NATURAL PLANT GLYCOLYSIS                                                                                                       | 2023/02/16  |

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|                    | SUBSTANCE FOR PREVENTING AND CONTROLLING PORCINE ENTERITIS AND PREPARATION METHOD AND APPLICATION THEREOF          |             |
| 2023/01925         | FURFURAL RESIDUE/USED COOKING OIL MODIFIED ASPHALT AND PREPARATION METHOD THEREFOR                                 | 2023/02/16  |
| 2023/01945         | A FIRE EXTINGUISHING DEVICE OF COOLING FIRE WATER AND ITS USE METHOD, A BATTERY FIRE EXTINGUISHING METHOD          | 2023/02/17  |
| 2023/01947         | PROCESSING METHOD FOR SPICED FREEZE-DRIED SLICES OF CHINESE CHESTNUT                                               | 2023/02/17  |
| 2023/01959         | TYPE III PULLULAN HYDROLASE MUTANT FOR PREPARING CORN RESISTANT STARCH, PREPARATION METHOD AND APPLICATION THEREOF | 2023/02/17  |
| 2023/01969         | INSTANT CHESTNUT FREEZE-DRIED SLICE OF MILK FLAVOR AND PROCESSING METHOD THEREOF                                   | 2023/02/17  |
| 2023/01975         | MGO ADSORBENT FOR ENVIRONMENTAL POLLUTION EMERGENCY AND PREPARATION METHOD AND APPLICATION THEREOF                 | 2023/02/17  |
| 2023/01976         | NOVEL FAULT DIAGNOSTIC APPARATUS FOR NONLINEAR ANALOG CIRCUIT                                                      | 2023/02/17  |
| 2023/01980         | METHOD AND APPARATUS FOR VERIFYING RESTORATION EFFECT OF WATER BODY RESTORATION SCHEME AND ELECTRONIC DEVICE       | 2023/02/17  |
| 2023/02053         | APPLICATION OF ETHYL FERULATE IN PREPARING TRANSFORMING GROWTH FACTOR-BETA RECEPTOR 1 INHIBITOR                    | 2023/02/20  |
| 2023/02062         | SOILLESS CULTIVATION METHOD OF CYMBIDIUM SSP.                                                                      | 2023/02/20  |
| 2023/02071         | FLOATING-POINT FUSED MULTIPLY-ADD                                                                                  | 2023/02/20  |
| 2023/02091         | METHOD FOR EXTRACTING ACTIVE COMPONENTS FROM DARK TEA AND USE THEREOF                                              | 2023/02/20  |
| 2023/02092         | LIVER-PROTECTING AND DE-ALCOHOLIC COMPOSITE BEVERAGE AND PREPARATION METHOD THEREOF                                | 2023/02/20  |
| 2023/02097         | DRUG FOR TREATING                                                                                                  | 2023/02/21  |

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|                    | TUBERCULOSIS                                                                                                         |             |
| 2023/02112         | AN ELECTROCHEMICAL IMMUNOSENSOR AND THE PREPARATION METHOD AND APPLICATION THEREOF                                   | 2023/02/21  |
| 2023/02135         | MOLECULAR MARKER FOR IDENTIFYING GENETIC SEXES OF LEIOCASSIS LONGIROSTRIS AND APPLICATION                            | 2023/02/21  |
| 2023/02142         | HIGH-RESOLUTION METEOROLOGICAL PREDICTION DEVICE                                                                     | 2023/02/21  |
| 2023/02215         | IMPROVED SEEDLING GRAFTING METHOD                                                                                    | 2023/02/22  |
| 2023/02322         | PRIMERS AND PROBES FOR SPECIFICALLY DETECTING FUMONISIN-PRODUCING FUSARIUM VERTICILLIOIDE AND APPLICATION            | 2023/02/23  |
| 2023/02323         | METHOD FOR RAPIDLY DETECTING POLLEN VIABILITY                                                                        | 2023/02/23  |
| 2023/02363         | OPTIMAL ALLOCATION METHOD FOR CAPACITY OF OPTICAL STORAGE MICROGRID BASED ON IMPROVED ANT COLONY DYNAMIC PROGRAMMING | 2023/02/23  |
| 2023/02367         | INTERNET OF THINGS-BASED CITY HEATING DATA COLLECTION AND FAULT LOCATING SYSTEM                                      | 2023/02/23  |
| 2023/02463         | SPECIAL CRUSHER FOR COAL WASHING                                                                                     | 2023/02/24  |
| 2023/02469         | MINE AMBIENT INTELLIGENCE MONITORING SYSTEM AND METHOD                                                               | 2023/02/24  |
| 2023/02488         | KIT FOR RAPIDLY DETECTING PSEUDOMONAS AERUGINOSA                                                                     | 2023/02/24  |
| 2023/02510         | KIT FOR RAPIDLY DETECTING FRANCISELLA TULARENSIS                                                                     | 2023/02/24  |
| 2023/02519         | PRIMER COMBINATION, KIT AND PSR METHOD FOR DETECTING BRUCELLA                                                        | 2023/02/24  |
| 2023/02520         | DOUBLE Q-P COORDINATION CONTROL SYSTEM AND METHOD FOR DOUBLY FED WIND TURBINE AND DVR                                | 2023/02/24  |
| 2023/02608         | DEVELOPMENT OF ENDOSCOPE ASSISTED DEVICE FOR MICE GASTRIC PERFUSION                                                  | 2023/02/27  |
| 2023/02683         | MATHEMATICS LEARNING ASSISTANT SYSTEM                                                                                | 2023/02/27  |
| 2023/02684         | ONLINE TEACHING SYSTEM FOR IDEOLOGICAL AND POLITICAL                                                                 | 2023/02/27  |

| Application Number | Patent Title                                                                                              | Filing Date |
|--------------------|-----------------------------------------------------------------------------------------------------------|-------------|
|                    | EDUCATION                                                                                                 |             |
| 2023/02751         | EXHAUST GAS TREATMENT SYSTEM IN THE CRUSHING AND SORTING PROCESS OF DISCARDED POWER LITHIUM BATTERIES     | 2023/02/27  |
| 2023/02792         | SALINE-ALKALI SOIL CONDITIONER AND PREPARATION METHOD THEREOF                                             | 2023/02/27  |
| 2023/02794         | CONTINUOUS-FLOW REACTION DEVICE FOR RAPIDLY CULTURING AEROBIC GRANULAR SLUDGE                             | 2023/02/27  |
| 2023/02797         | METHOD OF PROMOTING ANAEROBIC FERMENTATION OF VEGETABLE WASTES                                            | 2023/02/27  |
| 2023/02798         | RAPID TYPING KIT FOR PORCINE HALOTHANE GENE AND DETECTION METHOD THEREOF                                  | 2023/02/27  |
| 2023/02800         | PRODUCTION AND UTILIZATION METHOD OF TEA LEAVES, TEA BRANCHES AND TEA STEMS                               | 2023/02/27  |
| 2023/02802         | MULTIFUNCTIONAL ANTI-COUNTERFEITING AUTHENTICATION SYSTEM AND APPLICATION METHOD                          | 2023/02/27  |
| 2023/02803         | NAVEL ORANGE CLASSIFYING AND PACKAGING EQUIPMENT FOR SORTING NAVEL ORANGES                                | 2023/02/27  |
| 2023/02806         | AUTOMATIC LIFTING DEVICE FOR TOBACCO CLIP                                                                 | 2023/02/27  |
| 2023/02807         | METHOD OF USING CIRBP AS A MOLECULAR MARKER FOR DIAGNOSIS AND TREATMENT OF PANCREATIC CANCER              | 2023/02/27  |
| 2023/02808         | EFFICIENT NAVEL ORANGE SCREENING MACHINE                                                                  | 2023/02/27  |
| 2023/02809         | GRASSLAND VEGETATION EXTRACTION METHOD BASED ON RADAR REMOTE SENSING IMAGES                               | 2023/02/27  |
| 2023/02810         | ANNULUS JET SUCTION AGITATING FLOTATION MACHINE                                                           | 2023/02/27  |
| 2023/02811         | FLOTATION COMPLETE DEVICE                                                                                 | 2023/02/27  |
| 2023/02949         | MINE ENVIRONMENT INTELLIGENT PREDICTION SYSTEM BASED ON ARTIFICIAL INTELLIGENCE                           | 2023/02/28  |
| 2023/03017         | PREPARATION METHOD FOR BISMUTH OXYCHLORIDE NANOSHEET AND BISMUTH OXYCHLORIDE NANOSHEET PREPARED WITH SAME | 2023/02/28  |
| 2023/03018         | FRESH AIR AND CELLULAR HEAT EXCHANGE ENERGY SAVING                                                        | 2023/02/28  |



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|                    | SYSTEM                                                                                                              |             |
| 2023/03079         | AN ELECTRIC VEHICLE WITH A DETACHABLE AIR CONDITIONER EXTERNAL UNIT                                                 | 2023/02/28  |
| 2023/03122         | A METHOD OF EXTRACTING PLANT POLYSACCHARIDES FOR THE USE OF SOPHOROLIPID                                            | 2023/02/28  |
| 2023/03224         | A SYSTEM FOR PROVIDING CYBER SECURITY BY IMPROVED PREDICTIVE POTENTIAL OF MACHINE LEARNING AND METHOD THEREOF       | 2023/03/01  |
| 2023/03225         | A DEEP NEURAL NETWORK-BASED INTRUSION DETECTION SYSTEM BY USING MACHINE LEARNING INTERFACES FOR A CLOUD ENVIRONMENT | 2023/03/01  |
| 2023/03262         | STEEL WIRE MESH FRAME CONCRETE WALL FOR FABRICATED BUILDING                                                         | 2023/03/02  |
| 2023/03263         | VERTICAL HOISTING DEVICE FOR STEEL WIRE MESH FRAME SANDWICH PREFABRICATED WALLBOARD                                 | 2023/03/02  |
| 2023/03307         | AQUATIC PRODUCT CONVEYING DEVICE FOR FISHING VESSEL                                                                 | 2023/03/03  |
| 2023/03309         | QUALITY ANALYSIS METHOD AND SYSTEM BASED ON MACHINE VISION IN NEW ENERGY BATTERY MANUFACTURING                      | 2023/03/03  |
| 2023/03334         | A METHOD OF SYNTHESIZING PHOSPHOR BY HYDROTHERMAL METHOD                                                            | 2023/03/06  |
| 2023/03335         | SPRAYING MACHINE AS WELL AS SPRAY ROD DEVICE AND SPRAYING METHOD THEREOF                                            | 2023/03/06  |
| 2023/03336         | MONITORING SYSTEM OF SEISMIC INTENSITY INSTRUMENT                                                                   | 2023/03/06  |
| 2023/03337         | METHOD AND SYSTEM FOR MEASURING CARBON EMISSION OF DOMESTIC GARBAGE INCINERATION POWER GENERATION                   | 2023/03/06  |
| 2023/03347         | SMEETING METHOD OF NICKEL-CONTAINING METAL AND APPLICATION THEREOF                                                  | 2023/03/06  |
| 2023/03365         | APPLICATION OF UNTRANSLATED REGIONS OF A GROUP OF INFLUENZA VIRUS GENES IN PREPARING MRNA VACCINE                   | 2023/03/07  |
| 2023/03366         | SPRAYED HIGH-PERFORMANCE CONCRETE AND PREPARATION METHOD THEREOF                                                    | 2023/03/07  |

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| 2023/03367         | METHOD, KIT AND APPLICATION FOR DETECTION OF STAPHYLOCOCCUS AUREUS BASED ON RPA COMBINED WITH CRISPR CAS12A            | 2023/03/07  |
| 2023/03368         | REFINED PRE-EVALUATION METHOD OF EXTRACTION EFFECT IN GAS PRE-PUMPING WORKING FACE                                     | 2023/03/07  |
| 2023/03369         | METHOD FOR CO-PRODUCING BIOGAS-OIL-CARBON BY COUPLING ANAEROBIC FERMENTATION OF KITCHEN WASTE WITH STRAW PYROLYSIS     | 2023/03/07  |
| 2023/03406         | MODIFIED LIMESTONE POWDER AND PREPARATION METHOD THEREOF, AND CONCRETE                                                 | 2023/03/08  |
| 2023/03407         | ANAEROBIC FERMENTATION TANK FOR CIRCULATING HYDROGEN SUPPLY BY MICRO-NANO BUBBLES                                      | 2023/03/08  |
| 2023/03436         | IMPROVED SINGLE-LAYER SKIN AUXILIARY MATERIAL AND PREPARATION METHOD THEREOF                                           | 2023/03/09  |
| 2023/03464         | PURPLE SWEET POTATO PIGMENT TYPE PH TEST PAPER AND PREPARATION METHOD THEREOF                                          | 2023/03/09  |
| 2023/03466         | LIVER SUSPENSION DEVICE                                                                                                | 2023/03/10  |
| 2023/03484         | COMPOSITE STRUCTURE OF NAVIGATION LAMP PILE FOUNDATION AND MAINTENANCE CHANNEL FOR OFFSHORE BREAKWATER                 | 2023/03/10  |
| 2023/03514         | DISTRIBUTED DIAPHRAGM VIBRATION ABSORBER                                                                               | 2023/03/13  |
| 2023/03515         | INTEGRATED MOVABLE ELECTROMAGNETIC ACTUATOR                                                                            | 2023/03/13  |
| 2023/03516         | CERAMSITE BASED ON INDUSTRIAL, AGRICULTURAL AND MUNICIPAL SOLID WASTES, AND PREPARATION METHOD AND APPLICATION THEREOF | 2023/03/13  |
| 2023/03521         | AN AGRICULTURAL IRRIGATION WATER QUOTA CALCULATION SYSTEM                                                              | 2023/03/13  |
| 2023/03522         | A METHOD FOR MEASURING THE JOINT STRUCTURAL PARAMETERS OF A LOESS FOUNDATION AFTER LOADING AND COMPACTING THE SOIL     | 2023/03/13  |
| 2023/03523         | SIMULATION TEST SYSTEM FOR WATER ICING FLUID FLOW                                                                      | 2023/03/13  |
| 2023/03524         | SIMULATION TEST SYSTEM AND TEST METHOD FOR WATER ICING                                                                 | 2023/03/13  |

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| 2023/03557         | A FAST HMM MAP-MATCHING METHOD BASED ON R-TREE SPATIAL INDEX AND TRAJECTORY SEGMENTATION                                          | 2023/03/14  |
| 2023/03558         | METHOD FOR EVALUATING SOURCE OF ORGANIC MATTER BASED ON AQUACULTURE SYSTEM                                                        | 2023/03/14  |
| 2023/03559         | METHOD FOR REINFORCING TUNNEL IN SOFT AND BROKEN SHALLOW-BURIED UNFAVORABLE GEOLOGICAL CONDITION                                  | 2023/03/14  |
| 2023/03560         | EXPERIMENTAL DEVICE FOR AQUATIC PHYSIOLOGY AND ECOLOGY RESEARCH                                                                   | 2023/03/14  |
| 2023/03561         | SURGICAL BRACKET DEVICE FOR NEUROSURGERY                                                                                          | 2023/03/14  |
| 2023/03594         | EQUAL-LOAD PLANETARY REDUCER                                                                                                      | 2023/03/15  |
| 2023/03608         | TRANSCRIPTION FACTOR C/EBPZ FOR REGULATING ADIPOCYTE FORMATION AND APPLICATION THEREOF                                            | 2023/03/15  |
| 2023/03609         | CONSTELLATION CONFIGURATION OPTIMIZATION METHOD FOR ARAIM-APPLICATION-ORIENTED LOW EARTH ORBIT SATELLITE ENHANCEMENT SYSTEM       | 2023/03/15  |
| 2023/03625         | FUSION PROTEIN FOR DETECTING NEUROSYPHILIS AND KIT THEREOF                                                                        | 2023/03/16  |
| 2023/03626         | METHOD, APPARATUS, DEVICE AND STORAGE MEDIUM FOR ACQUIRING ROCK PARAMETERS BASED ON MASK R-CNN NETWORK                            | 2023/03/16  |
| 2023/03627         | AUTISM DIAGNOSIS FLORA MARKER AND AUTISM DIAGNOSIS REAGENT                                                                        | 2023/03/16  |
| 2023/03628         | APPLICATION OF VANCOMYCIN HYDROCHLORIDE IN PREPARATION OF REAGENT FOR REDUCING THE LEVEL OF NEUROTOXIN BETA-METHYLAMINO L-ALANINE | 2023/03/16  |
| 2023/03629         | APPLICATION OF INTESTINAL FLORA MARKERS AS MARKERS FOR AUTISM RISK SCREENING AND DETECTION KIT AND DETECTION SYSTEM               | 2023/03/16  |
| 2023/03631         | SIMPLE-STRUCTURE AND WIDE-SCANNING-RANGE DEVICE FOR ACQUIRING THREE-DIMENSIONAL DATA OF UNDERGROUND                               | 2023/03/16  |

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|                    | CAVITIES                                                                                                        |             |
| 2023/03632         | METHOD FOR MINERALIZATION AND PRECIPITATION OF IRON FROM LEACHING SOLUTION PRODUCED BY HYDROMETALLURGY OF ZINC  | 2023/03/16  |
| 2023/03633         | BIONIC DOUBLE-LAYER FOLDING AND UNFOLDING STRUCTURE BASED ON ECLOSION WING SPREADING OF KALLIMA INACHUS         | 2023/03/16  |
| 2023/03634         | SOYBEAN SEEDER                                                                                                  | 2023/03/16  |
| 2023/03635         | TISSUE CULTURE METHOD FOR RAPID PROPAGATION OF LUCULIA PINCEANA                                                 | 2023/03/16  |
| 2023/03636         | INTELLIGENT HIGH-PERFORMANCE CONCRETE AND PREPARATION METHOD THEREOF                                            | 2023/03/16  |
| 2023/03665         | METHOD FOR EXTRACTING EFFECTIVE SUBSTANCES IN CHINESE BAIJIU FERMENTATION RESIDUES BY USING SUPERCRITICAL FLUID | 2023/03/17  |
| 2023/03688         | SUBSTITUTED TRICYCLIC COMPOUNDS                                                                                 | 2023/03/17  |
| 2023/03689         | PROCESS FOR EXTRACTION OF NON TOXIC HIGH PURITY COLCHICOSIDE FROM GLORIOSA SUPERBA AND EXTRACT THEREOF          | 2023/03/17  |
| 2023/03692         | METHOD FOR PREPARING COMPOSITE REINFORCED ROCK WOOL BOARD                                                       | 2023/03/20  |
| 2023/03693         | BULK CURING PROCESS FOR HOMOGENEOUS COLOR FIXING OF WHOLE FLUE-CURED TOBACCO LEAVES                             | 2023/03/20  |
| 2023/03695         | SMOKE FOUNTAIN TYPE CUTTING STAGE-LAMP WITH ADJUSTABLE JET FLOW                                                 | 2023/03/20  |
| 2023/03696         | INTEGRATED SMOKE FOUNTAIN TYPE STAGE-LAMP                                                                       | 2023/03/20  |
| 2023/03697         | A METHOD OF PROCESSING AN ANTI-GRAFFITI NANO-COATING FOR WALLS                                                  | 2023/03/20  |
| 2023/03700         | A CNT-EG BASED NANO-COMPOSITION FOR HEAT CONVECTION IN HIGH ENERGY HEAT DISSIPATING DEVICES                     | 2023/03/20  |
| 2023/03702         | INTEGRATED SMART NUCLEIC ACID DETECTION SYSTEM                                                                  | 2023/03/20  |
| 2023/03703         | A COMPACT ELECTRO-MECHANICAL DEVICE TO CURTAIL RESIDUAL RIDGE RESORPTION                                        | 2023/03/20  |

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| 2023/03729         | GAS LEAKAGE MANAGEMENT SYSTEM AND POSITIONING METHOD                                                       | 2023/03/22  |
| 2023/03730         | FORMULA AND PREPARATION METHOD FOR MANGO AND EDIBLE MUSHROOM COMPOUND NUTRITIOUS BEVERAGE                  | 2023/03/22  |
| 2023/03731         | PLANTING METHOD OF FACILITY VEGETABLES                                                                     | 2023/03/22  |
| 2023/03732         | DEVICE FOR CONTROLLING FLATNESS OF CONCRETE STRUCTURAL SLAB                                                | 2023/03/22  |
| 2023/03762         | METHOD FOR SYNTHESIZING BETA-NICOTINAMIDE MONONUCLEOTIDE                                                   | 2023/03/23  |
| 2023/03763         | VITAMIN B COMPLEX AND VITAMIN COMPLEX FOR LEPIDOPTERA FEED                                                 | 2023/03/23  |
| 2023/03764         | PHOTOCURING 3D PRINTING MOLDING-BASED PREPARATION METHOD AND APPLICATION OF WOOD-PLASTIC PASTE             | 2023/03/23  |
| 2023/03765         | A CORRUGATED PAPER CUP                                                                                     | 2023/03/23  |
| 2023/03766         | 3D RECONSTRUCTION DEVICE BASED ON A DEPTH CAMERA MODULE                                                    | 2023/03/23  |
| 2023/03799         | THE BATTERY ENERGY STORAGE MANAGEMENT SYSTEM                                                               | 2023/03/24  |
| 2023/03801         | ANGLE-ADJUSTABLE AUXILIARY DEVICE FOR SOIL SAMPLING                                                        | 2023/03/24  |
| 2023/03802         | REMOTE-CONTROLLABLE FIELD RAIN-SHADING EXPERIMENTAL DEVICE                                                 | 2023/03/24  |
| 2023/03803         | A MEDIATING ROLE OF EMPLOYEE ENGAGEMENT IN IMPROVING EMPLOYEE'S PRODUCTIVITY                               | 2023/03/24  |
| 2023/03841         | APPLICATION OF HBO1 AND ITS INHIBITOR IN PREPARING DRUGS FOR TREATING CASTRATION-RESISTANT PROSTATE CANCER | 2023/03/27  |
| 2023/03842         | A METHOD FOR ANALYZING ADOPTION INTENTION OF E-BOOK USAGE AMONG STUDENTS DURING COVID-19                   | 2023/03/27  |
| 2023/03843         | A TEST DEVICE FOR COMPREHENSIVE SIMULATION OF TUNNEL STATE                                                 | 2023/03/27  |
| 2023/03846         | RAPID TEMPERATURE-RISING ELECTRIC BLANKET HEATING PROTECTION CIRCUIT                                       | 2023/03/27  |
| 2023/03889         | FLEXIBLE SELF-POWDERED HUMIDITY SENSOR AND                                                                 | 2023/03/28  |



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|                    | PREPARATION METHOD THEREFOR                                                                                            |             |
| 2023/03896         | QUALITY ANALYSIS METHOD BASED ON MACHINE VISION IN METAL FOIL MANUFACTURING                                            | 2023/03/28  |
| 2023/03920         | RADIOMETRIC CONSISTENCY CORRECTION METHOD FOR THE IMAGES COLLECTED BY THE MULTI-SPECTRAL UAV CAMERA                    | 2023/03/29  |
| 2023/03921         | NEW ENERGY COUPLING COAL CHEMICAL INDUSTRY MULTI-ENERGY SYSTEM, EVALUATION METHOD AND COMPUTER-READABLE STORAGE MEDIUM | 2023/03/29  |
| 2023/03925         | CLUSTER CENTER INITIALIZATION METHOD IN CONSIDERATION OF NEIGHBORHOOD INFORMATION                                      | 2023/03/29  |
| 2023/03926         | TUNG OIL-BASED PLASTICIZER AND PREPARATION METHOD THEREOF                                                              | 2023/03/29  |
| 2023/03927         | CONSTRUCTION MATERIAL COMPRESSIVE STRENGTH DETECTION DEVICE                                                            | 2023/03/29  |
| 2023/03928         | PHOTO-HYDROGEN FUEL CELL COGENERATION SYSTEM, CAPACITY CONFIGURATION METHOD AND MEDIUM                                 | 2023/03/29  |
| 2023/03929         | AN IOT BASED SYSTEM FOR DATA ACQUISITION                                                                               | 2023/03/29  |
| 2023/03931         | FLUSHING DEVICE FOR PREVENTING THE ADHESION AND RESIDUE OF OOCYTE CORONA CUMULUS COMPLEXES AT THE TUBE WALL            | 2023/03/29  |
| 2023/03935         | DEVICE FOR FLUSHING THE INNER WALL OF TEST TUBES DURING OOCYTE RETRIEVAL                                               | 2023/03/29  |
| 2023/03949         | METHOD FOR PREPARING GRAPHENE OXIDE NANOSCROLL                                                                         | 2023/03/29  |
| 2023/03950         | PREPARATION METHOD, PRODUCT AND APPLICATION OF SYMMETRICAL "PYRAMID" NANO ZINC OXIDE                                   | 2023/03/29  |
| 2023/03985         | A PRESSURE GAUGE OF EXPLOSION-PROOF STRUCTURE AND AUTOMATIC EQUIPMENT                                                  | 2023/03/30  |
| 2023/03986         | A DETECTING STRUCTURE AND A PRESSURE CONDUCTING TYPE LIQUID LEVEL GAUGE                                                | 2023/03/30  |
| 2023/03987         | A SHELL STRUCTURE AND AN INDUSTRIAL AUTOMATIC FLOWMETER                                                                | 2023/03/30  |

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| 2023/03991         | AN INFORMATION SECURITY INFORMATION TERMINAL                                                                      | 2023/03/30  |
| 2023/04007         | PLANT RODLET FOR FORESTRY, PREPARATION METHOD AND APPLICATION METHOD                                              | 2023/03/30  |
| 2023/04008         | ROAD SURFACE ROUGHNESS MEASUREMENT METHOD AND DEVICE, AND ELECTRONIC DEVICE AND MEDIUM                            | 2023/03/30  |
| 2023/04009         | DISTRIBUTED HIGHWAY IMAGE STORAGE METHOD AND APPARATUS, AND DISTRIBUTED HIGHWAY IMAGE SEARCH METHOD AND APPARATUS | 2023/03/30  |
| 2023/04010         | FE-CR-SI ALLOY AND PREPARATION METHOD THEREFOR                                                                    | 2023/03/30  |
| 2023/04035         | LONG-TERM PRESERVATION METHOD FOR SALICACEAE (SENSU STRICTO) SEEDS                                                | 2023/03/31  |
| 2023/04036         | SULPHOALUMINATE CEMENT MATERIAL WITH RETARDING EFFECT                                                             | 2023/03/31  |
| 2023/04083         | HIGH-PERFORMANCE BISMUTH BRASS ALLOY MATERIAL FOR MOBILE PHONE LENSES                                             | 2023/04/03  |
| 2023/04084         | GUIDE DEVICE FOR THREADING STEEL STRANDS                                                                          | 2023/04/03  |
| 2023/04085         | AUXILIARY DEVICE FOR THREADING STEEL STRANDS                                                                      | 2023/04/03  |
| 2023/04086         | DRINKING WATER PACKAGING FILM AND PREPARATION METHOD THEREOF                                                      | 2023/04/03  |
| 2023/04087         | CLEANING METHOD FOR EFFECTIVELY IMPROVING VIGOR OF SALICACEAE (SENSU STRICTO) SEEDS                               | 2023/04/03  |

## DESIGNS

## Advertisement List for April 2023

Number of Advertised Designs: 121

| Application Number | Design Articles | Filing Date |
|--------------------|-----------------|-------------|
| A2021/00892        | USER INTERFACE  | 2021/07/27  |
| A2021/00937        | BLENDER         | 2021/08/03  |
| A2021/01492        | EYELASH GUARD   | 2021/11/30  |

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|--------------------|-------------------------------------------|-------------|
| A2022/00227        | ROOF SHEET                                | 2022/03/02  |
| A2022/00248        | KNEE GUARD                                | 2022/03/11  |
| A2022/00250        | KNEE GUARD                                | 2022/03/11  |
| A2022/00273        | COVER FOR A CENTRIFUGAL PUMP              | 2022/03/18  |
| A2022/00281        | STOVE                                     | 2022/03/23  |
| A2022/00288        | FAUCET                                    | 2022/03/24  |
| A2022/00290        | FAUCET                                    | 2022/03/24  |
| A2022/00291        | FAUCET                                    | 2022/03/24  |
| A2022/00292        | FAUCET                                    | 2022/03/24  |
| A2022/00293        | FAUCET                                    | 2022/03/24  |
| A2022/00294        | FAUCET                                    | 2022/03/24  |
| A2022/00295        | FAUCET                                    | 2022/03/24  |
| A2022/00300        | FAUCET                                    | 2022/03/24  |
| A2022/00301        | FAUCET                                    | 2022/03/24  |
| A2022/00302        | FAUCET                                    | 2022/03/24  |
| A2022/00309        | SANITARY SHOWER                           | 2022/03/25  |
| A2022/00310        | SANITARY SHOWER                           | 2022/03/25  |
| A2022/00319        | SANITARY SHOWER                           | 2022/03/28  |
| A2022/00320        | SANITARY SHOWER                           | 2022/03/28  |
| A2022/00321        | HAND SHOWER                               | 2022/03/28  |
| A2022/00344        | HAIR CLIP                                 | 2022/04/01  |
| A2022/00419        | Motor Vehicle                             | 2022/04/20  |
| A2022/00421        | Toy Vehicle                               | 2022/04/20  |
| A2022/00465        | VENTILATOR                                | 2022/04/29  |
| A2022/00613        | ACCESSORY FOR AN INTRAVENOUS INFUSION SET | 2022/06/02  |
| A2022/00614        | ACCESSORY FOR AN INTRAVENOUS INFUSION SET | 2022/06/02  |
| A2022/00615        | ACCESSORY FOR AN INTRAVENOUS INFUSION SET | 2022/06/02  |
| A2022/00616        | ACCESSORY FOR AN INTRAVENOUS INFUSION SET | 2022/06/02  |
| A2022/00617        | ACCESSORY FOR AN INTRAVENOUS INFUSION SET | 2022/06/02  |
| A2022/00618        | ACCESSORY FOR AN INTRAVENOUS INFUSION SET | 2022/06/02  |
| A2022/00629        | CAPSULE                                   | 2022/06/07  |
| A2022/00631        | CAPSULE                                   | 2022/06/07  |
| A2022/00645        | DRY FREEZER INTERACTIVE TRAILER           | 2022/06/10  |
| A2022/00652        | MOTOR VEHICLES                            | 2022/06/14  |
| A2022/00746        | Car                                       | 2022/06/27  |
| A2022/00747        | Toy Car                                   | 2022/06/27  |
| A2022/00750        | WHEEL                                     | 2022/06/29  |
| A2022/00753        | LID FOR A CONTAINER                       | 2022/06/29  |
| A2022/00784        | HANDHELD SCANNERS                         | 2022/07/01  |
| A2022/00806        | Sheet Material                            | 2022/07/13  |
| A2022/00815        | Soles for Footwear                        | 2022/07/15  |
| A2022/00820        | AUTOMOBILES                               | 2022/07/20  |
| A2022/00821        | AUTOMOBILES                               | 2022/07/20  |

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|--------------------|----------------------------------------------------------|-------------|
| A2022/00822        | BEVERAGE DISPENSERS                                      | 2022/07/20  |
| A2022/00823        | Emulsion Plate                                           | 2022/07/21  |
| A2022/00845        | Trays                                                    | 2022/07/28  |
| A2022/00847        | Wristwatch                                               | 2022/07/28  |
| A2022/00848        | Wristwatch                                               | 2022/07/28  |
| A2022/00849        | Wristwatch                                               | 2022/07/28  |
| A2022/00850        | Wristwatch                                               | 2022/07/28  |
| A2022/00851        | Wristwatch                                               | 2022/07/28  |
| A2022/00852        | Wristwatch                                               | 2022/07/28  |
| A2022/00853        | Wristwatch                                               | 2022/07/28  |
| A2022/00854        | Wristwatch                                               | 2022/07/28  |
| A2022/00855        | Wristwatch                                               | 2022/07/28  |
| A2022/00856        | Wristwatch                                               | 2022/07/28  |
| A2022/00862        | Clasp for a Watch Bracelet                               | 2022/07/29  |
| A2022/00863        | Clock Hand                                               | 2022/07/29  |
| A2022/00864        | Clasp for Watch Bracelets                                | 2022/07/29  |
| A2022/00865        | Clasp for Watch Bracelets                                | 2022/07/29  |
| A2022/00867        | Sports Bar for a Vehicle                                 | 2022/07/29  |
| A2022/00868        | Electric Juicer                                          | 2022/07/29  |
| A2022/00893        | ANTI-WRINKLE APPLIANCE                                   | 2022/08/03  |
| A2022/00942        | KIOSK                                                    | 2022/08/17  |
| A2022/00946        | KIOSK ROOF                                               | 2022/08/17  |
| A2022/00948        | KIOSK                                                    | 2022/08/17  |
| A2022/00950        | KIOSK ROOF                                               | 2022/08/17  |
| A2022/00961        | TRANSPORT CONTAINER FOR AN ANIMAL                        | 2022/08/17  |
| A2022/00992        | VENDING TROLLEY                                          | 2022/08/26  |
| A2022/00995        | MEDICAL DEVICE                                           | 2022/08/26  |
| A2022/00996        | MEDICAL ELECTRODE                                        | 2022/08/26  |
| A2022/00997        | MEDICAL ELECTRODE                                        | 2022/08/26  |
| A2022/01012        | SNEAKERS                                                 | 2022/08/29  |
| A2022/01105        | BOTTLE                                                   | 2022/09/19  |
| A2022/01107        | BOTTLE                                                   | 2022/09/19  |
| A2022/01109        | BOTTLE                                                   | 2022/09/19  |
| A2022/01111        | BOTTLE                                                   | 2022/09/19  |
| A2022/01113        | BOTTLE                                                   | 2022/09/19  |
| A2022/01115        | BOTTLE                                                   | 2022/09/19  |
| A2022/01117        | BOTTLE                                                   | 2022/09/19  |
| A2022/01119        | BOTTLE                                                   | 2022/09/19  |
| A2023/00248        | ELECTRONIC CIGARETTE                                     | 2023/02/22  |
| F2020/00897        | MULTILAYER LAMINATED SHEET                               | 2020/06/25  |
| F2022/00222        | A HINGE ARRANGEMENT FOR A GRILL                          | 2022/03/01  |
| F2022/00224        | THROAT BUSH                                              | 2022/03/01  |
| F2022/00225        | OVEN ACCESSORY FOR A GRILL                               | 2022/03/01  |
| F2022/00226        | ROOF SHEET                                               | 2022/03/02  |
| F2022/00466        | VENTILATOR                                               | 2022/04/29  |
| F2022/00469        | BOSS FOR A SCRAPER OF A CONVEYOR BELT CLEANING APPARATUS | 2022/05/03  |
| F2022/00619        | ACCESSORY FOR AN                                         | 2022/06/02  |

| Application Number | Design Articles                           | Filing Date |
|--------------------|-------------------------------------------|-------------|
|                    | INTRAVENOUS INFUSION SET                  |             |
| F2022/00620        | ACCESSORY FOR AN INTRAVENOUS INFUSION SET | 2022/06/02  |
| F2022/00621        | ACCESSORY FOR AN INTRAVENOUS INFUSION SET | 2022/06/02  |
| F2022/00622        | ACCESSORY FOR AN INTRAVENOUS INFUSION SET | 2022/06/02  |
| F2022/00623        | ACCESSORY FOR AN INTRAVENOUS INFUSION SET | 2022/06/02  |
| F2022/00630        | CAPSULE                                   | 2022/06/07  |
| F2022/00632        | CAPSULE                                   | 2022/06/07  |
| F2022/00759        | ANTI-WRINKLE APPLIANCES                   | 2022/06/30  |
| F2022/00838        | PORTABLE GUN RESTS                        | 2022/07/27  |
| F2022/00894        | ANTI-WRINKLE APPLIANCE                    | 2022/08/03  |
| F2022/00898        | PALLET TOP CAP                            | 2022/08/04  |
| F2022/00899        | MECHANISM FOR A CONVEYOR BELT             | 2022/08/05  |
| F2022/00945        | KIOSK                                     | 2022/08/17  |
| F2022/00947        | KIOSK ROOF                                | 2022/08/17  |
| F2022/00949        | KIOSK                                     | 2022/08/17  |
| F2022/00962        | ENCLOSURE FOR A THERMOSTAT                | 2022/08/18  |
| F2022/00963        | ENCLOSURE FOR A THERMOSTAT                | 2022/08/18  |
| F2022/00969        | NOVEL VALVE                               | 2022/08/19  |
| F2022/00989        | BIPOLAR PLATE                             | 2022/08/26  |
| F2022/00990        | BIPOLAR PLATE                             | 2022/08/26  |
| F2022/00993        | VENDING TROLLEY                           | 2022/08/26  |
| F2022/01106        | BOTTLE                                    | 2022/09/19  |
| F2022/01110        | BOTTLE                                    | 2022/09/19  |
| F2022/01112        | BOTTLE                                    | 2022/09/19  |
| F2022/01114        | BOTTLE                                    | 2022/09/19  |
| F2022/01116        | BOTTLE                                    | 2022/09/19  |
| F2022/01118        | BOTTLE                                    | 2022/09/19  |
| F2022/01120        | BOTTLE                                    | 2022/09/19  |
| F2023/00290        | WATER HOSE                                | 2023/02/28  |